APPALACHIAN CORRIDOR H
PARSONS, WEST VIRGINIA TO DAVIS, WEST VIRGINIA
Supplemental Final Environmental Impact Statement

Submitted Pursuant to: 42 U.S.C. 4332(2)(c), 23 U.S.C. 128(a),
49 U.S.C. 303(c), 16 U.S.C. 470(f), and
80 Stat. 931, Public Law 89-670

US Department of Transportation - Federal Highway Administration and
West Virginia Department of Transportation - Division of Highways

Cooperating Agencies:
US Environmental Protection Agency, US Fish and Wildlife Service, US Forest Service,
US Army Corps of Engineers - Pittsburgh District, US Park Service

1-28-07
Date of Approval

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2-2-07
Date of Approval

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This SFEIS consists of a proposal to construct an approximately 9-mile long segment of the Corridor H highway
between the termini of Parsons and Davis, West Virginia. This supplemental FEIS was completed pursuant to the
February 2000 Settlement Agreement with Corridor H Alternatives, et al. The proposed Parsons-to-Davis Project
would provide a four-lane highway with partial control of access on new and existing location. This study evaluates
the preliminary engineering and the potential impacts to the economic, social, cultural, natural and physical
environment associated with the construction of the proposed project.

A Federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(l), indicating that one or
more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such
notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims
are filed within 180 days after the date of publication of the notice, or within such shorter time period as is specified in
the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published,
then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

Comments on this SFEIS are due by April 27, 2007 and should be sent to:
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<tr>
<td>PPM</td>
<td>Parts Per Million</td>
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<tr>
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<td>PRT</td>
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<td>Supplemental Final Environmental Impact Statement</td>
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<td>WVDOT</td>
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<td>WVOMST</td>
<td>West Virginia Office of Miner's Safety and Training</td>
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<tr>
<td>WVSHPO</td>
<td>West Virginia State Historic Preservation Officer (or an official authorized to act on his or her behalf for purposes of Section 106)</td>
</tr>
</tbody>
</table>
GLOSSARY OF COMMONLY USED TERMS

2000 Settlement Agreement: Refers to February 7, 2000 agreement between Corridor H Alternatives, et. al. and USDOT, the result of Corridor H Alternatives v. Slater, Case No. 96-CV-2622 (TFH). (Appendix B)

Acidity: A measurement of the hydrogen ion concentration of an aqueous solution.

Acid Drainage: Is a low pH, sulfate-rich water with high amounts of acidity, which results from the oxidation of metal disulfide minerals upon exposure to air and water.

Alignment: Refers to the proposed routing of Build Alternatives.

Alternative: General term that refers to possible approaches to meeting the project's purpose and need. Typically refers to the No-Build and the Build Alternatives.

Avoidance Alignments: Alternatives developed for consideration that avoid the use of land in the Blackwater Area as defined in the Settlement Agreement and land known to be occupied by the West Virginia northern flying squirrel.

Anticline: A convex fold in bedrock.

Aquifer: A water-bearing unit of permeable rock, sand, or gravel that yields considerable quantities of water to springs and wells.

Attainment: Status of the various pollutants described in the NAAQS. A condition where a pollutant meets NAAQS.

Benthic: Located on the bottom of a body of water or in the bottom sediments, or pertaining to bottom-dwelling organisms.

Biodiversity: The variety and abundance of species, their genetic composition, and the communities, ecosystems, and landscapes in which they occur.

Biological Opinion: Documents the opinion of the USFWS as to whether or not a proposed Federal action is likely to jeopardize the continued existence of a listed species and details the effects of the action on the species and/or its critical habitat. (50 CFR 402)

Blackwater Area: The area within and around the Blackwater Valley, south of Thomas, as depicted on Exhibit 4 of the Settlement Agreement (Appendix B).

Blackwater Avoidance Alignment: Any alignment for Corridor H that is located entirely outside the Blackwater Area.

Carbon Monoxide (CO): A colorless, odorless gas that is formed as a product of the incomplete combustion of carbon and is emitted directly by automobiles and trucks.

Corridor H Alternatives, Inc. (CHA): Any corporations that are subsidiaries of CHA or are otherwise legally affiliated with CHA, any successors-in-interest to CHA, and any existing or future entities, associations, or groups formed by or with the direct involvement of any persons who, as of the Effective Date, are directors or officers of CHA partly or entirely for the purpose of opposing Corridor H or any Project or for the purpose of promoting alternatives to Corridor H or any Project.

Community Cohesion: The connections between and within communities that are essential for serving the needs of the residents (e.g., churches, recreational facilities).

Corridor H: All or a portion of the Appalachian Corridor H Highway between Elkins, West Virginia, and the West Virginia/Virginia State Line.

Court of Appeals: The United States Court of Appeals for the District of Columbia Circuit.

Criteria of Effect Evaluation: An assessment of the potential effects of a proposed project on each resource determined eligible for or listed in the National Register of Historic Places.
**Cumulative Impact:** An impact on the environment that results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions.

**Cultural Resources:** Patterned physical remains of human activity distributed over the landscape through time.

**Design Speed:** The maximum safe operating speed for which a highway is designed. The posted speed limit is generally slightly less than the design speed.

**Determination of Eligibility Evaluation:** Identification of all buildings, structures, objects and districts over 50 years of age that may be affected by a proposed project and an assessment of each resource's eligibility for the National Register of Historic Places.

**District Court:** The United States District Court for the District of Columbia.

**Environmental Justice:** Presidential Executive Order 12898 requires federal agencies to take into consideration disproportionately high and adverse human health or environmental effects of federal programs and projects on low-income and minority populations.

**Floodplain:** The portion of a river or stream valley, adjacent to the channel, which is covered with water when the river or stream overflows its banks at flood stage. It is also defined as lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

**Flood Hazard Zone:** The area flooded during a 100-year storm.

**Floodway:** An area identified on a FIRM or a Flood Boundary Floodway Map (FBFM) that represents the portion of the floodplain that carries the majority of the flood flow and is often associated with high velocity flow and debris impact. The floodway includes the channel of a stream or river and the adjacent floodplain that must be reserved in an unobstructed condition in order to discharge the base flood without increasing flood levels by more than one foot.

**Groundwater:** Naturally occurring water that moves through the ground and underlying rock, at a depth of several feet to several hundred feet.

**Habitat Evaluation Procedure:** A method created by the USFWS to evaluate the quality of habitat for selected wildlife species.

**Habitat Unit:** A non-dimensional unit of comparison in the Habitat Evaluation Procedure (see above), used to quantify gains and losses in wildlife habitat value resulting from project-related activities, and calculated by multiplying an index of habitat suitability by the area of that habitat.

**Historic Archaeological Site:** Any subsurface cultural manifestation dated post-European contact.

**Historic Property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes, for the purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term “eligible for inclusion in the National Register” includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.

**Insertion Loss:** The difference in sound levels before and after installation of a noise barrier.

**Karst:** The occurrence of limestone as the first bedrock unit beneath the soil in which cavities form due to the solubility of limestone under certain conditions. Surface characteristics include sinkholes and sinking streams.

**Keeper:** The Keeper of the National Register of Historic Places, or any other official within the United States Department of the Interior vested with authority to determine the eligibility of historic properties for listing in the National Register, pursuant to 16 U.S.C. § 470a.
Level of Service (LOS): Operating conditions within a stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort, and convenience. Six levels of service are defined, designated A through F, with A representing the best conditions and F the worst.

Low-income Populations: A population whose household income is below the Department of Health and Human Services poverty guidelines.


National Environmental Policy Act (NEPA) Document: Any document or report prepared by or on behalf of FHWA or WVDOT pursuant to NEPA for a Project, including but not necessarily limited to any Environmental Assessment, Finding of No Significant Impact, Draft SEIS, Final SEIS, or Amended ROD, but not including any pre-decisional, deliberative, or privileged materials.

Nitrogen Oxide: Oxides of nitrogen (e.g., NO2, NO3)

Non-attainment: A condition where a pollutant exceeds the NAAQS two or more times during a year.

Original Preferred Alternative (OPA): The Build Alternative defined as preferred in the 1996 Corridor H FEIS and 1996 Corridor H ROD. In the Settlement Agreement it was called the “Blackwater Alignment,” although other alignments passing through the Blackwater Area may be called a Blackwater Alignment.

Ozone: Unstable blue gas with a pungent odor formed principally in secondary reactions involving volatile organic compounds, nitrogen oxides, and sunlight.

Palustrine Emergent (PEM) Wetland: Wetlands that are dominated by erect, herbaceous vegetation present for most of the growing season (i.e., marshes, wet meadows, fens, sloughs, or potholes). (Also, see “Wetland” below.)

Palustrine Forested (PFO) Wetland: Wetlands that are dominated by woody vegetation greater than 20 feet (6 meters) in height (i.e., swamps of bottomlands). (Also, see “Wetland” below.)

Palustrine Scrub-Shrub (PFO) Wetland: Wetlands that are dominated by woody vegetation less than 20 feet (6 meters) in height (i.e., pocosins, shrub swamps, or wet thickets). (Also, see “Wetland” below.)

Physiographic Province: A region which is generally consistent in geologic structure and climate and which has had a unified geomorphic history.

Proclamation Boundary: Legal boundary, established by Congress, for National Forest lands developed to aid in land management planning from project level to forest level.

Project Impact: Partnership between communities and FEMA that helps communities protect themselves from the devastating effects of natural disasters by taking actions that dramatically reduce disruption and loss.

Regulatory Floodway: The portion of the 100-year floodplain within which the majority of the floodwater is carried and where flooding hazards are the highest.

Riparian: Pertaining to anything connected with or immediately adjacent to the banks of a stream.

Secondary Impact: An impact on the environment resulting from the primary impact of the action.


Section 4(f) Document: Any finding, evaluation, report, or other document prepared by or on behalf of FHWA or WVDOT pursuant to Section 4(f) with respect to a Project, including, but not
necessarily limited to, any finding of no constructive use and any approval of the use of a Section 4(f) Resource, but not including any predecisional, deliberative, or privileged materials.

**Section 4(f) Resource:** Any park, recreation area, wildlife or waterfowl refuge, or historic site that is protected under Section 4(f).

**Settlement Agreement:** (See “2000 Settlement Agreement” above.)

**Supplemental Environmental Impact Statement (SEIS):** Document prepared by FHWA and WVDOT in accordance with NEPA and other applicable laws and regulations; generally presented in two parts – a Draft (SDEIS) and a Final (SFEIS).

**Syncline:** A concave fold in bedrock.

**Total Maximum Daily Load (TMDL):** A calculation of the maximum amount of pollutant that a waterbody can receive and not diminish its beneficial use classification and still meet water quality standard. In addition, a TMDL contains the reductions needed to meet water quality standards and allocates those reductions among sources in the watershed.

**Upland Habitat:** Land that has sufficient dry conditions that hydrophytic vegetation, hydric soils, and/or wetland hydrology are lacking. Any area that is not a wetland, deepwater aquatic habitat, nor other special aquatic site is considered upland habitat.

**Vertical Curves:** Hills, both inclines and declines.

**Viewshed:** All land seen from one static point.

**Watershed:** A specific geographic area drained by a major stream or river.

**Wetland:** Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions.

**Zone of Saturation:** The area found below the water table where water occupies all open space.

### COMMONLY USED METRIC CONVERSIONS

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<th>Metric Unit</th>
<th>English Unit</th>
<th>Factor to Convert Metric Units to English Units</th>
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<td>Kilometer (km)</td>
<td>Mile (mi)</td>
<td>Kilometers x 0.62 = Miles</td>
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<tr>
<td></td>
<td>Meter (m)</td>
<td>Foot (ft)</td>
<td>Meters x 3.28 = Feet</td>
</tr>
<tr>
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<td>Acre (ac)</td>
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<td>Volume</td>
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<td>Velocity</td>
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EXECUTIVE SUMMARY

In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002.

In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

S.1 BRIEF PROJECT DESCRIPTION

The West Virginia Department of Transportation (WVDOT), Division of Highways (WVDOH), in conjunction with the Federal Highway Administration (FHWA), is proposing to construct an approximately 9-mile long highway between Parsons and Davis in Tucker County, West Virginia. This Parsons-to-Davis Project is a component of the Appalachian Corridor H Project (Corridor H), which is a proposed 100-mile long highway between Elkins, West Virginia and the West Virginia-Virginia state line, spanning Randolph, Tucker, Grant, and Hardy counties in West Virginia. A Final Environmental Impact Statement (FEIS) for Corridor H was issued in April 1996, with a Record of Decision (ROD) issued in August 1996. The scope of both the FEIS and ROD covered the entire 100-mile long highway for the Appalachian Corridor H Project.

As a result of legal challenges to the 1996 ROD, a Settlement Agreement was executed in February 2000 (Appendix B). The Settlement Agreement divided Corridor H into nine individual projects, including the Parsons-to-Davis Project. The Settlement Agreement required the WVDOH and FHWA to prepare a Supplemental Environmental Impact Statement (SEIS) to evaluate one or more alignment shifts for the “Thomas-Davis section” of the Parsons-to-Davis Project. The purpose of the SEIS was to evaluate alternatives for avoiding the “Blackwater Area” (as defined in the Settlement Agreement), which includes historic and archaeological resources associated with coal and coke production in the Blackwater Valley.

During the SEIS process, a federally listed endangered species – the West Virginia northern flying squirrel (WVNFS) – was discovered between Parsons and Davis. New scientific information regarding the ecological habitat requirements of the WVNFS required additional surveys to be conducted at lower elevations. As a result of this discovery, FHWA and WVDOH extended the scope of the SEIS to include the entire length of the Parsons-to-Davis Project.

S.2 PURPOSE AND NEED

As a part of the Corridor H Project, the Parsons-to-Davis Project will contribute to addressing the needs identified in the Corridor H FEIS of 1996 (WVDOH, 1996). Additionally, the Parsons-to-Davis Project will address specific local needs. Overall, the purpose of the Parsons-to-Davis Project is to:

- Improve east-west transportation through northeastern West Virginia.
- Promote economic development in the region.
- Preserve or improve the quality of life in the region.
Additionally, at the local level, communities have identified two specific “quality of life” needs that could be addressed by the Parsons-to-Davis Project:

- Reduce truck traffic through the City of Thomas.
- Improve emergency response times and access to emergency facilities.

The purpose and need for the project are detailed in Section I: Project Background and Need.

S.3 ALTERNATIVES CONSIDERED

This study considered a range of alternatives for completing Corridor H between Parsons and Davis. The range of alternatives was developed based on National Environmental Policy Act (NEPA) requirements, as well as additional requirements contained in the Settlement Agreement. In particular, the Settlement Agreement requires consideration of at least one “Blackwater Avoidance Alignment.” The Settlement Agreement defines a Blackwater Avoidance Alignment as “any alignment for Corridor H that is located entirely outside the Blackwater Area” (Appendix B, Settlement Agreement, p. 6). The Settlement Agreement also requires consideration of the alternative approved in the 1996 Corridor H ROD; this alternative is referred to in the Settlement Agreement as a “Blackwater Alternative.”

In accordance with the Settlement Agreement, two distinct groups of Build Alternatives were considered: the “Blackwater Alternatives” and the “Blackwater Avoidance Alternatives.” These groups of alternatives included the following:

Blackwater Alternatives

The “Blackwater Alternatives” all pass through the Blackwater Area. A “Truck Route” was initially identified as an option for these alternatives; it was later incorporated into each of the Blackwater Alternatives in order to provide an alternative north-south route that allows access to Corridor H while bypassing downtown Thomas. The Blackwater Alternatives include:

- “Original Preferred Alternative” (OPA) – this alternative is the alternative approved in the 1996 Corridor H ROD
- “Alternative 2” – this alternative is a variant of the OPA
- “Revised OPA” (ROPA) – this alternative was developed after the Supplemental Final Environmental Impact Statement (SDEIS) for the Parsons-to-Davis Project and is presented in this Supplemental Final Environmental Impact Statement (SFEIS)

Blackwater Avoidance Alternatives

The “Blackwater Avoidance Alternatives” are located entirely outside of the Blackwater Area. WVDOH and FHWA initially developed 12 Blackwater Avoidance Alternatives. Six of these Blackwater Avoidance Alternatives – Alternative 1A (East and West), Alternative 1B (East and West), Alternative C, and Alternative H – were eliminated in the alternatives screening process. Alternative F was eliminated early in the process because it passed through the middle of the Tucker County Landfill. The following Blackwater Avoidance Alternatives were carried forward for detailed analysis in the SEIS:

- Alternative 1D (East and West)
- Alternative 1E
- Alternative 1G (East and West)

In addition to these Build Alternatives, FHWA and WVDOH also considered a No-Build Alternative and an Improved Roadway Alternative (IRA). The No-Build Alternative does not meet purpose and need for the project but was carried forward for detailed analysis as required by NEPA. The IRA was considered in the alternatives’ screening process, but was eliminated because it also does not meet the purpose and need for the project.
All of the alternatives carried forward for detailed analysis were analyzed in the SDEIS. The SDEIS was issued in December 2002 and was followed by a 120-day public comment period (initial 60-day period extended an additional 60 days at the request of CHA), which included a formal public hearing. Following the comment period, FHWA and WVDOH coordinated with the cities of Thomas and Davis as required under the Settlement Agreement. Based on comments received, as well as input from the cities of Thomas and Davis, FHWA and WVDOH issued a Preferred Alternative Report (dated December 2003) in January 2004 (Figure S-1). In that report, FHWA and WVDOH identified the “Revised Original Preferred Alternative” (ROPA) as the preferred alternative for the project. Like the preferred alternative approved in the 1996 Corridor H ROD, the ROPA passes through the Blackwater Area.

Following the circulation of the December 2003 Preferred Alternative Report, two resource agencies – the United States Fish and Wildlife Service (USFWS) and the United States Environmental Protection Agency (USEPA) – submitted comments indicating that they did not concur with the selection of the ROPA as the preferred alternative based on the information provided in that report. In particular, the USFWS stated that additional research regarding WVNFS habitat was needed before a preferred alternative could be identified. In response, additional studies of the WVNFS were undertaken and an Amended Preferred Alternative Report (dated November 2004) was issued in November 2004. The Amended Preferred Alternative Report reaffirmed the selection of the ROPA as the preferred alternative. The identification of the Preferred Alternative for the project is reviewed below in Section S.7 and detailed in Section II: Alternatives Analysis. Table S-1 shows the alternatives evaluated in this SEIS.

The alternatives analysis process is depicted in Figure S-1, which shows the development of alternatives throughout the project and how this development of alternatives related to other events such as the discovery of the WVNFS.
Figure S-1: Parsons-to-Davis Project Timeline

- Developed for DETAILED STUDY IN SDEIS
- Retained
- Developed AND Refined
- Alternatives
  - No-Build Alternative
  - Blackwater Alternatives
  - OPA
  - Blackwater Avoidance Alts.
  - Alt. 1A (East and West)
  - Alt. 1C (East and West)
  - Alt. 1E (East and West)
  - Alt. 1G (East and West)

- Study Scoping
  - SEIS Notice of Intent (NOI) (May 2002)
  - Scoping, Public and Agency Meetings (June 2002 - October 2002)
  - Revised NOI Issued (October 2002)
  - Presentation of Alternatives (October 2002)
  - Biological Assessment (August 2002)
  - DEIS Issued (December 2002)
  - Public Hearing SDEIS (February 2003)
  - SDEIS Comment Period Ends (April 2003)
  - Town of Davis Supports ROPA (October 2003)
  - Preferred Alternative Report Issued (December 2003)
  - SHPO Finding of No Adverse Effect (June 2004)
  - BA Resubmitted (August 2004)
  - Amended Preferred Alternative Report Issued (November 2004)
  - Formal Consultation Begins (October 2005)
  - FEIS Issued (February 2007)
Table S-1  
Alternatives Evaluated in the SEIS for the Parsons-to-Davis Project

<table>
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<th>Alternative</th>
<th>Eliminated in Screening</th>
<th>Studied in Detail in SDEIS</th>
<th>Developed After SDEIS</th>
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<td>Improved Roadway Alternative (IRA)</td>
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<td><strong>Blackwater Alternatives</strong></td>
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<td>Original Preferred Alternative (OPA)**</td>
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<td>Alternative 2**</td>
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<tr>
<td>Revised Original Preferred Alternative (ROPA)**</td>
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<td>√</td>
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<td>Alternative 1E</td>
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<td>Alternative 1G - West</td>
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<tr>
<td>Alternative 1G - East</td>
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<tr>
<td>Alternative 1H</td>
<td>√</td>
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</tbody>
</table>

* Because the No-Build Alternative does not satisfy the purpose and need, it did not pass the SDEIS alternatives screening process. However, as per Council on Environmental Quality (CEQ) regulations, the No-Build Alternative was carried through the SDEIS (and this SFEIS) as an “environmental baseline.”

** These alternatives include the Truck Route as a bypass for trucks around downtown Thomas. In the SDEIS, the Truck Route was presented as an option for the OPA and Alternative 2. In this SFEIS, the Truck Route has been incorporated into these alternatives.
5.4 ENVIRONMENTAL IMPACTS

The environmental impacts of the alternatives carried forward for detailed analysis are identified qualitatively and quantitatively in Section III: Existing Environment and Environmental Consequences. The potential impacts of the alternatives carried forward for detailed analysis are summarized below in Table S-2.

5.5 SECTION 4(F) ANALYSIS

Evaluation results indicate that none of the alternatives carried forward for detailed analysis would “use” Section 4(f) land. A final Section 4(f) Analysis is included with this SFEIS (Section IV: Section 4(f) and 6(f) Analyses).

5.6 SECTION 7 CONSULTATION

Throughout the development of the 1996 Corridor H FEIS for the overall Corridor H project, WVDOH and FHWA consulted with the USFWS pursuant to Section 7 of the Endangered Species Act (ESA). The documentation was considered sufficient by the USFWS to address effects on threatened and endangered species at the time the 1996 Corridor H ROD was signed in August 1996.

In June 2000, WVDOH and FHWA re-initiated informal consultation with the USFWS during agency coordination for the preparation of this SEIS. During the informal consultation process, the recovery plan for the WVNFS (Glaucomyss subrinus fuscus) was being amended to redefine the methods for identifying potential habitat for that species. Because of this potential amendment to the recovery plan, additional live-trapping surveys were conducted for the WVNFS. In the summer of 2001, populations of the WVNFS were found within the Study Area boundary.

Based on ensuing coordination with the USFWS, the FHWA and WVDOH developed alternatives that attempted to avoid, if practicable, known or potential WVNFS populations. After further coordination with the USFWS, including an initial submission of a Biological Assessment (BA) for the WVNFS in August of 2002, a second BA was prepared and submitted to the USFWS in August 2004. The BA evaluated the direct, indirect, and cumulative effects of the Build Alternatives on the WVNFS. The BA concluded that all alternatives would likely adversely affect the WVNFS, but that the ROPA would be the least damaging to the WVNFS. In a letter dated October 14, 2004, the USFWS concurred with the BA conclusions (Appendix D), thus completing informal consultation under Section 7 of the ESA.

Formal section 7 consultation was initiated on October 25, 2005 by FHWA and WVDOH. USFWS confirmed the initiation of formal consultation and the completeness of the Initiation Package on November 18, 2005. On March 22, 2006 the USFWS requested an extension for the completion of formal consultation; the request was granted by FHWA on March 30, 2006. A draft BO was issued by USFWS on May 5, 2006. The final BO was issued on November 6, 2006. The BO provides:

- a complete consultation history,
- biological background research and baseline summary,
- confirms the proposed conservation measures,
- terms and conditions associated with the Incidental Take Statement, including Reasonable and Prudent Measures (RPMs) for compliance and
- a conclusion to the formal consultation process with the detailed reinitiation requirements.

The USFWS has stated that, “...FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of G. s. fuscus habitat. ....Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO specifically states, “After reviewing the current status of the G. s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ Biological Opinion that constructing Corridor H,
Parsons to Davis, as proposed, is not likely to jeopardize the continued existence of the *G. s. fuscus.* The issuance of the final BO concludes the formal consultation process.

Further detail regarding the informal and formal ESA Section 7 consultation processes are provided in Section III: Existing Environment and Environmental Consequences and in Section VII: Comments and Coordination.

S.7 SECTION 106 CONSULTATION

WVDOH and FHWA consulted with the West Virginia State Historic Preservation Office (WVSHPO), as required by Section 106 of the National Historic Preservation Act, on Corridor H on a section-by-section basis. At the time of the SDEIS, the Parsons-to-Davis section was the final section that required evaluation. In June 2002, a draft Criteria of Effects (COE) Report was circulated. The Draft COE Report found that the Parsons-to-Davis Project would have “no effect” on the Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex). The WVSHPO, United States Forest Service Monongahela National Forest (USFS MNF), and Corridor H Alternatives (a plaintiff in the lawsuit), which were all consulting parties in the Section 106 process, submitted comments on the Draft COE Report as follows:

- In a letter dated October 30, 2002, WVSHPO found that the project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO commented, however, that the evaluation should focus on “the relative change” to the district, rather than the Draft COE Report’s evaluation of the percentage of the district that would experience visual or noise impacts.
- In a letter dated July 26, 2002, the USFS MNF expressed concerns related to Project’s potential visual, auditory, and physical impacts on the Monongahela National Forest. Following the receipt of the USFS MNF comments, in October 2002, the USFS MNF, WVDOH, and FHWA executed a Memorandum of Understanding (MOU) that included measures to mitigate these potential effects. In a letter dated October 24, 2002, the USFS MNF found that the project would have no adverse effect on historic resources within the Monongahela National Forest.
- In a letter dated December 12, 2003, counsel for Corridor H Alternatives disagreed with the Draft COE Report’s finding of “no effect,” and recommended a finding of “adverse effect” based on visual and auditory effects to the historic district and its setting.

On March 23, 2004, the Final COE Report was submitted to the WVSHPO for review and concurrence and to the USFS MNF and Corridor H Alternatives for comments, in accordance with the September 1995 Section 106 Programmatic Agreement for Corridor H (Appendix B). WVDOH and FHWA received comments on the Final COE Report as follows:

- In a letter dated June 23, 2004, the WVSHPO affirmed its earlier opinion that the Parsons-to-Davis Project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO stated that the “historic nature of the site will not adversely change” as a result of the project and that the proposed bridge “will not adversely effect” the interpretation of the physical remnants of the site.
- In a letter dated April 14, 2004, the USFS MNF concurred with the findings of the Final COE Report. The USFS MNF letter stated that the Parsons-to-Davis Project “would have no effect to contributing elements of the District, and recommend[ed] that project activities proceed as planned.”
- Corridor H Alternatives did not submit comments on the Final COE Report.

On May 13, 2004, at the request of Advisory Council on Historic Preservation (ACHP) staff, FHWA transmitted a copy of the Final COE Report to the ACHP, and requested concurrence from the ACHP with the Final COE Report’s “no adverse effect” finding.
5.8 INTEGRATED NEPA/404 PERMIT PROCESS

The Corridor H Project, in its entirety, including the 1994 Alignments Selection Draft Environmental Impact Statement (ASDEIS), the subsequent Final Environmental Impact Statement (FEIS) in 1996 was conducted following the guidelines and philosophy of the integrated NEPA/404 process as detailed in FHWA Region 3’s agreement with various federal agencies (i.e. USFWS, USEPA and USACE) entitled Integrating NEPA/404 for Transportation Projects (1992) and USDOT’s publication Applying the Section 404 Permit Process to Federal-Aid Highway Projects (1988).

Appropriately, the Parsons-to-Davis SEIS process (including this SFEIS) continues to follow the integrated NEPA/404 process. As summarized in the 1996 FEIS, “This process integrates requirements of the National Environmental Policy Act as they pertain to highway projects with those requirements of Section 404 of the Clean Water Act (CWA) to facilitate highway planning activities while encouraging the avoidance and minimization of encroachments into waters of the U. S., particularly wetlands. Additionally, state agencies were coordinated with and made part of the process. State and federal agencies were involved at all concurrence points of the project.” A complete list of all coordination meetings, subjects and attendees at those meetings can be found in Section VII: Comments and Coordination. All agency and public comments are provided in Appendix A.

As part of the Integrated NEPA/404 Process, a Section 404 permit application was submitted to the USACE. Additionally, the USACE’s public review process and comment period was integrated into the public review and public hearing process for the proposed highway project. This information is incorporated by reference; detailed information including recordation of the extensive agency coordination and public involvement process, including all meeting dates and comment letters are provided in the 1996 FEIS.
<table>
<thead>
<tr>
<th>ISSUE OR RESOURCE</th>
<th>No-Build</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>2(^2)</th>
<th>OPA(^3)</th>
<th>ROPA/Preferred Alternative(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainline Length (miles)</td>
<td>11.80</td>
<td>11.15</td>
<td>10.99</td>
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<td>9.96</td>
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<td>Cost (millions)(^5)</td>
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<td>209.6</td>
<td>218.2</td>
<td>208.1</td>
<td>209.4</td>
<td>194.4</td>
<td>163.0</td>
<td>142.4</td>
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<td>538</td>
<td>514</td>
<td>501</td>
<td>499</td>
<td>510</td>
<td>352</td>
<td>396</td>
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<td>Roadway Earthwork Volumes(^6)</td>
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<tr>
<td>- Borrow (MCY)</td>
<td>N/A</td>
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<td>4.85</td>
<td>6.04</td>
<td>0.42</td>
<td>0.42</td>
<td>0.00</td>
<td>0.00</td>
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<td>- Waste (MCY)</td>
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<td>7.86</td>
<td>7.86</td>
<td>4.29</td>
<td>2.53</td>
<td>2.46</td>
<td>11.40</td>
<td>15.07</td>
<td>1.13</td>
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<td>ROAD/Preferred Alternative(^7)</td>
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<td>Total Borrow and Waste (MCY)</td>
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<td>12.71</td>
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<td>-80%</td>
<td>-80%</td>
<td>-80%</td>
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<td>11</td>
<td>10</td>
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<td>- Residential</td>
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<tr>
<td>- PEM</td>
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<td>0.98</td>
<td>1.01</td>
<td>2.04</td>
<td>0.46</td>
<td>0.26</td>
<td>4.26</td>
<td>5.79</td>
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<td>- PSS</td>
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<td>0.72</td>
<td>0.34</td>
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<td>0.72</td>
<td>1.01</td>
<td>1.08</td>
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<td>Total</td>
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<td>1.73</td>
<td>5.86</td>
<td>0.66</td>
<td>1.03</td>
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<tr>
<td>- Impact length (linear feet)</td>
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<td>5,159</td>
<td>5,187</td>
<td>6,732</td>
<td>3,775</td>
<td>4,139</td>
<td>9,495</td>
<td>9,561</td>
<td>9,277</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>3.2</td>
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</tr>
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<td>Potential impact to WVNFS Habitat(^8)</td>
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<tr>
<td>Monongahela Nat'l Forest (MNF) (acres)</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>- MPA 3.0</td>
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<td>91</td>
<td>91</td>
<td>95</td>
<td>88</td>
<td>88</td>
<td>57</td>
<td>107</td>
<td>120</td>
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<tr>
<td>- MPA 6.1</td>
<td>N/A</td>
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<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>11</td>
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<tr>
<td>- Effects on NRHP Eligible/Listed Resources (Blackwater Industrial Complex Archaeological and Historic District)</td>
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<td>No Effect</td>
<td>No Effect</td>
<td>No Effect</td>
<td>No Effect</td>
<td>No Effect</td>
<td>No Effect</td>
<td>No Adverse Effect</td>
<td>No Adverse Effect</td>
</tr>
</tbody>
</table>

**Table S-2**

Updated Summary of Impacts by Alternative

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\(^1\) Additional engineering was performed on the ROPA after the submittal of the December 2003 Preferred Alternative (PA) Report. Therefore, impact numbers for streams and wetlands will differ slightly between the December 2003 PA report, the January 2004 Amended PA report and what is reported in this summary table and Section III of this SFEIS. Also, the TR is incorporated into the ROPA/Preferred Alternative so its impact information is included as part of the ROPA/Preferred Alternative.

\(^2\) The TR has been incorporated into these alternatives.

\(^3\) Based on current average construction costs, including such variables as earthwork, drainage, pavement and bridging. Does not include cost of ROW or utility relocations.

\(^4\) Each alternative was divided into reasonable segments (construction contract sections with reasonable haul distances), and evaluated as such. Hence, one segment may have borrow and another segment waste. The volumes shown above are a summation of these sub-sections, so the alternative as a whole has borrow quantities and waste quantities. The segments (or construction contract sections) will be further refined as the project moves forward into final engineering design. There are environmental impacts associated with both borrow and waste activities. Generally, if the amount of cut is greater than fill then waste will be generated, if the amount of cut is less than fill then borrow material must be obtained. Waste and borrow amounts should be viewed in total (added together).

\(^5\) The facilities include the scales and scale house of the Tucker County Landfill. The facilities would need to be moved due to construction of these alternatives.

\(^6\) Indicates the potential expansion area of the Tucker County Landfill.

\(^7\) Wetland impacts for the Parsons-to-Davis Project have been mitigated per the 1996 Record of Decision and Section 404 Permit.

\(^8\) The USFWS has stated that "...FHWA and the WVDOT have selected the least damaging practicable project construction alternative in regards to the direct removal of G. s. fuscus habitat. "Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized." Further, the BO specifically states, "After reviewing the current status of the G. s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services' biological opinion that constructing Corridor H, Parsons to Davis, as proposed, is not likely to jeopardize the continued existence of the G. s. fuscus."
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S.9 IDENTIFICATION OF A PREFERRED ALTERNATIVE

The development of alternatives and the process leading to the identification of a Preferred Alternative are presented in graphic form in Figure S-1. An extensive alternatives analysis was performed for the project, which involved a multiple level screening process in the SDEIS, refining and re-analyzing several alternatives following the issuance of the SDEIS, and ultimately selecting a Preferred Alternative. The SDEIS screening process eliminated the IRA and six (6) of the Blackwater Avoidance Alignments. In December 2002, the SDEIS was approved and circulated for review and comment. The comments received on the SDEIS were taken into consideration in modifying the alternatives studied and identifying the Preferred Alternative. Formal responses to these comments are included Appendix A.

Following the SDEIS, small but important changes were made to the OPA. These changes included:

- providing a connection to Tucker County High School (TCHS) from the Corridor H mainline;
- incorporating a slight shift south in the vicinity of Middle Run to avoid a possible population of the WVNFS; and
- incorporating the Truck Route (a two-lane roadway that would reduce truck traffic in the town of Thomas).

The alternative that incorporates these changes is referred to in this SFEIS as the Revised OPA, or ROPA.

After consideration of engineering constraints, environmental impacts, and public and agency comments, the ROPA was identified as the Preferred Alternative for the Parsons-to-Davis Project because:

- It best achieves the purpose and need for the project;
- It is similar to the other alternatives in terms of its overall environmental impacts; and in the areas where its impacts are greater (e.g., wetlands), the impacts have been mitigated;
- It is $35.9 million less expensive than the OPA; and, in particular, is at least $56.5 million less expensive than the least expensive of the Blackwater Avoidance Alternatives;
- It is consistent with applicable regulatory requirements, including Section 4(f); and
- It would have the least impact of the Build Alternatives on the WVNFS.

S.9.1 POST-SDEIS COORDINATION

After identifying a Preferred Alternative, FHWA and WVDOH coordinated with the cities of Thomas and Davis and with resource agencies in order to receive their feedback before preparation of an SFEIS. This coordination, which was required by the Settlement Agreement, is presented in a timeline/flowchart format in Figure S-1 above.

In July of 2003, WVDOH transmitted letters to the Mayors of Thomas and Davis, West Virginia, initiating the a 60-day review period as prescribed in the Settlement Agreement. The letters described the ROPA and identified it as WVDOH's Preferred Alternative for the Parsons-to-Davis Project. Following receipt of the letter, the Davis City Council adopted a resolution that supported construction of the ROPA, and the Thomas City Council adopted a resolution supporting a Blackwater Avoidance Alternative. Copies of these letters and resolutions are provided in Appendix A.

Since one of the City Councils (Davis) passed a resolution supporting an alternative located within the Blackwater area, FHWA and WVDOH had the right under the Settlement Agreement to discontinue consideration of the Blackwater Avoidance Alternatives without preparing an SFEIS. However, while the Settlement Agreement allowed this flexibility, FHWA and WVDOH determined that the National Environmental Policy Act (NEPA) required preparation of an SFEIS in order to ensure a complete analysis of new issues that had not been contemplated at the time of the Settlement Agreement, such as WVNFS habitat.
In January 2004, FHWA and WVDOH circulated a Preferred Alternative Report (dated December 2003) to the resource agencies. This report detailed the refined analyses performed since the SDEIS, described the ROPA, and identified the ROPA as the Preferred Alternative. An Amended Preferred Alternative Report (dated November 2004) was circulated in November 2004, which included additional information, documented additional studies, and reaffirmed the ROPA as the preferred alternative (Figure S-1).

Additionally, throughout this period, FHWA and WVDOH continued to consult with the USFWS with regard to the WVNFS. After a Revised BA was prepared in August 2004, USFWS concurred with the finding that all Build Alternatives will have adverse impact, and that the ROPA would have the least impact. This conclusion was reflected in the Amended Preferred Alternative Report (November 2004).

Following the circulation of the Amended Preferred Alternative Report, FHWA and WVDOH received comments from resource agencies, as follows:

- In a letter dated February 7, 2005, the USEPA concurred with the selection of the ROPA as the Preferred Alternative for the Parsons-to-Davis Project.
- In a letter dated March 18, 2005, the USFWS recommended that the ROPA be selected as the Preferred Alternative for the Parsons-to-Davis Project.
- In a letter dated January 15, 2005, the WVDNR did not support nor did it oppose the selection of the ROPA as the Preferred Alternative for the Parsons-to-Davis Project. The letter does continue to cite the WVDNR’s concerns about the environmental impacts of the ROPA while acknowledging WVDOH’s need to acknowledge cost considerations and savings.

S.10 OTHER GOVERNMENT ACTIONS REQUIRED

Before project construction begins, it may be necessary for WVDOH to modify permits and certifications that were issued for the OPA in 1996, or to seek new permits and certifications. Relevant permits and certification include:

- Section 404 Clean Water Act Permit (United States Army Corps of Engineers, Pittsburgh District);
- West Virginia NPDES Permit (West Virginia Division of Environmental Protection);
- West Virginia Stream Activity Permit (West Virginia Public Land Corporation); and
- West Virginia Section 401 Water Quality Certification (West Virginia Division of Environmental Protection).
In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002.

In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

1.1 PROJECT BACKGROUND

The West Virginia Department of Transportation (WVDOT), Division of Highways (WVDOH), in conjunction with the Federal Highway Administration (FHWA), is proposing to construct an approximately 9-mile long highway between Parsons and Davis in Tucker County, West Virginia. This Parsons-to-Davis Project is a component of the original Appalachian Corridor H Project (Corridor H), which is a proposed east-west route connecting I-79 at Weston, West Virginia to I-81 at Strasburg, Virginia. Corridor H has a long history of legislation, planning, environmental documentation, and decision-making (Figure I-1).

1.1.1 HISTORY OF APPALACHIAN CORRIDOR H

In 1965, Congress enacted the Appalachian Regional Development Act (ARDA). ARDA established the Appalachian Regional Commission (ARC), which was composed of the governors of 13 states in Appalachia, plus one member appointed by the President. ARC was given responsibility for coordinating development of the Appalachian Development Highway System (ADHS). As authorized by ARDA, the ARC designated 28 corridors as part of the ADHS, including Corridor H, an east-west route connecting I-79 at Weston, West Virginia to I-81 at Strasburg, Virginia.
Consistent with the goals of ARDA, the purpose of Corridor H is to stimulate economic development in rural, northeastern West Virginia by linking existing north-south routes in the area with a new east-west highway that meets the design standards adopted by the ARC for all highways in the ADHS.

Between the early 1980s and the early 1990s, WVDOT completed the portion of Corridor H between I-79 and Elkins, West Virginia, a distance of approximately 40 miles. Environmental studies for the remainder of Corridor H, from Elkins, West Virginia to I-81 in Virginia, were conducted during the early 1980s and put on hold until 1990 due to a lack of funding. In 1990, WVDOT, FHWA, and the Virginia Department of Transportation (VDOT) began to conduct supplemental environmental studies for the remainder of Corridor H, from Elkins to I-81. Due to the size and complexity of the project, the Draft Environmental Impact Statement (DEIS) was prepared in two stages: first, a Corridor Selection Supplemental Draft Environmental Impact Statement (CSDEIS), which was issued in 1992, and then an Alignment Selection Supplemental Draft Environmental Impact Statement (ASDEIS), which was issued in 1994.

A Preferred Alternative was identified for the project in the 1996 Corridor H Final Environmental Impact Statement (FEIS). In August of 1996, FHWA issued the Record of Decision (ROD) approving the alignment for Corridor H between Elkins and the West Virginia/Virginia state line. (No decision was made on the portion of Corridor H in Virginia because VDOT had withdrawn from the project in January 1995.)

1.1.1.1 Corridor H Lawsuit and Settlement Agreement

In late 1996, a lawsuit was filed that challenged the 1996 Corridor H ROD in the U.S. District Court in Washington, DC. In 1999, the case was referred to mediation proceedings, which resulted in a Settlement Agreement (filed February 7, 2000, Corridor H Alternatives v. Slater, 96-CV-2622 [TFH], U.S. District Court for the District of Columbia) (Appendix B). The terms of the Settlement Agreement are legally binding with regard to subsequent environmental studies, procedures, and resolutions prescribed.

The Settlement Agreement divides the 100-mile long Corridor H project between Elkins and the West Virginia/Virginia state line into nine separate projects. Figure I-2 shows these nine projects and shows the Northern Elkins bypass, also part of Corridor H, which was constructed under the 1996 ROD as specified by the court. One of these nine projects, the Parsons-to-Davis Project, is the subject of this Supplemental Final Environmental Impact Statement (SFEIS).

Each of these nine projects: (i) furthers the overall objective of completing Corridor H as a whole in West Virginia, in accordance with the goals of the ARDA; (ii) serves its own independent transportation purposes by providing faster, safer, and higher-capacity transportation linkages between existing transportation routes and population centers; and (iii) is to be approved in an Amended ROD as a stand-alone transportation improvement. The Amended ROD for each project can be issued only after specific requirements listed in the Settlement Agreement and other regulatory requirements for that project, including National Environmental Policy Act (NEPA) requirements, have been satisfied.

To date, Amended RODs have been issued for eight of the nine projects: Elkins-to-Kerens, Kerens-to-Parsons, Davis-to-Bismarck, Bismarck-to-Forman, Forman-to-Moorefield, Moorefield-to-Baker, Baker-to-Wardensville, and Wardensville-to-Virginia State Line. The Parsons-to-Davis Project, which is the subject of this study, is the only section of Corridor H for which an Amended ROD has not yet been issued.
1.1.1.2 Parsons-to-Davis Project

The Parsons-to-Davis Project begins east of Parsons, 0.2 mile north of the intersection of Tucker County Route (Tucker Co.) 219/4 and United States Route (US) 219 intersection, and 0.42 mile northeast of the intersection of US 219 and West Virginia State Route (WV) 32. The proposed facility will be a four-lane divided highway with partial control of access. The facility will be built primarily on a new location.

The proposed Parsons-to-Davis project will: expedite the movement of east-west traffic across Backbone Mountain, provide access to and from the communities of Parsons, Thomas, and Davis, and provide access to and from the recreational facilities of Canaan Valley (located south of the project). The project will also contribute to satisfying the purpose and need identified for the entire Appalachian Corridor H Project as provided in the 1996 Corridor H FEIS. The project’s purpose and need is discussed in greater detail in Sections 1.2 and 1.3.
Figure I-2
Appalachian Corridor H Settlement Agreement Project Areas
1.1.2 SETTLEMENT AGREEMENT REQUIREMENTS

The Settlement Agreement (Appendix B) requires FHWA and WVDOT to prepare a Supplemental Environmental Impact Statement (SEIS) for the “Thomas-Davis section” of the Parsons-to-Davis Project. The primary purpose of the SEIS process is to develop and evaluate alternatives for avoiding an area designated in the Settlement Agreement as the “Blackwater Area.” For that reason, the SEIS for the Parsons-to-Davis Project has been referred to as the Blackwater Avoidance Study or Blackwater Avoidance SEIS. The Settlement Agreement contains several important stipulations regarding this SEIS and the Parsons-to-Davis Project.

1.1.2.1 Blackwater Area Avoidance

The Settlement Agreement requires WVDOT and FHWA to prepare an SEIS for a portion of the Parsons-to-Davis Project to determine if avoidance of the Blackwater Area is prudent and feasible. The Blackwater Area is defined in the Settlement Agreement as “the area within and around the Blackwater Valley, south of Thomas, as depicted on Exhibit 4 [of the Settlement Agreement]” (Appendix B). The SEIS is required to evaluate a reasonable range of alternatives for completing the portion of the Parsons-to-Davis Project that surrounds the Blackwater Area. This portion is referred to as the “Thomas-Davis Section” in the Settlement Agreement; however, for the reasons discussed below, the SEIS will address the entire Parsons-to-Davis Project and therefore will not specifically focus on the Thomas-Davis Section.

The Settlement Agreement requires that the range of alternatives evaluated include at least one alternative that avoids the Blackwater Area. In order to develop one or more “Blackwater Avoidance Alignments,” as defined in the Settlement Agreement, a Study Area was established around the north tip of the Blackwater Area (Appendix B). As discussed in the following section, additional sensitive resources discovered in other parts of the Parsons-to-Davis Project warranted expansion of the Study Area beyond that required by the Settlement Agreement. Because the Thomas-Davis Section is part of the Parsons-to-Davis Project, which is the subject of this SFEIS, this SFEIS satisfies the requirements of the Settlement Agreement.

The range of alternatives evaluated must also include the “Blackwater Alignment,” as defined in the Settlement Agreement. This alignment is the portion of the Build Alternative chosen for the entire Corridor H Project, established in the 1996 Corridor H ROD, which passes through the Blackwater Area. Throughout this document, this alternative is referred to as the Original Preferred Alternative or OPA.

The Settlement Agreement further requires that the SEIS evaluate the alternatives to determine whether there is any alternative that (1) is “feasible” and “prudent” and (2) does not “use” any land protected by Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C § 303(c).

1.1.2.2 Additional Settlement Agreement Requirements

In addition to the specific requirements associated with the Blackwater Area, the Settlement Agreement also contains the following requirements associated with the SEIS:

- It requires the establishment of a Community Advisory Group (CAG) to provide input into the development of the SEIS. It also establishes a variety of requirements concerning the membership and operations of the CAG.
- It establishes a process for obtaining comments from the cities of Thomas and Davis following completion of the required comment period on the Supplemental Draft Environmental Impact Statement (SDEIS), and allows all Blackwater Avoidance Alternatives to be eliminated from further consideration following completion of the SDEIS if Thomas or Davis adopts a resolution either opposing those alternatives or supporting an alignment that passes through the Blackwater Area (referred to Blackwater Alternatives in this SFEIS).
• It establishes a set of decision-making requirements that must be followed in selecting a preferred alternative if the Blackwater Avoidance Alternatives have not been eliminated as a result of a resolution by the city of Thomas and/or Davis. (As explained below, the City of Davis has passed a resolution endorsing an alternative that passes through the Blackwater Area, the ROPA, and opposing the Blackwater Avoidance Alternatives; therefore, the decision-making requirements in the Settlement Agreement do not apply to the selection of a preferred alternative for this project.)

• It requires FHWA and WVDOT to ensure that construction limits for the Parsons-to-Davis Project would be located entirely outside of the drainage area for Big Run Bog National Natural Landmark.

• It establishes conditions that must be met before FHWA can issue an Amended ROD for the Parsons-to-Davis Project.

A copy of the Settlement Agreement is provided in Appendix B of this document. A copy can also be viewed or downloaded from the Corridor H website (http://www.wvcorridorh.com/resource/mediate.html) or requested from FHWA.

1.1.3 WEST VIRGINIA NORTHERN FLYING SQUIRREL AVOIDANCE

During the preparation of this SEIS, consultation was re-initiated with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (ESA). This coordination revealed that new habitat information had been developed relative to the endangered West Virginia northern flying squirrel (WVNFS) (Glaucomys sabrinus fuscus). Based on this new habitat definition, newly defined potential WVNFS habitat for the entire Parsons-to-Davis Project was identified and studies (live-trapping) were conducted. These studies determined that WVNFS was present in the vicinity of the Parsons-to-Davis Project. In order to assess potential impacts of the project to the species, further study was warranted; therefore, the entire Parsons-to-Davis Project became the subject of the SEIS.

Findings of the WVNFS studies are detailed in Section 3.3.3.3, and details regarding coordination with the USFWS are provided in Appendix A. The Biological Opinion for the WVNFS is provided in Appendix C.

1.1.4 SEIS REQUIREMENTS

FHWA regulations permit the issuance of an SEIS at any time and require an SEIS whenever the FHWA determines that “[n]ew information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS” (23 CFR §771.130 (a)(2)). Further, FHWA’s Technical Advisory T 6640.8A states, “[w]henever there are changes, new information, or further developments on a project, which result in significant environmental impacts not identified in the most recently distributed version of the draft or final EIS, a supplemental EIS is necessary” (FHWA, 1987, p. 49).

In addition to fulfilling requirements of the Settlement Agreement, this SEIS also serves to fulfill the regulatory requirement for supplemental documentation under FHWA’s NEPA regulations resulting from the “new information” regarding the discovery of the WVNFS within the vicinity of the OPA. Additionally, other issues that have arisen out of the assessment of alternatives in comparison to the OPA have been addressed in the SEIS process, including water quality of Slip Hill Mill Run and associated streams, and impacts associated with revisions and shifts in alignments of the alternatives.

With regard to format, applicable regulations specify that an SEIS should address only the relevant changes or new information: “There is no required format for a supplemental EIS. The supplement needs to address only those changes or new information that are the basis for preparing the
supplement and were not addressed in the previous EIS” (23 CFR 771.130 (a)). “Reference to and summarizing the previous EIS is preferable to repeating unchanged, but still valid, portions of the original document” (FHWA, 1987, p. 49-50).

This SFEIS is prepared pursuant to 23 CFR 771 and 40 CFR 1500 and in accordance with FHWA’s Technical Advisory T 6640.8A, the Settlement Agreement, and other binding laws and regulations. This SFEIS incorporates by reference the 1996 Corridor H FEIS and the subsequent 1996 Corridor H ROD. Where appropriate, this document includes cross-references to information in those previous documents.

1.1.4.1 Integrated NEPA/404 Permit Process

The Corridor H Project, in its entirety, including the 1994 Alignments Selection Draft Environmental Impact Statement (ASDEIS), the subsequent Final Environmental Impact Statement (FEIS) in 1996 was conducted following the guidelines and philosophy of the integrated NEPA/404 process as detailed in FHWA Region 3’s agreement with various federal agencies (i.e. USFWS, USEPA and USACE) entitled Integrating NEPA/404 for Transportation Projects (1992) and USDOT’s publication Applying the Section 404 Permit Process to Federal-Aid Highway Projects (1988).

Appropriately, the Parsons-to-Davis SEIS process (including this SFEIS) continues to follow the integrated NEPA/404 process. As summarized in the 1996 FEIS, “This process integrates requirements of the National Environmental Policy Act as they pertain to highway projects with those requirements of Section 404 of the Clean Water Act to facilitate highway planning activities while encouraging the avoidance and minimization of encroachments into waters of the U. S., particularly wetlands. Additionally, state agencies were coordinated with and made part of the process. State and federal agencies were involved at all concurrence points of the project.” A complete list of all coordination meetings, subjects and attendees at those meetings can be found in Section VII: Comments and Coordination. All agency and public comments are provided in Appendix A.

As part of the Integrated NEPA/404 Process, a Section 404 permit application was submitted to the USACE. Additionally, the USACE’s public review process and comment period was integrated into the public review and public hearing process for the proposed highway project. This information is incorporated by reference; detailed information including recordation of the extensive agency coordination and public involvement process, including all meeting dates and comment letters are provided in the 1996 FEIS.

1.1.5 OBJECTIVES OF THE PARSONS-TO-DAVIS PROJECT SEIS PROCESS

The objectives of the Parsons-to-Davis Project SEIS include:

- To develop one or more alternatives that avoid the Blackwater Area;
- To develop alternatives that minimize impacts to and/or avoid habitat known to be occupied by the endangered WVNFS;
- To consider a range of alternative(s), including the OPA, the Revised OPA or ROPA, Blackwater Avoidance Alternatives as required by the Settlement Agreement, WVNFS avoidance alternatives, and other alternatives as required by applicable laws, regulations, and guidance;
- To determine which alternatives will be carried forward for detailed analysis (Section II: Alternatives Analysis);
- To evaluate and compare the environmental consequences of all reasonable alternatives carried forward for detailed analysis (Section III: Existing Environment and Environmental Consequences);
• To assess whether there is a “feasible” and “prudent” alternative in the Parsons-to-Davis Study Area that does not “use” any land protected by Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C § 303(c) (Section IV: Section 4(f) and 6(f) Analyses); and
• To identify a Preferred Alternative for the Parsons-to-Davis Project.

1.1.6 THE STUDY AREA

As a first step in preparing the SEIS, FHWA and WVDOT identified the Study Area for the project. The Study Area (Figure I-3) was developed in accordance with the Settlement Agreement and known environmental constraints. The Study Area comprises approximately 14 square miles. The Study Area boundaries are discussed below:

• West – The Study Area boundary to the west was defined in the Settlement Agreement (see Appendix B, Settlement Agreement, p. 10) as “from Parsons (at County Route 219/4, 0.2 miles south of US Route 219)…”.
• North – The Study Area boundary to the north was determined by the presence of known WVNFS habitat, high-value wetlands and by transportation function (access and economic development). Because no population center is located north of William, an alternative any farther north would not provide the proper access to Thomas or to recreational areas to the south.
• East – The Study Area boundary to the east was expanded from the definition in the Settlement Agreement in order to accommodate alignment development to the east of the Tucker County Landfill, which is located near the Tucker County Industrial Park along WV 93.
• South – The Study Area boundary to the south corresponds roughly to the southern cut/fill boundary of the OPA, with a buffer zone of approximately 200 feet. This boundary delineation follows the Blackwater Area boundary, as defined in the Settlement Agreement.

The project termini are located in Parsons, West Virginia to the west and Davis, West Virginia to the east.
1.1.7 INITIATION AND SCOPI NG OF THE SEIS

On May 2, 2000, FHWA issued a Notice of Intent (NOI) in the Federal Register to advise the public that an SEIS would be prepared for the Thomas-Davis Section of the Parsons-to-Davis Project.

On June 14, 2000, an agency scoping meeting was conducted and a public information meeting was held in Canaan Valley, West Virginia. At that time, as stipulated in the Settlement Agreement, the focus of the SEIS was concentrated in the vicinity of the cities of Thomas and Davis, West Virginia. In December 2000, an additional agency coordination meeting was conducted.

On January 19, 2001, a public information meeting was held to educate the public and resource agencies about the environmental constraints associated with the project as well as preliminary Build Alternative alignments under consideration.

In May 2001, the federally endangered WVNFS was discovered in the vicinity of the Parsons-to-Davis Project. Additional studies were conducted to evaluate the potential habitat for the WVNFS and any potential impacts that might be associated with the Parsons-to-Davis Project. In August 2001, an additional agency coordination meeting was conducted to discuss the presence of the WVNFS in the vicinity of the project.

Because of potential impacts to a federally listed endangered species, FHWA issued a revised NOI on October 9, 2001 to advise the public that the limits of the SEIS Study Area were expanded from the original Thomas-Davis Section of the Parsons-to-Davis Project to include the entire Parsons-to-Davis Project. Information regarding the expanded SEIS Study Area was also presented at an additional public information meeting held on October 23, 2001.

Section VII: Comments and Coordination provides more detailed information on the scoping process and initiation of the SEIS.

1.2 NEEDS ANALYSIS

The Parsons-to-Davis Project is a component of the Appalachian Corridor H Project. As a section of that corridor, it is expected to address the needs identified in the 1996 Corridor H FEIS, which include:

- Improving east-west transportation through northeastern West Virginia.
- Promoting economic development in the region.
- Preserving or improving the quality of life in the region.

Additionally, at the local level, communities have identified two specific “quality of life” needs that could be addressed by the Parsons-to-Davis Project:

- Reduce truck traffic through the City of Thomas.
- Improve emergency response times and access to emergency facilities.

These needs are discussed below.

1.2.1 IMPROVE EAST-WEST TRANSPORTATION

1.2.1.1 System Linkage

System linkage refers to the role of a proposed project in closing gaps in the existing transportation network. At the local level, there is a need for a better link between Parsons, the Tucker County seat; Elkins, the Randolph County seat and the location of the closest hospital facility; and the communities of Thomas and Davis. The Study Area is the intersection of several major regional transportation routes – US 219, WV 93, and WV 32 – and is the northernmost access point to various recreational facilities (e.g., Canaan Valley State Park and Blackwater Falls State Park).

The need for improved system linkage at the local level reflects the deficiencies of the existing east-west route: US 219-to-WV 32-to-WV 93. The existing east-west route consists of two-lane
roadways with numerous design deficiencies (e.g., narrow shoulders and sharp curves), few passing opportunities, and no control of access. An inventory of design deficiencies indicated:

- Over 80% of the route is designated “no-passing” zones (roughly 9 of 11 miles);
- Over 50% of the horizontal curves are geometrically deficient (45 out of 80) when compared to current design standards (AASHTO, 1994); and
- Over 80% of the route has inadequate stopping sight distances when compared to current design standards (AASHTO, 1994).

These deficiencies contribute to poor driving conditions. The average safe travel speed on the existing east-west route is 35 to 45 mph for passenger vehicles and 30 to 40 mph for trucks. The average travel time between Parsons and Davis is 21 to 27 minutes for passenger vehicles and 24 to 32 minutes for trucks.

As shown in Table I-1, traffic volumes on this existing east-west route are moderate but the percentage of truck traffic is relatively high. The existing Level of Service (LOS) of the route ranges from LOS C to LOS D. LOS is a measurement of traffic congestion on a scale from LOS A (free-flowing conditions) to LOS F (severe congestion). Generally, in rural areas, the lowest acceptable LOS is LOS C (AASHTO, 1994). While the LOS on some parts of the existing east-west route is not expected to worsen, the Average Daily Traffic (ADT) is expected to increase over time. By 2013, all parts of the route will be operating at LOS D or worse, which are considered unacceptable in rural areas.

The completion of a four-lane, divided highway between Parsons and Davis would address the system linkage, roadway deficiency, and level of service problems identified here.

### Table I-1

<table>
<thead>
<tr>
<th>Segment</th>
<th>Length (in miles)</th>
<th>1999 ADT</th>
<th>1999 LOS</th>
<th>2013 No-Build ADT</th>
<th>2013 No-Build LOS</th>
<th>2020 No-Build ADT</th>
<th>2020 No-Build LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 219—from CR 31 (East of Parsons) to WV 32 (Thomas)</td>
<td>9</td>
<td>2,300</td>
<td>D</td>
<td>3,200</td>
<td>D</td>
<td>3,700</td>
<td>D</td>
</tr>
<tr>
<td>WV 32—from US 219 W (Thomas) to WV 93 (Davis)</td>
<td>2</td>
<td>4,200</td>
<td>C</td>
<td>5,900</td>
<td>D</td>
<td>6,700</td>
<td>D</td>
</tr>
</tbody>
</table>

### 1.2.1.2 Safety

Accident and injury rates, typically expressed as the number of accidents or injuries per 100 million vehicle miles of travel, can indicate the safety of existing roadways.

Table I-2 illustrates the projected accident and injury rates for the existing east-west route (US 219-WV 32-WV 93) (utilizing the statewide average between 1996 and 1998) and the projected accident and injury rates for similar road types in West Virginia during the same projected periods. The construction of the Parsons-to-Davis Project is expected to reduce accident and injury rates in two ways:

- By lowering the number of accidents on the existing east-west route because fewer cars will use this route; and
- By shifting a majority of the east-west traffic to a new route designed to meet current safety and geometric design standards with a lower accident rate.
Table I-2
Accident and Injury Rates for the Principal Existing East-West Route (US 219-WV 32) in the Study Area

<table>
<thead>
<tr>
<th>Segment</th>
<th>Year</th>
<th>Total Accidents</th>
<th>Total Injuries</th>
<th>Accident Rate(^1)</th>
<th>Injury Rate(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 219/WV 32 (Parsons-to-Davis) No-Build</td>
<td>Avg. 96-98</td>
<td>17</td>
<td>11</td>
<td>196</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>26</td>
<td>18</td>
<td>196</td>
<td>131</td>
</tr>
<tr>
<td>Corridor H (Parsons-to-Davis)(^3) Build</td>
<td>2020</td>
<td>31</td>
<td>20</td>
<td>196</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>30(^4)</td>
<td>18</td>
<td>68(^5)</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>38(^4)</td>
<td>23</td>
<td>68(^5)</td>
<td>41</td>
</tr>
</tbody>
</table>

\(^1\) Rate per 100 million vehicle miles of travel.
\(^2\) The injury rate for Corridor H was assumed to be 0.6. This was based on the assumption that the injury rate for Corridor H would be between the rate for rural primary routes (0.667 injuries per accident) and the rate for rural interstates, which have full access control (0.53 injuries per accident).
\(^3\) Accident/Injury Rate for Corridor H only.
\(^4\) The total number of accidents on Corridor H is higher than the total number on existing routes (US 219 and WV 32) because Corridor H carries more traffic than those existing routes. The higher traffic volumes result in more total accidents, even though Corridor H provides a safer experience for each individual driver. The increased safety provided by Corridor H is reflected in its lower accident rate, which is shown in the above table.
\(^5\) The accident rate for Corridor H is based upon the completed section of Corridor H from I-79 to Norton, West Virginia, west of Elkins.

1.2.2 PROMOTE ECONOMIC DEVELOPMENT AND PRESERVE/IMPROVE QUALITY OF LIFE

At the local level, the communities have identified two specific “quality of life” needs that could be addressed by the Parsons-to-Davis Project:

- Reduce the truck traffic through Thomas; and
- Improve emergency response times and access to emergency facilities.

In addition, a safer east-west transportation route would improve the quality of life for residents in the area. If all of these “quality of life” issues were improved, the Study Area would be more attractive for future economic development.

1.2.2.1 Truck Traffic

The completion of the project will reduce truck traffic through Thomas and on the existing roads in the Study Area in general, by attracting a substantial percentage of regional truck traffic onto the new facility. However, the ability of the project to achieve a reduction in truck traffic depends on the location and accessibility of the new highway. If the route provides significant time savings for truck trips, it will tend to divert truck traffic off existing roadways. However, if the route is too indirect, truck traffic will tend to remain on existing roadways and continue to inhibit quality of life in the City of Thomas.

1.2.2.2 Emergency Services Access

Tucker County does not have a hospital. The nearest full-service West Virginia hospital is Davis Memorial Hospital, located in Elkins, West Virginia. While Garrett Memorial Hospital in Maryland is 11 miles closer to Thomas than Davis Memorial, only 20 percent of emergency patients are transported to Garrett Memorial, while 40 percent are transported to Davis Memorial. The remaining 40 percent are either transported to other medical facilities or not transported (Stemple, 2001). The only medical facility in the Study Area is Cortland Acres Nursing Home, west of Thomas on US 219.
Emergency care and transport in Tucker County is provided by the Tucker County Emergency Ambulance Authority with stations in the following locations:

- Parsons Emergency Medical Service (EMS), Main Street (two ambulances);
- Thomas EMS, US 219 west of Thomas next to Courtland Acres (one ambulance); and,
- Canaan Valley EMS, WV 32 across from Deerfield Village (one ambulance).

Response times vary according to emergency location and road conditions. According to EMS licensure procedure, all of the Tucker County stations arrive on scene in less than 40 minutes, which is considered the middle range for a rural station (Stemple, 2001).

The trip from the Study Area to Davis Memorial requires approximately 50 minutes on the existing road network. Because the existing roadways are winding, the ability of technicians to administer care in transit is limited.

Law enforcement services are provided by the West Virginia State Police and the Tucker County Sheriff’s Office, both dispatched from Parsons. Tucker County fire protection is provided by four Volunteer Fire Departments (VFDs): Parsons, Thomas, Davis, and Canaan Valley. While the Thomas VFD is the most likely to respond to an incident in the Study Area, others are dispatched if necessary.

The construction of the proposed Parsons-to-Davis Project would decrease the travel time from the far end of the Study Area to the hospital in Elkins by approximately 10 minutes. It would also provide a less winding, more consistent roadway that would interfere less with medical technicians’ efforts to administer care in an ambulance. It would improve travel times between Parsons and the Study Area, such that the response of law enforcement would be improved. Finally, it is expected to improve the response for VFDs located outside the Study Area when they are needed to assist the Thomas VFD.

1.3 PURPOSE OF THE PARSONS-TO-DAVIS PROJECT

Based on the identified needs discussed above, the purpose of the Parsons-to-Davis Project is to:

- Improve east-west transportation through northeastern West Virginia.
- Promote economic development in the region.
- Preserve or improve the quality of life in the region in general, and specifically by:
  - reducing truck traffic through the City of Thomas.
  - improving emergency response times and access to emergency facilities.

1.4 PARSONS-TO-DAVIS PROJECT SEIS STATUS

The Supplement Draft Environmental Impact Statement (SDEIS) for the Parsons-to-Davis Project was approved by FHWA and circulated for agency and public comment in December 2002. In 2003 and 2004, Preferred Alternatives Reports (original and amended) were prepared and circulated for agency review and concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. Comments received on this SFEIS will be reviewed and substantive comments will be addressed in the Amended Record of Decision (AROD). Figure I-4 presents a timeline of the project.
Figure I-4
Parsons-to-Davis Project Timeline
SECTION II: ALTERNATIVES ANALYSIS

In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002.

In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

2.1 HISTORY OF ALTERNATIVES CONSIDERED FOR CORRIDOR H

Alternatives for the overall Appalachian Corridor H Project (Corridor H) have been evaluated in five previous National Environmental Policy Act (NEPA) documents. Each document contains a complete discussion of alternatives developed, considered, and eliminated from detailed analysis. These documents are:

- 1992 Corridor Selection Draft Environmental Impact Statement (CSDEIS) - this document studied a broad range of potential corridors for the Corridor H alignment.
- 1993 Corridor Decision Document - this document selected Option D-5 Corridor from the CSDEIS for detailed alignment studies. The document recognized that “it may become necessary to develop a specific alignment outside, but in the general vicinity of the selected corridor for the express purpose of avoiding important sensitive resources.”
- 1994 Alignment Selection Draft Environmental Impact Statement (ASDEIS) - this document studied a broad range of potential alignments within the selected Option D-5 Corridor, along with the No-Build Alternative and an Improved Roadway Alternative.
- 1996 Final Environmental Impact Statement (FEIS) - this document identified Option D-5 Corridor as the preferred corridor within which the Preferred Alignment Alternative (Line A) would be constructed for Corridor H as a whole.
- 1996 Record of Decision (ROD) - this document approved Option D-5 Corridor as the preferred corridor within which the Preferred Alignment Alternative (Line A) would be constructed for Corridor H as a whole.

2.2 RANGE OF ALTERNATIVES FOR THE PARSONS-TO-DAVIS PROJECT

2.2.1 DEVELOPMENT OF ALTERNATIVES

According to the Settlement Agreement, the Federal Highway Administration (FHWA) and the West Virginia Department of Transportation (WVDOT), Division of Highways (WVDOH) will evaluate a reasonable range of alternatives for the Parsons-to-Davis Project that will include at least one “Blackwater Avoidance Alignment” and the “Blackwater Alignment”. A Blackwater Avoidance Alignment is defined in the Settlement Agreement as “any alignment for Corridor H that is located entirely outside the Blackwater Area” (Appendix B, Settlement Agreement, p. 6). The “Blackwater Alignment” is defined in the Settlement Agreement as “the alignment for the Thomas-Davis Section that FHWA approved in the August 1996 Corridor H ROD, or any other alignment for the Thomas-Davis Section that is located at least partly within the Blackwater Area.” The Blackwater Area is defined as “the area within and around the Blackwater Valley, south of Thomas” (Appendix B,
Settlement Agreement, p. 6). The alignment approved by FHWA in the August 1996 Corridor H ROD is referred to as the Original Preferred Alternative (OPA) in this document.

The Settlement Agreement does not establish a minimum number of Blackwater Avoidance Alternatives that must be considered. However, the National Environmental Policy Act (NEPA) requires that all reasonable alternatives be considered. Therefore, a range of alternatives has been developed through a scoping process consistent with FHWA regulations and guidelines. The alternatives identified and studied in the Parsons-to-Davis NEPA process satisfy FHWA’s and WVDOT’s obligations under NEPA and the Settlement Agreement. This process is illustrated in Figure II-1.

![Figure II-1](image)

**Figure II-1**

**Corridor H: The Road to a Preferred Alternative**

WVDOT and FHWA identified and considered multiple factors in identifying the range of alternatives to be studied in the Supplemental Environmental Impact Statement (SEIS) and in evaluating these alternatives for the Parsons-to-Davis Project. These factors include: (i) environmental constraints and (ii) engineering constraints. A discussion of each of these factors is provided below. All Build Alternatives were developed to fulfill engineering guidelines and to avoid other potential environmental impacts where practicable.

### 2.2.2 CONSIDERATION OF ENVIRONMENTAL CONSTRAINTS

The locations of environmental constraints in the Study Area were initially identified from existing data sources (e.g., aerial photographs, wetlands mapping, agency file mapping) and information obtained from previous Corridor H environmental documents. These data were then compiled and refined by field investigations, entered into a computer-managed, geo-referenced mapping program
and laid over geo-referenced United States Geological Survey (USGS) digital topographic mapping (scale 1” = 2000’) for preliminary environmental analysis and engineering.

Multiple environmental constraints within the Study Area influenced the alternatives that were reasonable, and thus would be studied in detail in the SEIS. These baseline environmental constraints were presented to resource agencies on December 14, 2000 and to the public on January 18, 2001, and included:

- Refuse Sites (e.g., the Tucker County Landfill);
- Wetlands;
- Endangered Species Habitats;
- Potential Displacements (residential, commercial, and industrial);
- Historic Properties;
- Mines;
- Community Services; and,
- Recreational Facilities.

Baseline environmental constraints are shown in Exhibit II-1. Environmental constraints that were of particular importance in evaluating alternatives due to their environmentally sensitive nature included West Virginia Northern Flying Squirrel (WVNFS) habitat, Big Run Bog, and Slip Hill Mill Run.

2.2.2.1 Big Run Bog and Slip Hill Mill Run

During environmental studies conducted in the 1990s, Big Run Bog was identified within the Study Area. Big Run Bog is located on the southeast flank of Backbone Mountain in the Monongahela National Forest, in Tucker County, West Virginia (Exhibit II-1). Designated a National Natural Landmark in December 1974, Big Run Bog is a relict Pleistocene high altitude northern sphagnum-red spruce bog far south of its normal range, with a substantial number of rare plants and animals. The OPA, which was located approximately one half mile north of the bog, did not directly impact this unique wetland resource.

While the 1996 Corridor H FEIS addressed Big Run Bog and presented results of the FHWA’s Section 4(f) analysis, the WVDOH received additional comments regarding Big Run Bog from the National Park Service (NPS) in March 1997. In response to those comments, WVDOT conducted additional studies and analyses to determine the potential impact of the OPA on Big Run Bog’s contributing watershed, and developed alternative alignments that would avoid any encroachment on the Big Run Bog watershed. In 1998 the OPA was shifted (post-1996 ROD) to the north-northwest to further avoid direct impact to Big Run Bog and its watershed. The alignment shift to avoid the Big Run Bog watershed placed the alignment alternatives for the Parsons-to-Davis Project within the Slip Hill Mill Run and Mill Run watersheds (Figure II-2).
Figure II-2
SFEIS Sensitive Watersheds
Slip Hill Mill Run and Mill Run support native brook trout (*Salvelinus fontinalis*) populations which are very sensitive to changes in stream condition, especially increases in temperature and sedimentation (Etnier and Starnes, 1993). In May 2004, the United States Forest Service (USFS MNF) provided comments to the Parsons-to-Davis Project’s Preferred Alternative Report (December 2003) that was circulated for agency comment in January 2004. While supporting efforts to avoid Big Run Bog watershed, the USFS MNF expressed concern that the construction of the Parsons-to-Davis Project may increase the sediment burden of Slip Hill Mill Run and Mill Run, which may impact brook trout reproductive success within these streams. In response to these comments, the WVDOT conducted additional studies of these streams to characterize existing stream debris load and water quality, to determine if brook trout use the headwater tributaries of Slip Hill Mill Run and Mill Run, and to better assess the potential direct and indirect impacts to these sensitive streams. In addition, West Virginia University began long-term water chemistry, benthic macroinvertebrate, and fish surveys within Slip Hill Mill Run, in accordance with environmental commitments made in Volume III of the 1996 Corridor H FEIS.

### 2.2.2.2 West Virginia Northern Flying Squirrel (WVNFS)

During preparation of the SEIS, FHWA and WVDOT re-initiated informal consultation with the United States Fish and Wildlife Service (USFWS) for the WVNFS under Section 7 of the Endangered Species Act. Consultation was re-initiated because:

1. new information on the ecological habitat requirements and distribution of the WVNFS had been gained since 1996;
2. a post-1996 ROD alignment shift in the OPA to avoid Big Run Bog and its watershed had not been surveyed for WVNFS; and
3. the alternatives being developed to avoid the Blackwater Area in accordance with the Settlement Agreement also needed to be surveyed for the WVNFS.

Live-trapping surveys were conducted in potential habitat along alignments being developed for the SEIS and in the area of the OPA shift by Big Run Bog. Twenty-one WVNFS were captured in an area along Big Run and two were captured in an area near Middle Run. Subsequently, USFWS recommended that WVDOT identify and investigate an alternative that would avoid these capture areas (letter dated August 24, 2001, Appendix A).

A habitat suitability study was undertaken to assist in the development of alignments that would avoid the WVNFS. This study involved three separate but related activities (additional live trapping, detailed vegetative community analysis and Geographic Information System (GIS)-based satellite imagery analysis) and has been detailed in the WVNFS Biological Assessment (BA) prepared for the Parsons-to-Davis Project by Michael Baker Jr., Inc. (submitted to USFWS August 2002 and revised and re-submitted in August 2004). The habitat suitability study resulted in a better understanding of the WVNFS habitat and aided the development of feasible alternatives that would avoid known populations and avoid and/or minimize impact to potentially occupied habitat. Section 2.8 provides details regarding the additional engineering performed on the Revised Original Preferred Alternative (ROPA) as part of ongoing Section 7 consultation for the West Virginia Northern Flying Squirrel (WVNFS); additional engineering activities include the reduction/re-appropriation of waste and borrow materials and other design changes. A more detailed discussion of the WVNFS is also included in Section 3.3.3.3 of this SFEIS. The Biological Opinion for the WVNFS is provided in Appendix C.

### 2.2.3 Consideration of Engineering Constraints

Based on the environmental constraint mapping, preliminary engineering was conducted to the “line and grade” stage with sufficient detail to (i) estimate the preliminary cost per alternative, (ii) estimate the amount of earthwork required for construction, and (iii) identify and preliminarily
design necessary connections. In addition to the environmental constraints discussed above, the preliminary engineering effort was constrained by design standards, excess excavation, and connection requirements. Each of these engineering constraints is discussed below.

### 2.2.3.1 Design Standards

The Parsons-to-Davis Project (as part of Corridor H) is being constructed as part of the Appalachian Development Highway System (ADHS) (as discussed in Section I: Project Background and Need). Therefore, the design standards for this project must be consistent with the design standards of ADHS and for Corridor H as a whole. Corridor H is a principal arterial roadway with a design speed of 70 miles per hour (mph). The 70 mph design speed and the principal arterial designation determine the severity of allowable horizontal and vertical curves and the severity of allowable grades. The design standards used are those prescribed in the 1994 edition of A Policy of Geometric Design of Highways and Streets (AASHTO) and current West Virginia Division of Highways design directives. Build Alternatives were therefore developed to meet the following applicable design standards:

- Design speed of 70 mph,
- Maximum allowable degree of curve of 3º00'00'', and
- Maximum allowable grade of 5 percent.

The standard roadway template for Corridor H, or typical section, is depicted in Figure II-3. Generally, proposed Corridor H consists of a divided highway with two 12-foot lanes in each direction. Each travel way is separated by a maximum 46-foot graded median. Paved shoulders, 10 feet wide, are required for the outside lanes, and 6-foot paved median shoulders are also included.

### 2.2.3.2 Earthwork Volumes

Another engineering constraint affecting alternative development is the earthwork volume generated by each Build Alternative. Earthwork volume is the amount of soil and/or rock that has to be cut in one area of an alignment and then moved to fill another area. If the amount of cut material exceeds the amount of fill needed, there is an excess or “waste” situation and the waste must be disposed of somewhere off-site. The disposal of waste adds cost and environmental impacts to the project. If the fill requirement exceeds the amount of cut material available, a “borrow” situation exists. Additional fill material must be acquired from some source other than that generated by the project. Like disposal of waste, borrowing can also lead to additional costs and environmental impacts for the project.

Earthwork volumes used in this alternatives analysis are based on large-scale plans, which have been developed at a level appropriate for a NEPA study; it is not possible at this stage to account for how the project will be divided during construction. Therefore, the volumes may change during final design. This analysis is a tool used to evaluate the differences between alternatives.
2.2.3.3 **Connection Requirements**
As an economic development highway, Corridor H must serve to promote connections between population centers (e.g., Parsons, Thomas, and Davis), and current or proposed employment centers (e.g., the Tucker County Industrial Park, and the Cortland Acres Nursing Home). Connections between other roadways in the Study Area (e.g., US 219) and Corridor H are necessary to achieve the economic development purpose of Corridor H.

Potential connections between the mainline of Build Alternatives and existing roadways must also provide viable access opportunities for truck traffic. Trucks are expected to use Corridor H via connector roads, especially to access the Tucker County Landfill in the eastern portion of the Parsons-to-Davis Project’s Study Area. The grades and length of the connections were designed to facilitate efficient truck traffic flow; however, the alternative designs vary in the extent to which each achieves this efficiency as discussed below in the alternatives screening process.

2.3 **CONSIDERATION OF ALTERNATIVES IN THE SDEIS**
Based upon the factors identified above, WVDOT and FHWA identified and considered a range of alternatives in the SDEIS. Generally, these alternatives included a no-build alternative (Exhibit II-1), an improved roadway alternative, and multiple build alternatives (Exhibit II-2). The specific alternatives considered included:

- No-Build Alternative
- Improved Roadway Alternative (IRA)
- Build Alternatives:
  - Blackwater Alternatives:
    - Original Preferred Alternative (OPA), with a Truck Route option
    - Alternative 2, with a Truck Route option
  - Blackwater Avoidance Alternatives:
    - Alternative 1A (East and West options)
    - Alternative 1B (East and West options)
    - Alternative 1C
    - Alternative 1D (East and West options)
    - Alternative 1E
    - Alternative 1G (East and West options)
    - Alternative 1H

(Note: Alternative “1F” was eliminated early in the process because it passed through the middle of the Tucker County Landfill.) Additionally, a Truck Route option was considered for the OPA and Alternative 2, in order to allow trucks to bypass the City of Thomas. The Truck Route has been incorporated into those alternatives in this SFEIS.

2.3.1 **NO-BUILD ALTERNATIVE**
The Settlement Agreement does not specifically mandate consideration of a no-build alternative. However, Council on Environmental Quality (CEQ) regulations governing all federal agencies specifically require analysis of a No Action (i.e., No-Build) alternative in an Environmental Impact Statement (EIS) as a basis for comparison with the other alternatives. Therefore, while the No-Build Alternative clearly does not achieve the purpose and need for the project, it has also been defined and considered in the alternatives analysis, and carried forward for detailed analysis.

Under the No-Build Alternative, the Parsons-to-Davis Project would not be constructed. Instead, WVDOT would continue to maintain existing roads in the Study Area as part of its normal roadway improvement programs. For the purpose of this SFEIS, the No-Build Alternative (Exhibit II-1) assumes that US 219 - WV 32 - WV 93 would remain the principle east-west route through the Study Area. As per FHWA and CEQ regulations, the No-Build Alternative will be carried through the SFEIS as an environmental “base line.”
2.3.2 IMPROVED ROADWAY ALTERNATIVE (IRA)

In the Settlement Agreement, the plaintiffs in the Corridor H lawsuit agreed not to submit NEPA comments or file lawsuits seeking further consideration of an IRA in the SEIS. However, the Settlement Agreement does not state that an IRA can be automatically eliminated from detailed consideration in the SEIS. Therefore, an IRA has been defined and considered in the alternatives screening process for this document.

The IRA consists of more extensive upgrades (e.g., climbing lanes, horizontal and vertical curve re-alignments, and improvements to sight distance) to existing east-west roads than are proposed in the No-Build Alternative. This alternative would serve as the Parsons-to-Davis Project portion of Corridor H. Specifically, in this alternative, spot improvements would be made, where possible, to the principal existing east-west route in the Study Area, especially to US 219 as it traverses Backbone Mountain. The IRA would require a lower design speed than the rest of the alternatives. A design speed of 40 mph was used as a general guide, but not an absolute requirement, to determine what spot improvements would be necessary to ensure safe travel on this route. Where achieving a 40 mph design speed would require major relocations of the existing roadway, significant environmental impacts, or substantial costs, it was assumed that a lower design speed would be accepted. The IRA would shorten the existing travel route from 11.8 to 8.9 miles.

2.3.3 BUILD ALTERNATIVES

Consistent with the Settlement Agreement, the Build Alternatives include both “Blackwater Avoidance Alignments,” which are located entirely outside the Blackwater Area, and “Blackwater Alignments,” which pass through the Blackwater Area. The Build Alternatives include options that avoid known populations of the WVNFS and minimize impacts on potential habitat that could support populations of the WVNFS. All Build Alternatives were developed to fulfill engineering guidelines and to avoid other potential environmental impacts where practicable. The Build Alternatives are described in detail below.

2.3.3.1 BLACKWATER ALTERNATIVES

Original Preferred Alternative (OPA)

The OPA is the portion of Corridor H within the Study Area that was approved in the 1996 Corridor H ROD (between Stations 2465+00 and 2635+00). The OPA would be a four-lane divided highway approximately nine miles in length, and it would span the watersheds of Mill Run, Slip Hill Mill Run, Big Run, Tub Run, Long Run, Middle Run, the North Fork of the Blackwater River (south of Thomas at Coketon), and Pendleton Creek. It provides a diamond-shaped, grade-separated connection with WV 32 just north of its existing intersection with WV 93. It connects with existing WV 93 north of Davis. The OPA is shown in Exhibit II-2 (The diamond-shaped connection is not depicted in the exhibit.)

Alternative 2

As described above, the WVNFS surveys found that the OPA passed through an area where the WVNFS has been found. As a result of these surveys, WVDOT developed Alternative 2 (Exhibit II-2), which avoids the known occupied habitat of the WVNFS.

Alternative 2 begins and ends at the same locations as the other Build Alternatives (the OPA and the Blackwater Avoidance Alternatives). Beginning on the west, Alternative 2 proceeds in a northerly direction, following the same route as the Blackwater Avoidance Alternatives in order to avoid known occupied habitat of the WVNFS. After passing the area of known occupied WVNFS habitat, Alternative 2 diverges from the Blackwater Avoidance Alternatives and turns to the south, where it rejoins the route of the OPA. From that point eastward,
Alternative 2 follows the same route as the OPA, except in the region of Middle Run, where Alternative 2 includes an alignment shift (“Middle Run shift”) to avoid an additional area where the WVNFS has been found (Exhibit II-2). Like the OPA, Alternative 2 passes through the Blackwater Area, and thus is not a Blackwater Avoidance Alternative.

**Truck Route Option**

Existing heavy truck traffic was identified as a problem in the City of Thomas’ Development Strategy (1998). Public comments and the Community Advisory Group (CAG) formed pursuant to the Settlement Agreement indicated that the OPA posed some concerns for the citizens of Thomas because it had the potential to increase the already problematic heavy truck traffic traveling through the town.

In order to address the concerns of Thomas, a two-lane Truck Route option was developed. The Truck Route is planned as a two-lane minor arterial with a 40 mph design speed. It would include at-grade intersections at its termini, located along WV 32 in the south and along US 219 to the north. (This route is referred to as a Truck Route because it is primarily intended to remove heavy truck traffic from downtown Thomas; however, the route would be open to all traffic, including passenger cars.) The Truck Route is illustrated in Exhibit II-2.

The SDEIS addressed the Truck Route as an option for addition to either the OPA or Alternative 2, since neither alignment provided a means for trucks to bypass downtown Thomas. After the analysis and assessment of comments on the SDEIS, it became clear that the Truck Route should be incorporated into the OPA and Alternative 2 for purposes of the alternatives analysis in this SEIS. Therefore all analysis since the SDEIS has assumed that the OPA and Alternative 2 would include the Truck Route (and not just have it as an option).

**2.3.3.2 Blackwater Avoidance Alternatives**

The SEIS considered 11 alignments that avoided the Blackwater Area. These Blackwater Avoidance alignments also avoid known occupied WVNFS habitat. A general Blackwater Avoidance alignment was developed and given the name Alternative “1.” This alignment begins and ends along Corridor H at the same locations as the OPA (Stations 2465+00 and 2635+00). However, Alternative 1 proceeds north in order to avoid an area where the WVNFS was found in the western portion of the Study Area and to avoid the Blackwater Area in the eastern portion of the Study Area.

In order to provide an array of connection possibilities for consideration in the SEIS, multiple variations of Alternative “1” were developed and distinguished with the letters A through H. Each alternative would be a four-lane divided highway with partial control of access. Three connections are planned in the following general locations:

- US 219 at Benbush
- US 219 south of William and north of Thomas
- WV 93 north of Davis

Additional at-grade intersections may be accommodated following the guidelines for design set forth in the 1996 Corridor H FEIS.

The Blackwater Avoidance Alternatives considered in the SDEIS (1A East and West, 1B East and West, 1C, 1D East and West, 1E, 1G East and West, and 1H) are shown in Exhibit II-2. As explained below, the “East” and “West” designations reflect the route of the alternative around the Tucker County Landfill.
**Tucker County Landfill “East” and “West” options**

In March 2001, WVDOT and the Tucker County Solid Waste Authority held several meetings to discuss the Authority's plans for expansion of the Tucker County Landfill and how this proposed expansion might be impacted by Corridor H. Issues discussed included the view of the Tucker County Landfill from the future highway, the containment of windblown debris, and the preferred areas for expansion. Through these meetings, it was realized that the section of Corridor H proximate to the landfill presents specific concerns such as avoidance of the area immediately to the east which is the only suitable place of the landfill to expand its current cells; other concerns involve complex drainage requirements, permitting and the location of the landfill's scale operations.

Four of the Blackwater Avoidance Alternatives (Alternatives 1A, 1B, 1D, and 1G) have the option of passing to either the east or the west of the Tucker County Landfill. Each passes through or near a break in the Pendleton Creek wetland complex just north of the existing landfill (Exhibit II-2). From this point southward, each of the four alternatives could conceivably pass to either the west or the east of the Landfill. There was a concern at the March 2001 meetings between WVDOT and the Tucker County Solid Waste Authority that one of these alternatives could be eliminated solely based on the side of the landfill to which the alternative proceeded. It was decided that east and west options be developed, and that they both be considered for addition to any of these four alternatives. These alternatives were developed to compare the impacts and benefits of providing a Corridor H interchange at the landfill (West Options) and providing a Corridor H interchange at the proposed Tucker County Industrial Park (East Options).

2.3.4 PUBLIC INVOLVEMENT DURING SDEIS PREPARATION

During the development of the SDEIS, three public workshops were held to allow the public to participate in the identification of potential alignments. First, a public scoping meeting was held on June 14, 2000, to allow the public to preview the Study Area and to identify and discuss “key issues.” On January 18, 2001, a public workshop was held to present the alternatives developed to date and to allow the public to both discuss the alternatives and provide comments on those alternatives that should be carried forward for detailed analysis. Finally, on October 23, 2001, a meeting was held to review the WVNFS findings and present the new avoidance alignments in the western portion of the Study Area.

Additionally, in accordance with the Settlement Agreement, WVDOT established and consulted with a Community Advisory Group (CAG) composed of 12 members representing a cross-section of the interests potentially affected by the location of Corridor H in the Thomas and Davis areas. The CAG held 11 meetings that were attended by WVDOT staff and moderated by a professional facilitator. The CAG prepared and submitted two comment letters that are considered part of the public comment record for the project (Appendix A).

All comments received from the agency meetings and public information workshops were reviewed and considered in the preparation of the Parsons-to-Davis SEIS. In addition to the formal opportunities for agency coordination and public involvement, comments were accepted throughout the SEIS process on the project website, www.wvcorridorh.com.

Section VII: Comments and Coordination provides more detailed information on public involvement in the development of alternatives for the SDEIS. All comment and coordination letters are located in Appendix A.
2.3.5 SDEIS ALTERNATIVE SCREENING PROCESS

The purpose of the screening process was to identify potential alternatives for consideration in the SDEIS. The Settlement Agreement required consideration of the OPA, and CEQ regulations required consideration of the No-Build Alternative. Therefore, the screening process focused mainly on identifying new alternatives—in addition to the No-Build Alternative and OPA—for consideration in the SEIS. This screening process occurred in two stages: Level One, which involved qualitative judgments about facility type and location; and Level Two, which involved a more detailed development and evaluation of specific alignments. After consideration of comments received on the SDEIS and further consultation with resource agencies, the analysis of alternatives was condensed and refined in this SFEIS; an updated comparison of alternatives is addressed in Section 2.5.1

2.3.5.1 Level One Screening

As noted above, the No-Build Alternative and the OPA were automatically carried forward for detailed analysis. Therefore, Level One screening focused on developing Blackwater Avoidance Alternatives. Two main criteria were applied at this stage, which included:

1) **Must Provide a Four-Lane Connection from Parsons to Davis.** The purpose of the project, as defined in the purpose and need statement (1996 Corridor H FEIS), is to provide a four-lane highway consistent with the design standards for the ADHS. Given this objective, any alternative that does not provide for a four-lane highway between the project termini will not be carried forward for detailed analysis. (Note: The No-Build Alternative does not satisfy this requirement; however, it is carried forward for detailed analysis as required by federal regulations [40 CFR 1502.14].)

2) **Avoidance of the Blackwater Area.** One of the primary purposes of this study is to determine whether the project can be shifted entirely outside the Blackwater Area as defined in the Settlement Agreement. Accordingly, new alternatives were developed so as to completely avoid the Blackwater Area. The OPA and its variations cross through the Blackwater Area, and therefore do not meet this criterion. However, the OPA and its variations are carried forward for detailed analysis as required by the Settlement Agreement (Appendix B, Settlement Agreement, p. 25) and necessitated by the discovery of new environmental resource information.

This level of screening resulted in the elimination of the IRA. The IRA does not provide a four-lane connection that meets the design standards for the ADHS between Parsons and Davis. It also does not avoid the Blackwater Area, because it would include improvements to US 219 and WV 32 inside the Blackwater Area (in the City of Thomas).

2.3.5.2 Level Two Screening

The alternatives remaining for the Level Two screening in the SDEIS were all the Build Alternatives (Table II-1). In order to satisfy the Settlement Agreement requirement of evaluating the OPA and include an alternative that accounts for the new information on the WVNFS, WVDOT and FHWA carried the OPA and Alternative 2 forward for detailed analysis. Therefore, the Level Two screening process was applied solely to the Blackwater Avoidance Alternatives considered in the SDEIS in order to determine the alignments to be carried forward for detailed analysis. The screening criteria utilized in the Level Two analysis included total earthwork and connectivity. Because of the importance placed on total earthwork by resource agencies (1996 Corridor H FEIS), it was utilized in the screening process. The earthwork analysis was broken into two variables: (i) total footprint and (ii) mass balance of earthwork (described below). Because of the importance placed on connections by the CAG (see letters from the CAG, Appendix A), the desirability of connections was utilized in the screening process. The connections analysis was similarly broken into two variables:
whether or not climbing lanes would be required (which represents the combined effect of length and grade) and the type of connection. Alternatives meeting fewer than three of the four criteria were not carried forward for detailed analysis. The results of the screening process are summarized in Table II-1. As shown and described below, Alternatives 1A, 1B, 1C, and 1H met fewer than three of the Level Two criteria and were therefore not carried forward for detailed analysis.

Table II-1
Level Two Screening Results

<table>
<thead>
<tr>
<th>Criterion</th>
<th>1A</th>
<th>1B</th>
<th>1C</th>
<th>1D</th>
<th>1E</th>
<th>1G</th>
<th>1H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footprint (acres)</td>
<td>486</td>
<td>537</td>
<td>575</td>
<td>509</td>
<td>489</td>
<td>468</td>
<td>478</td>
</tr>
<tr>
<td>Earthwork Mass Balance</td>
<td>380,000 cubic yards of borrow</td>
<td>1,560,000 cubic yards of waste</td>
<td>840,000 cubic yards of waste</td>
<td>60,000 cubic yards of borrow</td>
<td>10,000 cubic yards of waste</td>
<td>1,680,000 cubic yards of waste</td>
<td>1,250,000 cubic yards of waste</td>
</tr>
<tr>
<td>Connections not requiring climbing lanes</td>
<td>None</td>
<td>None</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Includes left turn through oncoming traffic</td>
<td>Yes (two)</td>
<td>Yes (two)</td>
<td>No</td>
<td>No</td>
<td>Yes (one)</td>
<td>No</td>
<td>Yes (two)</td>
</tr>
</tbody>
</table>

1 Solid values represent those not meeting criteria.
2 Includes average impact of East and West Landfill Options
3 Disregards East/West Option Area.

Note: Earthwork amounts are based upon the level of engineering available at the screening stage, which occurred during development of the SDEIS in 2001 and 2002.

**1A East and West**

Alternative 1A (East and West options) was eliminated based on its connections. Connections for the Benbush and Williams areas were developed as part of Alternative 1A. Further examination of these connections revealed that they would both require climbing lanes due to the combined effects of their steepness and length. Both connections would also require a left turn for eastbound travelers in Benbush and for westbound travelers in Williams.

**1B East and West**

Alternative 1B (East and West options) was eliminated based on both earthwork and its connections. The amount of waste required for this alternative, 1.56 million cubic yards, far exceeds the average of 0.826 million cubic yards of excess material. Connections at both Benbush and Williams would require climbing lanes due to the combined effects of their steepness and length. Additionally, both connections would require a left turn - for eastbound travelers in Benbush and eastbound travelers in Williams.

**1C**

Alternative 1C was eliminated based on its earthwork, as the footprint for this alternative is greater than the average footprint (575 versus 506 acres) and the amount of waste required for this alternative (0.840 million cubic yards) exceeds the average of 0.826 million cubic yards of excess material as well. Although a specific cost estimate was not made in the screening process, the cost estimate for Alternative C would far exceed that of any other alternative (see Table II-1 of the SDEIS).
Alternative 1H was eliminated based on both earthwork mass balance and its connections. The amount of waste required for this alternative, 1.25 million cubic yards, far exceeds the average of 0.826 million cubic yards of excess material. With regard to connections, Alternative 1H would require a left turn to exit Corridor H for two of its connections (west of Thomas and north of Thomas). In addition, in the screening process, Alternative 1H would require substantial alterations (not required by any of the other alternatives) to US 219 in the vicinity of the connection north of Thomas.

2.3.5.3 Conclusions of the SDEIS Alternative Screening Process

The two-tiered screening process resulted in the elimination of the IRA and six of the Blackwater Avoidance Alternatives. The alternatives carried forward for detailed analysis in the SDEIS included:

- the No-Build Alternative,
- five (5) Blackwater Avoidance Alternatives (Alternatives 1D East and West, 1E, and 1G East and West),
- two (2) Blackwater Alternatives (the Original Preferred Alternative (OPA) and Alternative 2), and
- a truck route, considered in detail as a possible addition to either the OPA or Alternative 2.

The SDEIS evaluated all of these alternatives on an equal basis. The Build Alternatives carried forward for detailed analysis in the SDEIS are depicted on Exhibit II-3. Alternatives carried forward for detailed analysis in the SDEIS are also described below. The SDEIS did not identify a preferred alternative.

No-Build Alternative

The No-Build Alternative was carried forward for detailed analysis in the SDEIS as required by CEQ regulation, even though it does not provide a four-lane connection between Parsons and Davis and thus does not meet purpose and need.

Blackwater Avoidance Alternatives

Five Blackwater Avoidance Alternatives (Alternatives 1D East and West, 1E, and 1G East and West) were carried forward for detailed analysis in the SDEIS. Generally, beginning at the western end, these alternatives travel north to a point north of Tucker County High School, continue east parallel to existing US 219 and north of the City of Thomas, and traverse south toward and then to the east or west of the Tucker County Landfill. The East and West options associated with these alternatives provide for avoidance of the Tucker County Landfill.

Blackwater Alternatives

The OPA was carried forward for detailed analysis in the SDEIS as required by the Settlement Agreement. As defined in the SDEIS, the OPA is a four-lane divided highway approximately nine miles in length. This alternative would span the watersheds of Mill Run, Slip Hill Mill Run, Big Run, Tub Run, Long Run, Middle Run, the North Fork of the Blackwater River (south of Thomas at Coketton), and Pendleton Creek. It would provide a diamond-shaped, grade-separated connection with WV 32 just north of its existing intersection with WV 93 (north of Davis).

Alternative 2 was carried forward for detailed analysis in the SDEIS as a variation of the OPA. Alternative 2 was developed in response to new environmental resource information concerning West Virginia Northern Flying Squirrel (WVNFS) habitat. Alternative 2 begins at the same location as all of the other Build Alternatives. Beginning on the west, Alternative 2 proceeds in a northerly direction, following the same route as the Blackwater Avoidance Alternatives in order to avoid known occupied habitat of the WVNFS. After passing the area of known occupied
WVNFS habitat, Alternative 2 diverges from the Blackwater Avoidance Alternatives and turns to the south, where it rejoins the route of the OPA. From that point eastward, Alternative 2 follows the same route as the OPA, except in the region of Middle Run, where Alternative 2 includes an alignment shift to avoid an additional area where the WVNFS has been found. Like the OPA, Alternative 2 is not a Blackwater Avoidance Alternative.

The Truck Route was developed in response to public and Community Advisory Group (CAG) comments requesting that safety issues associated with heavy truck traffic in Thomas be addressed in the SDEIS. The Truck Route would provide an alternative route for heavy trucks by providing a two-lane connection that runs from US 219 north of Thomas to WV 32 on the southeast side of Thomas, northwest of the entrance to the Tucker County Landfill. The Truck Route also provides for aesthetic improvements to Thomas and a historic resource located within the Blackwater Industrial Complex Archaeological and Historic District, by minimizing noisy, heavy truck traffic from the city.

For additional details regarding the development and evaluation of alternatives considered, refer back to the SDEIS, Section II: Alternatives Analysis; and for details regarding the detailed analysis of alternatives carried forward, refer back to the SDEIS, Section III: Existing Environment and Environmental Consequences.

2.4 APPROVAL AND CIRCULATION OF THE PARSONS-TO-DAVIS SDEIS

In December 2002, the SDEIS was approved and circulated for review and comment. FHWA and WVDOT established a comment period ending on February 21, 2003. The comment period was subsequently extended to April 22, 2003 to accommodate a request by Corridor H Alternatives (a plaintiff in the Corridor H lawsuit).

The public hearing for the project was held at the Blackwater Lodge in Davis, West Virginia on Thursday, February 6, 2003. Information regarding the SDEIS was presented in detail with project personnel providing information and answering questions. Formal comments were taken via a certified court reporter (oral comments), in written form, and on the project website. Generally, attendees at the public hearing expressed concerns about the project costs and the lack of a connection to Tucker County High School (TCHS) given the safety issues associated with US 219. The comments received on the SDEIS were considered in modifying the alternatives studied and identifying the Preferred Alternative. Formal responses to these comments are included in this SFEIS in Appendix A, as is consistent with FHWA NEPA regulations.

2.4.1 AGENCY AND PUBLIC COMMENTS ON THE SDEIS

2.4.1.1 Agency Comments

Comment letters were received from the United States Department of the Interior (DOI), United States Environmental Protection Agency (USEPA) (Region III) and the West Virginia Division of Natural Resources (WVDNR) (Wildlife Resource Section) during the comment period. Both agencies expressed concerns regarding the project’s potential impacts to the WVNFS habitat areas. Another concern raised by both of the agencies was the potential impacts associated with the earthwork balances (waste/borrow material sites) for the roadway. The WVDNR encouraged WVDOT to select Alternative 1D East as the preferred alternative for the project.

2.4.1.2 Public Comments

A total of thirty-one comments were received from the public during the SDEIS public comment period. Twenty-nine comment letters (including website comments) were received and two (2) citizens submitted oral comments for the record at the public hearing via the court reporter. Of the twenty (20) comment letters that expressed an alternative preference, the majority
supported the OPA. Twelve (12) letters supported the OPA, some including a preference for the Truck Route, and one (1) supported the OPA with the Middle Run shift. Six (6) comment letters supported Blackwater Avoidance Alternatives in general: three preferred 1D, one preferred 1G and one preferred any iteration of Alternative 1 (D, E or G). In addition, two (2) letters supported the No-Build Alternative.

2.4.2 ACTIONS TAKEN IN RESPONSE TO COMMENTS ON SDEIS

As a result of the public hearing held February 6, 2003 and careful review and consideration of agency and public comments received on the SDEIS, additional engineering was performed on the alternatives carried forward for detailed analysis. This additional engineering allowed for a more refined identification of earthwork quantities, project cost, and assessment of key environmental impacts. Additional information regarding surface water resources and further analysis of water quality impacts were also evaluated for all alternatives carried forward in the SDEIS.

As a result of this more refined analysis, small but important changes were made to the OPA presented in the SDEIS. These changes included:

- providing a connection to TCHS from the mainline;
- incorporating a slight shift south in the vicinity of Middle Run to avoid a possible population of the WVNFS; and
- incorporating the Truck Route (a two-lane roadway that would reduce truck traffic in the City of Thomas).

The alternative that incorporates these changes is referred to as the Revised OPA, or ROPA. In addition to the ROPA, the OPA and Alternative 2 also were modified to include the Truck Route as part of those alignments. After assessment of comments on the SDEIS, it became clear that the Truck Route should be incorporated into these alternatives (versus being just an option) in order to provide a bypass for trucks traveling through downtown Thomas. (As noted above, the Truck Route will be open to all traffic, not just trucks; it is referred to as a Truck Route because its primary purpose is to reduce the volume of heavy truck traffic passing through downtown Thomas.)

Section 2.5.1 provides an updated comparison of the alternatives carried forward for detailed analysis in the SDEIS and the ROPA.

2.4.3 ADDITIONAL COORDINATION WITH CITIES OF THOMAS AND DAVIS

On July 28, 2003, WVDOT transmitted letters to the Mayors of Thomas and Davis, initiating the 60-day review period prescribed in the Settlement Agreement. Pursuant to the terms of the Settlement Agreement, if one of these city councils passes a resolution during the 60-day review period supporting an alternative other than a Blackwater Avoidance Alternative, FHWA and WVDOT have the right to discontinue consideration of the Blackwater Avoidance Alternatives and proceed with the ROPA, without preparing an SFEIS. WVDOT’s letters described the ROPA and stated that it is WVDOT’s Preferred Alternative for the Parsons-to-Davis Project. Copies of these letters are provided in Appendix A of this SFEIS. On September 10, 2003 and within the 60-day period prescribed in the Settlement Agreement, the Davis City Council adopted a resolution that supported construction of the ROPA. On September 23, 2003, the Thomas City Council adopted a resolution supporting a Blackwater Avoidance Alternative. Copies of these resolutions are also provided in Appendix A of this SFEIS. While the Settlement Agreement allowed FHWA and WVDOT to proceed without preparing an SFEIS based upon the City of Davis’ resolution, FHWA and WVDOT decided to prepare this SFEIS in
order to document the changes to the OPA since the SDEIS that resulted in the ROPA, document selecting the ROPA as the Preferred Alternative, and to complete the NEPA process.\(^1\)

### 2.5 PREFERRED ALTERNATIVE REPORT- DECEMBER 2003

In response to comments received on the SDEIS, the OPA was revised to include the TCHS connection, the Middle Run alignment shift, and the Truck Route. The alternative that incorporates these changes is the Revised OPA (or ROPA) (Exhibit II-4). The individual elements of the ROPA were examined in the SDEIS as elements of the OPA and/or Alternative 2. However, there was no single alternative in the SDEIS that incorporated all of these elements. Thus, the December 2003 Preferred Alternative Report provided an updated comparison of alternatives. The analysis examined the alternatives carried forward for detailed analysis in the SDEIS and the ROPA (Table II-2).

In accordance with the WVDOT’s July 1992 Consensus on Integrating NEPA/Section 404 Process for Transportation Projects, this report was prepared and circulated to participating resource agencies. The December 2003 Preferred Alternative Report compared the alternatives studied in the SDEIS and the ROPA based upon environmental impacts, ability to meet purpose and need, and cost.

#### 2.5.1 UPDATED COMPARISON OF ALTERNATIVES

##### 2.5.1.1 Environmental Impacts

The 2003 and 2004 Preferred Alternative Reports show that the alternatives are generally similar in their environmental impacts. Differences among the alternatives are apparent in terms of their impacts on certain categories of resources. Impacts can be summarized as follows:

- **Total Right-of-Way Required.** The alternative with the smallest “footprint” is the OPA (352 acres, including the Truck Route); the ROPA (with Truck Route and TCHS) is 375 acres. All of the other alternatives would require approximately 100-150 additional acres of right-of-way.

- **Earthwork.** The alternatives are generally similar in terms of the overall amount of earthwork required, but there are some differences.

- **Displacements.** The alternatives are generally similar in terms of residential and business displacements. Most of the alternatives would not result in any residential or business displacements. Alternative 1E, the OPA and the ROPA would each require one residential displacement. The only “business” displacement would occur under Alternatives 1D East, 1D West, 1G East, and 1G West, which would involve impacts to the Tucker County Landfill (on administrative facilities or expansion area, but not the landfill itself).

- **Section 4(f) Resources and Cultural Resources.** None of the alternatives will result in the “use” of land from any Section 4(f)-protected resource (i.e. any park, recreation area, refuge, or historic site). In addition, none of the alternatives would result in an “adverse effect” on any cultural resource (i.e. historic or archeological site).

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\(^1\) The Settlement Agreement contains provisions that would have governed the selection of a preferred alternative, if the Blackwater Avoidance Alignments were not eliminated from consideration based on a resolution adopted by the city councils of Davis and/or Thomas. In summary, those provisions would have required FHWA and WVDOT to select a Blackwater Avoidance Alignment unless it found that none of those alternatives were prudent and feasible. Because the city council of Davis has adopted a resolution endorsing the ROPA, the “no prudent and feasible alternative” requirement in the Settlement Agreement does not apply. The selection of a preferred alternative for this project still must comply with all applicable federal laws and regulations.
• **Wetlands, Streams, and Floodplains.** The Blackwater Avoidance Alternatives all generally result in lower total wetland, stream, and floodplain impacts than the Blackwater Alternatives. In particular, the alternatives with the lowest total wetland impacts are Alternatives 1G East and West, and the alternatives with the lowest total stream impacts are Alternatives 1D East, 1E, and 1G East. By comparison, the alternative with the highest total impacts in these categories is the ROPA. These differences in total surface water impacts were noted by the USEPA and WVDNR in their comments on the SDEIS. In part because of the comments of these agencies, a more detailed analysis of surface water impacts was undertaken and is discussed in the 2003 and 2004 Preferred Alternative Reports.

• **Endangered Species Habitat.** All of the alternatives have been found to have the potential to cause an adverse effect on the WVNFS, a federally listed endangered species. Any alternative will require a Biological Opinion to be issued by the USFWS. The BO concluded that “…the project has been designed to avoid and minimize these adverse impacts to *G. s. fuscus*, and the action area should be able to sustain reproducing populations after project construction.” The total acreage of impact associated with the ROPA/Preferred Alternative is 364 (25 acres of highly suitable habitat, 232 acres of suitable habitat, and 107 acres of unusable habitat remnants).

• **Sensitive Areas in Monongahela National Forest.** The Monongahela National Forest is classified into management prescription areas (MPAs). None of the MPAs within the Study Area are designated as wildlife refuges or sanctuaries. The Study Area encompasses two MPAs, 3.0 and 6.1. Both are open to hunting and other multiple-use activities (e.g., timber production and management). Additionally, a series of Forest Service roads for both motorized and non-motorized use are located throughout MPAs 3.0 and 6.1. The alternative with the least amount of Monongahela National Forest land within its footprint is the ROPA. The alternative with the least impact specifically on MPA 6.1 is Alternative 2.

• Table II-2 presents a summary of the impacts of each of the alternatives carried forward for detailed analysis and the ROPA.

Section III of this SFEIS provides comprehensive, updated information regarding impact analysis associated with the ROPA/Preferred Alternative. Because the ROPA/Preferred Alternative was refined through additional engineering analysis (required as part of formal Section 7 consultation for the WVNFS) the impact numbers reported in this SFEIS for the ROPA will be slightly different than those report in the 2003 and 2004 Preferred Alternative Reports. While the ROPA/Preferred Alternative has already been identified, the purpose of Section III of this SFEIS is to present a full disclosure of impacts assessed to date. Impact analyses for the Blackwater Avoidance Alternatives, OPA and Alternative 2 remain the same as those presented in the 2003 and 2004 Preferred Alternative Report documents.
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### Table II-2
Summary of Impacts by Alternative in December 2003 Preferred Alternative Report

<table>
<thead>
<tr>
<th>ISSUE OR RESOURCE</th>
<th>Alternatives Carried Forward in SDEIS</th>
<th>ROPA$^4$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No- Build</td>
<td>1D West</td>
</tr>
<tr>
<td>Cost (millions) $^2$</td>
<td>N/A</td>
<td>209.6</td>
</tr>
<tr>
<td>Footprint (acres)</td>
<td>N/A</td>
<td>540</td>
</tr>
<tr>
<td>Roadway Earthwork Volumes$^2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Cut (MCY)</td>
<td>N/A</td>
<td>22.12</td>
</tr>
<tr>
<td>- Borrow (MCY)</td>
<td>N/A</td>
<td>4.77</td>
</tr>
<tr>
<td>- Waste (MCY)</td>
<td>N/A</td>
<td>7.86</td>
</tr>
<tr>
<td>TOTAL BORROW AND WASTE</td>
<td>N/A</td>
<td>12.63</td>
</tr>
<tr>
<td>Reduction in Downtown Thomas Truck Traffic</td>
<td>N/A</td>
<td>-80%</td>
</tr>
<tr>
<td>Travel Time (minutes)</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Level of Service (2020)</td>
<td>D A A A A A A A A N/C A</td>
<td></td>
</tr>
<tr>
<td>Displacements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Residential</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>- Business</td>
<td>N/A</td>
<td>Landfill facilities$^a$</td>
</tr>
<tr>
<td>Wetlands (acres)$^6$</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>- PEM</td>
<td>N/A</td>
<td>0.98</td>
</tr>
<tr>
<td>- PSS</td>
<td>N/A</td>
<td>0.09</td>
</tr>
<tr>
<td>- PFC</td>
<td>N/A</td>
<td>0.06</td>
</tr>
<tr>
<td>- POW</td>
<td>N/A</td>
<td>0.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>N/A</td>
<td>1.13</td>
</tr>
<tr>
<td>Streams$^7$</td>
<td>N/A</td>
<td>9.017</td>
</tr>
<tr>
<td>Floodplains, 100yr (acres)</td>
<td>N/A</td>
<td>0.0</td>
</tr>
<tr>
<td>Potential impact to WWNFS Habitat?</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Monongahela Nat’l Forest (MNF) (acres)$^6$</td>
<td>N/A</td>
<td>345</td>
</tr>
<tr>
<td>- MPA 3.0</td>
<td>N/A</td>
<td>84</td>
</tr>
<tr>
<td>- MPA 6.1</td>
<td>N/A</td>
<td>No Effect</td>
</tr>
</tbody>
</table>

N/A = Not Applicable  
MCY = Million Cubic Yards  
N/C = Not Calculated  
TR = Truck Route  
WWNFS = West Virginia northern flying squirrel (Glaucomys sabrinus fuscus)  
MPA = Management Prescription Area, based on 1986 MNF Plan.

$^1$ Based on current average construction costs, including such variables as earthwork, drainage, pavement and bridging. Does not include cost of ROW or utility relocations.

$^2$ Each alternative was divided into reasonable segments (construction contract sections with reasonable haul distances), and evaluated as such. Hence, one segment may have borrow and another segment waste. The volumes shown above are a summation of these sub-sections, so the alternative as a whole has borrow quantities and waste quantities. The segments (or construction contract sections) will be further refined as the project moves forward into final engineering design. There are environmental impacts associated with both borrow and waste activities. Generally, if the amount of cut is greater than fill then waste will be generated; if the amount of cut is less than fill then borrow material must be obtained. Waste and borrow amounts should be viewed in total (added together).

$^3$ Assumes no Truck Route. (Changes to 80% with the addition of the Truck Route.)

$^4$ The facilities include the scales and scale house of the Tucker County Landfill. The facilities would need to be moved due to construction of these alternatives.

$^5$ Indicates the potential expansion area of the Tucker County Landfill.

$^6$ Wetland impacts for the Parsons-to-Davis Project have been mitigated per the 1996 Record of Decision and Section 404 Permit.

$^7$ Includes impacts to roadside drainage ditches and jurisdictional streams.

$^8$ Additional engineering was performed on the ROPA after the submittal of the December 2003 Preferred Alternative (PA) Report. Therefore, impact numbers for streams and wetlands will differ slightly between the December 2003 PA report, the January 2004 Amended PA report and Section III of this SFEIS. Please see paragraph immediately above table.
2.5.1.2 Ability to Meet Purpose and Need

As detailed in Section I: Project Background and Need, any of the Build Alternatives under consideration would meet the overall purpose and need and objectives for the Appalachian Corridor H project.

Two additional Parsons-to-Davis specific purposes were derived from the needs analysis conducted for the Parsons-to-Davis SDEIS. These two additional purposes were to: 1) reduce heavy truck traffic through the City of Thomas and (2) improve emergency response times and access to emergency facilities.

Each of the alternatives under consideration except the No-Build Alternative is predicted to reduce truck traffic through Thomas by approximately 80 percent (see Section 3.2.1). Therefore, the alternatives under consideration are all essentially the same in terms of their ability to reduce truck traffic through Thomas.

Each of the Build Alternatives can be expected to attract most of the slow-moving heavy tractor-trailer trucks from US 219. Because of this likely removal of these slow-moving vehicles and the difficulty in passing them on the steeply graded, narrow and winding US 219, it can be expected that any of the Build Alternatives would serve to reduce emergency response times within the Study Area.

However, in part because of its shorter length and less circuitous route, the ROPA, when compared to the other alternatives, results in additional reduced response times between Thomas and Davis and the only full-service hospital (Davis Memorial Hospital in Elkins) serving these communities. It is generally accepted among emergency providers that a reduction in response time of even a few minutes is important and can be crucial.

Because the ROPA provides a direct connector from Corridor H to TCHS, emergency response time reduction would also apply to this important facility. Response time reduction would also apply to other emergency providers (e.g., fire and police). Further, the addition of the TCHS connector increases safe travel for students; an element that improves the quality of life in Tucker County. While a connection to TCHS is feasible for all of the alternatives carried forward for detailed analysis in the SDEIS, the TCHS connection associated with the ROPA is the most desirable based on terrain, earthwork requirements, engineering constraints, and impacts to WVNFS habitat.

Additionally, the ROPA better meets the project objectives compared to Blackwater Avoidance Alternatives that run east of the Tucker County Landfill (Alternatives 1D East, 1E, and 1G East). These alternatives would impact the landfill’s ability to expand -- an important local economic consideration. The landfill currently services 10 counties in West Virginia. The ROPA will not impact the landfill facilities or the landfill’s ability to expand for future growth. Based on the discussion above, the ROPA better fulfills the project’s purpose than any of the other alternatives.

2.5.1.3 Project Cost

Cost is an important consideration for any project. As pointed out above, cost differences must be weighed against, and balanced with, differences in environmental impact and the ability of an alternative to meet the project’s purpose and need. As shown in the summary table of impacts by alternative (Table II-2), the cost of constructing the ROPA is $147.9 million, which is approximately $46 million less than the least expensive Blackwater Avoidance Alternative (1G East), and approximately $70 million less than Alternative 1D East, which is the most expensive of the alternatives.
2.5.2 IDENTIFICATION OF THE PREFERRED ALTERNATIVE

The December 2003 Preferred Alternative Report identified the ROPA as the Preferred Alternative for the Parsons-to-Davis Project, and sought agency concurrence with this decision. Consistent with the Integrated NEPA/404 process, the report was circulated in January 2004 to the resource agencies for comment.

2.5.3 COORDINATION WITH AGENCIES ON PREFERRED ALTERNATIVE REPORT

Of the resource agencies that received the December 2003 Preferred Alternative Report, the USEPA and the USFWS provided formal comments within the comment period. The USEPA and USFWS submitted comment letters in February 2004 that did not concur with the alternative identified as the Preferred Alternative for various reasons, including the lack of detailed studies on the likely effects on the WVNFS by each of the alternatives. The USFS MNF submitted a comment letter in May 2005 expressing concerns about the preferred alternative’s proximity to Big Run Bog and unstable soil conditions associated with Backbone Mountain. All comment and coordination letters are provided in Appendix A of this SFEIS.

2.6 ENDANGERED SPECIES ACT (ESA) SECTION 7 CONSULTATION (INFORMAL)

As a result of the USEPA and USFWS comments on the December 2003 Preferred Alternative Report, additional studies were conducted in connection with the Section 7 consultation on the WVNFS. The differences in impacts among the alternatives analyzed in the SDEIS and the ROPA on the WVNFS and its habitat were reevaluated. These impact differences were presented to the USFWS in an August 2004 Biological Assessment (BA). The August 2004 BA concluded that: 1) all alternatives under consideration will have direct and indirect impacts to WVNFS highly suitable and suitable habitat; 2) some identified habitat may be occupied by populations of the WVNFS; and 3) any of the alternatives adopted would be “likely to adversely affect” the WVNFS. The August 2004 BA also found that “of the alternatives under consideration, the ROPA is likely to have less overall direct and indirect effects [on the WVNFS] than those other alternatives under consideration because:

- The ROPA requires the removal of the fewest number of acres of either suitable or highly suitable habitat.
- The ROPA’s removal of highly suitable habitat primarily occurs on the highly suitable habitat’s edge and minimizes removal of “core” highly suitable habitat.
- The ROPA has less of a barrier effect and better preserves landscape permeability than the other alternatives because the magnitude of cut/fill slopes is less.”

On October 14, 2004, the USFWS concurred with the findings in the August 2004 BA that all Build Alternatives are likely to adversely affect the WVNFS and required initiation of Section 7 Formal Consultation.

2.7 AMENDED PREFERRED ALTERNATIVE REPORT- NOVEMBER 2004

Following receipt of USFWS concurrence on the August 2004 BA, WVDOT circulated an Amended Preferred Alternative Report (November 2004) to resource agencies that are parties to the WVDOT’s July 1992 Consensus on Integrating NEPA/Section 404 Process for Transportation Projects. The purpose of the Amended Preferred Alternative Report was to ‘respond specifically to the comments submitted by USEPA and USFWS on the 2003 Preferred Alternative Report’. Based on the August 2004 BA and USFWS’ concurrence regarding impacts, the Amended Preferred Alternative Report re-affirmed WVDOT’s decision to identify the ROPA as its Preferred Alternative for the Parsons-to-Davis Project. WVDOT found that the ROPA:
Best achieves the purpose and need for the project,
Is similar to the other alternatives in terms of its overall environmental impacts,
Is $35.9 million less than the OPA and $56.5 million less than the least expensive
Blackwater Avoidance Alternative;
Is consistent with applicable regulatory requirements, and
Would have the least impact of the Build Alternatives on the WVNFS.

In its comment letter, USEPA concurred with the selection of the ROPA as the Preferred Alternative.
WVDNR’s comment letter neither supported nor opposed the identification of the ROPA as the
Preferred Alternative. WVDNR continues to cite concerns about the environmental impacts of the
ROPA while acknowledging WVDOT’s need to acknowledge cost considerations and savings.
USFWS’s letter also stated that it did not oppose the ROPA as the Preferred Alternative and
acknowledged that the ROPA has the least amount of impact to suitable and highly suitable WVNFS
habitat.

All coordination letters are located in Appendix A of this SFEIS.

2.8 REFINEMENT OF THE ROPA

Following issuance of the Amended Preferred Alternative Report and during Section 7 consultation
(see Section 2.9 below), the location of the ROPA along Backbone Mountain (western portion of the
Study Area) was refined. WVDOH determined that it could further reduce excess excavation
through additional engineering. Exhibits II-4, II-42, 4b and 4c graphically illustrate the results of
this refined engineering.

Based upon this reengineering the refined ROPA:

- reduces the amount of excess excavation that will be generated in the western portion of
  the Study Area by approximately 10 million cubic yards (which balances waste and borrow
  quantities and allows waste and borrow to be incorporated into the preliminary engineering
  construction limits);
- is 10.47 miles (versus 9.99 miles as reported in the Preferred Alternative Reports);
- has a footprint that is currently estimated at 396 acres (versus 375 reported in the Preferred
  Alternative Reports); and
- costs approximately $101 million (versus $147 million reported in the Preferred Alternative
  Reports; the reduction in cost is the result of the 10 million cubic yard adjustment in
  excavation).

The ROPA/Preferred Alternative presented and analyzed throughout this SFEIS includes the
engineering refinements discussed above. Thus, Section III reports an updated impact analysis of
the refined ROPA/Preferred Alternative, and compares the impacts of the refined ROPA to the
impacts of Alternative 2 and all of the Blackwater Avoidance Alternatives carried forward for
detailed analysis.

As demonstrated in Section III, as compared to the Refined ROPA, the Blackwater Avoidance
Alternatives and Alternative 2 continue to have greater impacts on Slip Hill Mill Run watershed and
still require complex (and expensive) structures to negotiate the western slope of Backbone
Mountain. Further, the Blackwater Avoidance Alternatives continue to cost significantly more than
the ROPA, with that cost difference becoming greater when compared to the refined ROPA. The
ROPA as presented in the Preferred Alternatives reports is $10.3 less expensive than the least
expensive Blackwater Avoidance Alternative. By comparison, the refined ROPA is $56.5 million less
expensive than the least expensive Blackwater Avoidance Alternative. The Blackwater Avoidance
Alternatives continue to cost substantially more because they are longer (the current approximate
cost per mile of roadway for Corridor H average approximately $11M per mile) and require more complex structures (bridges and over-sized culverts) that add to project costs.

Thus, the refined ROPA does not significantly change the updated alternatives analysis detailed in the Preferred Alternatives Reports or the identification of the ROPA as the Preferred Alternative. The refined ROPA continues to best achieve purpose and need, remains similar to the other alternatives in environmental impacts, is projected to have the least impacts on WVNFS, and minimizes impacts to Big Run Bog and Slip Hill Mill Run watersheds.

2.9  ENDANGERED SPECIES ACT (ESA) SECTION 7 CONSULTATION (FORMAL)

After the issuance of the Amended Preferred Alternative Report in November 2004, WVDOH and FHWA continued coordination with the USFWS regarding the WVNFS. The goal of this additional coordination was to prepare a complete Section 7 Initiation Package. The Initiation Package is required to transition from informal Section 7 consultation into formal Section 7 consultation. As part of the continuous consultation related to the WVNFS throughout 2005 and the development of the Initiation Package, additional engineering was performed on the ROPA (the Preferred Alternative) in an attempt to further reduce overall environmental impacts and specifically to continue to reduce impacts to suitable and highly suitable habitat for the WVNFS.

The location of the ROPA along Backbone Mountain (western portion of the Study Area) was reevaluated to determine if excess excavation could be further reduced through additional engineering analysis. The additional engineering analysis was successful in adjusting the excavation. For the refined ROPA, the project waste and borrow quantities are balanced and incorporated in the preliminary engineering construction limits. Therefore, the amount of excess excavation that will be generated in the western portion of the Study Area has been reduced by approximately 10 million cubic yards. Exhibits II-4, II-4a, 4b and 4c graphically illustrate the results of the refined engineering on the ROPA/Preferred Alternative. The refined ROPA reduces impacts to the habitat for the WVNFS, reduces other potential indirect and cumulative impacts to sensitive resources, and decreases the cost of the ROPA/Preferred Alternative. Another engineering adjustment made to the ROPA includes the addition of the bifurcation in the area of the Middle Run Shift. The bifurcation was created to better accommodate WVNFS movement by increasing the landscape permeability in the area of highly suitable habitat. The additional engineering, which was completed as part of ongoing Section 7 consultation related to the WVNFS in 2004 and 2005, resulted in minor shifts in the alignment which resulted in a slight increase in the overall length of the ROPA. The refined ROPA/Preferred Alternative was then presented to USFWS as part of the Initiation Package for formal Section 7 consultation.

Formal Section 7 consultation was initiated on October 25, 2005 by FHWA and WVDOH. USFWS confirmed the initiation of formal consultation and the completeness of the Initiation Package on November 18, 2005. On March 22, 2006 the USFWS requested an extension for the completion of formal consultation; the request was granted by FHWA on March 30, 2006. A draft BO was issued by USFWS on May 5, 2006. The final BO was issued on November 6, 2006. The BO provides:

• a complete consultation history,
• biological background research and baseline summary,
• confirms the proposed conservation measures,
• terms and conditions associated with the Incidental Take Statement, including Reasonable and Prudent Measures (RPMs) for compliance and
• a conclusion to the formal consultation process with the detailed reinitiation requirements.

The USFWS has stated that, “...FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of G. s. fuscus habitat.
Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized." Further, the BO specifically states, "After reviewing the current status of the G. s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services' Biological Opinion that constructing Corridor H, Parsons to Davis, as proposed, is not likely to jeopardize the continued existence of the G. s. fuscus." The issuance of the final BO concludes the formal consultation process.

The BO is provided in Appendix C and additional information on the WVNFS is provided in Section 3.3.3.

2.10 CONCLUSION

The Parsons-to-Davis SEIS has developed and evaluated a reasonable range of alternatives. To date, alternatives have been considered within the SDEIS, the Preferred Alternative Report, the Amended Preferred Alternative Report and as part of the informal and formal Section 7 consultation for the WVNFS. Table II-3 details the alternatives considered during each phase of the SEIS to date.

Table II-3
Alternatives Evaluated in the SEIS for the Parsons-to-Davis Project

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Eliminated in Screening</th>
<th>Studied in Detail in SDEIS</th>
<th>Developed After SDEIS</th>
<th>Preferred Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Build</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved Roadway Alternative (IRA)</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blackwater Alternatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Preferred Alternative (OPA)**</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 2**</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Original Preferred Alternative (ROPA)**</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td><strong>Blackwater Avoidance Alternatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1A - West</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1A - East</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1B - West</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1B - East</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1C</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1D - West</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1D - East</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1E</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1G - West</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1G - East</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative 1H</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Because the No-Build Alternative does not satisfy the purpose and need, it did not pass the SDEIS alternatives screening process. However, as per CEQ regulations, the No-Build Alternative was carried through the SDEIS (and this SFEIS).

** These alternatives include the Truck Route as a bypass for trucks around downtown Thomas. In the SDEIS, the Truck Route was presented as an option for the OPA and Alternative 2. In this SFEIS, the Truck Route has been incorporated into these alternatives.
After exhaustive alternative development, environmental and engineering analysis and continuous coordination with the resource agencies, the public, and the CAG, the ROPA has been identified as the Preferred Alternative for the Parsons-to-Davis Project (Exhibit II-5). The Blackwater Avoidance Alternatives will continue to be substantially more expensive than the ROPA/Preferred Alternative as they are ultimately longer (the current approximate cost per mile of roadway for Corridor H average approximately $11M per mile) and they require more complex structures (bridges and over-sized culverts) which also add to project costs.

Of all of the alternatives considered during the SEIS process, the ROPA:

- Best achieves the purpose and need for the project;
- Is similar to the other alternatives in terms of its overall environmental impacts;
- Is currently $35.9 million less expensive as the OPA and, in particular, is at least $56.5 million less expensive than the least expensive Blackwater Avoidance Alternative;
- Of the alternatives analyzed, it is likely to have the least overall direct and indirect effects on the WVNFS;
- Minimizes impacts to both Big Run Bog and Slip Hill Mill Run watersheds; and
- Has received support from the public via the City of Davis, and the CAG.

While the ROPA has been identified at this stage of the SEIS process as the Preferred Alternative, its identification does not preclude WVDOT from changing the Preferred Alternative's identification at a later stage based on comments on the SFEIS or other new information or changed circumstances (Settlement Agreement, III(C)(b)(2)).

The refined ROPA/Preferred Alternative is presented throughout this SFEIS; Section III reports updated impact analysis associated with the refined ROPA/Preferred Alternative.
SECTION III: EXISTING ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002. In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

3.1 INTRODUCTION

In this section, the existing environment is described and the environmental consequences of the alternatives carried forward for detailed analysis will be identified and compared. For some categories of potential impact, information has not changed since the 1996 Corridor H FEIS. Where appropriate, the information has either been incorporated by reference from the 1996 Corridor H FEIS and/or 1996 Corridor H ROD or summarized from technical reports (e.g., Biological Assessments prepared as part of Section 7 Endangered Species Act coordination with the US Fish and Wildlife Service USFWS). Federal Highway Administration (FHWA) regulations implementing the National Environmental Policy Act (NEPA) state that “The supplemental EIS needs to address only those changes or new information that are the basis for preparing the supplement and were not addressed in the previous EIS” (23 CFR 771.130(a)). Those regulations were followed in the development of this SFEIS.

3.1.1 OVERVIEW OF THE STUDY AREA

The Study Area (Figure I-3) is an approximately 8,600-acre (13.4-square mile) area located in Tucker County, West Virginia. The Study Area is dominated by mixed deciduous and evergreen forests that are intermixed with wetlands, areas that have been disturbed by extensive surface coal mining activities, and small areas of mountaintop pasture land. The North Fork of the Blackwater River flows south through the Study Area. The Study Area includes the community of Thomas and the neighborhoods of Benbush, William, Railroad Hill, and Coketon. The town center of Davis is located immediately southeast of the Study Area. The majority of development in the Study Area is associated with either Thomas or Davis, with the western half of the Study Area largely undeveloped. As will be discussed in the land use section below, most of the property in the Study Area is privately held by the Western Pocahontas Land Corporation. While the Blackwater Area is not within the Study Area, potential impacts associated with this area are included in the following analyses.

3.2 SOCIO-ECONOMIC ENVIRONMENT

The following are discussions describing the existing social and economic conditions in the Study Area and addressing the potential impacts of the proposed Parsons-to-Davis Project on those conditions. The social and economic environment potentially affected by the proposed project includes the Study Area, the communities of Thomas and Davis and their neighborhoods, and, to a
certain degree, Tucker County as a whole. Because population and economic data, in particular, are available predominately at the county level, this analysis describes this larger environmental area. Where possible, however, the conditions and potential impacts within the Study Area and its communities and neighborhoods have been disaggregated and emphasized.

A variety of public reports and publications were utilized in this analysis. Additionally, interviews with individuals supplemented the research effort. Finally, field observations were used to verify the public reports, publications and interviews. Updated information, after the circulation of the Parsons-to-Davis SDEIS in December 2002, is included within this SFEIS.

3.2.1 Economic Environment

3.2.1.1 Existing Conditions

The 1996 Corridor H FEIS provided a description of the existing economic environment in Tucker County. Updated census data confirms that some population and economic trends have not changed since the approval of the Corridor H FEIS in 1996. The percent change in population between 1980 and 1990 reported in the 1996 Corridor H FEIS was -3% for Tucker County, while the change between 1990 and 2000 was -5%. The 1980 to 1990 changes in population in Thomas and Davis were -21% and -18%, respectively. Those trends were similar in the following decade as shown in Table III-1 (-21% and -22%, respectively). The trend in Parsons, however, has shifted from a shrinking population between 1980 and 1990 (-23%) to a population holding steady with 1% growth between 1990 and 2000. Table III-1 shows the recent trends for these and other Tucker County communities. Statistically, population and economic trends have not changed significantly since the December 2002 SDEIS, therefore, the information presented in the SDEIS remains valid in this SFEIS.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucker County</td>
<td>7,728</td>
<td>7,321</td>
<td>-5%</td>
<td>7,160</td>
</tr>
<tr>
<td>Davis</td>
<td>799</td>
<td>624</td>
<td>-22%</td>
<td>600</td>
</tr>
<tr>
<td>Hambleton</td>
<td>265</td>
<td>246</td>
<td>-7%</td>
<td>246</td>
</tr>
<tr>
<td>Hendricks</td>
<td>303</td>
<td>319</td>
<td>5%</td>
<td>312</td>
</tr>
<tr>
<td>Parsons</td>
<td>1,453</td>
<td>1,463</td>
<td>1%</td>
<td>1,440</td>
</tr>
<tr>
<td>Thomas</td>
<td>573</td>
<td>452</td>
<td>-21%</td>
<td>431</td>
</tr>
</tbody>
</table>

Source: US Census Bureau.
*July 1, 2003 population estimate.

Table III-2 and Table III-3 present the labor force, employment statistics, and income and poverty levels for Tucker County and its communities. Since 1990, the unemployment rate has fallen in Tucker County from 12.1% to 6.3% (Table III-2); however, the percent of people below the poverty level has remained essentially the same (17% in 1990 as reported in the 1996 Corridor H FEIS versus 18% in 2000, Table III-3). Within the Study Area in 2000, the poverty rate was 16%. The average income level for Tucker County was $8,978 in 1990, and had risen to $16,349 by 2000. The average income level within the Study Area was $17,027 in 2000.
Table III-2  
Tucker County Labor Force and Employment

<table>
<thead>
<tr>
<th>Census Statistic</th>
<th>1990</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Labor Force</td>
<td>3,502</td>
<td>3,330</td>
</tr>
<tr>
<td>Total full-time and part-time employment by place of work</td>
<td>3,522</td>
<td>3,121</td>
</tr>
<tr>
<td>Total Unemployment</td>
<td>422</td>
<td>209</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>12.1%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>


Table III-3  
Tucker County Income and Poverty Levels

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2000 Below Poverty Level</th>
<th>2000 % Below Poverty Level</th>
<th>2000 Per Capita Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucker County</td>
<td>1,302</td>
<td>18%</td>
<td>$16,349</td>
</tr>
<tr>
<td>Davis</td>
<td>92</td>
<td>15%</td>
<td>$22,399</td>
</tr>
<tr>
<td>Hambleton</td>
<td>40</td>
<td>17%</td>
<td>$12,835</td>
</tr>
<tr>
<td>Hendricks</td>
<td>76</td>
<td>23%</td>
<td>$21,315</td>
</tr>
<tr>
<td>Parsons</td>
<td>276</td>
<td>19%</td>
<td>$16,565</td>
</tr>
<tr>
<td>Thomas</td>
<td>63</td>
<td>14%</td>
<td>$14,918</td>
</tr>
<tr>
<td>Study Area*</td>
<td>218</td>
<td>16%</td>
<td>$17,027</td>
</tr>
</tbody>
</table>

Source: US Census Bureau.

*Aggregated CT 9652 BG 3 and CT 9653 BG 1.

One major purpose of the Parsons-to-Davis Supplemental Environmental Impact Statement (SEIS) has been to assess alternative options that pass north of the Blackwater Area. As part of the 2000 Settlement Agreement (Appendix B), a Community Advisory Group (CAG) was formed to participate in the study. The CAG’s scoping letter of July 13, 2000 (provided in Appendix A) states, “In studying alternative routes to the north of Thomas, it is desirable to maximize the potential for development and to control how development occurs.” The letter requests that any alternative of Corridor H provide connections both north and southwest of Thomas with US 219. The CAG letter also indicates the advantages of these connections:

1. Northern connection would minimize truck traffic in the downtown shopping, historic, recreational, and residential areas of Thomas, would provide access to the Thomas business district, and would “open up” the area north of Thomas for residential development.

2. Southwestern connection would provide access to the old airport area for industrial and residential development and provide access for the ambulance authority.

The City of Thomas’ Development Strategy (1998) also makes recommendations for the Corridor H alternative with respect to economic environmental impacts. The strategy document proposes a northerly shift away from the Original Preferred Alternative (OPA) for two reasons (specific connections were not identified):

1. To prevent Corridor H tourist traffic from bypassing Thomas; and,

2. To reduce truck traffic through Thomas.
The existing truck and tourist traffic conditions and the potential impacts of the alternatives carried forward for detailed analysis on those conditions are examined in the discussions below. Additional information regarding the CAG is provided in Section VII: Comments and Coordination; CAG comment letters are provided in Appendix A.

**Truck Traffic**

This analysis addresses the question of how the truck travel patterns in and around Thomas would change if Corridor H were in place today. The analysis includes an assessment of how local traffic would be affected by the connections associated with any one of the Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West). Preliminary design of the Blackwater Avoidance Alternatives includes connections at US 219 west of Thomas, US 219 north of Thomas, and WV 32/93 north of Davis. For this analysis, it was assumed that there would be no difference between the five Blackwater Avoidance Alternatives because these alternatives are so similar in location and length. The Truck Route was included in the Revised Original Preferred Alternative (ROPA)/Preferred Alternative to address truck traffic concerns in Thomas based on the analysis presented in the SDEIS. The truck traffic patterns that would be associated with the ROPA/Preferred Alternative and Alternative 2 were assumed to be the same as those for the OPA, taking into account that each of these three alternatives includes the Truck Route for bypassing downtown Thomas. No induced traffic impacts, due to development or regional traffic patterns outside the immediate Study Area, were considered for this study.

**Traffic Counts**

The traffic data for this analysis were derived from traffic counts conducted during October 1999. The total of all trucks counted in downtown Thomas was 440, including 220 tractor trailers per day. The actual numbers of trucks on any given day may vary from these counts. Discussions with officials of companies generating truck traffic indicate that weekly or monthly variances in truck traffic in the area are not unusual. There are no permanent count stations in the Study Area that could convey the annual spread of high and low truck Average Daily Traffic (ADT) and the frequency of peaks generated by local economic conditions. Therefore, in interpreting the results discussed below, one should not concentrate on the actual number differences but on the magnitude of the differences reported. Population and economic trends have not changed substantially since the December 2002 SDEIS, nor have land use or economic changes occurred that would be expected to alter travel patterns in the Study Area. Therefore, the 1999 traffic data and the information presented in the SDEIS remains valid in this SFEIS.

**Composition of Truck Traffic**

For the purposes of this study, truck traffic is defined as any vehicle with six or more tires. This includes small trucks (two axle, six tires), buses, single unit multiple axle trucks (three or more axles), and trailer trucks (single or multiple trailers). Because the concerns of Thomas are likely to reflect a focus on heavy truck traffic (i.e., tractor-trailers), the volume of that traffic has been “broken out” from the total truck traffic.

**Tourist Travel Patterns**

This analysis addresses the question of how tourist travel patterns in and around Thomas would change if Corridor H were in place today. The analysis also addresses how the three connections of the Blackwater Avoidance Alternatives would redistribute tourist traffic. For this analysis, it was assumed that there would be no difference between the five Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) in total tourist trips because the alternatives are so similar in location and length. Also, it was assumed that for
Alternative 2 tourist travel patterns would be similar to those for the OPA. The ROPA/Preferred Alternative has a connection; however, unlike the OPA the connection is substantially farther to the west than the connections associated with the Blackwater Avoidance Alternatives. Therefore, the ROPA/Preferred Alternative was also assumed to have tourist travel patterns similar to those for the OPA.

Because there are no major roads (i.e., interstates or Appalachian highways) that currently provide access to the various recreational opportunities near the Study Area (e.g., Blackwater Falls State Park, Canaan Valley), a variety of travel routes are available depending on personal preference, desired side trips, and road conditions. Therefore, for this study, the most likely travel routes had to be inferred from the relationship between the origin of visitors and the various recreational opportunities. For the SFEIS, the most recent visitor-origin information available was reviewed, and the assumptions of this analysis were confirmed as reasonable.

The first step in the route determination process was to determine the total number of visitors to tourist attractions in eastern Tucker County. Total visitor days for 1999 and previous years, when available, were collected from Blackwater Falls State Park, Canaan Valley State Park, Fairfax Stone State Park, Timberline Four Seasons Resort, White Grass Cross-Country Center, and wilderness areas within the Monogahela National Forest (MNF) (Dolly Sods and Otter Creek). Visitation data, discussions with park and recreation facility managers, and a visitor profile for the Potomac Highlands (Witt and Fletcher, 2004) provided insight into the geographic origin of visitors and percentage of overnight visitors. Comparatively less data were available on the origin of day-visitors; therefore, a population density analysis was completed in geographic information systems (GIS) to determine the total population within an 80-mile radius of eastern Tucker County. This analysis identified the location and density of potential day-tourists to the area.

Following collection of these data, the most direct routes were identified from state highway maps and directions provided by the tourist attractions themselves. Travel routes, also known as travelsheds, were determined for each of the major cities within the mid-Atlantic region (Pittsburgh, Baltimore, Washington, D.C., Richmond, Roanoke, Charleston, Wheeling, etc.) Four routes into eastern Tucker County were established (US 219 from the north, WV 93 from the east, WV 32 from the south, and US 219 from the west [Parsons]) and associated geographically with a tourist travelshed and its share of day and overnight visitors to the region.

Total tourist visitor days were converted to ADT volumes. Based on tourist travelsheds, each of the four routes into the Study Area was allocated a portion of the tourist traffic volumes.

Figure III-1 represents the existing directional distribution of tourist traffic based on the previously described methodology. Currently, the largest share of tourists (70 percent) accesses the tourist attractions from the south along WV 32. Using this route, tourists reach their destination without having to pass through Davis or Thomas. These tourists are generally from the Washington, D.C. area, Virginia, and portions of West Virginia. Approximately 30 percent of tourists, those from Pennsylvania, Ohio, western Maryland, and portions of West Virginia, currently access the recreational attractions from the west or north along US 219 and pass through both Thomas and Davis on their way to the attractions. The amount of tourists using WV 93 to enter the Study Area is considered insignificant, as other routes prove to be more efficient.
Figure III-1
Existing Tourist Traffic Directional Distribution
3.2.1.2 Potential Impacts

Truck Traffic

Table III-4 presents the effect of the various alternatives being considered on truck traffic passing through downtown Thomas. Conclusions are derived from diversion assumptions based on the observed truck data and discussions with companies generating truck traffic in the area. The ROPA/Preferred Alternative, the OPA, and Alternative 2, each of which includes the Truck Route, would affect at least a 45 percent reduction in total trucks in downtown Thomas (this is the amount estimated to use Corridor H without the truck bypass), but more likely would reduce trucks in downtown Thomas by 80 percent as a result of the truck bypass. The 80 percent reduction would include a 90 percent reduction in heavy trucks.

It is projected that connecting US 219 to Corridor H both west and north of Thomas with any of the Blackwater Avoidance Alternatives would also result in an 80 percent reduction of total truck traffic in downtown Thomas. Heavy truck traffic would be reduced by 90 percent with any of the Blackwater Avoidance Alternatives.

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total Trucks</td>
<td>Tractor-Trailers</td>
<td>Total Trucks</td>
</tr>
<tr>
<td>ADT of Trucks</td>
<td>440</td>
<td>220</td>
<td>85</td>
</tr>
<tr>
<td>Percent Change</td>
<td>--</td>
<td>--</td>
<td>-80%</td>
</tr>
</tbody>
</table>

1 All three of these alternatives include the Truck Route which provides a means for trucks to bypass downtown Thomas.

Tourist Travel Patterns

The alternatives will change the directional distribution of tourist traffic. For the comparative analysis of impacts to local business districts, it was assumed that the origin and number of tourists will remain the same as the existing conditions. Given the assumption that the ROPA/Preferred Alternative would have similar tourist travel patterns to that of the OPA, it would be expected that 10 percent of the tourists coming from the south would continue to utilize WV 32 and that 15 percent would continue to utilize US 219 from the north (Figure III-2). The remainder, 75 percent of tourist traffic, would utilize Corridor H and pass through Davis on their way to recreational facilities. The OPA and Alternative 2 would be expected to experience this change in travel pattern as well. With respect to the ROPA/Preferred Alternative, this analysis represents a slightly conservative estimate because, unlike the OPA and Alternative 2, the ROPA/Preferred Alternative provides an interchange location approximately six miles west of Thomas at Tucker County High School (TCHS). Tourist traffic seeking an alternative route to the recreation attractions could choose this interchange and travel along US 219 through Thomas.

This analysis assumes that all of the exits for the Blackwater Avoidance Alternatives (i.e., US 219 west and north of Thomas and WV 32 at Davis) would be signed as providing access to the recreation attractions. Travelers along Corridor H could choose any of the three exits to reach the recreation attractions. The difference between the northern and western US 219 connections is not relevant to this issue, as both connections “feed” traffic through the Thomas business district on its way to the recreational facilities.
Figure III-2
Tourist Traffic Directional Distribution with Corridor H - ROPA/Preferred Alternative¹, OPA and Alternative 2

¹This represents a slightly conservative estimate of travel patterns through Thomas with the ROPA/Preferred Alternative because this analysis has assumed travelers will not opt to use the TCHS exit along the ROPA/Preferred Alternative (six miles west of Thomas).
A westbound traveler on Corridor H would use the first and most logical exit to access the area - the connection at Davis. Eastbound travelers on Corridor H would have three signed exits to access the recreational attractions in the area under the Blackwater Avoidance Alternatives. As with the westbound travelers, the Davis connection is the closest to the attractions; however, a portion of the tourists traveling on Corridor H from the west could select any of the exits signed for those attractions. Depending on the need for services and the draw of historic downtown Thomas, eastbound tourists may prefer to access the area at the western or northern connection. The presence of Corridor H connections in the Thomas area has a substantial effect on the potential tourist traffic traveling through the Thomas business district.

Figure III-3 illustrates the tourist travel patterns if any of the Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) were constructed. Fifteen percent of tourists, represented by travelers from Pennsylvania or western Maryland, would continue to travel on US 219 to reach the recreational attractions, as the 2-mile long portion of Corridor H between the north connection and the Davis connection would not provide travel time savings over US 219 through Thomas. The tourists exiting at the Davis connection have traveled from the eastern points of origin (the Washington D.C. area or eastern Maryland).

Tourists traveling from the west account for 45 percent of the total tourist traffic. It is likely that those unfamiliar with the area and those interested in attractions of the Thomas business district would use the first signed exit (the west connection). These eastbound tourists may also use the north or Davis connection, but Figure III-3 represents the potential tourist traffic that would enter downtown Thomas based on highway signage.

Currently, without Corridor H, the estimated percentage of tourists that pass through Thomas is 30 percent. If the ROPA/Preferred Alternative, OPA or Alternative 2 were constructed, most of the potential tourist traffic would be routed through the Davis connection (bypassing Thomas); approximately 15 percent of total tourist traffic would enter downtown Thomas. As noted for the Blackwater Avoidance Alternatives, however, the 45 percent of motorists approaching from the west could choose to exit, based on signage or experience, on the west side of Thomas in order to visit Thomas on the way to other attractions. The ROPA/Preferred Alternative enables this choice with the inclusion of the TCHS connection. Nevertheless, it appears the ROPA/Preferred Alternative would result in some reduction in pass-through tourist traffic, which could have an adverse impact on businesses in Thomas and would not be supportive of the goals of the City of Thomas Development Strategy (1998).

Should any one of the Blackwater Avoidance Alternatives be constructed, 60 percent of all tourist traffic would potentially pass through Thomas via US 219 from the north or the western Thomas Corridor H connection. (Since it would place tourists further north from the tourist attractions than either of the adjacent exits, the northern Thomas connection is assumed not to be a logical exit for tourist traffic.) It is reasonable to assume that any increase in the tourist traffic in Thomas, as predicted with any of the Blackwater Avoidance Alternatives carried forward for detailed analysis (1D East and West, 1E, and 1G East and West) would have some positive economic consequences for Thomas.

In general, as the connections on Corridor H are planned to be designed and signed, tourist traffic not attracted by the amenities and shopping opportunities in the Thomas business district can easily bypass it, reducing through-tourist traffic; while tourists interested in the Thomas business district would have the opportunity to easily access it.
Figure III-3
Tourist Traffic Directional Distribution with Corridor H - Blackwater Avoidance Alternatives
3.2.1.3  Avoidance, Minimization, and Mitigation

All of the alternatives carried forward for detailed analysis would result in reductions in truck traffic in the Thomas business district; therefore, no direct adverse impacts on the local economy are expected and no avoidance, minimization, or mitigation measures are required.

The ROPA/Preferred Alternative, the OPA and Alternative 2 would reduce the potential for tourist traffic to enter the Thomas business district. While this would reduce the potential for tourism benefits through increased tourist traffic, it would also remove a portion of tourist related through-traffic, thereby decreasing congestion in the Thomas business district.

The Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) would increase the potential for tourist traffic to enter the Thomas business district, while allowing for through traffic to bypass Thomas by continuing on Corridor H. These Blackwater Avoidance Alternatives provide opportunities for additional tourism benefits when compared with the ROPA/Preferred Alternative, the OPA and Alternative 2; however, neither group of alternatives warrants mitigation with regard to tourism-related impacts.

3.2.2  LAND USE

3.2.2.1  Land Use Plans

Western Pocahontas Land Corporation (Western Pocahontas), a coal and timber industry land holding company, is the predominate landowner within the Study Area. The interests of Western Pocahontas would seem to indicate that most of the land in the Study Area will remain undeveloped until the mineral and timber resources are exhausted to the point that their extraction is not profitable. However, Western Pocahontas can conduct property transfers within the area as it deems appropriate.

Tucker County has a Planning Commission but does not have locally-legislated land use controls. Controls exist only to the extent that they are required by state and federal agencies in their various permitting processes.

In 1992, Tucker County adopted a Comprehensive Plan, which states its land use and development plans and objectives. Tucker County intends to update the plan but a timeline for that activity has not been formally determined. (Parsons Advocate, August 2006) The 1992 plan assumes that Corridor H will be constructed along the OPA and states that Corridor H would “greatly enlarge the number of potential industrial sites and enhance their development” (Tucker County Planning Commission, 1992, p. 44). In the Comprehensive Plan, three areas were identified for potential residential, commercial, and industrial development if Corridor H were completed. These areas are: west of Thomas near Benbush, Coketon, and the eastern side of Backbone Mountain near TCHS. The plan also recommends that zoning controls be extended in the vicinity of Corridor H to regulate potential development by preventing incompatible land uses and protecting scenic qualities (Tucker County Planning Commission, 1992, pp. 82 – 88).

Tucker County has also developed two handbooks to guide the development expected to result from Corridor H: Tucker County Development Handbook and Corridor H Design Guidelines. The handbooks were published in 1997 by Tucker County and the Urban Research and Development Corporation. They provide “guidelines for managing development along the highway corridor and at new highway interchanges [that] will help ensure that growth generated by Corridor H enhances, rather than detracts from, Tucker County’s natural and man-made environment” (Tucker County Planning Commission, 1997, p. 2).
Both the City of Thomas and the Town of Davis have economic development plans that identify future land use goals. The City of Thomas' Development Strategy (1998) identifies the need for an interchange with Corridor H and US 219 north of Thomas. It also proposes that the land between Thomas and Davis should be annexed by Thomas to maintain the current greenway corridor and to control new development in that area. Other land use recommendations in the plan include aesthetic improvements to roads and sidewalks, the creation of “gateways” to the community, and the development of a 145-acre city-owned parcel as a park. The Community Design Team of Davis has produced community, economic, and land use goals and strategies (1998). Land use goals include the development of a riverfront park, enacting aesthetic guidelines for historic downtown properties, and enhancing automobile and bicycle transportation throughout the town.

The MNF’s proclamation boundary extends eastward, just outside of Thomas and covers approximately 75 percent of the Study Area. The proclamation boundary for the Monongahela National Forest is the legal boundary, as designated by Congress, developed to aid in land management planning from project level to forest level. Land ownership within the proclamation boundary can be highly fragmented; all land within the boundary is not national forest land; some is privately owned. Publicly held lands within the MNF’s proclamation boundary are managed under the MNF’s Land and Resource Management Plan Monongahela National Forest (MNF Plan), an integrated management plan that guides all natural resource management activities within the MNF.

Throughout the planning history of the Corridor H project, the 1986 MNF Plan was in place and its prescriptions and uses have been considered in multiple Corridor H studies. In the December 2002 Parsons-to-Davis SDEIS, the 1986 MNF Plan was used for existing environment and impact analysis. In September 2006 the MNF issued the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the 2006 MNF Plan. The September 2006 MNF Plan describes updated Management Prescription Areas (MPAs) within the MNF. Three MPAs are represented within the Study Area: MPA 3.0, 4.1 and 6.1. The updated MPAs, particularly MPA 3.0 and 6.1 are similar to those described in the 1986 MNF Plan within the Study Area. MPAs are applicable to land held by the MNF only; private property is not subject to the prescriptions. The following synopses present a snap-shot of each MPA represented in the Project Study Area for the purpose of evaluating the Parsons-to-Davis project relative to consistency with the 2006 MNF Plan. The MPAs are shown in Exhibit III-1.

MPA 3.0, Vegetation Diversity, places an emphasis on:
  • “Age class diversity and sustainable timber production
  • A variety of forest scenery
  • Habitat for wildlife species tolerant of disturbance, such as deer, grouse and squirrel
  • A primary motorized recreation environment” (2006 MNF Plan, pg III-4)

“The area provides a diversity of habitats for wildlife species, a diverse visual landscape, and considerable human activity resulting from a variety of uses.” (2006 MNF Plan, pg III-7). In addition, “A system of roads and trails provides access within the area for public recreation and for administrative and management purposes, including transportation of forest products. Roads and trails provide abundant opportunities for motorized recreation, including driving for pleasure, forest product gathering, hunting, fishing, and wildlife viewing.” (2006 MNF Plan, pg. III-7) Approximately 360 acres of MPA 3.0 are located with the Project Study Area.

MPA 4.1, Spruce and Spruce-Hardwood Ecosystem Management, emphasizes:
  • “Active and passive restoration of spruce and spruce-hardwood communities
  • Research and administrative studies on spruce restoration
• Recover of threatened and endangered species and other species of concern...
• Management of hardwood communities where spruce is a negligible or absent component
• Generally restricted public access and use
• A mix of forest products” (2006 MNF Plan, pg. III-9)

The 2006 MNF Plan also states, “...this prescription area provides habitat for many species, it is primary habitat for the a number of federally listed or Regional Forester's Sensitive Species, including West Virginia northern flying squirrel, Cheat Mountain salamander and northern goshawk.” (2006 MNF Plan, pg. III- 11). Further, “A system of roads provides access within the area of administrative and management purposes, including transportation of forest products.” (pg. III- 13) and that “Special uses and facilities do not detract from the desired ROS (Recreational Opportunity Setting) settings for the area.” (2006 MNF Plan, pg. III-13) Approximately 95 acres of MPA 4.1 are located within the Project Study Area.

MPA 6.1, Wildlife Habitat Emphasis, prescribes:
• “A vegetation management strategy that emphasizes sustainable production of mast and other plant species that benefit wildlife
• Active restoration of pine-oak and oak-hickory communities
• Restricted motorized access and a network of security areas that reduce disturbance to wildlife
• A primarily non-motorized recreational setting
• A mix of forest products” (2006 MNF Plan, pg. III-31)

“A system of roads and trails provides access within the area for administrative and management purposes, including transportation of forest products.” (2006 MNF Plan, pg. III-35). Further, “Special uses and facilities such as utility corridors are compatible with minimizing disturbance to wildlife populations and the ROS setting for the area.” (2006 MNF, pg. III-35). Approximately 26 acres of MPA 6.1 are located within the Project Study Area.

In regard to MPA 8.0, Special Areas: “The Park Service, Department of the Interior, administers the Natural Landmarks Program. The objective of the program is to assist in the preservation of a variety of significant ecological and geological natural areas which, when considered together, will illustrate the diversity of the country's natural heritage.” (Pg. III-47) Big Run Bog (BRB) is a Natural Landmark; its watershed is approximately 660 acres. The 2000 SA prescribes avoidance of the BRB watershed, therefore, the mainline of the project Build Alternatives all avoid the BRB watershed.

This SFEIS acknowledges the relative changes in 2006 MNF Plan from the 1986 MNF Plan. While changes have been made to MPAs within the MNF, these changes do not warrant additional detailed analysis at this time. Further, the MNF Social Impact Assessment (2004) acknowledges the private development trends and increasing recreational demand in the study area. While the MNF proclamation boundary extends to cover most of the Study Area, the majority of the property within the proclamation boundary is privately held and therefore, not subject to MPA management.

Further discussion of the MNF lands is provided in Section 3.2.7 Recreation.

### 3.2.2.2 Consistency with Land Use Plans

All of the Build Alternatives (Blackwater Alternatives and Blackwater Avoidance Alternatives) are generally consistent with the plans of Tucker County, Thomas, and Davis. The No-Build Alternative, however, is not consistent with these local plans because the plans anticipate that Corridor H will be constructed.
The City of Thomas' Development Strategy (1998) states that an interchange with Corridor H and US 219 north of the City is desired. The Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) provide such a connection. While the ROPA/Preferred Alternative, OPA, Alternative 2, and the No-Build Alternative do not provide this connection, the Thomas Truck Bypass and TCHS connection included in the ROPA/Preferred Alternative provide some of the benefits of a northern connection as identified in the City of Thomas' Development Strategy (1998).

Through continuous coordination with the MNF, it has been determined that construction of any of the Build Alternatives does not conflict with the overall MNF Plan, or with any of the MPA through which it will traverse. Further, the alternatives carried forward for detailed analysis may facilitate some of the expected uses of these areas, specifically mineral exploration, timber harvesting, and recreational uses. Additional discussion of impacts to the MNF lands is provided in Section 3.2.7 Recreation. The No-Build Alternative is also consistent with the MNF Plan.

### 3.2.2.3 Land Use Conversions

Each of the Build Alternatives would require the direct conversion of land to transportation use. Approximate land conversions required by each of the alternatives carried forward for detailed analysis are shown in Table III-5. The No-Build Alternative will not require any land conversion.

<table>
<thead>
<tr>
<th>Table III-5</th>
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<tbody>
<tr>
<td><strong>Land Converted to Transportation Use (acres)</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>Footprint</strong></td>
</tr>
<tr>
<td><strong>MNF MPA1 3.0</strong></td>
</tr>
<tr>
<td><strong>MNF MPA1 6.1</strong></td>
</tr>
</tbody>
</table>

1 Monongahela National Forest Management Prescription Area, based on 2006 MNF Plan.

While MPA 4.1 is located within the Project Study Area, none of the Alternatives Carried Forward for Detailed Study directly impact MPA 4.1, therefore, no land use conversation are shown. Further, MPA 8.0 prescribes ‘special use’ for Natural Landmarks such as BRB. The mainline of the ROPA/Preferred Alternative avoids the BRB watershed; the relocated of FR 18 (partially located within the BRB watershed) will be developed in consultation with the MNF. While the 2006 MNF Plan presents changes to various MPA areas, these changes are not significant relative to the Parsons-to-Davis project. The Parsons-to-Davis project remains consistent with the MNF plan.

### 3.2.3 FARMLANDS

#### 3.2.3.1 Existing Conditions

The Farmlands Protection Policy Act requires a farmland impact evaluation for applicable, federally funded projects. Because the Study Area is considered to be rural and Corridor H is not a categorically excluded project, coordination with the National Resource Conservation Service (NRCS) is required. This coordination is accomplished through the completion of a Farmland Conversion Impact Rating (Form AD-1006) for each county impacted (i.e. Tucker County).

#### 3.2.3.2 Potential Impacts

Form AD-1006 was prepared for the OPA and the Blackwater Avoidance Alternatives and reviewed by the NRCS. The form and the NRCS response letter from January 2001 are included in Appendix A. Although the Alternatives have continued to evolve since January 2001, the NRCS response
indicates that the farmland scoring parameters as applied to this region make it highly improbable for an alternative in the area to receive a negative evaluation. Therefore, it is assumed that none of the Build Alternatives would receive a negative evaluation.

### 3.2.4 SOCIAL ENVIRONMENT

#### 3.2.4.1 Existing Conditions

**Communities and Neighborhoods**

The western portion of the Study Area is largely undeveloped; however, the eastern portion of the Study Area encompasses the community of Thomas and its neighborhoods of Benbush, William, Railroad Hill, and Cortland Acres. The community and its neighborhoods are not self-sufficient; residents are generally likely to leave the area to meet employment, education, social, commercial, medical, and recreation needs. The Study Area also overlaps with the outskirts of the community of the Town of Davis. The characteristics of these communities and neighborhoods are detailed in Table III-6. Exhibit III-2 shows the communities and neighborhoods in the Study Area.

<table>
<thead>
<tr>
<th>Community</th>
<th>Neighborhoods</th>
<th>Services and Facilities Available</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td>Schools Library</td>
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<tr>
<td>Thomas</td>
<td>Benbush</td>
<td>DTEMS* &amp; TCHS</td>
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<td></td>
<td>Coketon</td>
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<td></td>
<td>Cortland Acres</td>
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<td>William</td>
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<td>City of Thomas</td>
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<tr>
<td>Davis</td>
<td>Town of Davis</td>
<td>DTEMS* &amp; TCHS</td>
</tr>
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</table>

*Davis–Thomas Elementary and Middle School.

**Services, Facilities, and Organizations in the Community**

Kindergarten through Grade 12 students of the Study Area are served by the Davis-Thomas Elementary and Middle School (DTEMS) and the TCHS. Total enrollment in public and private schools in Tucker County has declined by 19 percent from 1985 to 2000.

Most (96 percent) of the public school students in Tucker County rely on a fleet of 16 school buses for school transportation. This fleet transports students of all ages, so all busses drop off students at DTEMS on WV 32 first, and then proceed west on US 219 to TCHS. The Study Area is served by parts of five different bus routes (Ramsey, pers. comm., 2000).

A few students, particularly those living in the eastern part of Thomas, elect to walk or bicycle to DTEMS. Therefore, some students are walking or bicycling on WV 32 between Thomas and DTEMS.
Because of its isolated location – on US 219 between Thomas and Hambleton on Backbone Mountain – and safety concerns, students are required to take the school bus or ride with parents to TCHS. In the past, students have not been allowed to drive, bike, or walk to TCHS; however, this issue is revisited periodically by the school board.

While some continuing education classes are available at the TCHS Career Center and the Thomas Education Center, most residents of the Study Area must leave the community to pursue higher education.

The community is served by a small public library, Mountain Top Library in Thomas. Residents of the Study Area may also choose to use the larger Five Rivers Library in Parsons.

The community is served by emergency services dispatched to all of Tucker County through “911” service. Law enforcement is provided by the West Virginia State Police and the Tucker County Sheriff’s Office, both located in Parsons. Fire protection is provided by Volunteer Fire Departments (VFDs) in Parsons, Thomas, Davis, and Canaan Valley. The Thomas VFD is located in downtown Thomas and would be the most likely to respond to incidents in the Study Area. Emergency Medical Service (EMS) is provided by the three stations of the Tucker County Emergency Ambulance Authority. The Thomas EMS station is most likely to respond to incidents in the Study Area.

Residents of the community must travel outside the area for health care. The nearest full-service hospital to the Study Area is Garrett County Memorial Hospital in Oakland, Maryland, approximately 23 miles north of the Study Area via US 219. The next nearest hospital, and the one most often selected by patients using EMS (Tucker County Emergency Services internal report) is Davis Memorial Hospital in Elkins, approximately 34 miles west of the Study Area by way of US 219. Davis Memorial Hospital also manages a clinic, Tucker Community Care, in Parsons on WV 72. A veteran’s clinic is also available in Parsons.

Cortland Acres is a nursing home located in the Study Area, west of Thomas on US 219. It also operates the adjacent Pineview Apartments that provides assisted living for elderly residents. The Village at Davis, in downtown Davis, is also a senior citizens residential community.

Because the number of persons over age 65 in the community and county is increasingly large, the Tucker County Senior Services program is extensive. There are two centers in the county – one in Parsons and the other in Thomas.

The community has a variety of recreational facilities and programs. Baseball fields are located at the Knights of Columbus Community Park and the Davis Baseball Field. Community centers are located in Thomas and Davis. During the summer, a joint children’s recreation program alternates between the Thomas and Davis community centers. Both localities have plans for community parks, the details of which are discussed in Section 3.2.7 Recreation.

A number of religious organizations service the community. The locations of identified religious facilities are illustrated in Exhibit III-3.

Finally, the community has a variety of civic organizations, which meet in lodges, churches, community buildings, members’ homes, or local restaurants. Various Parsons Advocate notices indicate that the current trend in civic organizations has been consolidation because of population and interest decline.

Socio-economic resources in the Study Area are shown on Exhibit III-3.
**Community Travel Patterns and Accessibility**

Because opportunities are often not available in the community of Thomas, travel outside the community is often required for employment, higher education, shopping, entertainment, and health care. Due to the rural and dispersed nature of development in the region, these facilities are almost exclusively accessed by private vehicles. The only public transportation systems in the community are the school bus system and a shuttle service for senior citizens. Alternative forms of transportation - walking and bicycling - are not generally used due to the terrain, roadway conditions, and the large distances between origins and destinations.

Thomas has identified the need to repair existing sidewalks and to provide bicycle and pedestrian trails to connect community resources, especially DTEMS and the Thomas Community Center/playground (City of Thomas, 1998).

**3.2.4.2 Potential Impacts**

None of the Build Alternatives carried forward for detailed analysis would separate residents from their community. Instead, they would provide improved safety and efficient transportation access to the necessary services outside the community. Generally, all Build Alternatives provide reasonable and safe access to facilities within the Thomas and Davis areas. The No-Build Alternative would not improve access to services within or outside the local communities.

Compared to one another, the Build Alternatives would have different impacts on community travel patterns because of the differences in their intersections with the existing roadway network. The OPA and Alternative 2 do not offer access points west of WV 32. The ROPA/Preferred Alternative includes a western connection near TCHS. The Blackwater Avoidance Alternatives offer access points to the west of Thomas, to the north of Thomas, as well as at WV 32/WV 93 and would facilitate community travel in numerous and differing ways. Some of the possible scenarios and comparisons of community travel are highlighted below.

The impact of the ROPA/Preferred Alternative on community travel patterns is similar to that of the OPA, Alternative 2 and the Blackwater Avoidance Alternatives. The ROPA/Preferred Alternative offers an access point closer to the TCHS than any of the Blackwater Avoidance Alternatives, and one that has fewer adverse environmental impacts. Because it offers a direct connection to the Tucker County High School entrance, movement to and from the high school would be best accommodated with the ROPA/Preferred Alternative. In order to satisfy or help achieve the project need for direct and safe access to TCHS, a connection would have to be added in the vicinity of the Blackwater Avoidance Alternatives and Alternative 2. A TCHS connection from these other alternatives would result in additional costs and environmental impacts, including requiring large cuts in an area of highly suitable WVNFS habitat. Further, a TCHS connection associated with the Blackwater Avoidance Alternatives or Blackwater Alternative 2 would most likely require additional upgrades to US 219 to improve sight distance, eliminate substandard curves, and generally improve safety since they would approach the school from the east. Thus, in addition to the reduced costs and environmental impacts associated with a TCHS connection from the ROPA, the ROPA/Preferred Alternative also offers the best engineering approach to TCHS.

The movement of visitors and residents to and from the Cortland Acres Nursing Home would be best served by any of the Blackwater Avoidance Alternatives than with the ROPA/Preferred Alternative, OPA or Alternative 2, but specifically Alternatives 1G West and 1G East offer the most convenient access to this facility.

Alternatives 1D West and 1D East offer the most convenient access to the community of Benbush since both the eastbound and westbound access points are closest to this area. Similarly,
Alternative 1E offers the most convenient access to the community of William. Exhibit III-3 can be consulted for conceiving community travel to other points of interest not mentioned in this discussion.

One of the purposes of the Parsons-to-Davis project is to improve the quality of life in the region by improving emergency response times and access to emergency facilities. In part because of its shorter length and less circuitous route, the ROPA, when compared to the other alternatives, results in additional reduced response times between Thomas and Davis and the only full-service hospital (Davis Memorial Hospital in Elkins) serving these communities. It is generally accepted among emergency providers that a reduction in response time of even a few minutes is important and can be crucial. Response time reduction would also apply to other emergency providers (e.g., fire and police).

3.2.5 RELocations

None of the alternatives will directly displace any business or community facilities. However, Alternatives 1D West and 1G West involve the relocation of the weighing scales and scale house of the Tucker County Landfill. The West Virginia Division of Highways (WVDOH) relocation program ensures that relocated facilities are adequately accommodated with minimal inconvenience and disruption in accordance with current guidelines instituted by the West Virginia Department of Transportation (WVDOT). An expansion of the Tucker County Landfill has been approved; the expansion area is located immediately adjacent to the east of the current cells. The ROPA/Preferred Alternative would not impact the landfill expansion area.

The ROPA/Preferred Alternative, the OPA and Alternative 1E would require one residential relocation. Alternatives 1D East and West, and 1G East and West would not require any residential relocations. Policies and procedures for accommodating relocations are detailed in the 1996 Corridor H FEIS and ROD.

3.2.6 ENVIRONMENTAL JUSTICE

Executive Order 12898 seeks to minimize disproportionate impacts of federal programs on minority and low-income populations. In accordance with this directive, data on the presence of and potential impacts to minority and low-income populations are included below.

3.2.6.1 Existing Conditions

According to the most recent data from the United States Census Bureau (2000 Census data), the population representing the Study Area (Census Tract 9652, block group 3; Census Tract 9653, block group 1; Census Tract 9653, block group 3; and Census Tract 9654, block group 2) had a similar percentage of non-white persons compared to Tucker County as a whole (32 non-white persons or 1.0 percent and 84 non-white persons or 1.1 percent, respectively). Interviews with local officials and field investigations noted that the non-white population is not a concentrated population and is dispersed throughout the Study Area (Schmiedeknecht, 2000 and Snyder, 2000).

The Study Area has a much lower ethnic minority (Hispanic) population than Tucker County. FHWA has defined low-income persons as those whose median household income is at or below the poverty level set by the United States Department of Health and Human Services (FHWA, 1998). In 2000, 17 percent (507 persons) were considered low-income in the Study Area, while 18 percent (1,302 persons) were considered low-income in Tucker County as a whole. Interviews with local officials and field investigations noted that the low-income population is not a concentrated population and is dispersed throughout the Study Area (Schmiedeknecht, 2000 and Snyder, 2000).
3.2.6.2 Potential Impacts

Minority and low-income populations reside in the Study Area, but public involvement conducted indicates that individual minority and low-income families are generally part of the broader community, as opposed to being located in minority or low-income neighborhoods. The environmental justice analysis indicates that these populations would not experience impacts from the No-Build Alternative or Build Alternatives any differently from the rest of the community. Therefore, disproportionately high and adverse impacts to environmental justice populations would not occur with either the No-Build Alternative or any of the Build Alternatives. Specifically, the ROPA/Preferred Alternative would not have disproportionately high and adverse impacts on environmental justice populations.

3.2.6.3 Avoidance, Minimization, and Mitigation

All efforts have been made to avoid and minimize disproportionately high and adverse impacts to environmental justice populations. No mitigation is necessary.

3.2.7 RECREATION

3.2.7.1 Existing Conditions

A detailed description of the existing recreation environment is found in the 1996 Corridor H FEIS Socioeconomic Technical Report while updated information concerning the alternatives under consideration in this SFEIS is reported below.

National and State Recreational Lands

There are no National or State Parks in the Study Area. However, approximately 75 percent of the Study Area is covered by the MNF; only publicly-held lands are subject to management in accordance with the applicable MPA. This portion of the MNF is managed by the Cheat Ranger District. While no official estimate has been completed regarding carrying capacity on the Cheat Ranger District, officials note that general trail and road usage is low, and in this region most trails are used between September and October to access hunting areas (Hicks, 2000).

Local Parks

There is one existing local park and one planned local park in the Study Area: The Knights of Columbus Community Park and the proposed City of Thomas Park, respectively. The Knights of Columbus Community Park is not publicly owned, but generally is publicly accessible. Facilities include a baseball field and picnic benches. The proposed City of Thomas Park is a 145-acre parcel and an adjacent 17-acre parcel that the City of Thomas’ Development Strategy (1998) identified for development as a park. The Thomas City Council has stated in a March 13, 2001 resolution (Appendix A) that it wishes to jointly develop this property as a park with FHWA and the WVDOH in such a way that both recreational facilities and Corridor H may be accommodated within its boundaries. There are no facilities on this property at the present time.

Private Recreation Lands

The Canaan Valley Institute purchased 3,208 acres along WV 93 north of Davis in 1992. According to the Canaan Valley Institute website (www.canaanvi.org), this tract of land will feature a variety of non-motorized recreation opportunities that will be available to the general public, including nature trails for hiking, biking, equestrian use and skiing; primitive camp sites; a fishing pier; boating/river access; and interpretive nature exhibits (Canaan Valley Institute, 2006). This parcel of land is located just outside the Study Area and will be adjacent to Corridor H just past the
eastern terminus of the Parsons-to-Davis project. There are no potential direct impacts to this site, but it is included due to its proximity to the Study Area.

**Recreational Trails**

The only major trail within the Study Area is the Allegheny Highlands Trail (Allegheny Trail). In its entirety, the Allegheny Trail is an approximately 330-mile long north-south hiking trail that starts on the Mason-Dixon Line at the Pennsylvania/West Virginia border near Bruceton Mills and makes its way south until it meets the Appalachian Trail on Peters Mountain at the Virginia/West Virginia border. Volunteer workers maintain all sections of the Allegheny Trail, which is marked by 2"x 6" yellow blazes. The MNF maintains other various multi-use trails (hiking and biking) within its proclamation boundary throughout Tucker County. These minor trails also allow for limited motorized access associated with hunting and fire protection. Most of these trails are underdeveloped (unpaved) and require minimal maintenance.

The Allegheny Trail enters the Study Area in the west on the bed of the historic West Virginia Central and Pittsburg [sic] (WVC&P) Railroad. It then connects with Tucker Co. 27 and proceeds north to WV 32. It follows WV 32 southwest to Tucker Co. 29 and proceeds southeast into Blackwater Falls State Park. Recreational trails are shown on Exhibit III-1.

Portions of the Allegheny Trail system are planned to be “upgraded” in the Study Area (continuing into the Davis-to-Bismarck Project of Corridor H), and are being developed in coordination with the MNF as part of the mitigation commitments associated with Corridor H. These upgrades are also referred to as the Corridor H bike paths. In the Study Area, developing the Corridor H bike paths will involve upgrading the historic railroad segment that runs throughout the Blackwater Canyon and the Allegheny Trail within the Study Area. When the proposed bike paths leave the Study Area they continue along the abandoned railroad grade, parallel to WV 93 and end immediately west of Mount Storm (Figure III-4). The current trail system includes a path between Elkins and the border of Parsons. The portions through Parsons itself and between Thomas and Davis are in final design. A trailhead park is planned for downtown Thomas (City of Thomas, 1998). The portion connecting Parsons to Thomas is on hold due to land ownership/land use issues. The MNF currently has a draft environmental impact statement (DEIS) in circulation that evaluates alternatives to address the landownership/land use issues associated with the trail upgrade. According to the MNF website, the Forest Service is currently reviewing comments on the DEIS.
Figure III-4
SFEIS Bike Paths
3.2.7.2 Potential Impacts

National and State Recreational Lands

Since there are no National or State Parks within the Study Area, none of the alternatives considered would impact these types of resources. Within the MNF proclamation boundary, the potential impacts associated with the alternatives considered would be minimal taking into account that the majority of the Study Area is privately owned and therefore, not subject to forest management. However, it is probable that some forest service roads and minor trails within the MNF will be located within or disrupted by the construction limits of any of the Build Alternatives. Secondary impacts to the MNF would most likely occur on a management level. All of the Build Alternatives considered would generally increase access to the MNF, allowing more visitors to use the recreational facilities in the forest. This increased usage may require additional maintenance, law enforcement, resource managers, technicians, information/interpretive specialists, and create a demand for new facilities. Under current budget limitations, manpower is already strained, and the potential recreational demand may only worsen the workload. However, more recreational use may justify an increase in the budget to meet recreational demand (Hicks, 2000). There would be no loss of recreational activity as a result of direct access limitations, and no new roads would be built as a result of increased demand on areas preserved for remote access. Impacts to the visual and noise environments in the MNF are addressed in Section 3.2.8 and Section 3.5.5, respectively.

Local Parks

None of the alternatives considered would directly impact the Knights of Columbus Community Park. The Blackwater Alternatives (ROPA/Preferred Alternative, the OPA, and Alternative 2) would not impact the proposed City of Thomas Park. However, the Blackwater Avoidance Alternatives would require joint development with the proposed City of Thomas Park. All the Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) would pass over parts of the proposed park on bridge structure. However, these alternatives would not adversely impact the proposed City of Thomas Park property because these alternatives’ planning would be coordinated with the creation of the park. The percentage of the park that would be directly impacted by these alternatives depends on the size of the actual park, which is yet to be determined. However, of the proposed 145-acre area, the Blackwater Avoidance Alternatives would require less than ten acres (or less than seven percent) according to preliminary engineering design.

The relationship between the proposed City of Thomas Park and the Blackwater Avoidance Alternatives is detailed in Section IV: Section 4(f) and Section 6(f) Analyses. There will be no Section 4(f) use of local parks, existing or proposed.

Private Recreation Lands

All of the Build Alternatives would increase access to private recreation lands within and immediately adjacent to the Study Area. The No-Build Alternative would not increase access to private recreation lands.

Recreational Trails

All of the alternatives considered would have minimal or no impacts to recreational trails within the Study Area. The Blackwater Avoidance Alternatives do not directly interact with the Allegheny Trail or the proposed Corridor H Bike Paths. The ROPA/Preferred Alternative, the OPA, and Alternative 2 would be on structure over the North Fork of the Blackwater River, and therefore would span the Allegheny Trail and the Corridor H Bike Paths in this location. The Blackwater Alternatives would cross the trail to the east of the Blackwater River where the trail is alongside WV 32. The crossing of the trail would be perpendicular, thereby minimizing potential impact. The No-Build would not
impact recreational trails or other recreational resources within or immediately adjacent to the Study Area. The No-Build would not impact or increase accessibility to recreational trails.

### 3.2.7.3 Avoidance, Minimization, and Mitigation

All Build Alternatives have been designed to avoid or minimize impacts to recreational resources within the Study Area. While the Blackwater Avoidance Alternatives would impact the proposed City of Thomas Park, the impacts would occur as part of concurrent project development of the park and Corridor H. The Blackwater Alternatives avoid and minimize impacts to the Allegheny Trail and proposed Corridor H Bike Paths (a mitigation element) by bridging much of the Blackwater Canyon. The WVDOH has committed to work cooperatively with the MNF to further minimize and mitigate impacts to forest resources during final engineering design and construction as part of the Memorandum of Understanding (MOU) between FHWA, WVDOT and the MNF executed in June 2003. The MOU is provided in Appendix E.

### 3.2.8 VISUAL ENVIRONMENT

#### 3.2.8.1 Existing Conditions

The Study Area was examined and evaluated following FHWA’s Visual Impact Assessment for Highway Projects (USDOT, 1981), consistent with the methodology used in the 1996 Corridor H FEIS. The Study Area, at the present time, has visual qualities derived from its mountainous terrain covered by secondary growth deciduous forest. The visual qualities of small parts of the Study Area are derived from abandoned, reclaimed, and active surface mining, and even smaller parts of the Study Area reflect limited development. The rural and natural visual qualities of the Study Area are typical for Tucker County and northeastern West Virginia. Therefore, the overall visual quality of the landscape is considered average.

Existing sites that may be sensitive to changes in their visual environment, including the addition of the proposed roadway to their viewshed, are residential areas, areas of recognized beauty, parks and recreation areas, designated historic and cultural areas, water bodies, and public facilities. Existing sensitive sites in the Study Area that could be affected by the proposed project are:

- Benbush residences;
- Cortland Acres and Pineview Apartments;
- Railroad Hill residences;
- William residences;
- Allegheny Trail;
- Knights of Columbus Community Park;
- Rosehill Cemetery;
- Mount Calvary Cemetery;
- DTEMS;
- TCHS; and
- Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex).

In addition, consideration was given to the visual relationship between the Build Alternatives and the Tucker County Landfill. Previous strip mining activities have rendered vegetative screening of the landfill less effective on the east side of the landfill than that on the south side.

Visual impacts to sensitive sites were assessed for two viewer groups:

- Those with a view from the proposed project; and
- Those with a view of the proposed project.
3.2.8.2 Potential Impacts

View From The Proposed Project
The 1996 Corridor H FEIS found that the OPA would make available vistas of the area that were previously unavailable to the traveling public. However, the OPA may not provide as intimate a visual experience as do existing roadways, and the feeling of local communities may not be as evident as it is on existing roadways (WVDOT, 1996). Because they are so similar in location, the remaining alternatives carried forward for detailed analysis in this document, including the ROPA/Preferred Alternative, are expected to provide similar visual experiences from the proposed roadway as would the OPA.

Views from the proposed project would be negatively impacted by only the Tucker County Landfill. The East options of Alternatives 1D and 1G will present travelers with a view of the Tucker County Landfill, particularly westbound travelers. The West options of Alternatives 1D and 1G will not include this view, nor will the ROPA/Preferred Alternative, the OPA, Alternative 2, or Alternative 1E, because these alternatives will pass the landfill at an elevation lower than the landfill itself.

View Of The Proposed Project
Of the sensitive sites identified in the Study Area and listed above, the following will have no change in their visual environment because none of the alternatives carried forward for detailed analysis are located in their viewsheds:

- Cortland Acres and Pineview Apartments;
- Railroad Hill residences;
- Mount Calvary Cemetery; and
- TCHS.

The potential impacts of the alternatives carried forward for detailed analysis on the remaining sensitive sites are presented in Table III-7. Where the proposed roadway is not visible from a sensitive site, there is “no impact” on the site. Where the proposed roadway is visible from a sensitive site, the impact on the site was considered. Because the existing visual environment is typical and average, the addition of the roadway to any view from a sensitive site was considered “no adverse impact” on the site. However, detailed analysis of the view from the Blackwater Industrial Complex was conducted for a Criteria of Effects (COE) report for this site which is eligible for listing on the National Register of Historic Places (NRHP).

The COE report documented potential impacts of the ROPA/Preferred Alternative on the Blackwater Industrial Complex. The report was submitted to the consulting parties in March of 2004 and concurrence with its conclusion of “No Adverse Effect” was received from the State Historic Preservation Office (SHPO) and the United States Forest Service (USFS MNF) which manages the property (the Blackwater Industrial Complex lies within the MNF). See Section 3.4.3.1: Historic Resources for details regarding this coordination. The viewshed analysis indicates the ROPA/Preferred Alternative, which would cross the Blackwater Industrial Complex in the same location as the OPA or Alternative 2, will be visible from within a portion of the Blackwater Industrial Complex. However, the analysis found that while the bridge of Corridor H would be visible, the visual impact would not alter any of the contributing features of the resource. Therefore, a finding of “no adverse impact” is reported in Table III-7.
**Table III-7**
Visual Impact on Sensitive Sites in the Study Area

<table>
<thead>
<tr>
<th>Sensitive site</th>
<th>1D West</th>
<th>1D East</th>
<th>1E West</th>
<th>1E East</th>
<th>1G West</th>
<th>1G East</th>
<th>ROPA/Preferred Alternative</th>
<th>OPA</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benbush</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>William</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>Allegheny Trail</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td></td>
</tr>
<tr>
<td>Knights of Columbus Community Park</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>Rosehill Cemetery</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td></td>
</tr>
<tr>
<td>DTEMS</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>Blackwater Industrial Complex</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Adverse Impact</td>
<td>No Adverse Impact</td>
<td>No Impact</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2.8.3 Avoidance, Minimization, and Mitigation

The visual quality of the views of and from the proposed roadway are important considerations for this project as stated in the 1996 Corridor H FEIS (p. III-88). Therefore, the commitment to design and construct a roadway facility that is visually compatible with the existing visual environment was made in the 1996 Corridor H FEIS (pp. III-89 through III-91). Mitigation could include the following categories: general design, construction, landscaping techniques, scenic overlooks, and site-specific measures to mitigate impacts, as appropriate.

### 3.2.9 SECONDARY AND CUMULATIVE IMPACTS

Secondary impacts are defined as those that are “caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable” (40 CFR §1508.8). This kind of impact is typically considered an effect indirectly caused or induced by construction of the proposed project. Secondary impacts include the changes in employment, population, and development that may result from a transportation project, as well as the social and environmental impacts of induced land use changes. Cumulative impacts are defined as those impacts that “result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions” (40 CFR §1508.7). Foreseeable actions are generally defined as those for which approved plans exist. Other major on-going and planned projects within the Study Area that could potentially affect development could have a cumulative impact on the environment. These are considered in this analysis to the extent possible.

The development of this secondary and cumulative impact analysis is based on FHWA’s Position Paper that addresses this type of analysis for highway projects (FHWA, 1992). In addition,
guidance was provided in the United States Environmental Protection Agency’s (USEPA’s) *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*, May 1999; the Council on Environmental Quality (CEQ) regulations 40 CFR §§1500–1508; and CEQ’s 1997 manual, *Considering Cumulative Effects Under the National Environmental Policy Act*.

In general, the methodology and analysis for secondary and cumulative impact analysis from the 1994 Corridor H Alignment Selection Draft Environmental Impact Statement (ASDEIS) is incorporated by reference and updated as appropriate for this study. The 1994 Corridor H ASDEIS predicted commercial, industrial, residential, and service-oriented development, allocated the raw land conversion, and assessed the environmental impacts. This extensive modeling exercise best represents the cumulative impacts of Corridor H as a whole, including the Parsons-to-Davis section. However, the following discussion is provided to highlight developments that have occurred since 1994 and identify specific features of the Build Alternatives that may affect potential secondary and cumulative impacts as presented in the 1994 Corridor H ASDEIS.

A comparison of secondary and cumulative impacts requires the establishment of the existing No-Build and Build Alternative conditions. The existing condition is detailed throughout *Section III: Existing Environment and Environmental Consequences* of this document and establishes the baseline of resources, ecosystems, and human communities in the year 2000. Demographic and land use analysis indicated that Tucker County’s employment and population are stable, and have resulted in a gradual population decline and slight employment growth from 1990 to 2000. It is assumed that the No-Build Alternative will continue these trends; however, this does not imply that the No-Build Alternative does not alter resources, ecosystems, and human communities. Planned and reasonably foreseeable projects and impacts are identified in the No-Build Alternative. The Build Alternatives and their associated induced development impacts have been compared to the No-Build Alternative to determine the incremental effects.

Existing planning documents such as the *Tucker County, West Virginia Comprehensive Plan* (1992), *City of Thomas Development Strategy* (1998), *Davis: Can’t Top It!* (1998), the *Corridor H Design Guidelines* (1997), and the *Tucker County Development Handbook* (1997) were consulted to identify planned projects, community goals, and tools for implementation. All of these documents, to some extent, addressed the potential impacts of Corridor H on land use and social and economic environment. In many cases these documents served as tools to address these impacts and provide mitigation of potential impacts. Interviews with local officials were conducted to update the findings of these documents and aid in the assessment of future impacts.

### 3.2.9.1 Industrial Development

The major planned and approved industrial development sites slated for this region are the build-out of the Mountain Top Industrial Park and the development of the Tucker County Industrial Park near Davis. It is assumed that these industrial parks will develop with or with out Corridor H, but Corridor H would influence the rate of development.

Consistent with the remainder of the Corridor H secondary and cumulative economic analysis, industrial development was assumed to take place in the existing or planned industrial parks. Industrial park growth would be expected to be related to existing businesses and industries in the area or targeted markets (Tucker County Planning Commission, 1992). For Tucker County, this would include wood products manufacturing, light manufacturing, back-office operations, call centers, and tourism (Schmiedeknecht, 2000 and Burns, 2000). Employment opportunities resulting from the build-out of the two industrial parks in the region is likely to have an impact on Study Area residents. Key characteristics of the industrial parks include:
**Mountain Top Industrial Park**
- Near Mt. Storm and currently accessed by WV 93, in Grant County (east of the Parsons-to-Davis Study Area).
- Referred to as the (new) Grant County Industrial Park in the 1994 Corridor H ASDEIS.
- 182 acres.
- Complete service package (water and sewer) currently available.
- Employment at full build-out is anticipated to be less than the figure projected in the 1994 Corridor H ASDEIS (1,435 employees) (Hiser, 2004).
- Employment is anticipated to include a portion of workers from Tucker County (Hiser, 2004).
- Same level of development regardless of the No-Build or Build Alternatives.

**Tucker County Industrial Park**
- Located north of Davis and south of WV 93, in Tucker County.
- 82 developable acres (161 total acres at site).
- Complete service package (water and sewer) currently available.
- Grants have provided additional funding that will allow for the extension of additional infrastructure (i.e., power, gas, telecommunications) to the site (Burns, 2004).
- Site is anticipated to be ready for development in 2005 and if funding permits a multi-tenant building will be completed (Burns, 2004).
- In the spring/summer of 2005, the Industrial Development Authority was considering an offer to sell the first parcel of the industrial park and utilities were expected to be completed (Stadelman, 2005b).
- With the No-Build Alternative, potential employers are assumed to be existing local businesses not dependent on heavy truck traffic or shipping (Burns, 2000).
- With the Build Alternatives, potential employers would not be limited by lack of transportation infrastructure due to the development of Corridor H.

In their 2004-2005 annual report, the West Virginia Region VII Planning and Development Council indicated the infrastructure for the Tucker County Industrial Park was nearing completion and noted the formation of the Hardwood Alliance Zone to promote the wood products industry (Region VII report, 2005). The Parsons Advocate reports that Tucker County Development Authority (TCDA) has been approached by prospective tenants in 2006.

Both industrial parks would benefit from the accessibility afforded by Corridor H, although there are no differences between the Build Alternatives in the type or magnitude of these benefits.

The CAG has identified the old airport area as a future site for industrial and residential development. No specific plans have been developed, but the direct access from Corridor H (with the Blackwater Avoidance Alternatives) and the topography of this area make it an obvious choice for future development. As no plans have been developed for this site, it is not assumed to be developed as an industrial park with the No-Build or Build Alternatives. This site is, however, assumed to be a logical location for commercial development with the Blackwater Avoidance Alternatives (discussed further in the following section).

The Tucker County Comprehensive Plan also identified the area adjacent to the TCHS as a potential industrial development area that could occur as a result of Corridor H. The ROPA/Preferred Alternative provides direct access to this site; however, the Tucker County Industrial Park remains
the county's priority site for industrial development (Burns, 2004). Similar to the old airport area, industrial development is not assumed to occur with the No-Build or Build Alternatives, but potential commercial development at this site is discussed in the following section.

The Tucker County Landfill is a source of revenue for Tucker County and currently accepts 50 to 60 truckloads of refuse daily and plans to expand its capacity. Plans for expansion are not dependent on the development of Corridor H, but it would generally benefit equally from all the Build Alternatives due to the potential expansion of its service area. Expansion of the service area would likely increase county landfill revenues in the short term. The West Option (for either 1D or 1G) would have a direct impact on the landfill due to the encroachment upon the facility’s scales and scale house. This issue is discussed previously in Section 3.2.5 Relocations. The landfill expansion, the development of a new cell, was initiated in August 2006; it is anticipated the new 6.4 acre cell will add seven (7) years of collection to the landfill operation. (Parsons Advocate, August 2006). The ROPA/Preferred Alternative does not impact landfill operations or the newly developed cell.

3.2.9.2 Commercial Development

Under the No-Build Alternative, no new highway-related commercial development is anticipated to occur. Analysis of new commercial development related to the construction of Corridor H was done in the 1994 Corridor H ASDEIS. The analysis used a model from a study of rural interchange development along new interstate highways (Hartgen et al., 1992), and is incorporated here by reference.

An additional tourism component was added to update this analysis based on the estimated origin and travel patterns of tourists destined to the attractions along the WV 32 corridor between Blackwater Falls State Park and Canaan Valley State Park. A description of these assumptions is located in Section 3.2.1 Economic Environment.

Traffic Volumes

New commercial development will seek locations with high traffic volumes to maximize exposure to potential customers (Hartgen et al., 1992). With Corridor H in place, the function of the local roads will change, affecting relative traffic routes. While US 219 north of Thomas will retain its importance as a major route to Maryland and I-68, US 219 to the west of Thomas will parallel Corridor H and therefore primarily serve local trips. A greater reduction in traffic is anticipated on US 219 between Parsons and Thomas with Corridor H in place as a result of this dynamic thus reducing potential traffic volumes at the western connection of the ROPA/Preferred Alternative and all of the Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West). Additionally, the ROPA/Preferred Alternative connection at the TCHS will be a primary access route for travelers to the high school.

WV 32 will remain a primary access route for long-distance travelers to the Canaan Valley area. Thus, as a factor in locating new commercial development, WV 32 (the Davis connection) is more favorable due to probable higher traffic levels than the northern and western connections.

Access to Developable Land and Infrastructure

TCHS Connection

The ROPA/Preferred Alternative is the only Build Alternative that provides direct access to TCHS. Over 20 acres of relatively level, developable land with access to the Thomas PSD main-line (water and sewer) are located near TCHS. Additionally, this area has been identified in the
Tucker County Comprehensive Plan as an area that can be developed to serve the commercial needs of traveling motorists.

**Western Thomas Connection**

Approximately 150 acres of relatively level, developable land is in the immediate vicinity of the western Thomas connection with Alternative 1G. The eastbound on/off ramp for Alternative 1E is also in this vicinity. A portion of the tract located north of US 219 is often referred to as the old airport property. The entire tract is adjacent to existing water and sewer lines, but it is outside the corporate limits of Thomas. Local officials have indicated that they desire this property to develop with residential and industrial uses, and that if development were to occur; they would anticipate annexing this area (Snyder, 2000). Alternative 1D and the westbound on/off ramp for Alternative 1E access smaller developable parcels of land west of Benbush. The ROPA/Preferred Alternative, the OPA and Alternative 2 do not access any land directly west of Thomas.

**Northern Thomas Connection**

Under all Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West), the northern connection occurs within a half mile and a mile of the existing downtown Thomas business district. Vacant properties in downtown Thomas as well as approximately 30 acres of property, a portion of which is riverfront, could potentially attract commercial development. The entire tract is adjacent to existing water and sewer lines. This parcel is located just north of the City of Thomas’ corporate limits, but local officials have indicated that they would attempt to annex this area to benefit from any development (Snyder, 2000). The ROPA/Preferred Alternative, the OPA and Alternative 2 do not access any land north of Thomas.

**Davis Connection**

The Davis interchange of all the Build Alternatives would directly access over 40 acres of level and developable land fronting WV 93 and WV 32. This development would be bound by the environmental constraints of the Tucker County Landfill to the north and a large wetland complex to the west. A portion of this area, just northwest of WV 93, is within the Town of Davis’ corporate limits. Water and sewer infrastructure could be extended from the Tucker County Industrial Park site.

**Distance from Connections**

Outside the Study Area, the nearest Corridor H connections are approximately 7 miles to the west in Parsons and 16 miles to the east in Bismarck. Within the Study Area, there is a distance of approximately 6 miles between the Davis connection and the TCHS connection along the ROPA/Preferred Alternative. For the Blackwater Avoidance Alternatives, there is approximately one mile between the western and northern Thomas connections and approximately three miles between the northern Thomas and Davis connections. The Study Area appears to be sufficiently distant from the nearest major connections to garner travelers’ demand for commercial development at each of the connections associated with the ROPA/Preferred Alternative, OPA, and Alternative 2. However, the Blackwater Avoidance Alternatives’ three connections within four to five miles within the Study Area would tend to disperse that demand across all three of the connections, with other factors being equal.
Tourists

Two aspects of tourist travel in the region will influence new commercial development in the Study Area: the distribution of tourist traffic and the potential increase in tourist visitation with Corridor H. These issues are discussed in detail in Section 3.2.1 Economic Environment.

Conclusions

Based on the factors detailed above, the following are the developmental stages that can occur on land surrounding new intersections and interchanges on rural highways according to the Hartgen model:

- minimal development;
- residential: single family homes;
- light tourist services: one gas station, one restaurant;
- economically competitive: two to four gas stations, two restaurants, one or two motels;
- economic integration: four or more gas stations, five or more restaurants, three or more motels, no residential, other business;
- heavy tourist: six or more motels, six or more restaurants, three or more gas stations; and
- truck stop.

This analysis was further adjusted based on knowledge of local plans and goals.

The 1994 Corridor H ASDEIS Secondary and Cumulative Impacts Technical Report predicted approximately 300 additional commercial jobs in all of Tucker County (including the Parsons area) with the OPA, which would result in the use of approximately 66 acres of land (WVDOT, 1994c). Based on the increased access provided by the Blackwater Avoidance Alternatives and the ROPA/Preferred Alternative for the Parsons-to-Davis Project, this figure is expected to be somewhat higher. The estimates from the original analysis thus present an order-of-magnitude estimate, and based on this estimate, it appears that ample developable acres are available to receive new commercial development. The actual level of development will depend on additional factors, such as the type and level of development desired by the locality, parcel ownership, regional growth, market factors, and infrastructure development.

All connections of the Build Alternatives have the potential to develop to an economically competitive level. As noted above, the economically competitive level, which includes gas stations, restaurants, and motels, is the highest level of development anticipated for any connection associated with this project. Due to the distance between connections, the ROPA/Preferred Alternative would most likely result in light tourist services at both the TCHS connection and the Davis connection. Since the OPA and Alternative 2 have only one connection near Davis, these alternatives are the most likely of the Build Alternative connections to result in commercial development at an economically competitive level. Due to the close proximity of all three interchanges of the Blackwater Avoidance Alternatives, it is unlikely that this region could support the full build-out of all three interchanges. Of the three connections, it is anticipated that the Davis connection has the greatest commercial development potential, which will likely range from light tourist services to economically competitive levels.

3.2.9.3 Residential and related service-oriented growth

The 1994 Corridor H ASDEIS Secondary and Cumulative Impacts Technical Report includes analysis of the effects of Corridor H on residential and service-oriented development (WVDOT, 1994c). As new residential development occurs, service-oriented development grows to support it. This
original analysis allocated residential and service-oriented growth within the 100-mile corridor of the project on the basis of several factors, including availability of land, school district characteristics, and accessibility to employment. The original analysis allocated approximately 400 new housing units to Tucker County as a whole. For the current analysis, a closer look at the labor force characteristics and land use within eastern Tucker County was considered relative to the updated information on industrial park development.

Substantial residential development in Tucker County is not anticipated as a result of the jobs created by the Tucker County Industrial Park or the Mountain Top Industrial Park. Given the unemployment rate in Tucker County, a substantial number of new jobs could be created without generating a need for new workers to move into the county, assuming the new jobs fit the skills of the labor pool. Although residential expansion is not anticipated within the time frame of this analysis, localities have identified potential areas for future residential growth. This residential growth will, in part, supplement or replace the aged housing stock that is currently available in Thomas and Davis.

The Tucker County Comprehensive Plan (1992) has identified the expansion of residential areas close to existing towns and specifically, most of the future growth can be accommodated “in the Davis-Thomas area where sufficient and suitable land is available for this growth” (Tucker County Planning Commission, 1992). The CAG has identified the parcels west of Thomas at the site of the old airport and north of Thomas as potential areas for residential growth. The City of Thomas also identified the area west of WV 32/1 (south of the catholic cemetery) as a site for potential residential and commercial development. However, new housing construction was ranked in the bottom third of priority projects identified in a survey completed by the community of Thomas and the Steering Committee (City of Thomas, 1998).

Under the No-Build Alternative, a continued slight population loss is projected (0.28 percent average annual compound loss from 2000 to 2025) (West Virginia University, 2004), and as such, little or no growth in the housing stock would be anticipated to occur. With any of the Build Alternatives, some residential infill would be expected to occur between Thomas and the Davis connection and the Tucker County Industrial Park and possibly on the tracts in the Thomas area identified for potential residential development. While the Tucker County Comprehensive Plan identifies the eastern slope of Backbone Mountain as a potential residential growth area that may result from the development of Corridor H, recent discussions with local representatives, note that this area is less attractive for residential development than the Davis-Thomas area due to its isolation from services and its environmental constraints (Burns, 2004).

3.2.9.4 Other Development

Two large tracts of land have been purchased along WV 93 near Davis. The Vandalia Heritage Foundation purchased approximately 1,120 and the Canaan Valley Institute owns approximately 3,200 acres of land in the area. The type of development anticipated on these parcels is undetermined in one case and is institutional in the other - specifically, private research and conference facilities. These types of development are discussed here to establish whether there is any secondary impact link to Corridor H and to address potential cumulative impacts.

It is undetermined if the tract purchased by the Vandalia Heritage Foundation will be developed for commercial, residential, recreational, preservation, or other uses, or some combination. The Foundation has a “Legacy Project” that is charged with “preserving the ‘unbuilt environment’ — the rich cultural heritage of northern West Virginia.” (Vandalia Heritage Foundation, 2006) However, it is not currently foreseeable whether this property will be part of that program or will be developed for other purposes. The preservation and heritage focus of Vandalia Heritage Foundation projects
suggest that this potential future development is based on a cultural mission within West Virginia and does not appear to be linked to Corridor H. For purposes of cumulative impact analysis, this project is not reasonably foreseeable; the scale, type and timing of the land development has not been defined.

The vast majority of this land that has been purchased by the Canaan Valley Institute is planned for open space, featuring public recreation opportunities and environmental research. A 70,000-square foot research center is planned, including meeting rooms, lab space, and an auditorium (Stadelman, 2005a). While the project may be reasonably foreseeable, the actual acres that will be developed and location of the development is not foreseeable at this time, making an estimation of cumulative environmental impacts impossible. However, the scale of the development concept indicates that wetland and/or water quality permits will be required that, in turn, will require avoidance, minimization, and mitigation of impacts to sensitive resources. An environmental impact statement is being prepared for the site. In addition, the research mission of the Canaan Valley Institute and information on its website indicate that wetland rehabilitation projects will be features of on-site environmental research regardless of any environmental impacts from development (Canaan Valley Institute, 2006). The project is currently on-hold due to taxation issues associated with the property (Parsons Advocate, April 2006). Further, according to CVI's website (www.canaanvi.org, accessed January 10, 2007), "Due to unforeseen circumstances, Canaan Valley Institute's headquarters/educational building construction project has been placed on hold until further notice."

### 3.2.9.5 Cumulative Economic Impacts

In 1998, Wilbur Smith Associates completed a study entitled Appalachian Development Highways Economic Impact Studies, which measures the extent to which the completed portions of the Appalachian Development Highway System (ADHS) have contributed to the economic well-being of Appalachia. As a designated Appalachian Development Highway, Corridor H is anticipated to result in similar economic benefits, although on a smaller scale, as those identified in that study. Unlike the industrial, commercial, and tourist-based growth anticipated as a result of any of the Build Alternatives, travel time efficiencies resulting from Corridor H would correlate into many secondary economic benefits for the region. Travel time efficiencies may be in the form of reduced travel time, reduced vehicle operating costs, and a reduced number of accidents. The Wilbur Smith Associates study assumed that the “improved travel efficiency along the ADHS corridors ultimately leads to an increase in economic production, job opportunities, wages, population, and travel benefits to the people and communities it serves” (Wilbur Smith Associates, 1998). While these specific benefits have been quantified to the extent possible throughout this document for the Parsons-to-Davis Project, the Wilbur Smith Associates study used a regional economic model (the REMI Model) to quantify the economic opportunity created for the entire Appalachia region.

Following are some of the relevant study conclusions for the twelve ADHS corridors in the Appalachia region:

- **ADHS has created jobs** – By 1995 a net increase of 16,000 jobs are estimated to have been created that would not have existed without the competed portions of the ADHS. By 2015, the net increase will be a total of 42,000 jobs.

- **ADHS has led to increased production** – By 1995 the net increase in value added was $1 billion. In 2015 the net increase in value added is projected to be $6.9 billion.

- **Improved road conditions and access resulting from greater efficiency** has been valued at $4.89 billion over the 1965-2025 period.
• Over the life cycle of the ADHS, for each $1 invested, the return is $1.18 in efficiency benefits, and $1.32 in economic impact benefits.
• Individual corridor efficiency benefit returns on investment range from 5.44 percent per year to 10.06 percent per year.

3.3 NATURAL ENVIRONMENT
3.3.1 FLOODPLAINS
Floodplains are those areas adjacent to streams and rivers that are subject to periodic inundation. The width of the floodplain can vary from a few feet to many miles. Floodplain and floodway maps have been developed by the Federal Emergency Management Agency (FEMA) as part of its National Flood Insurance Program (NFIP). A detailed discussion of the NFIP is included in the 1996 Corridor H FEIS (Section III.N), and incorporated by reference into this document.

Floodplains serve a variety of abiotic and biotic functions. They moderate the flow of floods and serve as storage areas for floodwater, provide water quality maintenance, act as areas for ground water recharge, and serve as habitat for plants and animals.

3.3.1.1 Methodology
The methodology used for the floodplain analysis was presented in the 1996 Corridor H FEIS. The assessment methodology is based on the requirements provided in Executive Order 11988, Floodplain Management; 23 CFR part 650, Location of Hydraulic Design of Encroachments on Floodplains, and USDOT 5650.2, Floodplain Management and Protection. Study Area mapping, with floodplains and floodways highlighted, is presented in Exhibit III-4.

3.3.1.2 Existing Environment
The North Fork of the Blackwater River above Thomas and portions of Pendleton Creek have relatively wide floodplains on flat valley floors. Due to the flat, wide, and approximately level nature of these floodplains, flood-flow velocities and depth outside the mainstream channel are relatively low.

Over the last 20 years, there have been several significant flooding events in the region and the local watershed. Some of these events have been catastrophic. In 1996, flooding events in local sub-watersheds twice peaked at or above 100-year flood return levels. Because of a long flooding history and continued high risk, Tucker County has joined with Randolph County as partners in FEMA's Project Impact. Through this program, communities learn to protect themselves from the devastating effects of natural disasters by taking actions that dramatically reduce disruption and loss.

3.3.1.3 Potential Impacts
As described in the 1996 Corridor H FEIS, the No-Build Alternative would have no effect on floodplains in the Study Area.

Table III-8 presents the 100-year floodplain encroachment area for each of the Build Alternatives carried forward for detailed analysis. The Blackwater Avoidance Alternatives (1D West and East, 1E, 1G West and East) do not require floodplain encroachments. The Blackwater Alternatives (ROPA/Preferred Alternative, OPA, and 2) will require floodplain encroachments associated with the Pendleton Creek crossing. Final engineering design will determine bridge pier placement in accordance with floodplain regulations and pertinent Section 106 commitments. There is no regulatory floodway designated for Pendleton Creek; therefore, no floodway impacts are associated with this stream crossing.
Table III-8
Floodplain/Floodway Impacts (in acres)

<table>
<thead>
<tr>
<th>Floodplain/Floodway</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>OPA</th>
<th>2</th>
<th>ROPA/Preferred Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-year Floodplain</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>3.2</td>
<td>2.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Regulatory Floodway</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

All Blackwater Alternatives, including the ROPA/Preferred Alternative, will bridge the regulatory floodway associated with the North Fork of the Blackwater River. The ROPA/Preferred Alternative may require the placement of bridge piers within the 100-year floodplain of this river. Final engineering design will determine bridge pier placement in accordance with floodplain regulations, and Section 106 commitments, as appropriate.

Based on coordination with the local Project Impact partnership, none of the alternatives carried forward for detailed analysis conflict with the Project Impact initiative in Randolph and/or Tucker County.

3.3.2 VEGETATION & WILDLIFE

3.3.2.1 Methodology

The existing environment and impacts to vegetation and wildlife for the project were detailed in the 1996 Corridor H FEIS, and are incorporated by reference into this document.

The following sections provide an updated vegetation and wildlife habitat assessment for the alternatives carried forward for detailed analysis in this SFEIS. This assessment follows the guidance of the FHWA Technical Advisory T 6640.8A (FHWA, 1987) and the USEPA’s Evaluation of Ecological Impacts from Highway Developments (Southerland, 1993).

3.3.2.2 Wildlife Habitat

Methodology

Wildlife habitat values within the Study Area were assessed using the United States Fish and Wildlife Service (USFWS) Habitat Evaluation Procedure (HEP) (USFWS, 1981). HEP was utilized to rate the quality and quantity of wildlife habitat in order to quantify the impacts that result from land and water development projects. HEP is based on the fundamental assumption that the quantity and quality of a habitat can be numerically documented and reasonably predicted for future conditions. Generally, HEP provides information to evaluate the relative value of different habitat types before, during and after highway construction for each of the proposed alternatives. A detailed discussion of the HEP methodology, species selection, and data collection requirements is included in the 1994 Corridor H ASDEIS Vegetation and Wildlife Technical Report and the 1996 Corridor H FEIS.

Of the 119 available wildlife species models, 18 evaluation species were selected to evaluate 11 USFWS habitat types within the Study Area (Table III-9). Due to the time and expense involved in model development and field-testing, only those wildlife models previously developed by the USFWS were considered for this assessment. In conjunction with HEP, the Habitat Suitability Index (HSI) program developed a list of habitat variables for each species and generated a data collection form for each cover type.
### Table III-9

**Land Cover Type Use By Evaluation Species**

<table>
<thead>
<tr>
<th>USFWS Land Cover Type</th>
<th>Evaluation Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC- Cropland</td>
<td>American Woodcock</td>
</tr>
<tr>
<td></td>
<td>Barred Owl</td>
</tr>
<tr>
<td></td>
<td>Black-capped Chickadee</td>
</tr>
<tr>
<td></td>
<td>Brown Thrasher</td>
</tr>
<tr>
<td></td>
<td>Downy Woodpecker</td>
</tr>
<tr>
<td></td>
<td>Eastern Cottontail</td>
</tr>
<tr>
<td></td>
<td>Eastern Meadowlark</td>
</tr>
<tr>
<td></td>
<td>Eastern Wild Turkey</td>
</tr>
<tr>
<td></td>
<td>Eastern Wild Turkey</td>
</tr>
<tr>
<td></td>
<td>Gray Squirrel</td>
</tr>
<tr>
<td></td>
<td>Hairy Woodpecker</td>
</tr>
<tr>
<td></td>
<td>Mink</td>
</tr>
<tr>
<td></td>
<td>Mink</td>
</tr>
<tr>
<td></td>
<td>Pileated Woodpecker</td>
</tr>
<tr>
<td></td>
<td>Pine Warbler</td>
</tr>
<tr>
<td></td>
<td>Red-winged Blackbird</td>
</tr>
<tr>
<td></td>
<td>Red-winged Blackbird</td>
</tr>
<tr>
<td></td>
<td>Veery</td>
</tr>
<tr>
<td></td>
<td>White-tailed Deer</td>
</tr>
<tr>
<td></td>
<td>Yellow Warbler</td>
</tr>
</tbody>
</table>

**Existing Conditions**

The Study Area is dominated by mixed deciduous forest and evergreen forests that are intermixed with wetlands, areas that have been disturbed by surface coal mining activities, and small areas of mountaintop pasture land. The forest community within the Study Area consists of northern hardwood forest species including sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), black cherry (*Prunus serotina*), American beech (*Fagus grandifolia*), yellow birch (*Betula alleghaniensis*), hemlock (*Tsuga canadensis*) and red spruce (*Picea rubens*). Northern hardwood forests or upland forests generally occur at elevations above 3,000 feet, but can extend down slope as low as 2,460 feet in rich moist loamy soils (Stephenson, 1993).

Table III-10 provides the land cover types within the construction limits of the Build Alternatives, based on the USFWS cover type classification system (USFWS, 1981).
Table III-10

**USFWS Land Cover by Build Alternative (in acres)**

<table>
<thead>
<tr>
<th>USFWS Land Cover Type</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>OPA</th>
<th>2</th>
<th>ROPA/Preferred Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC - Cropland</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>AO - Orchards</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>AP - Pasture or Hayland</td>
<td>4.6</td>
<td>10.0</td>
<td>7.7</td>
<td>3.1</td>
<td>8.5</td>
<td>15.8</td>
<td>14.8</td>
<td>16.7</td>
</tr>
<tr>
<td>UF - Forbland</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>UFOD - Deciduous Forest</td>
<td>393.0</td>
<td>391.0</td>
<td>367.0</td>
<td>352</td>
<td>350.0</td>
<td>219.3</td>
<td>321.3</td>
<td>250.0</td>
</tr>
<tr>
<td>UFOE - Evergreen Forest</td>
<td>106.0</td>
<td>97.0</td>
<td>112.0</td>
<td>108.0</td>
<td>100.0</td>
<td>117.7</td>
<td>130.1</td>
<td>115.2</td>
</tr>
<tr>
<td>UG - Grasslands</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>USHD - Deciduous Shrublands</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>PEM - Palustrine Emergent Wetland</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
<td>0.5</td>
<td>0.3</td>
<td>3.7</td>
<td>4.2</td>
<td>5.3</td>
</tr>
<tr>
<td>PFO - Palustrine Forested Wetland</td>
<td>0.1</td>
<td>0.0</td>
<td>3.5</td>
<td>0.1</td>
<td>0.1</td>
<td>0.6</td>
<td>0.0</td>
<td>1.1</td>
</tr>
<tr>
<td>PSS - Palustrine Scrub-Shrub Wetland</td>
<td>0.1</td>
<td>0.7</td>
<td>0.3</td>
<td>0.1</td>
<td>0.7</td>
<td>1.1</td>
<td>1.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**Potential Impacts**

As described in the 1996 Corridor H FEIS, the No-Build Alternative would not result in the loss of vegetated area; therefore, no Habitat Units (HUs) would be lost, and the No-Build Alternative would have no effect on vegetation and wildlife in the Study Area.

HUs were calculated within the construction limits of each Build Alternative. During highway construction, and for five years following completion, it was assumed that no habitat would be available within highway construction limits. Construction activities would have either removed existing vegetation or would have resulted in disturbances sufficient to render the remaining habitat unsuitable to support viable wildlife populations. Bridged areas were also included as wildlife habitat impacts even though bridges would not result in the same level of impact when compared to culvert crossings and cut and fill slopes.

After five years, portions of all the Build Alternatives would revegetate and provide some level of habitat previously lost due to construction. Based on past highway projects, the revegetated portions would be composed of 70 percent grassland, 10 percent shrub cover, and 5 percent tree cover. Therefore, wildlife species adapted to herbaceous and shrub cover will use the habitat within the construction limits (Oetting and Cassel, 1971; Adams and Geis, 1982; Michael, 1975; Getz et al., 1978; Burke and Sherburne, 1982; Michael and Kosten, 1981).

Table III-11 provides the comparison of baseline HUs within the construction limits of the Build Alternatives, based on the identified evaluation species. The Blackwater Avoidance Alternatives (1D West and East, 1E, 1G West and East) would result in the greatest amount of HU loss. The Blackwater Alternatives (ROPA/Preferred Alternative, OPA, and 2) would result in the least amount of HU loss with the OPA resulting in the least HU loss of all the Build Alternatives. When compared to the OPA, the ROPA/Preferred Alternative would result in an additional loss of 301 HUs. The additional HU loss is attributed to the addition of the TCHS connection to the ROPA/Preferred Alternative.
## Table III-11
Comparison of Baseline Habitat Units (HUs) by Evaluation Species (in acres)

<table>
<thead>
<tr>
<th>Evaluation Species</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>OPA</th>
<th>2</th>
<th>ROPA/Preferred Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Woodcock</td>
<td>299</td>
<td>293</td>
<td>290</td>
<td>276</td>
<td>270</td>
<td>203</td>
<td>271</td>
<td>220</td>
</tr>
<tr>
<td>Barred Owl</td>
<td>329</td>
<td>322</td>
<td>318</td>
<td>304</td>
<td>297</td>
<td>223</td>
<td>298</td>
<td>242</td>
</tr>
<tr>
<td>Black-capped Chickadee</td>
<td>499</td>
<td>488</td>
<td>483</td>
<td>460</td>
<td>450</td>
<td>338</td>
<td>451</td>
<td>366</td>
</tr>
<tr>
<td>Brown Thrasher</td>
<td>66</td>
<td>65</td>
<td>63</td>
<td>60</td>
<td>60</td>
<td>46</td>
<td>61</td>
<td>50</td>
</tr>
<tr>
<td>Downy Woodpecker</td>
<td>250</td>
<td>244</td>
<td>241</td>
<td>230</td>
<td>225</td>
<td>169</td>
<td>226</td>
<td>183</td>
</tr>
<tr>
<td>Eastern Cottontail</td>
<td>373</td>
<td>369</td>
<td>360</td>
<td>343</td>
<td>339</td>
<td>261</td>
<td>345</td>
<td>283</td>
</tr>
<tr>
<td>Eastern Meadowlark</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Eastern Wild Turkey</td>
<td>277</td>
<td>274</td>
<td>270</td>
<td>255</td>
<td>252</td>
<td>194</td>
<td>256</td>
<td>211</td>
</tr>
<tr>
<td>Gray Squirrel</td>
<td>204</td>
<td>203</td>
<td>193</td>
<td>183</td>
<td>182</td>
<td>114</td>
<td>167</td>
<td>131</td>
</tr>
<tr>
<td>Hairy Woodpecker</td>
<td>287</td>
<td>286</td>
<td>270</td>
<td>257</td>
<td>256</td>
<td>161</td>
<td>235</td>
<td>183</td>
</tr>
<tr>
<td>Mink</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Muskrat</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pileated Woodpecker</td>
<td>190</td>
<td>185</td>
<td>183</td>
<td>175</td>
<td>171</td>
<td>128</td>
<td>172</td>
<td>139</td>
</tr>
<tr>
<td>Pine Warbler</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Red-winged Blackbird</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Veery</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>White-tailed Deer</td>
<td>490</td>
<td>485</td>
<td>478</td>
<td>450</td>
<td>446</td>
<td>248</td>
<td>457</td>
<td>378</td>
</tr>
<tr>
<td>Yellow Warbler</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,271</td>
<td>3,224</td>
<td>3,163</td>
<td>3,000</td>
<td>2,958</td>
<td>2,096</td>
<td>2,953</td>
<td>2,397</td>
</tr>
</tbody>
</table>
Avoidance, Minimization, and Mitigation Measures

Where practicable, Build Alternatives were developed to avoid and/or minimize known areas of unique wildlife habitat (i.e. caves, suitable and highly suitable West Virginia northern flying squirrel (WVNF) habitat, red spruce forest, sensitive watersheds, and wetlands) where federally listed threatened and endangered species have been documented. Specific measures to mitigate for wildlife habitat impacts are described in detail in the 1996 Corridor H FEIS, Volume III Mitigation Document, and the Biological Opinion.

A HU ledger has been created to monitor and track WVDOH's effort to mitigate for upland habitat loss. WVDOH has committed to spend $1.8 million to purchase and preserve unique habitat. USFWS and WVDNR accepted this commitment (see USFWS letter dated March 12, 2002, Appendix A). WVDOH determined and the agencies agreed that the 1996 Corridor H FEIS Preferred Alternative would impact 6,145 HUs (calculated using the area of impact in hectares).

In April 2004, a summary of Corridor H mitigation activities was presented to the following resource agencies at a meeting held at Stonewall Jackson Lake State Park: USACE Pittsburgh District; USEPA; USFWS; WVDNR; WVDEP. Through mitigation measures such as minimization of clearing and grubbing, the purchase of upland area surrounding the Leading Creek mitigation wetland, the purchase of uneconomical land remnants for preservation along Corridor H, and the purchase of the property in the Cheat River Canyon to preserve habitat for federally threatened and endangered species, 4,592 HUs have been preserved or recovered. WVDOH is committed to purchase additional unique habitat to preserve or recover the remaining 1,553 HU to balance the HU ledger. Consistent with Volume III of the 1996 Corridor H FEIS, mitigation coordination will continue through the project development process; mitigation compensation ledgers will be updated and revised, as appropriate.

Secondary impacts to wildlife are categorized as either development-related or highway-related impacts. Development-related impacts on wildlife include induced development for industrial, commercial, residential, and service-oriented growth. Additional habitat may be lost due to predicted development. Predicted development is an aggregate of intersection/interchange, residential and service oriented development. Potential secondary and cumulative impacts resulting from the construction of Corridor H are discussed in detail in the 1994 Corridor H ASDEIS Secondary and Cumulative Impacts Technical Report which is incorporated by reference into this document.

3.3.2.3 Forest Fragmentation & Biodiversity

Methodology

Large forested tracts are important habitat for area sensitive species and species requiring large territories. These forested areas contain other microhabitats such as streams and associated riparian corridors that are used by a wide variety of wildlife species for feeding and/or breeding purposes. During the preparation of the 1996 Corridor H FEIS, forest interior neotropical migrant bird species were chosen to represent area-sensitive and landscape-dependent (sensitive to changing land use patterns) wildlife species to assess the possible effects that forest fragmentation may have on these species and biological communities.

An extensive literature review and detailed information on the methodology used for the evaluation of forest fragmentation on landscape dependent species, represented by neotropical migrant birds species, is presented in the 1994 Corridor H ASDEIS Vegetation and Wildlife Technical Report and the 1996 Corridor H FEIS, and is incorporated into this document by reference.
Breeding bird survey (BBS) data were reviewed to determine the present population trends of four neotropical migrant bird species within West Virginia: wood thrush (*Hylocichila mustelina*), red-eyed vireo (*Vireo olivaceus*), ovenbird (*Seiurus aurocapillus*), and veery (*Catharus fuscescens*). Because the brown-headed cowbird (*Molothrus ater*), a species that exploits the forest edge, is implicated as one factor in the decline of neotropical migrants (Brittingham and Temple, 1983; Donovan *et al*., 1995; Robinson *et al*., 1995; Trine, 1998), population trends of this species were also reviewed. Based upon the existing land cover data within the Study Area, a GIS analysis was used to determine the total area of forest habitat within each of the alternatives carried forward for detailed analysis before and immediately after highway construction.

**Existing Environment**

Within the Study Area there are approximately 7,570 acres of upland forest which accounts for approximately 88 percent of the 8,600-acre Study Area. The topography and hydrology of Study Area has been altered through historical and present surface mining and mining related activities (e.g., railroads, access roads, waste disposal), and some portions of the forested area have undergone timbering and selective cutting. This physical alteration of existing land use and changing land use patterns over time has already led to habitat simplification and fragmentation within the Study Area. Despite this land use pattern, there are large contiguous tracts of upland forest that extend beyond the limits of the Study Area.

BBS data and minimum breeding area requirements within the Study Area are summarized in Table III-12. Within West Virginia, the population trends showed an increase for two of the four indicator species, red-eyed vireo and the ovenbird, with varying minimum breeding area requirements. These population increases suggest that there has been movement of these bird species from sub-optimal to more optimal habitat, likely due to increasing attention to land management practices in West Virginia.

The wood thrush and brown-headed cowbird showed a decrease in population over the investigated period (1980-1998), with trend values of -0.82 and -4.65 respectively. These negative values may reflect the overall land use patterns within the state, and the species ability to exploit these patterns. Brown-headed cowbirds are able to utilize open areas of traditional foraging habitat (agriculture/pasture) as a base from which to parasitize forest dwelling species. Of the 1,464,418 acres of land in West Virginia, 80 percent of the land cover is forested, while agriculture/pasture makes up 18 percent. The trend of increasing forest cover in West Virginia likely accounts for the apparent declining trend in brown-headed cowbird populations within the state.

**Table III-12**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Minimum Breeding Area (in acres)</th>
<th>Population Trends 1980 - 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>wood thrush</td>
<td><em>Hylocichila mustelina</em></td>
<td>2.5</td>
<td>- 0.82</td>
</tr>
<tr>
<td>red-eyed vireo</td>
<td><em>Vireo olivaceus</em></td>
<td>6</td>
<td>+ 0.80</td>
</tr>
<tr>
<td>ovenbird</td>
<td><em>Seiurus aurocapillus</em></td>
<td>15</td>
<td>+ 3.68</td>
</tr>
<tr>
<td>veery</td>
<td><em>Catharus fuscescens</em></td>
<td>49</td>
<td>No data</td>
</tr>
<tr>
<td>brown-headed cowbird</td>
<td><em>Molothrus ater</em></td>
<td>No data</td>
<td>- 4.65</td>
</tr>
</tbody>
</table>

1 The brown-headed cowbird is a known parasite of neotropical migrant bird species.
2 Sauer et al., 2000
3 Patuxent Bird Identification and Breeding Bird Survey results (average percent annual change).
**Potential Impacts**

As described in the 1996 Corridor H FEIS, the No-Build Alternative would not result in the loss of forested area; therefore, the No-Build Alternative would not result in any further forest fragmentation and would have no effect on the existing biodiversity within the Study Area.

Eighty-eight (88) percent of the Study Area is composed of large contiguous areas of upland forest, which have been subject to timbering and surface coal mining activities. The GIS digital land use and land cover database was utilized to determine the total amount of forest cover within the Study Area and within the construction limits of each Build Alternative. A comparison of forest cover within the construction limits of each Build Alternative, and the percentage of the total forest cover with the Study Area that will be converted to highway use for each Build Alternative is presented in Table III-13.

**Table III-13**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Total Area of Impact (in acres)</th>
<th>Total Area of Forest Cover Impacts (in acres)</th>
<th>Percent Forest within Alternative</th>
<th>Percent of Study Area Forest Cover Impacted¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1D West</td>
<td>540</td>
<td>499</td>
<td>92.4</td>
<td>6.3</td>
</tr>
<tr>
<td>1D East</td>
<td>538</td>
<td>488</td>
<td>90.7</td>
<td>6.1</td>
</tr>
<tr>
<td>1E</td>
<td>514</td>
<td>479</td>
<td>93.2</td>
<td>6.0</td>
</tr>
<tr>
<td>1G West</td>
<td>501</td>
<td>460</td>
<td>91.8</td>
<td>5.8</td>
</tr>
<tr>
<td>1G East</td>
<td>499</td>
<td>450</td>
<td>90.2</td>
<td>5.6</td>
</tr>
<tr>
<td>OPA</td>
<td>350</td>
<td>238</td>
<td>68.0</td>
<td>3.1</td>
</tr>
<tr>
<td>2</td>
<td>508</td>
<td>452</td>
<td>89.0</td>
<td>6.0</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative</td>
<td>396</td>
<td>224</td>
<td>56.6</td>
<td>3.0</td>
</tr>
</tbody>
</table>

¹Upland forest cover comprises 7,570 acres (88%) of the Study Area.

The Blackwater Avoidance Alternatives (1D West, 1D East, 1E, 1G West, and 1G East) and Blackwater Alternative 2 would result in the greatest impacts to forest cover. The ROPA/Preferred Alternative and OPA would result in the least amount of forest cover impacts. The difference in forest cover impacts among the alternatives carried forward for detailed analysis is primarily due to their various lengths. The ROPA/Preferred Alternative will result in a 3 percent loss in existing forest cover which represents a very small percentage of regional forest lands.

Breeding bird survey data suggests a positive trend toward habitat availability and usage by neotropical migrant bird species resulting from better land management practices in West Virginia. As shown in Table III-13 the ROPA/Preferred Alternative would impact 3 percent of the total forest cover within the Study Area. It is unlikely that construction of the ROPA/Preferred Alternative will impact the positive trend of habitat availability and usage for neotropical migrant bird species. Furthermore, large forest patches (greater than 1,235 acres) would remain to accommodate species with large territory or “home-range” requirements.

**Edge Effects**

The creation of edges due to highway construction can lead to the distribution of non-native plant species and noxious weeds if not controlled or mitigated after construction. Additionally, long grassy right-of-way (ROW) corridors can facilitate the distribution of non-forest animal species (e.g., meadow vole, brown-headed cowbird). Mitigation measures to minimize the spread of non-native plant species and noxious weed species are detailed in the 1996 Corridor H FEIS, Volume III Mitigation Document.
Avoidance, Minimization, and Mitigation Measures

Mitigation measures presented in the 1996 Corridor H FEIS, Volume III Mitigation Document outline control measures to minimize the spread of non-native plant species and noxious weed species. The Mitigation Document also contains commitments for the use of native vegetation to rapidly re-vegetate areas disturbed during construction (WVDOT, 1996). Where practicable, WVDOH, in conjunction with the natural resource agencies, will attempt to limit the area of clearing and grubbing operations. Similarly, the amount of ROW maintained in short grasses would be limited to control the population densities of grassland and pioneer species of fauna.

3.3.2.4 Wildlife Mortality

Methodology

A thorough discussion of wildlife mortality on reptiles, amphibians, birds, and mammals as a result of highway construction and operation is presented in the 1994 Corridor H ASDEIS Vegetation and Wildlife Technical Report (WVDOH, 1994e) and 1996 Corridor H FEIS, and is incorporated by reference into this document.

Existing Environment

As discussed in Sections 3.3.2.2 and 3.3.2.3, 88 percent of the land cover type within the Study Area is upland forest that is intermixed with areas disturbed by surface mining activities, wetlands, and a few small areas of pastureland. Three major routes, US 219, WV 32, and WV 93 are located within the Study Area. US 219 is the only direct route between Parsons and Davis, WV 32 connects the towns of Thomas and Davis, and WV 93 continues east of Davis to Mount Storm. Wildlife mortality resulting from collisions with motor vehicles traveling these routes is present, but no specific studies have been conducted along these routes to determine the animal species affected or to quantify the number of animals killed. However, research of highway related wildlife mortality indicates that it is density dependent, and that the species killed in greatest numbers are those attracted to grassy and early successional ROW habitat with high population densities, such as edge associated birds and small/medium sized mammals (Adams and Geis, 1981 and Michael, 1975).

One federally endangered species, the West Virginia northern flying squirrel (WVNFS), is found within the Study Area. One population has been identified in Big Run, and a second in Middle Run (Exhibit III-5). Approximately 4,909 acres of WVNFS suitable habitat and 817 acres of highly suitable WVNFS habitat are located within the Study Area. The highly suitable WVNFS habitat is located at the western portion of the project area along the ridge of Backbone Mountain (Exhibit III-5).

Potential Impacts

The construction of any of the Build Alternatives carried forward for detailed analysis would convert existing land covers to early successional grassy or shrubby vegetation commonly associated with highway ROWs. Potential highway-wildlife impacts would likely follow those observed on the Appalachian Corridor E (I-68) study (Michael, 1975), which is similar to the proposed project. The results of the I-68 study indicate that highway construction and operation would not adversely affect the majority of bird and mammal species, including game species that exist within the project watershed. Wildlife mortality would be density dependent, and the species killed in the greatest numbers would be those attracted to ROW habitat with high population densities (Michael, 1975). Wildlife mortality would continue to occur on existing roadways with the No-Build Alternative, and impacts would be similar to those found by Adams and Geis (1981) for county roads.
All of the Build Alternatives would cross through highly suitable and suitable WVNFS habitat, and would have the potential to interdict dispersing WVNFS. However, because of its geographic and topographic location, the ROPA/Preferred Alternative would not require long and high cut and fills and as a result would have the smallest highway “footprint” of all the Build Alternatives. A more detailed discussion of potential WVNFS mortality associated with the Build Alternatives is presented in the Biological Opinion.

Avoidance, Minimization, and Mitigation Measures

Avoidance, minimization, and mitigation measures for potential interdiction of WVNFS dispersants that may result from the construction of the ROPA/Preferred Alternative are detailed in Section 3.3.3.3 and in the Biological Opinion.

3.3.3 THREATENED & ENDANGERED SPECIES

The Endangered Species Act (ESA) of 1973 (16 USC 1531-1543 et seq.) protects threatened and endangered species and designated Critical Habitat of such species occurring both in the United States and abroad. Section 7 of the ESA requires that federal agencies such as FHWA ensure that any federal action authorized, funded, or carried out is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of Critical Habitat of any such species. Critical Habitat, as defined in the ESA (16 USC 402.03 (5)(A)), is the specific location within the geographic area occupied by the species essential to the conservation of the species, which may require special management considerations or protection. Critical Habitat does not include the entire geographic area that can be occupied by the threatened or endangered species (16 USC 402.03 (5)(C)).

The USFWS is the regulatory agency responsible for administering ESA compliance. In a letter dated July 14, 2000 (Appendix A), the USFWS identified four threatened or endangered species that could possibly occur within or near the Study Area (Table III-14).

Table III-14  
Federally Listed Species Potentially Located in the Study Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Federal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana bat</td>
<td><em>Myotis sodalis</em></td>
<td>Endangered</td>
</tr>
<tr>
<td>Virginia big-eared bat</td>
<td><em>Corynorhinus townsendii virginianus</em></td>
<td>Endangered</td>
</tr>
<tr>
<td>West Virginia northern flying squirrel</td>
<td><em>Glaucomys sabrinus fuscus</em></td>
<td>Endangered</td>
</tr>
<tr>
<td>Cheat Mountain salamander</td>
<td><em>Plethodon nettingi</em></td>
<td>Threatened</td>
</tr>
</tbody>
</table>

The USFWS recommended than an analysis of the Study Area be conducted to identify potential habitat and determine the likelihood of these species occurring along the alternatives. If identified, potential habitat was to be surveyed to determine the presence or probable absence of each species. The following subsections discuss the methods used to assess potential impacts to each federally listed threatened or endangered species and describe potential impacts that may result from the project, if any.

3.3.3.1 Indiana Bat

Because the Indiana bat was known to occur within the Study Area, a Biological Assessment (BA) was prepared to evaluate the potential effects of the Corridor H Project on Indiana bat habitat and was submitted on March 22, 1999 to the USFWS. The BA provided an estimate and percentage of potential summer roosting habitat that could be removed by Corridor H if constructed. Given the
small percentage of available habitat that will be removed, the BA concluded that the Indiana bat would not likely be adversely affected by the removal of habitat. The USFWS concurred with the findings of the BA in a letter dated June 21, 1999 (Appendix A).

In addition, a commitment was made to mist-net along Corridor H to detect the presence or probable absence of the Indiana bat. Mist-netting was conducted for all potential alternatives between May 15th and August 15th, 2001. No Indiana bats were captured, thus no further ESA Section 7 consultation is required for the Study Area regarding the Indiana bat. The USFWS concurred with these findings in a letter dated November 9, 2001 (Appendix A). Additional mist-netting or potential roost tree (PRT) removal will be conducted prior to construction activities, as appropriate.

### 3.3.3.2 Virginia Big-Eared Bat

A Biological Evaluation (BE) was prepared for the Virginia big-eared bat for the Corridor H Project and submitted to the USFWS in February 2001. The BE provided a history of the informal ESA Section 7 consultation regarding the Virginia big-eared bat. In addition, the BE defined and identified essential habitat (including hibernacula, roosting and maternity caves, as well as the foraging areas that surround these habitats) and satellite caves (caves of less importance used periodically) that occur near Corridor H. The BE found that no essential habitat or satellite caves occur within the Study Area for this project. Given that no habitat occurs for the species, no adverse effect would result in the construction of this project. In a letter dated April 18, 2001, USFWS found the BE to be sufficient and concurred in the “no adverse effect” finding (Appendix A).

### 3.3.3.3 West Virginia Northern Flying Squirrel (WVNFS)

In June 2000, WVDOH and FHWA re-initiated informal consultation with the USFWS during agency coordination for the preparation of this SEIS. During the informal consultation process, the recovery plan for the WVNFS (*Glaucomys sabrinus fuscus*) was being amended to redefine the methods for identifying potential habitat for that species. Because of this potential amendment to the recovery plan, additional live-trapping surveys were conducted for the WVNFS.

Ed Michael, Ph.D., a recognized expert of the WVNFS, investigated the Study Area to identify potential habitat for the squirrel. Dr. Michael identified ten areas of potential habitat. Consistent with USFWS guidelines, live trapping was conducted for ten nights at each site in August and September 2000, and April and May 2001. A total of 10 to 25 live traps were set at each site depending upon the size and suitability of the habitat. During the trapping of 2001, the WVNFS was captured in two locations within the Study Area, along the Right Fork of Big Run and south of Middle Run, both of which are within the cut and fill limits of the OPA. Given this discovery and following further consultation with the USFWS, additional trapping was conducted to determine the extent of the Big Run population in order to develop avoidance alternatives in the western portion of the Study Area.

The results of this survey were reported in a BA prepared for the WVNFS, submitted August 2002. The BA found that the OPA would likely result in an adverse effect to the species and that the avoidance alternatives would not likely adversely affect the WVNFS. In a letter dated October 11, 2002, the USFWS did not concur with this conclusion and stated that any of the alternatives presented in the BA (which are equivalent or very similar to the alternatives presented in this SFEIS) would not avoid suitable habitat for the species (Appendix A). According to the most recent Recovery Plan for the species (USFWS, 2001), suitable habitat for the WVNFS is assumed to be potentially occupied by the species; therefore, any of the alternatives would impact potentially
occupied WVNFS habitat. Further consultation with the USFWS was required to determine which of the alternatives was the least damaging to the WVNFS.

After the ROPA was selected as the Preferred Alternative, a second BA was prepared (August 2004) to evaluate the direct, indirect, and cumulative effects of the ROPA/Preferred Alternative and the other Build Alternatives on the WVNFS and its habitat. The BA concluded all Build Alternatives were “likely to adversely affect” the WVNFS, but the ROPA/Preferred Alternative would be the least damaging to the WVNFS because:

- The ROPA requires the removal of the fewest number of acres of either suitable or highly suitable habitat.
- The ROPA’s removal of highly suitable habitat primarily occurs on the highly suitable habitat’s edge and minimizes removal of “core” highly suitable habitat.
- The ROPA has less of a barrier effect and better preserves landscape permeability than the other alternatives because the magnitude of cut/fill slopes is less.

In a letter dated October 14, 2004, the USFWS concurred with this conclusion, and stated that formal consultation would be required for all the Build Alternatives (Appendix A).

A Formal Consultation Initiation Package (IP) was prepared after the ROPA was reaffirmed as the Preferred Alternative in the November 2004 Amended Preferred Alternative Report. The IP contained a detailed project description, a discussion of the WVNFS and its natural history, a summary of the direct and indirect impacts, and cumulative effects of the ROPA/Preferred Alternative on the WVNFS and its habitat, and a description of conservation measures that were incorporated into the ROPA/Preferred Alternative.

Formal section 7 consultation was initiated on October 25, 2005 by FHWA and WVDOH. USFWS confirmed the initiation of formal consultation and the completeness of the Initiation Package on November 18, 2005. On March 22, 2006 the USFWS requested an extension for the completion of formal consultation; the request was granted by FHWA on March 30, 2006. A draft BO was issued by USFWS on May 5, 2006. The final BO was issued on November 6, 2006. The BO provides:

- a complete consultation history,
- biological background research and baseline summary,
- confirms the proposed conservation measures,
- terms and conditions associated with the Incidental Take Statement, including Reasonable and Prudent Measures (RPMs) for compliance, and
- a conclusion to the formal consultation process with the detailed reinitiation requirements.

The USFWS has stated that, “...FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of *G. s. fuscus* habitat. ....Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO specifically states, “After reviewing the current status of the *G. s. fuscus*, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ Biological Opinion that constructing Corridor H, Parson to Davis, as proposed, is not likely to jeopardize the continued existence of the *G. s. fuscus*.”

A timeline for events related to ESA Section 7 consultation (whether informal or formal) on the WVNFS is presented in Table III-15 A summary of the BO is provided after Table 22, below.
### Table III-15
ESA Section 7 consultation for the WVNFS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2000</td>
<td>USFWS initiates informal ESA Section 7 consultation for the WVNFS during agency coordination for the preparation of the SEIS for the Parsons-to-Davis section of Appalachian Corridor H. The USFWS indicates the WVNFS may occur along the Parsons-to-Davis section and recommends live trap surveys to determine the presence or absence of the species.</td>
</tr>
<tr>
<td>July 2000</td>
<td>USFWS provides coordination letter that identifies federally listed species that could occur in the project study area.</td>
</tr>
<tr>
<td>August 2000-May 2001</td>
<td>Live-trapping surveys were conducted in August/September 2000 and April/May 2001 in potential habitat along each of the Build Alternatives being studied at the time that avoided the Blackwater Area and along “shifts” of the OPA (to avoid Big Run Bog in the west). The WVNFS is captured at two locations during the 2001 survey. Twenty-one individuals are captured along the Right Fork of Big Run, and two individuals are captured south of Middle Run. Both capture areas overlap the cut and fill limits of the OPA. Additional live trap surveys are conducted to delineate WVNFS occupation along the Right Fork of Big Run.</td>
</tr>
<tr>
<td>July 2001</td>
<td>WVDOH provides coordination letter to USFWS requesting attendance at meeting to discuss potential impacts to WVNFS habitat.</td>
</tr>
<tr>
<td>August 2001</td>
<td>The USFWS determines two populations of WVNFS are present in the Parsons-to-Davis section, and encourages FHWA and WVDOH to develop alternatives in the western portion of the area that would not result in an incidental take of the WVNFS (alternatives to the OPA had already been developed to avoid the Blackwater Area, but none had been developed in the western portion of the Parsons-to-Davis section). Meeting held with WVDOH, FHWA, USEPA WVDNR and USFS MNF to discuss project alternatives. WVDOH provides coordination letter to USFWS regarding WVNFS documentation studies within the project study area. USFWS provides coordination letter to WVDOH stating alternatives under consideration would impact WVNFS habitat; recommends the development of measures to avoid and/or minimize potential impacts.</td>
</tr>
<tr>
<td>September 2001</td>
<td>The USFWS amends Appendix A of the 1990 WVNFS Recovery Plan. Appendix A provides guidelines for WVNFS habitat identification. The amendment states that if an area exhibits suitable habitat, then it is assumed to be potentially occupied by the WVNFS.</td>
</tr>
<tr>
<td>October 2001</td>
<td>FHWA re-issues Notice of Intent in Federal Register. The Study Area is expanded west from the Blackwater Area to include the entire Parsons-to-Davis section; potential WVNFS habitat is mapped for the area; and two Squirrel Avoidance Alternatives (SAAs) are developed.</td>
</tr>
<tr>
<td>December 2001</td>
<td>USFWS provides coordination letter to FHWA concurring with expanded study area identified in re-issued October 2001 NOI.</td>
</tr>
<tr>
<td>August 2002</td>
<td>A BA is prepared to evaluate the direct effects of the OPA and the two SAAs on the WVNFS and its habitat. The BA concludes the OPA would likely adversely affect the WVNFS, by resulting in an incidental take. Conversely, the BA concluded that the two SAAs were not likely to adversely affect the WVNFS. The BA is submitted to the USFWS for concurrence.</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>October 2002</td>
<td>Informal field review with USFWS is conducted to review potential WVNFS within the project study area. The USFWS does not concur with the BA conclusions, and states all alternatives are likely to adversely affect the WVNFS. The USFWS recommends further evaluation of suitable habitat along the proposed alternatives. Additionally, the USFWS requests a second BA to compare direct and indirect impacts between alternatives, and to aid in the selection of an alternative that is the least damaging to the WVNFS. Informal ESA Section 7 consultation continues.</td>
</tr>
<tr>
<td>December 2002</td>
<td>WVDOH submits SFEIS for agency and public review and comment.</td>
</tr>
<tr>
<td>January 2003</td>
<td>USFWS provides coordination letter to WVDOH regarding SDEIS; recommends WVDOH select the least damaging alternative.</td>
</tr>
<tr>
<td>November 2003</td>
<td>Meeting held with WVDOH, FHWA, WVDNR and consultants to discussed updated information regarding WVNFS.</td>
</tr>
<tr>
<td>December 2003</td>
<td>The OPA is revised to provide a safer access to TCHS, reduce wetland impacts around Middle Run, and to incorporate the Truck Route to bypass the City of Thomas. The Revised Original Preferred Alternative (ROPA) is identified as the Preferred Alternative for the Parsons-to-Davis Project. A Preferred Alternative report (dated December 2003) is submitted in January 2004 to the resource agencies for review and comment.</td>
</tr>
<tr>
<td>January 2004</td>
<td>Meeting held with WVDOH, FHWA, USFWS to discuss format consultation procedures and proposed schedule.</td>
</tr>
<tr>
<td>February 2004</td>
<td>USFWS provides coordination letter to WVDOH commenting on the December 2003 PA Report and recommends a revised BA be completed for the ROPA/Preferred Alternative. Additional WVNFS habitat mapping provided to USFWS.</td>
</tr>
<tr>
<td>April 2004</td>
<td>Meeting held with WVDOH, FHWA and consultants to review and discuss WVNFS habitat mapping.</td>
</tr>
<tr>
<td>May 2004</td>
<td>Revised WVNFS habitat mapping provided to USFWS. Field review conducted to further evaluate revised habitat mapping.</td>
</tr>
<tr>
<td>July 2004</td>
<td>Meeting held with WVDOH, FHWA, USFWS and consultants to discuss information to be included in revised BA for the WVNFS.</td>
</tr>
<tr>
<td>August 2004</td>
<td>A second BA is prepared to evaluate the direct, indirect, and cumulative effects of the ROPA/Preferred Alternative and the SAAs on the WVNFS and its habitat. The BA concludes all alternatives would likely adversely affect the WVNFS, but the ROPA/Preferred Alternative would be the least damaging to the WVNFS. Meeting held with WVDOH, FHWA, USFWS and consultants to discuss comments on revised BA.</td>
</tr>
<tr>
<td>September 2004</td>
<td>Comments on revised BA addressed; document sent back to USFWS for review and comment.</td>
</tr>
<tr>
<td>October 2004</td>
<td>The USFWS concurs with the BA conclusions. Informal ESA Section 7 consultation is complete, and formal consultation is required for all the project’s Build Alternatives.</td>
</tr>
<tr>
<td>November 2004</td>
<td>The ROPA is reaffirmed as the Preferred Alternative for the Parsons-to-Davis section of Appalachian Corridor H. An Amended Preferred Alternative Report (dated November 2004) is submitted to the resource agencies for review and comment.</td>
</tr>
</tbody>
</table>
### March 2005
USFWS provides coordination letter regarding Amended PA report and does not object to selection of ROPA as the preferred alternative.

### July 2005
Meeting held with WVDOH. FHWA, USFWS and consultants to discuss contents of Initiation Package and schedule for formal consultation.

### August 2005
Meeting held with WVDOH, FHWA, USFWS and consultants to discuss the results of the additional engineering performed on the Revised Original Preferred Alternative (ROPA). The additional engineering adjusted the excavation in the vicinity of Big Run Bog and Slip Hill Mill Run, and reduced direct impacts to WVNFS habitat by eliminating the need to place excess excavation outside of the construction limits of the highway. The FHWA submits a written request to initiate formal ESA Section 7 consultation for the WVNFS that includes a discussion of the optimized ROPA. The Formal Consultation Initiation Package (IP) includes a detailed project description, a discussion of the WVNFS and its natural history, a summary of direct, indirect, and cumulative impacts, and conservation measures that are incorporated into the project.

### September – October 2005
The USFWS requests additional information concerning indirect impacts to WVNFS habitat. The FHWA provides the information in a revised IP.

### November 2005
The USFWS determines receipt of all the information necessary to initiate formal consultation. Formal ESA Section 7 consultation begins.

### March 2006
The USFWS requests a 30-day extension from the FHWA to complete the Biological Opinion. The FHWA grants the 30-day extension.

### May 2006
The USFWS completes and transmits the draft Biological Opinion to the FHWA.

### November 2006
The USFWS completes and transmits the final Biological Opinion to the FHWA. Formal section 7 Consultation is complete.

The Biological Opinion (BO) for the WVNFS was developed by USFWS in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). Pertinent background and project documentation was reviewed and considered in the development of the BO. This information included the 1990 USFWA Recovery Plan, 2004 Biological Assessments prepared by WVDOH, 2005 Initiation Package and additional scientific information obtained from the various studies of the WVNFS such as studies from the Monongahela National Forest and the results of required WVNFS surveys performed for various projects in West Virginia. Section 7 consultation for the Parsons-to-Davis Project of Appalachian Corridor H began with project scoping in 2000 and has concluded with the issuance of the final BO for the WVNFS on November 6, 2006 (Appendix C).

WVNFS conservation measures that will be implemented for the Parsons-to-Davis Project are listed below:
- Develop[ed] detailed habitat mapping at the project level (within the action area);
Conducted additional preliminary engineering was performed to reduce overall impacts to highly suitable and suitable habitat;

Refined engineering in the vicinity of Middle Run avoid a known population and to reduce impacts to highly suitable habitat;

Implemented of a 2,000 ft long bifurcated mainline design in the vicinity of Middle Run to minimize potential impact on a potential dispersal corridor;

Established of a Habitat Mitigation Fund to support WVNFS management and recovery efforts.

The action area for the WVNFS is approximately 6,916 acres. Of these 6,916 acres, approximately 751 acres contain highly suitable habitat (approx. 10% of total acres in the action area) and 3,513 acres contain suitable habitat (approx. 51% of total acres in action area).

The 2003/2004 ROPA projected the removal of approximately 43 acres of highly suitable habitat and 226 acres of suitable habitat. The additional engineering effort refined the ROPA to further reduce impacts to WVNFS habitat and known populations. The refined ROPA/Preferred Alternative will impact/remove approximately 25 acres of highly suitable habitat (3.5% of highly suitable habitat within the action area) and 232 acres of suitable habitat (6.7% of suitable habitat within the action area). In addition to the direct removal of habitat, the ROPA/Preferred Alternative, will result in approximately 107 acres of ‘unusable’ habitat remnants. Therefore, the total acreage of impact associated with the ROPA/Preferred Alternative is 364 (25 acres of highly suitable habitat, 232 acres of suitable habitat and 107 of unusable habitat remnants). Regarding this impact, the BO states, “Most significantly, the FHWA and WVDOH have selected the least damaging practicable project construction alternative in regards to direct removal of *G. s. fuscus* habitat.”

The most disruptive effects to WVNFS habitat will occur during initial construction (construction completion estimates range from 3-5 years) of the roadway and will therefore be temporary. Direct mortality is most likely to occur as the result of tree clearing activities; limited impacts are expected from vehicular strikes. Noise and associated disturbances are not expected to, “...significantly impact essential behavioral patterns, including breeding, feeding, or sheltering (May 2006 draft BO). The May 2006 draft BO also states that cumulative effects “...are not reasonably certain to occur within the action area’.

The May 2006 draft BO has concluded that, “the project has been designed to avoid and minimize these adverse impacts to *G. s. fuscus*, and the action area should be able to sustain reproducing populations after project construction. Further, “...it is the Service’s Biological Opinion that constructing Corridor H, Parsons to Davis, as proposed, is not likely to jeopardize the continue existence of the *G. s. fuscus.*”

**Incidental Take Statement/ Reasonable and Prudent Measures (RPMs):**

“The Service anticipates that the proposed project could cause incidental take of *G. s. fuscus* either as a result of harm through loss of habitat, or direct mortality.” However, implementation of the terms and conditions associated with the reasonable and prudent measures will reduce the potential for incidental take.” (May 2006 BO)

**RPM 1: Avoid Direct Take of Immobile Young**

Action: Potential nest site trees within highly suitable and suitable habitat will be removed only between September 15 and April 1. Non-nesting trees may be cleared between April 2 and September 14.

**RPM 2: Reduce impacts of habitat loss by enhancing nesting and foraging habitat in remaining habitat**
Action: Install of nest boxes in adjacent forest to enhance nest site availability. A total of 57 nest boxes will be required; nest box locations will be documented and reviewed by USFWS.

Action: During disturbance of highly suitable and suitable habitat, trees and woody debris will be stockpiled in adjacent areas; pile design and location will be documented and reviewed by USFWS.

**RPM 3: Reduce barriers to dispersal by retaining and restoring adjacent habitat**

Action: Limit clearing and grubbing within the project right-of-way and retain forested areas and spruce trees, as much as possible.

Action: Development a project reclamation plan for revegetated areas; reclamation plan will be development in consultation with the USFWS.

Action: Development of a project maintenance plan for right-of-way; maintenance plan will be development in consultation with the USFWS.

**RPM 4: Implement all Proposed Conservation Measures**

Action: Implement all conservation measures proposed in 2005 formal consultation Initiation Package (Appendix B).

Action: Establish and execute funding for the WVNFS Habitat Mitigation Fund (as described in Appendix B of the 2005 Initiation Package). These actions are to occur within 30-days of the issuance of the ROD for the Parsons-to-Davis Project.

**RPM 5: Develop and implement a monitoring project to track incidental take associated with the Project.**

Action: Development of a plan for surveying, monitoring and reporting incidental take of the WVNFS within the action area. The plan will be developed in consultation with the USFWS.

Action: Monitor clearing activities within the action area during construction through mapping and other documentation.

Action: Development and implementation of a tracking program to monitor the WVNFS’s response to construction activities.

Action: Annual reporting of all mitigation commitments, status, implementation and data collection.

**RPM 6: Implementation of these minimization measures shall be ensured by appropriately informing all project personnel and contractors.**

Action: FHWA and WVDOH will commit to providing full disclosure and understanding of the BO requirements for the WVNFS to all contractors working on the project to assure compliance with the goals of the BO. Implementation of the terms and conditions of the RPMs is required for FHWA and the WVDOH to remain in compliance with the requirements of the Incidental Take Statement. Discretionary conservation recommendations are not being recommended by USFWS. Reinitiation requirements are provided in detail in the BO (Appendix C). The issuance of the final BO concludes the formal consultation process.

Note: On July 6, 2005, the United States Fish and Wildlife Service (USFWS), Department of Interior, posted an action notice in the Federal Register relative to the West Virginia Northern Flying Squirrel (WVNFS). The action notice announced the initiation of a five-year review of the endangered Virginia Northern Flying Squirrel (*Glaucomys sabrinus fuscus*) to “…ensure that the listing classification of a species is accurate”. A five-year review is based on the best scientific and commercial data available at the time of review including information that has become available since the species listing as an endangered species in 1985 (50 FR 26999-27002). Based on the information received during the review period, the USFWS will determine whether or not a status
change (delisting the species or changing its classification) is necessary for the WVNFS. To date, the USFWS has not posted a decision regarding the status of the species review process for the WVNFS.

3.3.3.4 Cheat Mountain Salamander

Thomas Pauley, Ph.D., a recognized expert of the Cheat Mountain salamander, conducted field investigations to identify potential habitat and the actual presence of the Cheat Mountain Salamander within the Study Area. During the investigation, which focused on high elevation peaks, three areas were found with emergent boulders or rocks and conifer forests that could support the salamander. These areas, as well as other less suitable habitats, were surveyed. No Cheat Mountain Salamanders were found. The survey results were presented in a letter report, submitted to the USFWS July, 2002. In a letter dated August 12, 2002, the USFWS concurred that the Parsons-to-Davis Project is not likely to adversely affect the Cheat Mountain Salamander, and that no further Section 7 consultation is required with regard to this species (Appendix A).

3.3.3.5 Species of Concern

In addition to the list of threatened and endangered species, the USFWS provided a list of 11 Species of Concern that may occur in the Study Area, but not necessarily within the construction limits of the alternatives carried forward for detailed analysis. These species are presented in Table III-16. While Species of Concern are not formally protected by the ESA, the USFWS and the WVDNR encourage continued consideration of these species in environmental planning. Where possible, alternatives were developed to avoid known populations of Species of Concern.

As discussed in Section 3.3.2.3 Forest Fragmentation and Biodiversity above, sufficient forest will remain after construction of the project such that wildlife, including Species of Concern, will retain adequate available habitat. In addition, when possible, impacts to aquatic habitat will be avoided and/or minimized.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
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<tbody>
<tr>
<td>Eastern small-footed bat</td>
<td>Myotis liebii</td>
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<tr>
<td>Eastern woodrat</td>
<td>Neotoma floridana magister</td>
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<td>Southern rock vole</td>
<td>Microtus chrotorrhinus</td>
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<td>Appalachian cottontail rabbit</td>
<td>Sylvilagus obscurus</td>
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<td>Southern water shrew</td>
<td>Sorex palustris punctulatus</td>
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<td>Hellbender</td>
<td>Cryptobranchus alleganiensis</td>
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<td>Cheat minnow</td>
<td>Rhinichthys bowersi</td>
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<td>Darlington’s spurge</td>
<td>Euphorbia purpurea</td>
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<td>Butternut</td>
<td>Juglans cinerea</td>
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<td>Northern goshawk</td>
<td>Accipiter gentilis</td>
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<td>Cerulean warbler</td>
<td>Dendroica cerulea</td>
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3.3.3.6 State Protection of Species

The State of West Virginia relies upon federal legislation to protect vertebrate, invertebrate, and plant resources. The West Virginia Department of Commerce, Division of Labor, and the West Virginia Natural Heritage Program (WVNHP) within the WVDNR, maintain a database with the known location of federally listed threatened and endangered species, as well as a list of Rare
Species. The WVNHP places species on this list based on their population status within West Virginia. The WVNHP provided a list of the Rare Species found in Tucker County, as well as a list of those with known occurrences within the Study Area. Rare Species, which may be limited in West Virginia for a variety of reasons (e.g., being at the far extent of the species range), but more abundant and widespread in other states, are not afforded special legal protection as are the federally listed threatened and endangered species. However, a review of the impacts to these species was considered in the planning process through coordination with the WVNHP.

3.3.3.7 Avoidance, Minimization, and Mitigation Measures

The only rare, threatened, or endangered species impacted by any of the alternatives is the WVNFS. All of the alternatives presented in this SFEIS would impact habitat potentially occupied by the WVNFS. Stated above, the summary of the BO outlines avoid, minimization and mitigation measures associated with the WVNFS. The summary also outlines the conservation measures and RPMs (reason and prudent measures associated with the Incidental Take Statement). The BO is provided in Appendix C.

The 1996 FEIS, Volume III also provides for:

- The minimization of clearing and grubbing activities to an area extending no more than 10 feet beyond project construction limits.
- The purchase and preservation of uneconomical land remnants and unique habitat to mitigate for upland habitat loss including WVNFS habitat.
- Where practicable, bridges will be designed and constructed to provide riparian buffer strips along stream banks to facilitate wildlife movement.
- The opportunity for resource agencies to review and comment during all design engineering phases.

3.3.4 WETLANDS

Executive Order (E.O.) 11990 establishes a national policy to “avoid to the extent possible the long-term and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.” Wetlands within the Study Area have been evaluated in accordance with E.O. 11990.

3.3.4.1 Methodology

Detailed discussions of the wetland identification and delineation methods used for the Study Area are included in the 1994 Corridor H ASDEIS Wetlands Technical Report (WVDOH, 1994f) and the 1996 Corridor H FEIS. Wetlands are defined by the USEPA and the USACE as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (40 CFR § 230.3 and 33 CFR § 328.3). Prior to conducting fieldwork, locations of known wetlands and potential wetland areas were identified using existing data which included the Tucker County Soil Survey (USDA, 1967), USFWS National Wetland Inventory (NWI) Maps, USGS Maps 7.5’ Quadrangles, and the USACE Wetland Delineation Manual, January 1987.

Field delineations for wetlands located within the Study Area were conducted by environmental scientists trained in federal wetland identification and delineation procedures according to the Routine Onsite Determination Method outlined in the USACE Wetlands Delineation Manual (Environmental Laboratories, 1987). Wetland data forms are part of the project file and can be viewed upon request. Wetland classification was defined using the classification system developed by the USFWS (Cowardin et al., 1979). All wetland data, including boundaries and vegetation classification, were entered into the project’s GIS.
A functions and value evaluation of each wetland located in the Study Area was conducted with the WET 2.1 computer model and a descriptive approach developed by the USACE New England Division (1999). The WET 2.1 model is based on FHWA’s Wetland Evaluation Technique (WET) and provides an estimate of the likelihood that a function or value will occur in a wetland in terms of social significance, effectiveness, or opportunity to perform the function. The descriptive approach, developed by the USACE New England Division, provides an approach to graphically represent wetland functions and values either separately or in relationship to other constraints and/or resources.

### 3.3.4.2 Existing Conditions

The proposed project traverses the Black Fork local watershed within the Cheat River regional watershed. The wetlands found within the Study Area (Exhibit III-4) are primarily high elevation bogs and fens which are dominated by mosses, sedges, and ericaceous shrubs such as blueberries, and many of the wetlands are influenced by beaver activity. A large portion of the local watershed has been disturbed by surface coal mining activities, and numerous wetlands are affected by acid mine drainage.

Approximately 90 percent of the wetlands are located within stream headwaters or within stream floodplains, and form extensive wetland systems (Exhibit III-4). To capture key wetland functions and values, the assessment was performed on groups or systems of wetlands. Wetland systems that were identified in the 1994 ASDEIS Wetland Technical Report 1996 and the Corridor H FEIS were placed in AR-prefix systems. Most of these systems are located along the southern portion of the Study Area and within the Long Run and Middle Run watersheds. CY-prefix wetland systems are located within the floodplain of the North Fork of the Blackwater River. Wetlands within the Snyder Run and Pendleton Creek watersheds located in the northern portion of the Study Area were placed in HJ-prefix systems.

Table III-17 identifies the wetland systems, provides break down of the dominant wetland types within each system, and summarizes of the key functions and values of each system within the Study Area. Thirteen wetland systems were identified within the Study Area. The primary function of the wetland systems is nutrient removal, retention, and transformation, and nine of the wetland systems provide sediment, toxicant, and pathogen retention which is important to mitigate the acidic deposition associated with surface coal mining disturbances within the Study Area. Because most of the wetlands are located within stream headwaters and floodplains, eighty five (85) percent of the wetland systems provide floodflow retention or alteration. Ten of the wetland systems provide wildlife habitat.

### 3.3.4.3 Potential Impacts

As described in the 1996 Corridor H FEIS, the No-Build Alternative would have no effect on wetlands or wetland systems in the Study Area.

For each Build Alternative, individual wetland impacts by wetland type are provided in Table III-18. Table III-19 provides a summary of potential wetland impacts by wetland type for each Build Alternative. Wetland impacts for each of the alternatives are generally small impacts on small, low quality, palustrine emergent wetland systems. The Blackwater Avoidance Alternatives (1D West, 1D East, 1E, 1G West, and 1G East) and Blackwater Alternative 2 will impact fewer wetlands than the OPA and the ROPA/Preferred Alternative. The increased wetland impacts associated with the ROPA/Preferred Alternative are associated with the addition of the TCHS connection which was added to the ROPA to meet specific purposes derived from the needs analysis conducted for the Parsons-to-Davis SDEIS. A TCHS connection associated with Alternatives 1D West, 1D East, 1E, 1G West, 1G East, and 2 would not increase impacts to wetlands; however, it is not desirable because such a connection would require large cuts in an area of highly suitable WVNFS habitat resulting in additional impacts to this endangered species from the removal of additional habitat and the interdiction of potential dispersal routes.
### Table III-17
Wetland System Function and Values

<table>
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<tr>
<th>Wetland System</th>
<th>Dominant Wetland Composition</th>
<th>System Acreage</th>
<th>PEM Acreage</th>
<th>PFO Acreage</th>
<th>POW Acreage</th>
<th>PSS Acreage</th>
<th>Key Functions &amp; Values Performed</th>
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<td>AR 1</td>
<td>PEM/PFO</td>
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<td>1362 B</td>
<td>0.18</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AR 3</td>
<td>1362 A</td>
<td>0.04</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AR 3</td>
<td>1339 F</td>
<td>0.24</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HJ 1</td>
<td>1268</td>
<td>0.52</td>
<td>29.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AR-2</td>
<td>1299</td>
<td>0.03</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total PSS</td>
<td></td>
<td></td>
<td>1.01</td>
<td>30.02</td>
</tr>
</tbody>
</table>

**ALTERNATIVE 2 TOTAL** 5.66 103.96

¹ NS indicates a wetland that was not part of a wetland system.
² Impact values of 0.00 indicate that impacts to the wetland are less than 0.01 acre.
Table III-19
Summary of Wetland Impacts By Build Alternative

<table>
<thead>
<tr>
<th>Alternative</th>
<th>PEM</th>
<th>PSS</th>
<th>PFO</th>
<th>POW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1D West</td>
<td>0.98</td>
<td>0.09</td>
<td>0.06</td>
<td>0</td>
<td>1.13</td>
</tr>
<tr>
<td>1D East</td>
<td>1.01</td>
<td>0.72</td>
<td>0</td>
<td>0</td>
<td>1.73</td>
</tr>
<tr>
<td>1E</td>
<td>2.04</td>
<td>0.34</td>
<td>3.48</td>
<td>0</td>
<td>5.86</td>
</tr>
<tr>
<td>1G West</td>
<td>0.46</td>
<td>0.09</td>
<td>0.11</td>
<td>0</td>
<td>0.66</td>
</tr>
<tr>
<td>1G East</td>
<td>0.26</td>
<td>0.72</td>
<td>0.05</td>
<td>0</td>
<td>1.03</td>
</tr>
<tr>
<td>OPA</td>
<td>5.79</td>
<td>1.08</td>
<td>0.59</td>
<td>0.54</td>
<td>8.00</td>
</tr>
<tr>
<td>2</td>
<td>4.26</td>
<td>1.01</td>
<td>0</td>
<td>0.39</td>
<td>5.66</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative</td>
<td>8.24</td>
<td>0.57</td>
<td>1.37</td>
<td>0.57</td>
<td>11.13</td>
</tr>
</tbody>
</table>

### 3.3.4.4 Avoidance, Minimization & Mitigation Measures
To the maximum extent practicable, the impacts to wetlands have been avoided or minimized through an interdisciplinary, interagency approach and the use of the GIS prepared for the project. Discussions of mitigation activities are included in the 1996 Corridor H FEIS (WVDOH, 1996, pp. III-178 through III-184, and Volume III: Mitigation Document, p.7). In addition, two compensatory wetland sites totaling 45.5 acres were constructed between 1996 and 1998 to mitigate for wetlands potentially impacted by the entire Corridor H project. Research conducted by West Virginia University has determined that each of the sites supports a diverse flora and fauna, and provides a plethora of wetland functions and values. The Section 404 Permit, issued in 1996, authorizes activities (including discharges) into jurisdictional surface waters. The permit authorizes these activities through December 2007, and provides a process for extending the approved authorization period. The permit terms and conditions will be updated addressed, as required, as part of the ongoing agency coordination process outlined in Volume III of the 1996 Corridor H FEIS. Comment and coordination letters are provided in Appendix A.

### 3.3.5 WATERSHEDS & STREAMS

#### 3.3.5.1 Methodology
The methodology employed in evaluating baseline conditions and the potential environmental consequences on affected watersheds and surface water resources included a review of published information, detailed field investigations, GIS analysis, and the use of Rapid Bioassessment Protocol (RBP) procedures (Plafkin et al., 1989) for select streams in the Study Area. The RBP data gathering protocol and analysis is detailed in the 1994 Corridor H ASDEIS Streams Technical Report (WVDOH, 1994d) and the 1996 Corridor H FEIS, which are incorporated here by reference. Summary results of these analyses are provided in the following sections. Additionally, partly in response to comments received from resource agencies, the stream analysis presented in the SDEIS (December 2002) has been refined.

To complete the more refined analysis, the stream segments of each of those “streams” identified on project preliminary engineering design mapping as impacted (i.e., culverted, relocated or filled) were investigated in the field and classified (i.e., drainage ditches, ephemeral streams, intermittent streams or perennial streams) based on standard field techniques. Following this classification, the water quality of each of the identified intermittent and perennial streams was determined based on data obtained from the WVDNR and/or WVDEP.

In a letter dated May 7, 2004 (Appendix A), the USFS MNF expressed specific concerns regarding Slip Hill Mill Run and Mill Run which are native brook trout streams impacted by the ROPA. In
response to these concerns, more detailed analysis of these streams was conducted to characterize existing stream debris load and water quality, to determine if brook trout use the headwater tributaries of Slip Hill Mill Run and Mill Run, and to better assess the potential direct and indirect impacts to these sensitive streams. Based upon the results of this analysis, advanced preliminary engineering was conducted to minimize the ROPA’s impact to WVNFS habitat and reduce the amount of highway fill placed within the Slip Hill Mill Run watershed.

3.3.5.2 Existing Conditions

Cheat River Regional Project Watershed

The Parsons-to-Davis project is within the Cheat River Regional Project Watershed (as defined in the 1996 Corridor H FEIS). The Cheat River drains approximately 1,425 square miles of seven counties in West Virginia, Maryland, and Pennsylvania. The river is formed near Parsons, West Virginia, at the confluence of the Black Fork and Shavers Fork Rivers. It flows north to its confluence with the Monongahela River at Point Marion, Pennsylvania. The Cheat River watershed, including all its tributaries, consists of parts of Pocahontas, Randolph, Tucker, Preston, and Monongalia counties in West Virginia.

The Cheat River watershed is the largest free-flowing watershed in the eastern United States. Above Parsons, the major contributing watersheds in and outside of the Study Area include Black Fork, Shavers Fork, Dry Fork, Blackwater River, Laurel Fork, Glady Fork, and Red Creek. Much of the Cheat River Regional Project Watershed land use consists of undeveloped rural land dominated by deciduous and mixed forests (84 percent) and cropland and pasture (12 percent). Part of the MNF, including the Congressionally-designated Otter Creek and Dolly Sods Wilderness areas, lie within the Cheat River Regional Project Watershed. These wilderness areas are not impacted by the proposed project.

Coal mining has impacted a number of sub-basins within the Cheat River drainage system. The lower portion of this Regional Project Watershed has been severely polluted by acid drainage, much of which comes from abandoned deep and surface coal mines. Although the lower Cheat River has been degraded by acid drainage for many years, recent spills from active mine operations, primarily within the Muddy Creek watershed, have compounded the situation to the point where downstream recreation is threatened (Skousen, 2001).

Black Fork Local Project Watershed

Within the Cheat River Regional Project Watershed, the Study Area overlaps the Black Fork Local Project Watershed (as defined in the 1996 Corridor H FEIS). The Black Fork Local Project Watershed drains 153 square miles of land along Backbone Mountain, Canaan Mountain, Canaan Valley, and Beaver Creek. There are an estimated 117 miles of perennial stream within this local watershed, including the North Fork of the Blackwater River, Mill Run, Slip Hill Mill Run, Long Run, Middle Run, Tub Run, Pendleton Creek, Blackwater River, and Beaver Creek. Primary stream systems and contributing watersheds are depicted in Exhibit III-4.

A large portion of the Black Fork Local Project Watershed has been subjected to deep and surface coal mining. As a result, many abandoned deep and surface mines in the area discharge untreated mine drainage including the drainage areas for Beaver Creek, North Fork, Pendleton Creek, Long Run, and Middle Run (Skousen, 2001). In addition to human-induced acid mine drainage, naturally acidic conditions are found in the headwaters of Big Run, Tub Run, Long Run, and Middle Run which drain bog-like wetlands resulting in tannic water and naturally low pH. There are two native brook trout streams (Slip Hill Mill Run and Mill Run) and three state-listed high quality streams (North Fork of the Blackwater River, Pendleton Creek and Beaver Creek) located within the Study Area (WVDNR, 2001).
**Affected Project Basins and Primary Stream Systems**

Primary stream systems within the Study Area were previously assessed using the RBP (Plafkin et al., 1989). Stream data contained in this study (Parsons-to-Davis) were previously assessed in the 1994 Corridor H ASDEIS Streams Technical Report. Relevant stream data were incorporated into this study in order to make comparisons among the alternatives. In addition, Slip Hill Mill Run and Mill Run were further examined in 2004, and these findings are detailed after the following discussion of Study Area streams.

In total, 24 streams within the Black Fork local watershed were field investigated for the Corridor H Project. Two methods of evaluation were performed at each sampling point, a habitat assessment and a benthic macroinvertebrate survey, the methods and results of which were previously described in detail in the 1994 Corridor H ASDEIS. The habitat assessment measured parameters such as bottom substrate, embeddedness, stream flow, channel alteration, bottom scouring and deposition, pool:riffle or run:riffle ratio, bank stability, bank vegetation stability, and streamside cover. Numerical scores, given for each parameter, were totaled and assigned a habitat assessment score. Habitat assessment scores were divided into five classes:

- 0 to 30 - Severely Impaired
- 31 to 60 - Impaired
- 61 to 90 - Moderate
- 91 to 120 - Good
- 121 to 135 - Excellent

The benthic macroinvertebrate community was also used to indicate the overall water quality of each potentially impacted stream. One analysis tool used to assess the benthic macroinvertebrate community was the Hilsenhoff Biotic Index (HBI). This index is used to determine the overall water quality and the degree of organic pollution of a stream (Hilsenhoff, 1988). HBI scores less than 5.00 indicate “Excellent” to “Good” water quality, and “Unlikely” to “Some” degree of organic pollution. Water quality and benthic data collected at multiple sites throughout a stream were pooled to assess the overall stream condition. Table III-20 presents the results of these surveys.

**Table III-20**

Summary of Baseline Aquatic Habitat Value for Streams within the Study Area

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Stream Name</th>
<th>Habitat Assessment Score</th>
<th>HBI Score</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC3304</td>
<td>Trib. to Mill Run</td>
<td>66</td>
<td>Moderate</td>
<td>2.17 Excellent</td>
</tr>
<tr>
<td>MC3302</td>
<td>Slip Hill Mill Run*</td>
<td>56</td>
<td>Impaired</td>
<td>1.20 Excellent</td>
</tr>
<tr>
<td>MC3303</td>
<td>Trib. Slip Hill Mill Run*</td>
<td>66</td>
<td>Moderate</td>
<td>3.86 Very Good</td>
</tr>
<tr>
<td>MC1311</td>
<td>Big Run</td>
<td>85</td>
<td>Moderate</td>
<td>4.16 Very Good</td>
</tr>
<tr>
<td>MC1312</td>
<td>Trib. Big Run</td>
<td>91</td>
<td>Good</td>
<td>3.67 Excellent</td>
</tr>
<tr>
<td>MC1310</td>
<td>Tub Run</td>
<td>105</td>
<td>Good</td>
<td>5.09 Fair</td>
</tr>
<tr>
<td>MC1305</td>
<td>Long Run</td>
<td>65</td>
<td>Moderate</td>
<td>8.00 Very Poor</td>
</tr>
<tr>
<td>MC1306</td>
<td>Long Run</td>
<td>72</td>
<td>Moderate</td>
<td>9.00 Very Poor</td>
</tr>
<tr>
<td>MC1307</td>
<td>Long Run</td>
<td>74</td>
<td>Moderate</td>
<td>6.18 Fairly Poor</td>
</tr>
<tr>
<td>MC1308</td>
<td>Long Run</td>
<td>79</td>
<td>Moderate</td>
<td>5.50 Fair</td>
</tr>
<tr>
<td>MC3311</td>
<td>Trib. Long Run</td>
<td>51</td>
<td>Impaired</td>
<td>8.00 Very Poor</td>
</tr>
<tr>
<td>MC3312</td>
<td>Long Run</td>
<td>87</td>
<td>Moderate</td>
<td>3.95 Very Good</td>
</tr>
<tr>
<td>MC3309</td>
<td>Snyder Run</td>
<td>70</td>
<td>Moderate</td>
<td>2.90 Excellent</td>
</tr>
<tr>
<td>MC3310</td>
<td>Trib. Snyder Run</td>
<td>68</td>
<td>Moderate</td>
<td>8.00 Very Poor</td>
</tr>
<tr>
<td>Site ID</td>
<td>Stream Name</td>
<td>Habitat Assessment Score</td>
<td>HBI Score</td>
<td>pH</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>MC1309</td>
<td>Middle Run</td>
<td>57</td>
<td>Impaired</td>
<td>5.92</td>
</tr>
<tr>
<td>MC1302</td>
<td>N.F. Blackwater River</td>
<td>87</td>
<td>Moderate</td>
<td>10.00</td>
</tr>
<tr>
<td>MC1303</td>
<td>Trib. N.F. Blackwater River</td>
<td>64</td>
<td>Moderate</td>
<td>10.00</td>
</tr>
<tr>
<td>MC1304</td>
<td>N.F. Blackwater River</td>
<td>65</td>
<td>Moderate</td>
<td>8.00</td>
</tr>
<tr>
<td>MC3301</td>
<td>N.F. Blackwater River</td>
<td>90</td>
<td>Moderate</td>
<td>7.84</td>
</tr>
<tr>
<td>MC1211</td>
<td>Trib. Pendleton Creek</td>
<td>38</td>
<td>Impaired</td>
<td>7.28</td>
</tr>
<tr>
<td>MC1212</td>
<td>Pendleton Creek</td>
<td>86</td>
<td>Moderate</td>
<td>6.00</td>
</tr>
<tr>
<td>MC1213</td>
<td>Trib. Pendleton Creek</td>
<td>32</td>
<td>Impaired</td>
<td>6.28</td>
</tr>
<tr>
<td>MC1209</td>
<td>Trib. Beaver Creek</td>
<td>60</td>
<td>Moderate</td>
<td>8.00</td>
</tr>
<tr>
<td>MC1210</td>
<td>Trib. Beaver Creek</td>
<td>62</td>
<td>Moderate</td>
<td>7.49</td>
</tr>
</tbody>
</table>

*HBI score was calculated from benthic macroinvertebrate data collected in 2004.

Seventy percent of the streams sampled within the Black Fork Local Project Watershed have moderate habitat, and HBI scores above 5 (fair to very poor HBI scores) indicating poor water quality. Big Run, Snyder Run, Slip Hill Mill Run, and Mill Run exhibited moderate to high water quality (HBI scores below 5). Slip Hill Mill Run and Mill Run support native trout populations, and the headwaters of these streams are located within the Study Area.

The pH of streams in the Study Area ranges from 2.9 to 7. Nine (9) of the 24 streams (38%) exhibit a pH below 5 which is generally considered to be acidic and toxic to aquatic organisms. Soils in the Study Area are consistently acidic to highly acidic (USDA, 1967), and disturbance to the soils and their parent material from surface coal mining activities likely contribute to the lower pH levels detected in streams.

**Slip Hill Mill Run**

Slip Hill Mill Run is a tributary to Mill Run and flows through the western most portion of the Study Area (Exhibit III-4). Both streams are known to contain reproducing populations of native brook trout. The OPA approved in the 1996 Record of Decision (ROD) did not directly impact Slip Hill Mill Run because it was located outside of the stream’s watershed boundary approximately one half mile north of Big Run Bog, a National Natural Landmark. While the OPA did not directly impact Big Run Bog, it crossed the northwestern portion of its watershed.

While the 1996 Corridor H FEIS addressed Big Run Bog and presented results of the FHWA’s Section 4(f) analysis, the WVDOH received additional comments regarding Big Run Bog from the National Park Service (NPS) in March 1997. In response to those comments, WVDOT conducted additional studies and analyses to determine the potential impact of the OPA on Big Run Bog’s contributing watershed, and developed alternative alignments that would avoid any encroachment on the Big Run Bog watershed. In 1998 the OPA was shifted (post-1996 ROD) to the north-northwest to further avoid direct impact to Big Run Bog and its watershed, and the Settlement Agreement requires the FHWA and WVDOT to ensure that construction limits for the Parsons-to-Davis Project are located outside the drainage area for Big Run Bog. The alignment shift to avoid
the Big Run Bog watershed placed the alignment alternatives for the Parsons-to-Davis Project within the Slip Hill Mill Run and Mill Run watersheds.

In May 2004, the USFS MNF provided comments to the December 2003 Preferred Alternative Report that was circulated for agency comment in January 2004 (Appendix A). In these comments, the USFS MNF expressed concern that the construction of the Parsons-to-Davis Project may increase the sediment burden of Slip Hill Mill Run and Mill Run which may impact brook trout reproductive success within these streams. In response to these comments, the WVDOH conducted additional studies within the Slip Hill Mill Run watershed to establish baseline physical and biological stream condition within the proposed project area, and downstream of the project area.

Slip Hill Mill Run headwaters consist of many springs and intermittent and perennial tributaries located along the crest and western slope of Backbone Mountain. There is one perennial unnamed tributary and several intermittent and ephemeral tributaries that originate from culverts carrying drainage away from existing US 219 (Figure III-5).
Slip Hill Mill Run and its unnamed tributary have steep slopes resulting in a cascading, step-pool morphology. First order streams of this type do not generally provide suitable brook trout spawning habitat because of the violent nature of these streams during high flow periods. Generally, high stream flow events occur in West Virginia during the spring and fall when brook trout typically spawn. In addition, an approximately 20-foot rock drop and an undersized culvert carrying a private road over Slip Hill Mill Run were discovered downstream of the Build Alternatives during surveys conducted in 2004 (Figure III-5). It is unlikely that brook trout could successfully migrate upstream beyond these potential barriers.

Ninety-four (94) percent of the watershed is forested with highly erosive soils (USDA 1967). The physical characteristics of the watershed indicate a high sediment load; however, pebble counts yielded normal particle size distribution with a predominance of gravel indicating the streams are effectively moving fine sediment through the watershed.

The results of benthic macroinvertebrate sampling and habitat assessment reflect the high quality of Slip Hill Mill Run. HBI values ranged from 1.20 to 3.00 in Slip Hill Mill Run and from 2.88 to 3.86 in the unnamed tributary indicating “Very Good” to “Excellent” water quality, and stream pH ranged from 5 to 6.

### 3.3.5.3 Potential Impacts

As described in the 1996 Corridor H FEIS, the No-Build Alternative would have no effect on streams in the Study Area.

For each Build Alternative, Table III-21 and Table III-22 provide details of potential impacts to streams for comparison. The actual length of stream loss is based on 1:200 mapping and was measured from the centerline of a stream (including meanders). Stream impact type (i.e. relocation or enclosure) for each Build Alternative is summarized in Table III-23. Blackwater Alternative 2 and the ROPA/Preferred Alternative would result in the greatest lengths of enclosures or relocations to streams in the Study Area. However, historic coal mining activities within the watersheds of the majority of the Study Area streams have resulted in poor water quality. The only streams in the Study Area that have not been historically impacted by coal mining activities are Mill Run and Slip Hill Mill Run. All of the Build Alternatives would impact tributaries to Mill Run and Slip Hill Mill Run. However, the ROPA/Preferred Alternative would result in less direct impact to these sensitive watersheds because it crosses the headwaters of the Mill Run and Slip Hill Mill Run watersheds located along the crest of Backbone Mountain (Figure III-5). Potential impacts to Slip Hill Mill Run are discussed separately.
### Table III-21
Parsons-to-Davis Inventory of Stream Impacts (For Alternatives 1D West, 1D East, 1E, 1G West, 1G East)

<table>
<thead>
<tr>
<th>Stream Name</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bridge</td>
<td>Enclosures</td>
<td>Relocation</td>
<td>Culvert Length(ft)</td>
<td>Relocation Length(ft)</td>
</tr>
<tr>
<td>Mill Run</td>
<td>1</td>
<td>324</td>
<td>326</td>
<td>1</td>
<td>324</td>
</tr>
<tr>
<td>UT-1 of Mill Run</td>
<td>1</td>
<td>77</td>
<td>77</td>
<td>1</td>
<td>77</td>
</tr>
<tr>
<td>UT-1 to UT-1 of Mill Run</td>
<td>1</td>
<td>387</td>
<td>401</td>
<td>1</td>
<td>387</td>
</tr>
<tr>
<td>UT-1 to UT-2 to UT-1 of Mill Run</td>
<td>1</td>
<td>387</td>
<td>387</td>
<td>1</td>
<td>387</td>
</tr>
<tr>
<td>UT-3 to UT-2 of Mill Run</td>
<td>1</td>
<td>387</td>
<td>387</td>
<td>1</td>
<td>387</td>
</tr>
<tr>
<td>Slip Hill Mill Run</td>
<td>1</td>
<td>387</td>
<td>401</td>
<td>1</td>
<td>387</td>
</tr>
<tr>
<td>UT-1 of Slip Hill Mill Run</td>
<td>1</td>
<td>387</td>
<td>387</td>
<td>1</td>
<td>387</td>
</tr>
<tr>
<td>UT-1 of Left Branch</td>
<td>1</td>
<td>344</td>
<td>344</td>
<td>1</td>
<td>344</td>
</tr>
<tr>
<td>UT-2 of Left Branch</td>
<td>1</td>
<td>344</td>
<td>344</td>
<td>1</td>
<td>344</td>
</tr>
<tr>
<td>Big Run</td>
<td>1</td>
<td>65</td>
<td>109</td>
<td>1</td>
<td>65</td>
</tr>
<tr>
<td>UT-1 to UT-2 of Big Run</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>UT-1 to UT-2 of Tub Run</td>
<td>1</td>
<td>133</td>
<td>105</td>
<td>1</td>
<td>133</td>
</tr>
<tr>
<td>UT-1 to UT-1 to UT-2 of Middle Run</td>
<td>1</td>
<td>127</td>
<td>127</td>
<td>1</td>
<td>127</td>
</tr>
<tr>
<td>UT-2 to UT-1 to UT-2 of Middle Run</td>
<td>1</td>
<td>28</td>
<td>28</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Snyder Run</td>
<td>1</td>
<td>477</td>
<td>477</td>
<td>1</td>
<td>477</td>
</tr>
<tr>
<td>UT-5 of Snyder Run</td>
<td>1</td>
<td>134</td>
<td>134</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>UT-1 to UT-6 to UT-5 of Snyder Run</td>
<td>1</td>
<td>233</td>
<td>233</td>
<td>1</td>
<td>233</td>
</tr>
<tr>
<td>UT-15 of Snyder Run</td>
<td>1</td>
<td>193</td>
<td>193</td>
<td>1</td>
<td>193</td>
</tr>
<tr>
<td>UT-3 to UT-15 of Snyder Run</td>
<td>1</td>
<td>386</td>
<td>386</td>
<td>1</td>
<td>386</td>
</tr>
<tr>
<td>UT-4 to UT-15 of Snyder Run</td>
<td>1</td>
<td>159</td>
<td>159</td>
<td>1</td>
<td>159</td>
</tr>
<tr>
<td>UT-6 of Snyder Run</td>
<td>1</td>
<td>45</td>
<td>45</td>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td>UT-1 to UT-6 of Snyder Run</td>
<td>1</td>
<td>16</td>
<td>16</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Stream Name</td>
<td>1D West</td>
<td>1D East</td>
<td>1E</td>
<td>1G West</td>
<td>1G East</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>----</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>Bridge</td>
<td>Enclosures</td>
<td>Culvert Length(ft)</td>
<td>Relocation Length(ft)</td>
<td>Impact Length(ft)</td>
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<td>91</td>
<td>91</td>
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<td>425</td>
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<td>UT-1 to UT-6 to UT-5 of Snyder Run</td>
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<td>Relocation</td>
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</table>

NOTE: Cells with no values indicate no impacts.
### Table III-23

**Summary of Stream Impacts Based On Total Length of Enclosure, and Total Length of Relocations**

<table>
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<tr>
<th>Alternative</th>
<th>Actual Impacted Length (ft)</th>
<th>Number of Enclosure</th>
<th>Culvert Length (ft)</th>
<th>Number of Relocation</th>
<th>Relocation Length (ft)</th>
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</thead>
<tbody>
<tr>
<td>1D West</td>
<td>5,159</td>
<td>9</td>
<td>3,495</td>
<td>9</td>
<td>644</td>
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<td>1D East</td>
<td>5,187</td>
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<td>3,269</td>
<td>9</td>
<td>837</td>
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<tr>
<td>1E</td>
<td>6,732</td>
<td>8</td>
<td>3,564</td>
<td>9</td>
<td>821</td>
</tr>
<tr>
<td>1G West</td>
<td>3,775</td>
<td>6</td>
<td>2,194</td>
<td>14</td>
<td>409</td>
</tr>
<tr>
<td>1G East</td>
<td>4,139</td>
<td>8</td>
<td>2,414</td>
<td>13</td>
<td>409</td>
</tr>
<tr>
<td>OPA</td>
<td>5,651</td>
<td>11</td>
<td>3,803</td>
<td>6</td>
<td>1,458</td>
</tr>
<tr>
<td>2</td>
<td>9,945</td>
<td>12</td>
<td>5,353</td>
<td>8</td>
<td>1,660</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative</td>
<td>9,277</td>
<td>16</td>
<td>7,018</td>
<td>6</td>
<td>2,351</td>
</tr>
</tbody>
</table>

*Does not include impacts to drainage ditches.

**Potential Impacts to Slip Hill Mill Run**

Each Build Alternative will directly impact Slip Hill Mill Run by placing segments of the stream into culverts (Table III-21 and Table III-22). In addition to the culverts, highway construction in mountainous terrain generally requires long and high cuts and fills that disturb large areas, and the magnitude of the cuts and fills is directly related to landscape position and topography. Disturbance to forested areas will likely increase the sediment loading within the Slip Hill Mill Run watershed because of the steep slopes within the watershed and the high erosion potential of the soils. Studies conducted by the Monongahela National Forest during the mid 1990's indicate that Slip Hill Mill Run currently has a sediment load approaching the danger threshold for native trout that inhabit that stream downstream of the Study Area.

Blackwater Avoidance Alternatives 1D West and East, 1E, 1G West and East, and Blackwater Alternative 2 are located along the steep western slope of Backbone Mountain. The magnitude of the cut and fills required at this location would disturb large forested areas within the watershed, and thus expose large areas of denuded soil during construction. Exposure of these areas may increase the potential for increased sedimentation into Slip Hill Mill Run. Conversely, the ROPA/Preferred Alternative and OPA cross the headwaters of Slip Hill Mill Run near the crest of Backbone Mountain where the topography is not as steep. Therefore, the cut and fills associated with the ROPA/Preferred Alternative and OPA would not be as long and high, and would disturb less forested area within the watershed.

**3.3.5.4 Avoidance, Minimization, and Mitigation**

The preliminary design of the Build Alternatives carried forward for detailed analysis employed general and alternative-specific avoidance and minimization measures. Minimization and mitigation of surface water resource impacts will follow the guidelines and agreements detailed in the 1994 Corridor H ASDEIS Streams Technical Report and the 1996 Corridor H FEIS (including the Mitigation Document), and are incorporated into this document by reference. Based on those guidelines and agreements, impacts to streams were to be avoided to the extent practicable based on the following principles:

- Attempt to avoid know native and stocked trout streams, bridge where practicable;
- Attempt to avoid longitudinal impacts to perennial streams and riparian forests;
- Attempt to bridge perennial streams, if practicable, to avoid culverts and/or relocations; and
- Attempt to avoid skewed crossings of perennial streams in order to minimize the length of culverts and pipes.
Avoidance and minimization measures developed during the preliminary design process and further refined during ESA Section 7 consultation included adjustments of the ROPA/Preferred Alternative (horizontal alignment) and the width of the construction limits (vertical alignment) where practicable. The horizontal and vertical alignments were adjusted to avoid and/or minimize the number and length of relocations and enclosures. However, the adjustments were constrained by the presence of other sensitive resources (e.g. WVNFS habitat, the Big Run Bog watershed, wetlands, known cultural resources, and/or residences). Perennial streams were bridged where practicable, and Table III-24 lists proposed bridge locations and lengths by Build Alternative.

Mitigation measures specific to this project are discussed in the 1996 Corridor H FEIS Volume III Mitigation Document. General and specific design measures and construction techniques that will be considered for this project include stabilizing stream banks, vegetating eroded areas along stream banks, and continued coordination with resource agencies to utilize a more comprehensive approach to address and remediate the low quality streams present in the Study Area (e.g. Long Run, Middle Run, and Beaver Creek).

The Section 404 Permit, issued in 1996, authorizes activities (including discharges) into jurisdictional surface waters. The permit authorizes these activities through December 2007, and provides a process for extending the approved authorization period. The stream impacts disclosed in the 1996 Section 404 permit were based upon the 1996 OPA. The 1996 OPA crossed the northwestern portion of Big Run Bog's watershed, and did not directly impact the headwater tributaries of Slip Hill Mill Run. As a result of comments received from the NPS in 1997 on the selection of the Preferred Alternative, the WVDOH shifted the OPA outside of the watershed of Big Run Bog. In addition, the avoidance of the Big Run Bog watershed was a requirement of the 2000 Settlement Agreement. The 1998 shift to avoid the Big Run Bog watershed, placed the Build Alternatives for the Parsons-to-Davis Project into the Slip Hill Mill Run watershed. These types of alignment changes are anticipated on complex transportation projects such as Corridor H, and the post-ROD agency coordination process outlined in Volume III of the 1996 FEIS provide for continued agency involvement and concurrence on these types of alignment changes. In addition, the permit terms and conditions allow for disclosure and approval of project modifications. The permit terms will be addressed, as required, as part of the on-going agency coordination process.

**Avoidance, Minimization, and Mitigation within Slip Hill Mill Run**

While impacts to Slip Hill Mill Run cannot be avoided, the ROPA/Preferred Alternative would result in the least amount of direct impact to the watershed of this sensitive stream because of its landscape position (Figure III-5). In addition, the advanced preliminary engineering conducted on the ROPA/Preferred Alternative during ESA Section 7 consultation to minimize the ROPA's impacts to highly suitable and suitable WVNFS habitat also reduced highway cut and fill encroachments within the Slip Hill Mill Run.

In addition to these minimization efforts:

- The 1996 Corridor H FEIS, Volume III Mitigation Document and the 2003 MOU among the FHWA, WVDOH, and the USFS MNF provides an opportunity for resource agencies to participate in office and field reviews during all engineering design phases including final design and to suggest additional mitigation measures.
- Specific erosion and sediment mitigation measures will be developed within the Slip Hill Mill Run watershed during final design.
- West Virginia University began base level and long-term water chemistry, benthic macroinvertebrate, and fish monitoring surveys within Slip Hill Mill Run as required by the Volume III Mitigation Document of the 1996 Corridor H FEIS. These data will be utilized to better understand the effects of highway construction, operation and maintenance on native trout streams.
### Table III-24
 Proposed Bridge Locations and Lengths by Build Alternative

<table>
<thead>
<tr>
<th>ALTERNATIVE</th>
<th>STATION # (Midpoint)</th>
<th>BRIDGE LENGTH (ft)</th>
<th>CROSSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1D WEST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>88+50</td>
<td>650</td>
<td>US 219 crossing of Corridor H</td>
</tr>
<tr>
<td></td>
<td>992+00</td>
<td>600</td>
<td>Corridor H crossing of unknown tributary of Slip Hill Mill Run</td>
</tr>
<tr>
<td></td>
<td>1155+00</td>
<td>1400</td>
<td>Corridor H crossing of Long Run</td>
</tr>
<tr>
<td></td>
<td>1252+50</td>
<td>1000</td>
<td>Corridor H crossing of US 219 and Snyder Run</td>
</tr>
<tr>
<td></td>
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<td>1150</td>
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</tr>
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</tr>
<tr>
<td></td>
<td>56+00</td>
<td>250</td>
<td>Landfill Road crossing of Corridor H</td>
</tr>
<tr>
<td></td>
<td>27+00</td>
<td>250</td>
<td>WV 93 crossing of Corridor H</td>
</tr>
<tr>
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<tr>
<td></td>
<td>88+50</td>
<td>650</td>
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</tr>
<tr>
<td></td>
<td>20+50</td>
<td>350</td>
<td>Corridor H crossing of wetlands</td>
</tr>
<tr>
<td></td>
<td>24+00</td>
<td>450</td>
<td>Corridor H crossing of wetlands</td>
</tr>
<tr>
<td></td>
<td>443+50</td>
<td>200</td>
<td>Corridor H crossing of WV 93</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ALTERNATIVE 1G EAST TOTAL 7950</td>
</tr>
<tr>
<td>2</td>
<td>87+50</td>
<td>550</td>
<td>US 219 crossing of Corridor H</td>
</tr>
<tr>
<td></td>
<td>64+50</td>
<td>900</td>
<td>US 219 crossing of Corridor H</td>
</tr>
<tr>
<td></td>
<td>1294+50</td>
<td>1000</td>
<td>Corridor H crossing of US 219 and North Fork of Blackwater River</td>
</tr>
<tr>
<td></td>
<td>1388+00</td>
<td>200</td>
<td>Corridor H crossing of WV 32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ALTERNATIVE 2 TOTAL 2650</td>
</tr>
<tr>
<td>OPA</td>
<td>1784+50</td>
<td>1050</td>
<td>Corridor H crossing of Unnamed Tributary to SHMR</td>
</tr>
<tr>
<td></td>
<td>32+00</td>
<td>1200</td>
<td>US 219 crossing of Unnamed Tributary to SHMR</td>
</tr>
<tr>
<td></td>
<td>408+50</td>
<td>1050</td>
<td>Corridor H crossing of North Fork of Blackwater River</td>
</tr>
<tr>
<td></td>
<td>502+50</td>
<td>250</td>
<td>Corridor H crossing of WV 32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OPA TOTAL 3550</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative</td>
<td>4413+50</td>
<td>1080</td>
<td>Corridor H crossing of North Fork of Blackwater River</td>
</tr>
<tr>
<td></td>
<td>4508+00</td>
<td>300</td>
<td>Corridor H crossing of WV 32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ROPA/PREFERRED ALTERNATIVE TOTAL 1380</td>
</tr>
</tbody>
</table>
3.3.6 WILD & SCENIC RIVERS

In 1968, Congress passed the National Wild and Scenic Rivers Act, Public Law 90-542, to preserve and protect wild and scenic rivers and their immediate environments. This act identifies federally administered rivers included in the National Wild and Scenic Rivers System (NWSRS), identifies additional rivers to be studied for possible inclusion in the NWSRS, and provides guidance for the management of rivers within the NWSRS. West Virginia does not have a state level scenic rivers program.

As a result of the National Wild and Scenic Rivers Act, the NPS prepared and maintains the Nationwide Rivers Inventory (NRI) of significant free-flowing rivers. The rivers included in the NRI are presented in the NPS's Final List of Rivers, which includes the Final List of Wild and Scenic Rivers (1979) and the Final List of Recreational Rivers (1981) (www.ncrc.nps.gov/rtca/nri/). Segments of rivers included in the NRI have been identified as meeting the minimum requirements for further study and/or potential designation to the NWSRS.

Three NRI-listed rivers are located near the Study Area, but all eligible segments of these rivers fall outside of the Study Area boundaries. Therefore, the project will have no impact on the status or classification of any NRI-listed rivers.

3.4 CULTURAL RESOURCES

Cultural resources are defined as patterned physical remains of human activity distributed over the landscape through time. Cultural resources are classified as architectural resources (buildings, structures, objects, and districts) and archaeological sites, as defined by the National Register of Historic Places (NRHP) (36 CFR § 60.4). For this study, the Area of Potential Effect (APE), as defined in 36 CFR § 800, is equal to the area within 1,000 feet of each side of any proposed alternative.

3.4.1 SECTION 106 PROCESS

Under the Settlement Agreement, the Amended ROD for the Parsons-to-Davis Project cannot be issued until FHWA and WVDOH have completed all of the studies and consultation required for Section 106 of the National Historic Preservation Act (NHPA) (see Appendix B, Settlement Agreement, p. 34).

Section 106 determinations are being conducted under the terms of the September 1995 Corridor H Programmatic Agreement (Appendix D), which established certain procedures that must be carried out for all Section 106 studies for Corridor H. Consultation under the Programmatic Agreement involves the steps shown in Figure III-6.
Figure III-6
Section 106 Process for Historic Places Under Corridor H Programmatic Agreement
3.4.2 KNOWN AND EXPECTED CULTURAL RESOURCES IN THE STUDY AREA

An extensive historical context of the Study Area was presented in the technical appendices to the 1994 Corridor H ASDEIS, supplemented by the historical context found in the 1999 Determination of Eligibility (DOE) Report incorporated here by reference. Further detail regarding the resources mentioned below can be found in the Section 4(f) analysis, Section IV of this SFEIS.

Consultation History

WVDOH and FHWA consulted with the West Virginia State Historic Preservation Office (WVSHPO), as required by Section 106 of the National Historic Preservation Act, on Corridor H on a section-by-section basis. At the time of the SDEIS, the Parsons-to-Davis section was the final section that required evaluation. In June 2002, a draft Criteria of Effects (COE) Report was circulated. The Draft COE Report found that the Parsons-to-Davis Project would have “no effect” on the Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex). The WVSHPO, United States Forest Service Monongahela National Forest (USFS MNF), and Corridor H Alternatives (a plaintiff in the lawsuit), which were all consulting parties in the Section 106 process, submitted comments on the Draft COE Report as follows:

- In a letter dated October 30, 2002, WVSHPO found that the project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO commented, however, that the evaluation should focus on “the relative change” to the district, rather than the Draft COE Report’s evaluation of the percentage of the district that would experience visual or noise impacts.

- In a letter dated July 26, 2002, the USFS MNF expressed concerns related to Project’s potential visual, auditory, and physical impacts on the Monongahela National Forest. Following the receipt of the USFS MNF comments, in October 2002, the USFS MNF, WVDOH, and FWHA executed a Memorandum of Understanding (MOU) that included measures to mitigate these potential effects. In a letter dated October 24, 2002, the USFS MNF found that the project would have no adverse effect on historic resources within the Monongahela National Forest.

- In a letter dated December 12, 2003, counsel for Corridor H Alternatives disagreed with the Draft COE Report’s finding of “no effect,” and recommended a finding of “adverse effect” based on visual and auditory effects to the historic district and its setting.

On March 23, 2004, the Final COE Report was submitted to the WVSHPO for review and concurrence and to the USFS MNF and Corridor H Alternatives for comments, in accordance with the September 1995 Section 106 Programmatic Agreement for Corridor H (Appendix B). WVDOH and FHWA received comments on the Final COE Report as follows:

- In a letter dated June 23, 2004, the WVSHPO affirmed its earlier opinion that the Parsons-to-Davis Project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO stated that the “historic nature of the site will not adversely change” as a result of the project and that the proposed bridge “will not adversely effect” the interpretation of the physical remnants of the site.

- In a letter dated April 14, 2004, the USFS MNF concurred with the findings of the Final COE Report. The USFS MNF letter stated that the Parsons-to-Davis Project “would have no effect to contributing elements of the District, and recommend[ed] that project activities proceed as planned.”

- Corridor H Alternatives did not submit comments on the Final COE Report.
On May 13, 2004, at the request of Advisory Council on Historic Preservation (ACHP) staff, FHWA transmitted a copy of the Final COE Report to the ACHP, and requested concurrence from the ACHP with the Final COE Report’s “no adverse effect” finding.

3.4.2.1 Historic Resources

Phase I and II investigations of architectural resources presented in the 2000 DOE indicated that only one building, structure, object, or district was located within the Study Area. The West Virginia State Historic Preservation Office (WVSHPO) and the Keeper of the NRHP concurred that the West Virginia Central and Pittsburgh (WVC&P) Railway (Resource BW-019) was the only historic property in the Study Area (Exhibit III-6). In a Determination of Eligibility Notification dated January 17, 2001, the Keeper reiterated its finding that the WVC&P Railway was eligible for the NRHP under Criteria A and C as a “discontiguous historic district” (Appendix A). Also within this correspondence, the Keeper found that a stone arch bridge near the community of William appeared to be the only contributing element for this portion of the discontiguous historic district.

Additionally, during investigations of the OPA, three archaeological sites were identified. All three are located in the Blackwater Area and are related to the historic colliery at Coketon (Figure III-7). The Keeper of the NRHP has determined that the entire Coketon study area is a contributing component of the continuous Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex) (Exhibit III-6). The Blackwater Industrial Complex was found eligible for the NRHP under criteria A, B, C, and D (Keeper’s Eligibility Determination, August 2, 2001, in Appendix A). Because the Big Run Bog shift, TCHS connection and Truck Route are all located within the APE, any resources that might have been impacted by these ROPA changes would have been identified in the Section 106 process.
Figure III-7
Coketon Area
3.4.2.2 Prehistoric Predictive Model

An extensive prehistoric context regarding the Corridor H Study Area, including the Parsons-to-Davis Study Area, was prepared and presented in the 1995 Corridor H ASDEIS Cultural Resources Technical Report, which is incorporated here by reference. In addition, a Prehistoric Predictive Model was developed for Corridor H and employed to identify areas of high to low probability for the presence of prehistoric sites. The Prehistoric Predictive Model was presented in a 1994 report (Johnson et. al., 1994), which is also incorporated here by reference. This synchronic prehistoric predictive model was based on a variety of factors. These factors included: the results of previous archaeological surveys; the distribution of previously recorded archaeological sites in the vicinity of the Corridor H Study Area; previously proposed regional predictive models; and physiographic, geologic, hydrologic, and topographic factors. The model was field tested for verification (and presented in the 1994 Corridor H ASDEIS Cultural Resources Model Test Report) before it was implemented along the entire length of Corridor H.

The Prehistoric Predictive Model has been applied to the Parsons-to-Davis Study Area. Archaeological data gathered in the general project vicinity during previous Corridor H archaeological investigations (1996 through the present) were also used to refine the model. The prehistoric probability zones were plotted onto project mapping. Once the alternatives were finalized, the total area of each probability zone, per alternative, was calculated.

The acreage of high and medium probability areas for prehistoric resources potentially impacted by each alternative is presented in Table III-25. Because the locations of archaeological sites are protected to prevent unlawful collection of artifacts, an illustration of the probability areas is not included here but have been provided to the WVSHPO.

3.4.3 POTENTIAL IMPACTS

3.4.3.1 Historic Resources

WVC&P Railway

None of the Blackwater Alternatives would impact the WVC&P Railway. North of Thomas, the WVC&P Railway would be crossed by the Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) (Exhibit III-6). However, none of the proposed alternatives take any land from within the historic boundaries of the WVC&P Railway. Additionally, the stone arch bridge is not located within the APE for any of the alternatives. Therefore, the project will not affect the resource.

Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex)

The Blackwater Industrial Complex would be crossed by the ROPA/Preferred Alternative, the OPA or Alternative 2 (Exhibit III-6). The Blackwater Avoidance Alternatives (1D East and West, 1E, and 1G East and West) all pass north of the Blackwater Industrial Complex; therefore, would have no effect on the resource.

A final Criteria of Effects (COE) report was prepared for this resource in accordance with the 1995 Programmatic Agreement developed for the Appalachian Corridor H Project under Section 106 of the NHPA. The COE was provided to resource agencies and stakeholders in March 2004 after a draft version had been circulated and comments on the draft had been addressed. The final COE report addressed specifically the potential effect of the selected Preferred Alternative, the ROPA. The final COE report is incorporated here by reference, and its findings are summarized below.
The final COE report was prepared in accordance with 36 CFR § 800 and specifically evaluated: 1) the effect of the ROPA/Preferred Alternative on the Blackwater Industrial Complex, and 2) the impacts specific to the area immediately adjacent to the bridge crossing (Coketon study area). The methodology used in assessing the potential impacts was based on the type of impact: direct physical, visual, auditory, or induced development in land use. Each type of impact and its methodology for evaluation is described in the COE report.

The ROPA/Preferred Alternative (but also the OPA and Alternative 2) will cross the National Register boundary of the Blackwater Industrial Complex on structure. The structure will be designed with piers located in the historic boundary; however, those piers will be designed so that property that is individually eligible (e.g., WVC&P Railway grade) will not be directly impacted by the piers. Nor will property be used that contributes to the district’s historic significance (i.e., contributing resources).

After the analyses were conducted for the final COE report, it was concluded that the project will have an effect but not an adverse effect on the Blackwater Industrial Complex. This finding is based on the following considerations:

- the piers of the bridge will be confined to non-contributing areas, and thus there will be no physical impacts on any contributing elements of the district;
- the bridge will be visible, but the view of the bridge will not adversely affect any contributing element of the district, because the current setting (forested, quiet, and rural) is not a contributing element of the district;
- the increased noise levels resulting from the presence of the bridge will not adversely affect the resource because the current quiet setting is not a contributing element of the district; and
- the project will not cause induced development in the Blackwater Industrial Complex, due to a lack of direct access; the fact that much of this area is owned and managed by the USFS MNF; and the topography of the area.

Through the Section 106 consultation with the WVSHPO and the other consulting parties under the Programmatic Agreement, WVSHPO determined that the project as planned would have no adverse effect on the Blackwater Industrial Complex (see letters dated June 23, 2004 and October 30, 2002, in Appendix A). Additionally, the USFS MNF concurred with the findings of the final COE report in a letter dated April 14, 2004 (Appendix A).

Section IV of this SFEIS includes a Section 4(f) analysis for the proposed project. This analysis concludes that no resources eligible for protection under Section 4(f) will be directly or constructively used by any of the Build Alternatives.

### 3.4.3.2 Archaeology Investigations

The No-Build Alternative would not impact archaeological resources within the Study Area. Preliminary impacts associated with the Build Alternatives were evaluated using the project’s Prehistoric Predictive Model.

The ROPA/Preferred Alternative will impact 0.7 acres of high and 7.7 acres of medium probability areas. Of all the alternatives carried forward for detailed analysis, Alternative 1E will impact the greatest combined acreage of high and medium probability areas (16.2 acres), as well as the greatest acreage of high probability area alone (11.1 acres). Alternative 1G East will impact the least combined high and medium acreage (2.8 acres) and the least of high probability area alone (0.3 acres).
The ROPA/Preferred Alternative, the OPA and Alternative 2 will each have relatively few impacts to high probability areas when compared to the Blackwater Avoidance Alternatives (except 1G East); however, potential impacts to medium probability areas by these alternatives are essentially the same as those by the Blackwater Avoidance Alternatives.

Table III-25
Potential Impacts to Prehistoric Probability Areas (acres)

<table>
<thead>
<tr>
<th>Prehistoric Probability Area</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>OPA</th>
<th>2</th>
<th>ROPA/ Preferred Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Probability</td>
<td>7.9</td>
<td>5.5</td>
<td>11.1</td>
<td>2.7</td>
<td>0.3</td>
<td>1.4</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Medium Probability</td>
<td>6.8</td>
<td>6.8</td>
<td>5.1</td>
<td>2.5</td>
<td>2.5</td>
<td>7.0</td>
<td>5.8</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Phase I archaeological investigations have been conducted for the ROPA/Preferred Alternative. No potentially significant archaeological resources were found; WVDOH received concurrence from West Virginia Division of Cultural and History (WVDCH) in a letter dated February 17, 2005 (see Appendix A).

3.5 PHYSICAL ENVIRONMENT

3.5.1 GROUNDWATER RESOURCES

Groundwater resources have been evaluated in accordance with FHWA's Technical Advisory T 6640.8A. This discussion focuses on three groundwater topic areas: private wells, springs, and karst topography. These topics are discussed in the 1996 Corridor H FEIS. Sources for information in this assessment include the West Virginia Geologic and Economic Survey (WVGES), United States Geological Survey (USGS), WVDEP, the West Virginia Department of Health and Human Resources (WVDHHR), and the Tucker County Health Department.

The Study Area is primarily located in remote areas with populations centralized in five neighborhoods: Benbush, Coketon, Davis, Thomas, and William. Municipal public water service covers the communities of Benbush, Coketon, Davis, and Thomas. William is dependent on private wells.

3.5.1.1 Private Wells

Well locations and additional data regarding well construction and bedrock units were obtained from the USGS National Water Information System, USGS publications, the Tucker County Health Department, and field observations. Water quality data concerning private wells is described according to the geologic formation or rock units into which the wells were installed.

USGS 7.5 minute topographic maps were used to estimate the number and location of residences that are identified as being within a potential impact zone. The potential impact zone criteria are residences that are outside of public water service and within 500 feet of the estimated construction limits of the alternatives carried forward for detailed analysis.

Because these are private residences that typically have low production volumes, the 500-foot distance is based upon the minimum pumping capacity fixed radius used by the WVDHHR for Source Water Assessment and Protection Program (WVDHHR, 1999) for community wellhead protection. In addition, well impacts were assumed to occur when relocations of residences that are not currently served by a known public water supply would be required.

A description of the geology of the Study Area is included in the 1996 Corridor H FEIS, which is incorporated into this SFEIS by reference, and is summarized in Section 3.5.2 Geology, Mines and
Minerals of this SFEIS. Wells in the Study Area are typically installed in the first water bearing rock formation encountered during well drilling. These wells may be installed within the Conemaugh, Allegheny Pottsville, Mauch Chunk and Greenbrier Groups.

Potential Impacts

The No-Build Alternative would not impact groundwater resources. All of the Build Alternatives would have similar minimal impacts on groundwater resources. Most of the Study Area populations are covered by public water service. Potential impacts and available local residential well information are presented below:

- William, West Virginia is dependent on the Conemaugh Group for groundwater. Seven residences are reported, just south of William, beyond the Thomas PSD water service in the Study Area. Well logs on file with the Tucker County Health Department had an average depth of 102 feet (ranging between 35 and 147 feet) and an average potential production rate of 14 gallons per minute (gpm) (ranging between 1.25 and 45 gpm). Water quality is moderately hard with low levels of iron, dissolved solids and chlorine. Water production for the formation is moderate to good, depending on formation exposure for recharge (Reger, 1924, Schwietering, 1981 and Ward, 1968a/b). These wells are north of any of the Build Alternatives’ (carried forward for detailed analysis) potential impact zones.

- The Tucker County Health Department reported one well in the Conemaugh/Allegheny formations in Thomas. The well is 260 feet deep and was reportedly for a concrete batch plant. This well is outside any of the Build Alternatives’ (carried forward for detailed analysis) potential impact zones.

- Four wells were reported by the USGS in the immediate vicinity of TCHS. Seven to ten residences are shown beyond the public water service in the Study Area, just south of William, WV. Well logs on file with the Tucker County Health Department had an average depth of 344 feet (ranging between 197 and 650 feet) screened in the Pottsville and Mauch Chunk formations. Water production from these formations is high in the Pottsville Group (especially when overlain by the Conemaugh/Allegheny formations) and low in the Mauch Chunk Group. Water quality is soft with high to moderate levels of iron and chlorine, and low levels of dissolved solids and chlorine (Reger, 1931, Schwietering, 1981, and Ward, 1968). The statuses of these wells are unknown, but may be no longer in service, with the expansion of the Thomas PSD water service along the route to TCHS. One or more of these wells are within the 500-foot potential impact zone of the ROPA/Preferred Alternative and the OPA. The wells are outside the remaining Build Alternatives’ (carried forward for detailed analysis) potential impact zones.

Avoidance, Minimization, and Mitigation

The alternative development process included efforts to avoid or minimize impacts to groundwater resources. The following mitigation measures could be used during final design and construction of the proposed alternatives to monitor impacts to existing wells:

- Any wells that would be lost due to construction activities would be replaced, as necessary, through WVDOH’s ROW acquisition process. Wells would be properly abandoned and sealed in accordance with standards set by current regulations.

- Wells that are within 500 feet of the ROPA/Preferred Alternative will be monitored before, during, and after construction to identify any changes in water quality during construction activities. If substantial changes in water quality or quantity occur, these wells would be replaced.

- If necessary, existing public water supply lines could be extended to service areas where several residences are within the potential impact zone.
3.5.1.2 Springs

The location and evaluation of springs were based upon literature searches of the WVGIS, the USGS, and the Tucker County Health Departments. There is one spring reported within the Study Area: the Close Mountain Spring located near Long Run about three miles west of Benbush, West Virginia. The spring issues from the hillside exposure of the Mauch Chunk Group Mississippian shale and sandstones at a rate of about 4 gpm (McColloch, 1986).

Potential Impacts

The No-Build Alternative and the Blackwater Alternatives would not impact springs. The Close Mountain Spring is over 500 feet northwest of US 219 and over 1,000 feet north of the Blackwater Avoidance Alternatives. The spring is recharged from waters flowing from the northwest, within the Mauch Chunk Group, from under the Backbone Mountain region. Impacts to the spring are not anticipated above those existing from the current US 219 and nearby Long Run strip mine.

Avoidance, Minimization, and Mitigation

Mitigation measures are not required. If additional springs are discovered during final design and construction, the appropriate monitoring measures will be conducted, if appropriate. Springs that are within 500 feet of the ROPA/Preferred Alternative will be monitored before, during, and after construction to identify any changes in water quality during construction activities.

3.5.1.3 Karst Topography

There are no surface expressions of karst topography in the Study Area.

3.5.1.4 Secondary Impacts on Groundwater Resources

The proposed roadway construction would increase the amount of impervious cover in the watersheds. While this would slightly increase storm-water runoff volumes and peak discharges, no long-term impact to the quantity of groundwater would be expected. The area covered by the highway pavement would be small in comparison to the overall land available for recharge. Therefore, no significant impact on groundwater is expected due to highway construction.

3.5.1.5 Public Water Supply

Impacts to sole-source aquifers have been evaluated in accordance with 40 CFR § 149. The municipalities served by, and the sources of, public drinking water supplies were identified based on published River Basin Plans for the Potomac and Monongahela Rivers, as well as on direct communications with state, county, and local officials. Public water supply systems were identified for Davis and Thomas. For each public water supply identified, the approximate location of the source or system intake and the distribution/service area were identified on project GIS, as shown on Exhibit III-7.

Identification and protection of sole source aquifers and wellhead protection areas are required by the Safe Drinking Water Act of 1986. Wellhead protection areas are defined in the Act as “the surface and subsurface area surrounding a water well or wellfield supplying a public water system through which contaminants are reasonably likely to move toward or reach such well or wellfield” (USEPA, 1987).

Existing Conditions

The WVDHHR verified that sole source aquifers or wellhead protection areas were not reported within the Study Area.

Two public water supplies were identified within the Study Area: the Davis and Thomas Public Service Districts (PSDs). Both PSDs obtain their water supply from surface water. The service areas and intakes are shown on Exhibit III-7.
The Davis PSD is located 0.6 mile east of Davis on the Blackwater River. The facility was installed in 1976 and rebuilt in 1985, following a severe flood. The Davis PSD has intakes on the Blackwater River and from a reservoir behind Weiner's Dam south of the river. The primary water source is from the Blackwater River intakes. The Weiner's Dam intakes, located on a small tributary that flow into the Blackwater River, provide supplemental capacity during peak usage or equipment maintenance. The water is piped to a treatment facility located on the north side of the river. Treatment includes sediment basins, filtration, and chlorination. Water production varies greatly due to the summer tourist demand from the Blackwater Falls State Park and Lodge, and associated campgrounds.

The Thomas PSD is located 0.4 mile north of Thomas. The PSD collects water from the City of Thomas Reservoir, 1.2 mile north of Thomas, southeast of William and east of US 219. Water is piped 0.8 mile from the reservoir to a treatment building located east of the Blackwater River. Treatment performed at the facility includes filtration and chlorination.

**Potential Impacts**

The No-Build Alternative would not impact public water supplies within the Study Area. Potential environmental impacts to the two public water supplies were evaluated for each of the Build Alternatives. The Build Alternatives cross the Beaver Creek and the Blackwater River system downstream of the Thomas and Davis PSDs intakes. Potential impacts to the Thomas and Davis PSDs are not anticipated because both the intakes and recharge areas are upstream of the Build Alternatives. The public water supplies’ geographical relationships to the proposed alternatives are presented on Exhibit III-7.

### 3.5.2 GEOLOGY, MINES & MINERALS

To gain an understanding of the potential impacts to geology, mines and minerals associated with the proposed project, a literature search of state and federal sources was conducted. Sources included reports, databases, files, maps, and interviews with the WVGES, the USGS, the WVDEP - Division of Mining and Reclamation, the WVDEP - Abandoned Mine Lands and Reclamation (AMLR), the United States Department of the Interior (DOI) - Office of Surface Mining (OSM), West Virginia Office of Miner’s Safety and Training (WVOMST), and knowledgeable local citizens.

#### 3.5.2.1 Existing Conditions

The Study Area is within the Appalachian Plateau Province and the Black Fork Local Project watershed, which is part of the Cheat River Regional Project Watershed within the Monogahela River basin. The Study Area is predominantly covered with the Dekalb-Brinkerton soils, which are from acid sandstone and shale parent materials with strong to extreme acid content (USDA, 1967). Sedimentary rocks become progressively older from Upper Pennsylvanian age bedrock in the Thomas area, to Mississippian age bedrock to the east, west and south within the large North Potomac (George's Creek) Syncline. The Upper Freeport coal seam slopes (dips) an average of 25 degrees northeast along the syncline axis from Coketon to Thomas. A generalized geologic map of the Study Area is presented in Figure III-8.
The following groups underlie the Study Area with exposures in descending order to the south of the Study Area:

- **Conemaugh Group** – Pennsylvanian - cyclic red and gray shale, siltstone and sandstone, with thin limestones and coal seams. The formation is generally 430 feet thick (Cardwell, 1986).
- **Allegheny Group** – Pennsylvanian - cyclic sandstone, siltstone, shale, limestone and coal. The formation is generally 150 feet thick. Commercial coal production has been restricted to the Upper Freeport coal, which has been extensively mined both at the surface and underground (Reger, 1923).
- **The Pottsville Group** – Pennsylvanian - primarily conglomeratic sandstones with thin shales and coals.
- **Mauch Chunk Group** – Mississippian - red, green, and medium-gray shale and sandstone, with few thin limestones; coal is absent, and the unit is largely barren of valuable deposits (Reger, 1923).
- **Greenbrier Group** – Mississippian - marine limestone and marine/non-marine red and gray shale, and minor sandstone beds, coal is absent, and, while the unit is known for the presence of both springs and caves, none are reported within the Study Area (Cardwell, 1986, Davies, 1965, Reger, 1923).
Coal Mining

The Bakerstown and Upper Freeport coal seams have been extensively mined near the communities of Davis, Thomas, Benbush and Coketon. Underground (deep) mining in the Bakerstown coal seam extends from Douglas to about 0.6 mile north of Thomas, and from Benbush to Chaffey Run east of the Study Area. Surface mining extends along outcrops in the Pendleton Creek, Long Run, Synder Run, Beaver Creek, Lost Run and the North Fork of Blackwater River valleys across the southern portion of the Study Area and north to Thomas and Benbush. Extensive underground (deep) mining in the Upper Freeport covers the central portion of the Study Area from Douglas to Pierce and from Long Run to Davis and the east side of Thomas. Surface mining extends along Long Run, Beaver Creek, the North Fork of Blackwater River, and outcrops west of Benbush and west of Davis.

The DOI, OSM and WVDEP records identify 28 coal-mining locations in the Study Area. These records were reviewed in January 2006 to determine if permit changes have occurred in the Study Area. The records were also reviewed to determine if new permits have been issued since the December 2002 SDEIS. While no new permits have been issued (for new sites) there have been some status modifications to existing sites. The updated information is included in Table III-26. Mines permitted by the WVDEP are shown on Exhibit III-8. The current mine permits are listed in Table III-26.

### Table III-26
Issued Mine Permits

<table>
<thead>
<tr>
<th>Permit</th>
<th>Type</th>
<th>Location</th>
<th>Issued Date</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>O004583</td>
<td>Haul Road</td>
<td>1.3 km (0.8 mi.) Southwest of Thomas on WV 93</td>
<td>8/21/01</td>
<td>Done/Phase 3 Released</td>
</tr>
<tr>
<td>O200695</td>
<td>Haul Road</td>
<td>0.5 km (0.3 mi.) Southwest of WV 93, West of Davis</td>
<td>2/5/96</td>
<td>Active/Renewed</td>
</tr>
<tr>
<td>S000780</td>
<td>Surface</td>
<td>1.8 km (1.1 mi.) East of Thomas, Pendleton Creek</td>
<td>9/7/04</td>
<td>Done/Phase 3 Released</td>
</tr>
<tr>
<td>S007379</td>
<td>Surface</td>
<td>0.5 km (0.3 mi.) Southwest of WV 93, Pendleton Creek</td>
<td>7/18/05</td>
<td>Done/Phase 3 Released</td>
</tr>
<tr>
<td>S007476</td>
<td>Surface</td>
<td>1 km (0.6 mi.) Southwest of WV 93, West of Davis</td>
<td>6/23/05</td>
<td>Done/Phase 1 Released</td>
</tr>
<tr>
<td>S014677</td>
<td>Surface</td>
<td>0.5 km (0.3 mi.) Southwest of WV 93, Pendleton Creek</td>
<td>9/14/02</td>
<td>Renewal Waiver</td>
</tr>
<tr>
<td>S201892</td>
<td>Surface</td>
<td>1 km (0.6 mi.) Southwest of WV 93, West of Davis</td>
<td>7/18/05</td>
<td>Done/Phase 3 Released</td>
</tr>
<tr>
<td>S202392</td>
<td>Surface</td>
<td>0.2 km (0.1 mi.) Southwest of WV 93, Northwest of Davis</td>
<td>4/1/93</td>
<td>Inactive/Renewed</td>
</tr>
<tr>
<td>S200595</td>
<td>Surface</td>
<td>1 km (0.6 mi.) Southwest of Benbush, West of Davis</td>
<td>1/31/96</td>
<td>Never Started/Renewed</td>
</tr>
<tr>
<td>U200389</td>
<td>Underground</td>
<td>East of Benbush and North of WV 93</td>
<td>4/21/03</td>
<td>Done/Phase 3 Released</td>
</tr>
<tr>
<td>Q002574</td>
<td>Quarry</td>
<td>West of Benbush</td>
<td>3/1/74</td>
<td>Active/Renewed</td>
</tr>
<tr>
<td>Q004078</td>
<td>Quarry</td>
<td>West of TCHS</td>
<td>3/28/78</td>
<td>Active/Renewed</td>
</tr>
</tbody>
</table>

Note: All Permits issued to Buffalo Coal Co. except the Quarries permits issued to Stanley Industries, Inc.
The coal mining industry makes a low-level economic contribution to the Study Area and Tucker County (Harris, 1999). In 1998, the coal mining industry employed 55 people, just 0.3 percent of the population of Tucker County. It produced 179,000 tons of coal from surface mines, 76,000 tons of limestone, and 550 tons of shale in Tucker County in that same year (Harris, 1999). There are reported to be 178 million tons of recoverable coal reserves in Tucker County (West Virginia Coal Association, Inc., 2002).

The area around Thomas has been particularly susceptible to mine subsidence in the past. Because of the documented occurrences of subsidence and the extensive network of underground mines, the entire Study Area is considered subsidence-prone for the purposes of this SFEIS. No sources indicate the presence of mine fires in the Study Area.

**Acid Drainage**

Acid drainage is a low pH (acidic), sulfate-rich water. Acid drainage results from the oxidation of metal disulfide minerals upon exposure to air and water. Numerous mine seeps producing acid-drainage have been identified by the AMLR in the Study Area. Because of the geologic composition and the known seeps, the entire Study Area is considered prone to acid drainage.

**Natural Gas and Oil**

WVDEP records report an exploratory natural gas well (#093-00067) 0.6 mile northeast of Thomas and 0.3 mile east of US 219. The records indicate it was never viable and no other wells are reported in the Study Area.

**Sandstone and Limestone Quarries**

The Stanley and Fairfax quarries are located north of US 219 and are well outside of any of the potential impact zones of the Build Alternatives carried forward for detailed analysis.

**Mineral Resources**

The Conemaugh and Allegheny Formations are listed as having favorable geology for sandstone uranium. The Conemaugh Formation is also favorable for sediment-hosted copper. However, no occurrences of sandstone uranium or sediment-hosted copper are reported in the Study Area. In addition, there are no deposits that indicate profitable production of these minerals either now or in the foreseeable future (Cannon et al., 1994 and Reger, 1923).

**Karst Topography**

There are no surface expressions of karst topography in the Study Area.

**Unique Geologic Features**

There are no known unique geologic features in the Study Area.

3.5.2.2 Potential Impacts

Because the entire Study Area is considered prone to subsidence, all of the Build Alternatives carried forward for detailed analysis are considered to have an equal potential to encounter subsidence. The No-Build Alternative will not encounter subsidence.

Because most of the Study Area is considered prone to acid-drainage, all the Build Alternatives carried forward for detailed analysis are considered to have an equal potential to produce acid drainage.

3.5.2.3 Avoidance, Minimization & Mitigation

Specific avoidance, minimization, and mitigation measures regarding subsidence are detailed in the 1996 Corridor H FEIS (p. III-237) and are incorporated here by reference. The potential for acid drainage as a result of project construction and appropriate avoidance, minimization, and mitigation
measures are detailed in the 1996 Corridor H FEIS, Volume III *Mitigation Document* (pp. 22 - 25) and are incorporated here by reference (WVDOT, 1996).

### 3.5.3 HAZARDOUS MATERIALS

The hazardous materials analysis has been conducted in accordance with WVDOT’s *Guidelines for Identifying and Dealing with Hazardous Waste on Highway Projects* (WVDOT, 1989) and the guidelines set forth in FHWA’s Technical Advisory T 6640.8A (FHWA, 1987), and *Interim Guidance: Hazardous Waste Sites Affecting Highway Project Development* (FHWA, 1988).

Several federal programs regulate hazardous waste sites. These programs include the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA [or Superfund]), and the Superfund Amendments and Reauthorization Act (SARA). These federal laws give USEPA responsibility for regulating hazardous waste. In response to this directive, USEPA is inventorying uncontrolled sites and has published the National Priority List (NPL).

Appropriate data collections and coordination with local, state and federal agencies was undertaken to determine the location of known permitted and non-regulated hazardous waste sites within the Study Area. During the 1994 Corridor H ASDEIS and 1996 Corridor H FEIS stages of the Corridor H Project, letters of inquiry were sent to the West Virginia Division of Waste Management to obtain information regarding countywide lists of hazardous waste sites. Background data searches were also conducted at the ASDEIS and FEIS stages. This information has been updated for the purposes of this SFEIS and was confirmed through field reconnaissance of the Study Area.

#### 3.5.3.1 Existing Conditions

The Study Area is largely comprised of surface and underground mining operations (recent and historical), wetland complexes, and forest. Commercial development is mostly limited to properties with direct access from US 219 and WV 93, including the City of Thomas. The City of Thomas is located within the Blackwater Area defined in the 2000 Settlement Agreement (Appendix B). Potential small-scale hazardous waste generators, such as gas stations (operational and abandoned) and dry cleaners, are also located within this area and along US 219. An abandoned gas station is located in the extreme northern portion of the Study Area, near William on WV 90.

Historically, municipal waste was disposed in “dumps” such as old strip-mining areas. Two of these historic “dumps” are located in the Study Area: the Benbush Refuse area and the Tire Dump. The extent of the Tire Dump was not previously documented, so its extent was delineated by a field evaluation of the existing terrain and other natural features. The old Tucker County dump was located south of Pendleton Creek, but its contents were reportedly removed when mining operations resumed in the late 1980s.

Immediately southeast of Thomas is the Tucker County Landfill (TCL). The landfill is permitted for municipal waste disposal and may accept certain types of “special solid waste” (e.g., shredder fluff, insulation, ash, and drums). “Hazardous wastes” as defined by WVDEP and USEPA are not accepted at the TCL. All potential hazardous waste sites are shown in Exhibit III-8.

Environmental Data Resources, Inc. performed a background data search for the Study Area in June 2002. Table III-27 presents the number of listed hazardous waste facilities within the Study Area.
### Table III-27

**Potential Hazardous Waste Sites in Study Area**

<table>
<thead>
<tr>
<th>Government Reporting Database</th>
<th>Source Agency</th>
<th># of Potential Sites in Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERCLIS</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Information System</td>
<td>USEPA</td>
</tr>
<tr>
<td>NPL</td>
<td>National Priority List</td>
<td>USEPA</td>
</tr>
<tr>
<td>ERNS</td>
<td>Emergency Response Notification System</td>
<td>USEPA/NTIS</td>
</tr>
<tr>
<td>RCRIS</td>
<td>Resource Conservation and Recovery Information System</td>
<td>USEPA/NTIS</td>
</tr>
<tr>
<td>CORRACTS</td>
<td>Corrective Action Report</td>
<td>USEPA</td>
</tr>
<tr>
<td>BRS</td>
<td>Biennial Reporting System</td>
<td>USEPA/NTIS</td>
</tr>
<tr>
<td>CONSENT</td>
<td>Superfund (CERCLA) Consent Decrees</td>
<td>USEPA Regional Offices</td>
</tr>
<tr>
<td>FINDS</td>
<td>Facility Index System/Facility Identification Initiative Program Summary Report</td>
<td>USEPA</td>
</tr>
<tr>
<td>HMIRS</td>
<td>Hazardous Materials Information Reporting System</td>
<td>USDOT</td>
</tr>
<tr>
<td>MLTS</td>
<td>Material Licensing Tracking System</td>
<td>Nuclear Regulatory Commission</td>
</tr>
<tr>
<td>NPL LIENS</td>
<td>Federal Superfund Liens</td>
<td>USEPA</td>
</tr>
<tr>
<td>PADS</td>
<td>PCB Activity Database System</td>
<td>USEPA</td>
</tr>
<tr>
<td>RAATS</td>
<td>RCRA Administrative Action Tracking System</td>
<td>USEPA</td>
</tr>
<tr>
<td>ROD</td>
<td>Records of Decision</td>
<td>NTIS</td>
</tr>
<tr>
<td>TRIS</td>
<td>Toxic Chemical Release Inventory System</td>
<td>USEPA</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
<td>USEPA</td>
</tr>
<tr>
<td>MINES</td>
<td>Mines Master Index File</td>
<td>Dept. of Labor, Mine Safety and Health Administration</td>
</tr>
<tr>
<td>LUST</td>
<td>Leaking Underground Storage Tanks</td>
<td>Division of Environmental Protection</td>
</tr>
<tr>
<td>SHWS</td>
<td>State Hazardous Waste Sites</td>
<td>Dept. of Commerce, Labor and Environmental Resources</td>
</tr>
<tr>
<td>LF</td>
<td>List of M.S.W. Landfills/Transfer Station Listing</td>
<td>Division of Environmental Protection</td>
</tr>
</tbody>
</table>
### Potential Impacts

The West Option of Alternatives 1D and 1G involves the use of property currently used by the TCL. However, this section of property is where the access road and scales are located, and hazardous wastes are not expected to exist in this area. None of the other alternatives carried forward for detailed analysis are expected to directly impact known potential hazardous waste sites. The ROPA/Preferred Alternative would not result in any direct impacts to known hazardous waste sites.

### Avoidance, Minimization, & Mitigation Measures

WVDOT’s hazardous waste guidelines state that it is WVDOT practice to avoid known hazardous waste sites (WVDOT, 1989). Avoidance of hazardous waste facilities is often the most practical alternative due to the potential costs of handling, sampling, treatment, storage, and transportation and disposal of these materials. Because no hazardous waste sites are located within the construction limits of the alternatives carried forward for detailed analysis, no site-specific mitigation measures would be necessary.

If any potential hazardous waste site is identified during final design, an environmental site assessment would be performed prior to the acquisition of the property. This assessment would establish the overall risk or liability the property represents to the purchaser. The site investigations would be conducted in accordance with WVDOT’s *Guidelines for Identifying and Dealing with Hazardous Waste on Highway Projects* (WVDOT, 1989) and the guidelines set forth in FHWA’s Technical Advisory T 6640.8A.

### AIR QUALITY

The 1996 Corridor H FEIS included a detailed analysis of the predicted air quality along the immediate corridor of the 100-mile Corridor H highway project. A similar air quality analysis was performed for the Parsons-to-Davis Project to determine whether the 9-mile section for the OPA could be replaced with the ROPA/Preferred Alternative, Alternative 2 or one of the Blackwater Avoidance Alternatives without resulting in an exceedance of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO).

### Existing Environment

The Study Area is located in Tucker County, West Virginia and within Region 3 of the USEPA’s jurisdiction. The agencies normally involved with monitoring and regulating air quality in this region are the USEPA, the WVDEP, and WVDOT.

The Clean Air Act directed the USEPA to establish standards for clean air via the NAAQS. The NAAQS are shown in Table III-28. The standards represent levels of these pollutants and exposure...
periods that pose no significant threat to human health or welfare. The state of West Virginia adheres to these same standards. As a result of the Clean Air Act Amendments, and based on historical monitoring data, Tucker County is designated as being in attainment for both CO and ozone (O₃), the pollutants most often associated with mobile source (motor vehicle) emissions.

**Table III-28**

**National Ambient Air Quality Standards**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Primary Standards</th>
<th>Secondary Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>1-hour Average^b 35 parts per million (ppm) (40 milligrams per cubic meter of air [mg/m³])</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>8-hour Average^b 9 ppm (10 mg/m³)</td>
<td>None</td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO₂)</td>
<td>Annual (Arithmetic Mean) 0.053 ppm (100 micrograms per cubic meter [µg/m³])</td>
<td>Same as Primary</td>
</tr>
<tr>
<td>Ozone (O₃)</td>
<td>Maximum Daily 1-hour Average^c 0.12 ppm (235 µg/m³)</td>
<td>Same as Primary</td>
</tr>
<tr>
<td></td>
<td>Maximum Daily 8-hour Average^c 0.08 ppm (157 µg/m³)</td>
<td>Same as Primary</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>Maximum Quarterly Average 1.5 µg/m³</td>
<td>Same as Primary</td>
</tr>
<tr>
<td>Particulate Matter (PM₁₀)</td>
<td>Annual (Arithmetic Mean)^d 50 µg/m³</td>
<td>Same as Primary</td>
</tr>
<tr>
<td></td>
<td>24-hour Average^b 150 µg/m³</td>
<td>Same as Primary</td>
</tr>
<tr>
<td>Particulate Matter (PM₂₅)</td>
<td>Annual (Arithmetic Mean)^d 15 µg/m³</td>
<td>Same as Primary</td>
</tr>
<tr>
<td></td>
<td>24-hour Average^b 65 µg/m³</td>
<td>Same as Primary</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>24-hour Average^b 0.14 ppm (365 µg/m³)</td>
<td>3-hour Average^b 0.50 ppm (1,300 µg/m³)</td>
</tr>
<tr>
<td></td>
<td>Annual (Arithmetic Mean) 0.03 ppm (80 µg/m³)</td>
<td>None</td>
</tr>
</tbody>
</table>


^a Parenthetical values are approximately equivalent concentrations.

^b Not to be exceeded more than once per year.

^c The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm or maximum 8-hour concentrations above 0.08 does not exceed 1.

^d The annual standard is attained when the expected annual arithmetic mean concentration is less than or equal to 50 mg/m³ for PM₁₀ and 15 mg/m³ for PM₂₅.

The term “attainment” refers to the status of the various pollutants described in the NAAQS. If a pollutant does not exceed the standard more than once per year, then it is considered in attainment of the standard. If the pollutant exceeds the standard two or more times during the year, then it is considered in non-attainment of the standard. When a proposed highway project is located in a non-attainment area, it must be included in an approved Transportation Improvement Plan or meet a series of requirements in order for the project to be approved. The Parsons-to-Davis Project is located in an area designated as being in attainment of the standard for both CO and O₃.
3.5.4.2 CO Microscale Analysis - Methodology

An air quality assessment was performed, using a microscale analysis, to determine the potential effects of the highway project on the surrounding local CO concentrations. The microscale analysis predicts the generation and transportation (dispersion) of CO within the immediate project vicinity. The years 2010 (opening year) and 2020 (design year) were analyzed and compared to the NAAQS criteria for CO. A detailed description of the methodology is provided in the 1996 Corridor H FEIS.

Receptor sites were modeled to represent locations where the highest CO concentration levels could be expected and where the general public could have access during the analysis periods. These receptors were placed at various offsets from the proposed Build Alternatives to represent locations where human activity may occur. The CO concentrations were compiled to include both vehicular and background CO concentrations.

3.5.4.3 Microscale Analysis - Results

Results from the microscale analysis show that none of the predicted one-hour analysis sites exceeded the one-hour CO criteria of 35 ppm, as identified in the NAAQS. These predicted concentrations also did not exceed the more stringent eight-hour CO concentration criteria of 9 ppm. Therefore, a separate eight-hour CO analysis was not performed because the one-hour concentrations were less than eight-hour NAAQS for CO (per USEPA guidelines).

Table III-29 shows the highest predicted one-hour CO concentrations at the various offsets for the 2010 opening and 2020 design years. These predicted CO concentration levels would be typical at locations along the Build Alternatives where the greatest traffic volumes would occur and where human activities may be expected to occur adjacent to the corridor ROW. All predicted concentrations include a conservative (worst-case) one-hour background CO level of 2.0 ppm.

<table>
<thead>
<tr>
<th>Year</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
<th>400</th>
<th>450</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2.9</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
<td>2.6</td>
<td>2.5</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td></td>
</tr>
</tbody>
</table>

Source: Michael Baker Jr., Inc.
NAAQS: 1-Hour = 35ppm, 8-Hour = 9ppm Predicted concentrations include a background CO level of 2.0 ppm.

The highest predicted one-hour CO concentration for the years 2010 and 2020 were 2.9 ppm and 3.0 ppm, respectively. Based on these results, no exceedances of either the one-hour or eight-hour criteria are predicted to occur for any of the Build Alternatives. These results are consistent with the air quality analysis conducted for the 1996 Corridor H FEIS where no receptor exceeded either the one or eight-hour criteria for CO.

With the implementation of the ROPA/Preferred Alternative, the OPA, or Alternative 2, the Truck Route would be in operation, which would divert between 45 and 90 percent of the current heavy truck traffic from downtown Thomas (see Section 3.2.1: Economic Environment). In the year 2020, the Truck Route will attract an approximate ADT of 500 trucks, of which 50 percent can be assumed to be heavy trucks. This would have a positive impact on the air quality of downtown Thomas. Specifically, the City of Thomas could expect a substantial decrease in Particulate Matter due to the diversion of truck traffic from the Truck Route associated with the ROPA/Preferred Alternative, OPA or Alternative 2.
3.5.4.4 **Avoidance, Minimization & Mitigation**

The Study Area is in an attainment area for CO. Based on the predicted results, the construction of any of the Build Alternatives carried forward for detailed analysis would not cause an exceedance of the NAAQS for CO in any of the analysis years. As described in the 1996 Corridor H FEIS, the No-Build Alternative will not impact the local air quality.

The predicted CO concentration levels for the proposed Build Alternatives are well below both the one-hour and eight-hour NAAQS criteria for CO. Therefore, no mitigation measures would be required. The Study Area is in an attainment area for O₃. It is also in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, the conformity procedures of 40 CFR Part 51 do not apply.

A quantitative mesoscale or “regional” air quality analysis was not performed for the project because the Study Area is in attainment for both CO and O₃.

3.5.5 **TRAFFIC NOISE**

A noise analysis was prepared in accordance with the WVDOT Noise Analysis and Abatement Guidelines and in conjunction with 23 CFR 772, which establishes the requirement for a noise study for any proposed Federal or Federal-aid transportation project.

This section presents a description of the methods used in the analysis, applicable noise standards and criteria prescribed by Federal regulations and WVDOT, and the identification of noise sensitive areas contiguous to the project. Additionally, it contains the qualitative modeling results for the base year (1999) and design year (2020) build sound level environments, with a generalized comparison of the predicted future sound levels to the existing (base) year sound environment and to the noise abatement criteria. Finally, the analysis includes a discussion on noise abatement measures.

Details of the noise analysis for Corridor H as a whole are contained in the 1994 Corridor H ASDEIS Air, Noise, and Energy Technical Report (WVDOH, 1994b), and cumulative impacts were addressed in the 1996 Corridor H FEIS (p. III-250 to III-254).

3.5.5.1 **Fundamentals of Sound and Noise**

Sound intensity is normally presented as a sound level using the unit decibel (dB). The decibel is used to measure either sound power or sound pressure levels. These sound pressure levels are expressed as dBA Leq(h). The term dBA refers to decibels on the A-weighted scale that represents the way the human ear perceives sound. The term Leq(h) refers to the sound level that is representative of the average sound level over a one hour time period. Research has shown that normal human hearing can only detect sound level changes of three (3) decibels or more. Therefore, changes of one (1) or two (2) decibels are not generally noticeable.

3.5.5.2 **Existing Environment**

In order to assess the existing (ambient) sound environment within the Study Area, sound level measurements were taken at 17 representative sites, using a Metrosanics dB-3080 Sound Level Analyzer. Short-term measurement periods of 15 minutes duration each were conducted at the selected monitoring sites. These monitoring sites were chosen to be representative of the noise sensitive land uses adjacent to the Build Alternatives and characteristic of the existing background sound levels within the Study Area. Simultaneous traffic counts were also recorded for nearby roadways as applicable for validating the monitored verses modeled data. A summary of these monitoring sites and their associated sound levels is presented in Table III-30.

Dominant noise sources within the Study Area included traffic from nearby roadways, various localized neighborhood activities, and the sounds resulting from activities at the Tucker County
Landfill. Ambient sound levels measured in the field at the various monitoring locations ranged from 46 to 65 dBA Leq. The highest measured sound levels occurred at M-8, where sound levels are influenced by the peak-hour traffic volumes along US 219. The lowest sound level was measured at site M-14, where traffic noise contributions primarily came from secondary and local roads. These measured ambient sound levels characterize the existing sound environment within the Study Area and include representative peak-hour traffic conditions where appropriate.

<table>
<thead>
<tr>
<th>ID No.</th>
<th>Noise Abatement Criteria (NAC) Level</th>
<th>Date</th>
<th>Measurement Period</th>
<th>Sound Level (dBA Leq)</th>
<th>Dominant Noise Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-1</td>
<td>66</td>
<td>2/13/02</td>
<td>15:30 - 15:45</td>
<td>47</td>
<td>Quiet, distant heavy truck (HT) traffic on US 219</td>
</tr>
<tr>
<td>M-2</td>
<td>66</td>
<td>2/12/02</td>
<td>8:40 - 8:55</td>
<td>53</td>
<td>Traffic on US 219</td>
</tr>
<tr>
<td>M-3</td>
<td>66</td>
<td>2/12/02</td>
<td>9:30 - 9:45</td>
<td>50</td>
<td>Traffic on US 219</td>
</tr>
<tr>
<td>M-4</td>
<td>66</td>
<td>2/12/02</td>
<td>11:30 - 11:45</td>
<td>62</td>
<td>Traffic on US 219</td>
</tr>
<tr>
<td>M-5</td>
<td>66</td>
<td>2/12/02</td>
<td>12:05 - 12:20</td>
<td>46</td>
<td>Quiet, local ambient sounds</td>
</tr>
<tr>
<td>M-6</td>
<td>66</td>
<td>2/12/02</td>
<td>13:45 - 14:00</td>
<td>61</td>
<td>Traffic on US 219 and Tucker Co. 18</td>
</tr>
<tr>
<td>M-7</td>
<td>66</td>
<td>2/12/02</td>
<td>13:07 - 13:22</td>
<td>51</td>
<td>Traffic on US 219 and Tucker Co. 18</td>
</tr>
<tr>
<td>M-8</td>
<td>66</td>
<td>2/12/02</td>
<td>14:10 - 14:25</td>
<td>65</td>
<td>Traffic on US 219</td>
</tr>
<tr>
<td>M-9</td>
<td>66</td>
<td>2/12/02</td>
<td>16:30 - 16:45</td>
<td>52</td>
<td>Quiet, distant traffic on US 219</td>
</tr>
<tr>
<td>M-10</td>
<td>66</td>
<td>2/12/02</td>
<td>15:15 - 15:30</td>
<td>50</td>
<td>Quiet, distant traffic on US 219</td>
</tr>
<tr>
<td>M-11</td>
<td>66</td>
<td>2/12/02</td>
<td>14:40 - 14:55</td>
<td>60</td>
<td>Local activities at nursing facility, Traffic on US 219</td>
</tr>
<tr>
<td>M-12</td>
<td>66</td>
<td>2/13/02</td>
<td>8:24 - 8:39</td>
<td>64</td>
<td>Traffic on WV 32 (South)</td>
</tr>
<tr>
<td>M-13</td>
<td>66</td>
<td>2/13/02</td>
<td>9:48 - 10:03</td>
<td>47</td>
<td>Distant HT traffic on WV 32, local school activities inside school</td>
</tr>
<tr>
<td>M-14</td>
<td>66</td>
<td>2/13/02</td>
<td>12:45 - 13:00</td>
<td>46</td>
<td>Quiet, local ambient sounds</td>
</tr>
<tr>
<td>M-15</td>
<td>71</td>
<td>2/13/02</td>
<td>13:23 - 13:38</td>
<td>63</td>
<td>Landfill operational noises</td>
</tr>
<tr>
<td>M-16</td>
<td>66</td>
<td>2/13/02</td>
<td>14:36 - 14:51</td>
<td>52</td>
<td>Local ambient sounds, distant HT traffic on WV 93</td>
</tr>
<tr>
<td>M-17</td>
<td>66</td>
<td>2/13/02</td>
<td>14:00 - 14:15</td>
<td>53</td>
<td>Distant noise from landfill operations, distant HT traffic on WV 93</td>
</tr>
</tbody>
</table>

3.5.5.3 Traffic Noise Modeling and Impacts

Methodology

Noise Sensitive Areas

Land use and noise levels interact to play an important role in the impact of traffic-generated noise on an area. Some types of land use are more sensitive to noise levels than others. Typically, the land use most sensitive to noise is residential, especially those residential areas composed of single-family dwellings. Other land uses with less sensitivity to noise include open range and pasture lands, wooded areas, commercial and industrial properties, and agricultural areas.

Land within the Study Area is composed primarily of mixed deciduous forest and large tracts of undeveloped land. Areas of rural development and their associated land uses are dispersed...
throughout the Study Area. They consist of mixed land uses, including residential dwellings, farmsteads and associated buildings, commercial businesses, public service facilities, churches, and schools. Communities include the City of Thomas and the neighborhoods of Benbush, William, Railroad Hill, Cortland Acres, and Coketon. The Town of Davis is located immediately southeast of the Study Area.

Exhibit III-9 shows the locations of all the noise sensitive receptors included in the noise analysis modeling.

**Noise Standards and Criteria**

The WVDOT Noise Analysis and Abatement Guidelines were used to provide subjective descriptors of noise impacts at receptors along the proposed Build Alternatives in conjunction with 23 CFR 772. These define traffic noise impacts as “impacts which occur when predicted traffic noise levels approach or exceed the Noise Abatement Criteria (NAC), or when the predicted traffic noise levels substantially exceed the existing noise levels.” The NAC are expressed in terms of dBA Leq(h), and describe the various degrees of noise sensitivity for different land use activity categories. Table III-31 shows the NAC for various land use activity categories. The approach criterion is defined as one dBA less than the criterion for each Activity Category. Also, a 16 dBA increase over the existing condition is considered a “substantial increase impact” according to WVDOT guidelines.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Leq (h)*</th>
<th>Description of Activity Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>57( exterior)</td>
<td>Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.</td>
</tr>
<tr>
<td>B</td>
<td>67( exterior)</td>
<td>Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals.</td>
</tr>
<tr>
<td>C</td>
<td>72( exterior)</td>
<td>Developed lands, properties, or activities not included in Categories A or B above.</td>
</tr>
<tr>
<td>D</td>
<td>--</td>
<td>Undeveloped lands.</td>
</tr>
<tr>
<td>E</td>
<td>52( interior)</td>
<td>Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.</td>
</tr>
</tbody>
</table>

Source: 23 CFR 772

*Hourly A-weighted Sound Level (dBA)

Noise sensitive receptors evaluated in the analysis were representative of Category B and C receptors. Category B represents the exterior sound levels of such places as parks, residences, schools and hospitals. Category C represents exterior sound levels at commercial and business sites. According to FHWA and WVDOH noise analysis policy as derived through 23 CFR 772, an impact at any Category B receptor occurs if the design year Build Alternative sound levels equal or exceeds the approach criterion of 66 dBA. For Category C receptors, the criterion is 71 dBA.

**Traffic Noise Model**

Traffic noise calculations were performed using the FHWA’s Traffic Noise Model, Version 1.0b (1999). The Traffic Noise Model or TNM1.0b calculates noise levels in the vicinity of highways using a one-third octave-band database and algorithms. The noise modeling accounted for operating speed and peak-hour traffic volumes for autos, medium trucks (two-axle, six-tires), and
heavy trucks (three or more axles). In addition, tree zones, terrain, and elevation were also incorporated into the noise modeling.

**Traffic Data**

Paragraph b, Section 772.17 of 23 CFR 772 states that, “in predicting noise levels and assessing noise impacts, traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year shall be used.” Since the level of highway traffic noise is normally related directly to the traffic volume, the traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the design year will be the average hourly volume for the highest traffic hour of each day.

Traffic volumes for the Study Area were derived from traffic reports prepared by WVDOH and Michael Baker Jr., Inc. The design directional hourly volumes (DDHV) were used in the analyses to represent the loudest period of the day. An operating speed of 60 miles per hour (mph) was used for the proposed Build Alternatives, while the posted speed limits were used for all existing roadways. Traffic assumptions included a DDHV of ten (10) percent. Recent traffic surveys indicate that the vehicle mix for the proposed highway would consist of eighty-seven (87) percent automobiles (including pickup trucks, vans, etc.), three (3) percent medium trucks (two-axle, six-tires), and ten (10) percent heavy trucks (three or more axles).

**Traffic Noise Impacts**

The locations of the receptors identified as noise sensitive sites and modeled in the analysis are illustrated in Exhibit III-9 and listed in Table III-32. Table III-33 shows the sound level environments and identified criteria impacts at each of the modeled receptor locations for the base year (existing condition), and design year (2020) No-Build Alternative and Build Alternatives.

**Base Year**

Existing noise levels for receptors in the Study Area range from 42 dBA to 70 dBA. Areas with higher noise levels are located near the major roadways in the Study Area (i.e., US 219, WV 93 and WV 32). Existing noise levels indicate that six (6) NAC Category B receptors currently approach or exceed the NAC impact criterion of 66 dBA (receptors 1, 29, 55, 57, 58, and 59). Modeled existing noise levels are presented in Table III-33.

**No-Build Alternative**

The modeled noise levels under the No-Build Alternative in the design year indicate that the six (6) receptors currently impacted under the NAC criteria will continue to be impacted by traffic noise in the future. An additional four (4) NAC Category B receptors will also approach or exceed the NAC criteria (66 dBA). These are receptors 2, 33, 35, and 53. There will be no West Virginia (WV) substantial increase criteria impacts with the No-Build Alternative. Modeled No-Build Alternative noise levels are shown in Table III-33 and summarized in Table III-34.

**Build Alternatives**

Design year predicted noise levels at each of the receptor sites were modeled for each Build Alternative and are shown in Table III-33. A summary of impacts is provided in Table III-34. None of the Build Alternatives will have more NAC impacts than the No-Build Alternative (10 NAC impacts) in the design year. The ROPA/Preferred Alternative, along with Alternatives 1E, 1G (both East and West), and Alternative 2 will have the least number of impacts with seven (7) NAC impacts. Alternatives 1D (both East and West) and the OPA are predicted to impact the most number of sensitive receptors, with eight (8) NAC impacts. There were no predicted WV substantial increase criteria impacts for any of the alternatives carried forward for detailed analysis. All of the impacted receptors are NAC Category B (Table III-32).
The proposed Truck Route, near the community of Thomas, is now considered part of the ROPA, OPA and Alternative 2. When combined with any of these alternatives, the Truck Route is predicted to impact five (5) locations, all of which are already predicted to be impacted by the ROPA, OPA or Alternative 2 alone (53, 55, 57, 58 and 59).

### Table III-32
Modeled Noise-Sensitive Receptors

<table>
<thead>
<tr>
<th>Receptor Number</th>
<th>Description / Location</th>
<th>NAC Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Residential home located at intersection of US219 &amp; CR-18 in Benbush</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>Residential home located at intersection of US219 &amp; CR-18 in Benbush</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>Residential home located on access road off of US219 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>4 (M-6)</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>5</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>6</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>7</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>9</td>
<td>Residential home located on access road off of CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>10</td>
<td>Residential mobile home located on access road off of CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>11</td>
<td>Residential home located on access road off of CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>12</td>
<td>Residential home located on access road off of CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>13</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>14</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>15</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>16</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>17</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>18</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>19</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>20</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>21</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>22 (M-7)</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>23</td>
<td>Residential home located on CR-18 at Benbush</td>
<td>B</td>
</tr>
<tr>
<td>24</td>
<td>Office/tower building at airfield landing strip off of Cortland Acres Drive</td>
<td>C</td>
</tr>
<tr>
<td>25</td>
<td>Ground maintenance building at Rose Hill Cemetery on Cortland Acres Drive</td>
<td>C</td>
</tr>
<tr>
<td>26 (M-10)</td>
<td>Thomas City Park located near intersection of US219 &amp; WV32</td>
<td>B</td>
</tr>
<tr>
<td>27</td>
<td>Pineview Apartments located on US219 near intersection with Cortland Acres Drive</td>
<td>B</td>
</tr>
<tr>
<td>28</td>
<td>Pineview Apartments located on US219 near intersection with Cortland Acres Drive</td>
<td>B</td>
</tr>
<tr>
<td>Receptor Number</td>
<td>Description / Location</td>
<td>NAC Type</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>29</td>
<td>Pineview Apartments located on US219 near intersection with Cortland Acres Drive</td>
<td>B</td>
</tr>
<tr>
<td>30</td>
<td>Pineview Apartments located on US219 near intersection with Cortland Acres Drive</td>
<td>B</td>
</tr>
<tr>
<td>31 (M-11)</td>
<td>Cortland Acres Nursing Home on US219 near intersection with Cortland Acres Drive</td>
<td>B</td>
</tr>
<tr>
<td>32 (M-14)</td>
<td>Residential home located at end of CR-27/4 in Coketon</td>
<td>B</td>
</tr>
<tr>
<td>33</td>
<td>Residential home located on SB section of US219 (Spruce St.) in Thomas</td>
<td>B</td>
</tr>
<tr>
<td>34</td>
<td>Residential home located on SB section of US219 (Spruce St.) in Thomas</td>
<td>B</td>
</tr>
<tr>
<td>35</td>
<td>Residential home located on SB section of US219 (Spruce St.) in Thomas</td>
<td>B</td>
</tr>
<tr>
<td>36</td>
<td>Residential home located on side street off of US219 in northern section of Thomas</td>
<td>B</td>
</tr>
<tr>
<td>37 (M-9)</td>
<td>Residential home located on side street off of US219 in northern section of Thomas</td>
<td>B</td>
</tr>
<tr>
<td>38</td>
<td>Residential home located on side street off of US219 in northern section of Thomas</td>
<td>B</td>
</tr>
<tr>
<td>39</td>
<td>Residential home located on side street off of US219 in northern section of Thomas</td>
<td>B</td>
</tr>
<tr>
<td>40</td>
<td>Ground maintenance building at Thomas Cemetery located on Second St. in Thomas</td>
<td>C</td>
</tr>
<tr>
<td>41 (M-13)</td>
<td>Public School Building located on Second St. in Thomas</td>
<td>B</td>
</tr>
<tr>
<td>42 (M-15)</td>
<td>Thomas Landfill Operations building located north of WV32 and WV93 intersection</td>
<td>C</td>
</tr>
<tr>
<td>43</td>
<td>Davis Community Baseball Field Complex near intersection of WV32 and WV93</td>
<td>B</td>
</tr>
<tr>
<td>44</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>45 (M-17)</td>
<td>2 Residential homes located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>46</td>
<td>4 Residential mobile homes located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>47</td>
<td>4 Residential mobile homes located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>48</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>49</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>50</td>
<td>5 Residential homes located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>51</td>
<td>3 Residential homes located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>52</td>
<td>3 Residential mobile homes located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>53</td>
<td>Residential home located on US219 north of Thomas</td>
<td>B</td>
</tr>
<tr>
<td>54</td>
<td>Residential mobile home located on US219 south of intersection with WV90</td>
<td>B</td>
</tr>
<tr>
<td>55</td>
<td>Residential home located on US219 south of intersection with WV90</td>
<td>B</td>
</tr>
<tr>
<td>56</td>
<td>Residential home located on US219 south of intersection with WV90</td>
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</tr>
<tr>
<td>57</td>
<td>Residential home located on US219 south of intersection with WV90</td>
<td>B</td>
</tr>
<tr>
<td>58</td>
<td>Residential home located on US219 south of intersection with WV90</td>
<td>B</td>
</tr>
<tr>
<td>59</td>
<td>Residential home located on US219 south of intersection with WV90</td>
<td>B</td>
</tr>
<tr>
<td>60</td>
<td>Residential home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>Receptor Number</td>
<td>Description / Location</td>
<td>NAC Type</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>61</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>62</td>
<td>Residential home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>63</td>
<td>Residential mobile home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>64</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>65</td>
<td>Residential home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>66</td>
<td>Residential home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>67</td>
<td>Residential home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>68 (M-16)</td>
<td>Residential home located in subdivision south of WV93 in Davis</td>
<td>B</td>
</tr>
<tr>
<td>69</td>
<td>Residential mobile home located on Fairfax Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>70</td>
<td>Residential home located on Second Street in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>71</td>
<td>Residential home located on Second Street in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>72</td>
<td>Residential home located on Kent Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>73</td>
<td>Residential home located on Kent Ave in subdivision in Davis</td>
<td>B</td>
</tr>
<tr>
<td>101</td>
<td>Residential home located on access road off of US 219</td>
<td>B</td>
</tr>
<tr>
<td>104</td>
<td>Residential home located on CR-219/4</td>
<td>B</td>
</tr>
<tr>
<td>105</td>
<td>Residential mobile home located on CR-219/4</td>
<td>B</td>
</tr>
<tr>
<td>106 (M-1)</td>
<td>Farm house located off of CR-219/4</td>
<td>B</td>
</tr>
<tr>
<td>107</td>
<td>Residential home located on CR-219/4</td>
<td>B</td>
</tr>
<tr>
<td>108</td>
<td>Residential home located on CR-219/4</td>
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</tr>
<tr>
<td>109</td>
<td>Residential home located on CR-219/4</td>
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<td>110</td>
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<tr>
<td>111</td>
<td>Residential home located on CR-219/3</td>
<td>B</td>
</tr>
<tr>
<td>112</td>
<td>Residential home (2) located on CR-219/3</td>
<td>B</td>
</tr>
<tr>
<td>113</td>
<td>Residential home located on access road off of US 219, south of High School</td>
<td>B</td>
</tr>
<tr>
<td>114</td>
<td>Residential home located on access road off of US 219, south of High School</td>
<td>B</td>
</tr>
<tr>
<td>115</td>
<td>Residential home located on access road off of US 219, south of High School</td>
<td>B</td>
</tr>
<tr>
<td>116</td>
<td>Residential home located on access road off of US 219, south of High School</td>
<td>B</td>
</tr>
<tr>
<td>117 (M-2)</td>
<td>Vacant Cabin located on access road off of US 219, south of High School</td>
<td>B</td>
</tr>
<tr>
<td>118 (M-3)</td>
<td>TCHS located on US 219</td>
<td>B</td>
</tr>
<tr>
<td>119</td>
<td>Residential home located on access road off of US 219, near the High School</td>
<td>B</td>
</tr>
<tr>
<td>120 (M-4)</td>
<td>Centennial Park and Scenic Overlook on US 219</td>
<td>B</td>
</tr>
<tr>
<td>121</td>
<td>Residential home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>122</td>
<td>Residential mobile home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>Receptor Number</td>
<td>Description / Location</td>
<td>NAC Type</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>123</td>
<td>Residential home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>124</td>
<td>Residential home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>125</td>
<td>Residential mobile home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>126</td>
<td>Residential mobile home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>127</td>
<td>Residential home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>128 (M-5)</td>
<td>Sugarland Church located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>129</td>
<td>Residential home located on access road off of CR-25</td>
<td>B</td>
</tr>
<tr>
<td>130</td>
<td>Commercial/Business located on CR-25</td>
<td>C</td>
</tr>
<tr>
<td>131</td>
<td>Residential mobile home located on CR-25</td>
<td>B</td>
</tr>
<tr>
<td>132</td>
<td>Residential home located on access road off of CR-25</td>
<td>B</td>
</tr>
<tr>
<td>133</td>
<td>Sugarland School located on CR-25/4</td>
<td>B</td>
</tr>
<tr>
<td>134</td>
<td>Residential home located on CR-25/4</td>
<td>B</td>
</tr>
<tr>
<td>135</td>
<td>Residential home located on CR-25/4</td>
<td>B</td>
</tr>
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Modeled Noise Levels at Noise Sensitive Receptors

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**Notes:**
- **NAC:** Noise As Community
- **Impact:** Level change from base year to alternative.
- **No:** No change.
- **1:** One unit change.
- **6:** Six units change.
- **52:** Fifty-two units change.
- **49:** Forty-nine units change.
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Number and
NAC Level

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1E

1G West

1G East

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Alternative

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FEBRUARY 2007

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Knights of Columbus Ballfield
Table III-34
Predicted Design Year Noise Level Impacts

<table>
<thead>
<tr>
<th>Alternative</th>
<th>NAC Impacts</th>
<th>WV Substantial Increase Impacts</th>
<th>Impacted Receptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Build</td>
<td>10</td>
<td>0</td>
<td>1, 2, 29, 33, 35, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>1D West</td>
<td>8</td>
<td>0</td>
<td>1, 2, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>1D East</td>
<td>8</td>
<td>0</td>
<td>1, 2, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>1E</td>
<td>7</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>1G West</td>
<td>7</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>1G East</td>
<td>7</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>OPA¹</td>
<td>8</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59, 113</td>
</tr>
<tr>
<td>2¹</td>
<td>7</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative¹</td>
<td>7</td>
<td>0</td>
<td>1, 29, 53, 55, 57, 58, 59</td>
</tr>
</tbody>
</table>

¹With the ROPA/Preferred Alternative, the OPA, or Alternative 2, the Truck Route would not impact any additional receptors.

3.5.5.4 Mitigation Measures

In accordance with 23 CFR 772, noise abatement measures for the reduction or elimination of noise impacts along a proposed highway corridor must be considered for those noise sensitive locations that receive an impact. FHWA and WV DOT specify several types of mitigation to be studied for areas warranting noise abatement consideration. These include traffic management measures, changes in horizontal and vertical alignment of the proposed roadway, acquisition of property rights for construction of noise barriers/construction of earth berms/sound walls, creation of buffer zones, sound insulation for public institutions, and other considerations as warranted under 23CFR772.13 (d).

A preliminary mitigation (barrier) analysis was conducted for the modeled impacted receptor sites under each of the proposed Build Alternatives. Guidance criteria established under WV DOT policy for barrier reasonableness and feasibility were followed in determining whether the barriers could be implemented as noise abatement measures.

There were no practical noise abatement measures that would eliminate or reduce the traffic noise impacts at these receptor locations under WV DOT policy for barrier reasonableness and feasibility. The impacted receptors were eliminated from further noise abatement consideration (sound barriers) for one or more of the following reasons:

- Isolated or single receptor locations that would not typically warrant further consideration because of the potential cost of protecting one site;
- Areas with only a few homes which did not have acceptable cost per receptor ratios;
- Areas where the predicted noise contributions coming from other roadways would have precluded a sufficient Insertion Loss (IL) from any proposed noise abatement structure; and
- Overriding direct access requirements to existing roadways.

In general, sound barriers for any of the proposed Build Alternatives were found to be ineffective in reducing traffic noise levels (insufficient IL) for any of the impacted receptors. This was due to the close proximity of US 219 to each of the receptors, whereby the overriding traffic noise contribution from US 219 prevented any sufficient IL from occurring at the impacted receptors by a sound barrier along the proposed Build Alternatives. Additional sound barriers located between the different receptor locations and US 219 would not be feasible due to the direct access requirements (driveways and entrances) from the highway to the residential properties.
The redirecting of truck traffic through the use of the Truck Route, as proposed with the ROPA/Preferred Alternative, the OPA, or Alternative 2, is forecasted to decrease truck traffic through downtown Thomas by as much as 80 percent (see Section 3.2.1 Economic Environment). This reduction would lower noise levels by as much as six (6) decibels in the downtown area (as modeled at receptor site M-12, Table III-32). This would be a “noticeable” improvement (as discussed above) in the noise environment within this area.

3.5.6 ENERGY

The 1996 Corridor H FEIS included a detailed computational analysis of the predicted transportation-related energy consumption for the 100-mile long Corridor H Project. The analysis presented below was conducted to compare energy requirements for each of the Parsons-to-Davis Build Alternatives. The following three categories of energy consumption were analyzed: construction, maintenance, and operational.

3.5.6.1 Methodology

Construction-related energy consumption is based on the construction cost of the roadway alternatives. The energy analysis methodology was developed for the FHWA by the California Transportation (CALTRANS) Laboratory (California Department of Transportation, 1983). It determines the total amount of British Thermal Units (BTUs) required for the production and placement of materials (earthwork, asphalt, structures, etc.) based on the project’s construction cost. These BTU estimates are then converted to quantities of gasoline. Approximately 125,000 BTUs equal 1 gallon of fuel.

3.5.6.2 Existing Environment

The existing energy consumption environment is normally not analyzed. Construction energy requirements do not apply for the base year (1999). However, maintenance and operational energy consumption quantities can be computed for informational and comparative purposes. The primary roadway network within the Study Area was analyzed for both maintenance and operational energy consumption. The roadway network was comprised of US 219 extending from Mackeyville Road to the WV 32 intersection at Thomas, then northward along US 219 for 0.95 mile and a segment of WV 32 from the US 219 intersection to the WV 93 interchange. The 1999 average daily fuel consumption for these roadway segments was calculated to be 1,140 gallons, while the maintenance energy requirement for these same roadway segments was calculated to be 23,700 gallons of fuel, annually.

3.5.6.3 Impacts

Table III-35 summarizes the construction, maintenance and operational energy requirements for each of the alternatives for the ten-year period between 2010 and 2020. The ROPA/Preferred Alternative would consume an estimated 175,755,700 gallons of fuel over the ten-year period (total fuel consumption). Alternative 2 is predicted to consume the greatest amount of energy of all the alternatives during the ten-year period (over 207 million gallons of fuel). The OPA is predicted to consume the least amount of total energy of all the Build Alternatives (172,369,100 gallons of fuel). It is important to note that the Truck Route, which would allow for truck traffic to bypass the town of Thomas, was included as part of the overall alignment for the ROPA/Preferred Alternative, the OPA, and Alternative 2 in the energy analysis. Of the total energy consumption for the ROPA/Preferred Alternative, approximately 16 percent is due to the Truck Route component. Even with this component included in its alignment, the total energy expended on the ROPA/Preferred Alternative is less than any of the other Build Alternatives, except for the OPA alignment. As described in the 1996 Corridor H FEIS, the No-Build Alternative would not impact energy usage in the Study Area.
Table III-35
Energy Consumption for the Ten Year Period 2010 to 2020 (in gallons of fuel)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Build</td>
<td>N/A</td>
<td>237,000</td>
<td>6,215,900</td>
<td>6,452,900</td>
</tr>
<tr>
<td>1D West</td>
<td>180,057,300</td>
<td>430,100</td>
<td>19,834,800</td>
<td>200,322,200</td>
</tr>
<tr>
<td>1D East</td>
<td>176,842,000</td>
<td>422,400</td>
<td>19,462,100</td>
<td>196,726,500</td>
</tr>
<tr>
<td>1E</td>
<td>165,588,400</td>
<td>395,500</td>
<td>18,034,200</td>
<td>184,018,100</td>
</tr>
<tr>
<td>1G West</td>
<td>178,449,600</td>
<td>426,200</td>
<td>19,659,700</td>
<td>198,535,500</td>
</tr>
<tr>
<td>1G East</td>
<td>175,234,300</td>
<td>418,600</td>
<td>19,287,000</td>
<td>194,939,900</td>
</tr>
<tr>
<td>ROPA/Preferred Alternative</td>
<td>160,765,400</td>
<td>384,000</td>
<td>14,606,300</td>
<td>175,755,700</td>
</tr>
<tr>
<td>OPA</td>
<td>157,550,100</td>
<td>385,900</td>
<td>14,433,100</td>
<td>172,369,100</td>
</tr>
<tr>
<td>2</td>
<td>189,703,200</td>
<td>462,700</td>
<td>17,815,200</td>
<td>207,981,100</td>
</tr>
</tbody>
</table>

ROPA/Preferred Alternative, OPA, and Alternative 2 include the Truck Route as part of the overall alignment.
N/A - Not Applicable

3.5.6.4 Avoidance, Minimization, & Mitigation Measures
Mitigation measures for energy consumption are normally not employed, primarily due to the avoidance of environmentally sensitive areas and single-family residences, as well as basic highway engineering laws. However, recovery of the construction energy may be calculated to predict when the benefits gained by the predicted operational consumption equals or exceeds the construction energy loss.

This project is intended to attract people into the surrounding area; therefore, recovery of the construction energy that would normally result from the relief of congestion is not applicable to this project. However, energy that is not predicted to be used for this project may have to be used for other roadway improvements if Corridor H is not constructed.

3.6 RELATIONSHIP OF LOCAL SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY
The construction phase of the project would cause limited adverse effects on the environment, which would be short-term. Adverse effects have been evaluated in detail and mitigation measures identified. In addition, careful attention would be given to the problems identified during final design. Proposed mitigation measures, some temporary and some permanent, would minimize adverse short-term effects and avoid any substantial long-term damage.

The project would be classified as a long-term productive facility. This project, with its desirable design characteristics, would provide for safe and efficient vehicle operation for present and future traffic volumes. The benefits such as reduced operating costs, reduced travel time, reduced accidents, and general economic enhancement of the area, offered by the long-term productivity of this project, should more than offset the short-term inconvenience and adverse effects on the human environment.
3.7 IRREVERSIBLE & IRRERTRIEVABLE COMMITMENTS OF RESOURCES

Implementation of any of the Build Alternatives carried forward for detailed analysis would involve a commitment of a range of natural, physical, human, and fiscal resources. Land used in the construction of the proposed facility is considered an irreversible commitment during the period that the land is used for a highway facility. However, if a greater need arises for the use of the land, or if the highway facility is no longer needed, the land can be converted to another use. At present, there is no reason to believe such a conversion would be necessary or desirable.

Considerable amounts of fossil fuels, labor, and highway construction materials such as cement, aggregate, and bituminous material would be expended. In addition, large amounts of labor and natural resources would be used in the fabrication and preparation of construction materials. These materials are not generally retrievable; however, they are not in short supply, and their use would not have an adverse effect upon continued availability of these resources. Any construction would also require a substantial one-time expenditure of both state and federal funds, which are not retrievable.
SECTION IV: SECTION 4(F) AND 6(F) ANALYSES

In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002.

In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

4.1 PROJECT HISTORY

4.1.1 INTRODUCTION

The 2000 Settlement Agreement states in part: “The SEIS will evaluate a reasonable range of alternatives for completing the Thomas-Davis Section of the Parsons-to-Davis Project. The range of alternatives will include one or more Blackwater Avoidance Alignments and the Blackwater Alignment.” The Settlement Agreement continues: “The SEIS will evaluate the Blackwater Avoidance Alignment(s) to determine whether there is any such alternative that 1) is “feasible” and “prudent” and 2) does not “use” any land protected by Section 4(f). The evaluation required by this paragraph will be included in draft form in the Draft SEIS and in final form in the Final SEIS.” The final Section 4(f) as well as Section 6(f) analyses are included in this section of the SFEIS.

As defined in the 2000 Settlement Agreement “Section 4(f) means Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C § 303(c).” Section 4(f) regulations are provided in 49 CFR 771.135 and in various Federal Highway Administration (FHWA) guidance documents. Section 4(f) regulations define “land” protected by Section 4(f) as a “significant publicly owned public park, recreation area, or wildlife or waterfowl refuge, or any significant historic site” (49 CFR 771.135 (a)(1)).

4.1.2 DESCRIPTION OF THE PROJECT

The West Virginia Department of Transportation (WVDOT), in conjunction with the FHWA, is proposing to construct an approximately 9-mile long highway between Parsons and Davis in Tucker County, West Virginia. This Parsons-to-Davis Project is a component of the Appalachian Corridor H Project which is a proposed 100-mile highway between Elkins and the West Virginia-Virginia state line, spanning Randolph, Tucker, Grant, and Hardy counties in West Virginia.

As a result of legal challenges, a Settlement Agreement required the WVDOT and FHWA to prepare a Supplemental Environmental Impact Statement (SEIS) to evaluate one or more alignment shifts for the Thomas-Davis Section of the Parsons-to-Davis Project to determine if avoidance of the Blackwater Area, also defined in the Settlement Agreement (Appendix B), was prudent and feasible.

Additionally, discovery of an endangered species within the limits of the Original Preferred Alternative (OPA) between Parsons and Davis has necessitated that the SEIS address the entire length of the Parsons-to-Davis Project and not just the Thomas-Davis Section. Therefore, the Study Area was expanded to encompass the entire Parsons-to-Davis Project.
4.1.3 PURPOSE AND NEED

The Parsons-to-Davis Project is a component of the Appalachian Corridor H Project. As a section of that corridor, it is expected to contribute to addressing needs identified in the 1996 Corridor H FEIS:

- Improve east-west transportation through northeastern West Virginia.
- Promote economic development in the region, and
- Preserve or improve the quality of life in the region.

Additionally, at the local level, communities have identified two specific “quality of life” needs that could be addressed by the Parsons-to-Davis Project:

- Reduce truck traffic through the City of Thomas.
- Improve emergency response times and access to emergency facilities.

A detailed discussion of the need for and purpose of the project is presented in Section I: Project Background and Need.

4.2 SECTION 4(F) OVERVIEW

This report has been prepared pursuant to Section 4(f) of the Department of Transportation Act of 1966 as amended (49 U.S.C. 3030), Section 138 of the Federal-aid Highway Act of 1968, and FHWA regulations in 23 CFR 771.135. The U.S. Department of Transportation Act of 1966, Section 4(f) states, in part, that:

“the Secretary shall not approve any program or project which requires the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from a historic site of national state or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreation area, wildlife and waterfowl refuge or historic site resulting from such use.”

4.2.1 SECTION 4(F) USE DEFINED

4.2.1.1 Direct Use

A direct use of a Section 4(f) resource 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 preservationist purposes.

4.2.1.2 Constructive Use

Constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from a Section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished (23 CFR 771.135).

4.3 IDENTIFICATION AND DESCRIPTION OF SECTION 4(F) RESOURCES IN THE STUDY AREA

There are three resources in the study area where Section 4(f) is potentially applicable (Exhibit IV-1):

- City of Thomas Park (proposed);
• Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex) - considered eligible as an historic district with the West Virginia Central and Pittsburg (WVC&P) Railway and the Coketon study area considered contributing resources to the historic district; and
• West Virginia Central and Pittsburg (WVC&P) Railway - considered individually eligible as a discontiguous historic district with one individually eligible contributing resource – the Stone Arch Bridge over an unnamed tributary of the North Fork of the Blackwater River near William, West Virginia.

Each of these resources and their Section 4(f) applicability is discussed in further detail below.

### 4.3.1 CITY OF THOMAS PARK (PROPOSED)

#### 4.3.1.1 Physical Description

The City of Thomas owns a 145-acre parcel in the Study Area that it intends to develop as a public park (City of Thomas, 1998) (Table IV-1). No park facilities are currently present on the parcel. Exhibit IV-1 provides a map showing the relationship of the proposed park with the Revised Original Preferred Alternative (ROPA).

<table>
<thead>
<tr>
<th>Table IV-1</th>
<th>Description of Thomas Park (Proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Size</td>
<td>145 acres</td>
</tr>
<tr>
<td>Ownership</td>
<td>City of Thomas</td>
</tr>
<tr>
<td>Function</td>
<td>Public Park</td>
</tr>
<tr>
<td>Existing and Planned Facilities</td>
<td>Public Park</td>
</tr>
<tr>
<td>Access and Usage</td>
<td>Public Recreation</td>
</tr>
<tr>
<td>Relationship to other similarly used property in the area</td>
<td>None</td>
</tr>
<tr>
<td>Applicable clauses affecting ownership</td>
<td>None</td>
</tr>
<tr>
<td>Unusual Characteristics</td>
<td>None</td>
</tr>
</tbody>
</table>

#### 4.3.1.2 Section 4(f) Applicability

Based on consultation with the owner of the park facility (City of Thomas), it has been determined that Section 4(f) is not applicable to the proposed park. The City of Thomas is continuing to develop plans for the park. By resolution dated March 13, 2001 (Appendix A), the City stated: “The City of Thomas passed a resolution stating that we would like to develop the property as a park but we would like to do it jointly with the West Virginia Division of Highways and the Federal Highway Administration such that Corridor H may be located within property boundaries [of the park].” The FHWA Section 4(f) Policy Paper dated June 7, 1989 outlines whether or not Section 4(f) applies to joint development (i.e., when a tract is reserved for a highway corridor at the time the development plan for the tract is established). The Policy Paper states: “The requirements of Section 4(f) do not apply to the subsequent highway construction on the reserved right-of-way as previously planned.” Therefore, Section 4(f) is not applicable to the planned City of Thomas Park.
4.3.2 BLACKWATER INDUSTRIAL COMPLEX ARCHAEOLOGICAL AND HISTORIC DISTRICT

4.3.2.1 Physical Description

The Keeper of the National Register (Keeper) has determined the Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex) (Table IV-2) is eligible for the National Register under criteria A, B, C, and D as a historical and archaeological district. In a letter dated August 2, 2001 (Savage, August 2, 2001, letter is included in Appendix A), the Keeper determined that the:

“The Blackwater Industrial Complex continues to convey its historic meaning as a significant concentration of contiguous, interrelated historic industrial and archeological resources throughout the Blackwater River corridor from Thomas to Hendricks, in Tucker County, West Virginia. The complex contains a 10-mile stretch of the 1888 West Virginia Central and Pittsburg Railway (WVC&P) grade with associated bridges and culverts, the abandoned community of Limerock along with the historic mining towns of Thomas, Coketon and Douglas, including numerous historic buildings, mine portals, stone foundations of the Coketon power house, several mine buildings and two mine tipples, many other unidentified structure foundations, and the standing remains of approximately 300 (out of the original 1,235) bee hive style coke ovens. The Complex's numerous historic and archeological features located outside of the Coketon area in conjunction with the significant resources within the Coketon study area combine in a geographic concentration from one end of the Blackwater Industrial Complex to the other. Because of this continuity of important resources, the entire Blackwater Industrial complex is considered one entity and the Coketon study area evaluated within this larger context.”

“The Coketon study area includes key resources such as the banks of bee hive style coke ovens and the WVC&P railroad grade that may or may not be individually eligible, but which nonetheless, are contributing resources that tie the larger Blackwater Industrial Complex together. Due north of the Coketon area, significant resources such as those of the Thomas Commercial Historic District, extant examples of workers’ housing, the Davis company office building, the former department store building, and the railroad grade, are characteristic examples of the seamless continuity of the Complex's historic material remains.”

The Blackwater Industrial Complex encompasses a 10-mile stretch of the WVC&P Railway and the Coketon study area that are both considered contributing resources to the district. The Coketon study area has been determined by the West Virginia State Historic Preservation Office (WVSHPPO) to be eligible for inclusion in the National Register of Historic Places (NHRP) under Criterion D for its information potential (Pierce, January 17, 2001, letter is included in Appendix A). Exhibit IV-1 provides a map showing the relationship of this resource and its contributing resources with the ROPA.

<table>
<thead>
<tr>
<th>Description of Blackwater Industrial Complex Archaeological and Historic District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property Size</strong></td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
</tr>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td><strong>Existing and Planned Facilities</strong></td>
</tr>
<tr>
<td><strong>Access and Usage</strong></td>
</tr>
<tr>
<td><strong>Relationship to other similarly used property in the area</strong></td>
</tr>
<tr>
<td><strong>Applicable clauses affecting ownership</strong></td>
</tr>
<tr>
<td><strong>Unusual Characteristics</strong></td>
</tr>
</tbody>
</table>
4.3.2.2  **Historical Background**
A detailed description and history of the Blackwater Industrial Complex is presented in the Keeper of the NRHP's August 2, 2001 Determination of Eligibility Notification and is included here by reference (Appendix A).

4.3.2.3  **Section 4(f) Applicability**
The district has been determined to be eligible for listing on the NRHP; therefore, Section 4(f) is applicable to this resource.

4.3.3  **THE WEST VIRGINIA CENTRAL & PITTSBURG (WVC&P) RAILWAY**

4.3.3.1  **Physical Description**
The rail corridor, historically known as the West Virginia Central & Pittsburg (WVC&P) Railway and locally known as the Western Maryland Railway, extends in its entirety from Cumberland, Maryland to Elkins, West Virginia. An approximately 10-mile portion of the rail corridor from immediately west of Hambleton continuing to Thomas, within the Blackwater Industrial Complex is the focus of this analysis (Table IV-3) and is considered a contributing resource to the Blackwater Industrial Complex (see above). This portion of the railway is characterized by steep terrain, many drainages, and dramatic structures. The WVC&P Railway is also considered individually eligible as a discontiguous historic district with one individually eligible contributing resource – the Stone Arch Bridge over an unnamed tributary of the North Fork of the Blackwater River near William. Exhibit IV-1 provides a map showing the relationship of this resource and its contributing resources with the ROPA.

<table>
<thead>
<tr>
<th>Table IV-3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description of the West Virginia Central &amp; Pittsburg (WVC&amp;P) Railway</strong></td>
</tr>
<tr>
<td><strong>Property Size</strong></td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
</tr>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td><strong>Existing and Planned Facilities</strong></td>
</tr>
<tr>
<td><strong>Access and Usage</strong></td>
</tr>
<tr>
<td><strong>Relationship to other similarly used property in the area</strong></td>
</tr>
<tr>
<td><strong>Applicable clauses affecting ownership</strong></td>
</tr>
<tr>
<td><strong>Unusual Characteristics</strong></td>
</tr>
</tbody>
</table>
4.3.3.2 Historical Background
A complete detailed description and history of the WVC&P Railway is presented in Appalachian Corridor H: Sections 12 and 13, Architectural and Historical Documentation (submitted to the Keeper of the NRHP, March 1999), and is included here by reference.

4.3.3.3 Section 4(f) Applicability
The WVC&P Railway has been determined to be individually eligible for listing on the NRHP as a discontinuous historic district; therefore, Section 4(f) is applicable to this historic resource.

4.4 IMPACTS ON PROPERTIES WHERE SECTION 4(F) IS APPLICABLE

4.4.1 BLACKWATER INDUSTRIAL COMPLEX ARCHAEOLOGICAL AND HISTORIC DISTRICT
The Blackwater Industrial Complex is traversed by the ROPA/Preferred Alternative. The ROPA/Preferred Alternative will cross above the Blackwater Industrial Complex on structure (i.e., bridge) (Exhibit IV-2). The structure will be designed with piers located in the historic boundary; however, those piers will be designed so that property/structures that are individually eligible (e.g., WVC&P Railway grade) will not be directly impacted by the project nor will property be used that contributes to the factors that make the district historic (i.e., contributing resources).

A final Criteria of Effects (COE) Report was prepared for this resource in accordance with the 1995 Programmatic Agreement developed for the Appalachian Corridor H Project and Section 106 of the National Historic Preservation Act. The final COE Report (February 2004) was provided to resource agencies and stakeholders after a draft version (June 2002) had been circulated and comments on the draft had been addressed. The final COE Report specifically addressed the potential effect of the ROPA/Preferred Alternative on this resource. The final COE Report (February 2004) is incorporated here by reference, and its findings are summarized below.

The final COE Report was prepared in accordance with 36 CFR 800 and specifically evaluated: 1) the effect of the ROPA on the Blackwater Industrial Complex, and 2) the impacts specific to the area immediately adjacent to the bridge crossing (Coketon study area). The methodology used in assessing the potential impacts was based on the type of impact: direct physical, visual, auditory, or induced development in land use. Each type of impact and its methodology for evaluation is described in the final COE Report.

After the analyses were conducted for the final COE Report, it was concluded that the project will have an effect but no adverse effect on the Blackwater Industrial Complex. This finding is based on the following considerations:

- the piers of the bridge will be confined to non-contributing areas, and thus there will be no physical impacts on any contributing elements of the district;
- the bridge will be visible, but the view of the bridge will not adversely affect any contributing element of the district, because the current setting (forested, quiet, and rural) is not a contributing element of the district;
- the increased noise levels resulting from the presence of the bridge will not adversely affect the resource because the current quiet setting is not a contributing element of the district; and
- the project will not cause induced development in the Blackwater Industrial Complex, due to a lack of direct access; the fact that much of this area is owned and managed by the United States Forest Service Monongahela National Forest (USFS MNF); and the topography of the area.
Consultation with the WVSHPO has determined that through careful placement of piers within the boundaries of the resource, the project will have no adverse effect to the Blackwater Industrial Complex (see letters dated June 23, 2004 and October 30, 2002, included in Appendix A). Additionally, the USFS MNF concurred with the findings of the final COE Report in a letter dated April 14, 2004 (Appendix A).

Further, the ROPA/Preferred Alternative will cross the National Register boundary of the Blackwater Industrial Complex on structure. The structure will be designed with piers located within the historic boundary; however, those piers will be placed so that property that is individually eligible (e.g., WVC&P Railway grade) will not be used by the project nor will property be used that contributes to the factors that make the district historic (i.e., contributing resources). Since the ROPA/Preferred Alternative does not take property that is individually historic or contribute to the factors that make the district historic, and since the project will have no adverse effect to the resource, the FHWA made a final determination that the ROPA/Preferred Alternative would not result in a Section 4(f) use of the Blackwater Industrial Complex. FHWA policy states that “In the absence of an adverse effect determination, Section 4(f) will not apply (FHWA, Section 4(f) Policy Paper, March 1, 2005, 3. Historic Sites, Question/Answer C – reproduced in toto below). Therefore, it has been concluded that the project as proposed will not constitute a Section 4(f) use of the Blackwater Industrial Complex.

**Question C: How does Section 4(f) apply in historic districts on or eligible for National Register?**

**Answer C:** Within a National Register (NR) listed or eligible historic district, Section 4(f) applies to the use of those properties that are considered contributing to the eligibility of the historic district, as well as any individually eligible property within the district. It must be noted generally, that properties within the bounds of an historic district are assumed to contribute, unless it is otherwise stated or they are determined not to be. For those properties that are not contributing elements of the district or individually significant, the property and the district as a whole must be carefully evaluated to determine whether or not it could be used without substantial impairment of the features or attributes that contribute to the NR eligibility of the historic district.

The proposed use of non-historic property within an historic district which results in an adverse effect under Section 106 of the NHPA will require further consideration to determine whether or not there may be a constructive use. If the use of a non-historic property or non-contributing element substantially impairs (see Question 2 B) the features or attributes that contribute to the NR eligibility of the historic district, then Section 4(f) would apply. In the absence of an adverse effect determination, Section 4(f) will not apply [emphasis added]. Appropriate steps, including consultation with the SHPO and/or THPO, should be taken to establish and document that the property is not historic, that it does not contribute to the National Register eligibility of the historic district and its use would not substantially impair the historic district.

### 4.4.2 The West Virginia Central and Pittsburg (WVC&P) Railway

Based on consultation with the WVSHPO, it has been determined that the ROPA/Preferred Alternative would not have an adverse effect on this resource or its contributing structures nor does the project have an adverse effect on the Blackwater Industrial Complex to which the WVC&P Railway is a contributing resource. With respect to historic resources on the NHRP or eligible for listing on the NHRP, constructive use does not occur when compliance with Section 106 of the
National Historic Preservation Act results in a determination of “no effect” or “no adverse effect” (23 CFR 771.135(p)(5)(i)). Therefore, none of the alternatives under consideration “use” this Section 4(f) protected resource.

4.5 SECTION 4(F) CONCLUSION

It is the finding of this analysis of Section 4(f) that no resources eligible for protection under Section 4(f) will be directly or constructively used by the ROPA/Preferred Alternative. Further, none of the Blackwater Alternatives or Blackwater Avoidance Alternatives considered during the SEIS directly or constructively use a Section 4(f) protected resource.

4.6 SECTION 6(F) ANALYSIS

In accordance with Section 6(f) of the 1965 Land and Water Conservation Fund Act (LWCFA), overall evaluations were conducted for properties considered to be qualified for Section 6(f) evaluations. The stated purpose of the LWCFA (16 USC 4601-4 et seq.) is to assist in preserving, developing, and assuring access to outdoor recreation resources by providing funds and assistance to states in planning, acquisition, and development of needed land and water areas and facilities. Section 6(f) of the LWCFA (16 USC 4601-8(t)(3)) states that “No property acquired or developed with assistance under this section shall, without the approval of the Secretary [of the Interior], be converted to other than public outdoor recreation uses.” Approval of such conversions is contingent upon the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

State and local governments often obtain grants through the LWCFA to acquire or make improvements to parks and recreation areas. Section 6(f) of the LWCFA prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the United States Department of the Interior (DOI) – National Park Service (NPS).

4.6.1 RESOURCE IDENTIFICATION AND CONVERSION EVALUATION

Based on coordination with the DOI and the West Virginia Division of Community Development, there are no Section 6(f) properties in the Study Area. Therefore, the ROPA/Preferred Alternative will not require any conversions of Section 6(f) property to transportation use. Further, none of the Blackwater Alternatives or Blackwater Avoidance Alternatives considered during the SEIS requires any conversion of Section 6(f) property in the Study Area.
This document was prepared by the U.S. Department of Transportation, Federal Highway Administration, and the West Virginia Department of Transportation, Division of Highways, with assistance from Michael Baker Jr., Inc., consulting engineers and planners.

5.1 **FEDERAL HIGHWAY ADMINISTRATION**

Mr. Henry Compton, P.E.  
B.S. Degree in Engineering with 17 years experience in highway design and environmental projects with FHWA.

5.2 **WEST VIRGINIA DIVISION OF HIGHWAYS**

Mr. Ben Hark  
Chief, Environmental Section  
M.A. degree with 29 years experience with WVDOT – Division of Highways.

Mr. Norse Angus  
Environmental Analyst  
B.S. degree in Biology with 18 years experience with WVDOT – Division of Highways.

Mr. James M. Colby  
Geologist  
B.S. degree in Geology with 15 years experience with WVDOT – Division of Highways.

Mr. Randolph T. Epperly, Jr., P.E., P.S.  
Chief Engineer - Development  
B.S. degree in Civil Engineering with 31 years experience with WVDOT – Division of Highways.

5.3 **MICHAEL BAKER JR., INC.**

Dr. Willard C. McCartney  
Project Manager  
Ph.D. degree in Biology with 36 years experience with ecological and environmental analyses.

Mr. Laurence D. Gale  
Environmental Manager  
M.S. degree in Marine Biology with 16 years experience in conducting and documenting field studies.

Ms. Wendy Vachet  
Project Manager  
B.S. degree in Public Affairs with 12 years experience in NEPA documentation and environmental assessments including research, technical writing and hazardous waste site/facilities evaluations.

Ms. Alison Rogers  
Environmental Specialist  
M.S. in Biological Sciences with 7 years experience performing stream analyses, wetland delineations, and natural resource surveys.

Ms. Martha Young DoByns  
Environmental Scientist  
M.S. degree in Environmental Science with 10 years experience in environmental assessments including technical writing, wetland delineations and surveys for endangered species.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Education and Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Mary Keith Floyd, AICP</td>
<td>Environmental Scientist</td>
<td>B.A. in Environmental Science with 6 years of experience with land use, social, and economic impact analysis.</td>
</tr>
<tr>
<td>Mr. James Arlester White, Jr.</td>
<td>Air/Noise Planner</td>
<td>M.S. degree in Meteorology with 16 years experience in Traffic Noise Modeling and Noise Abatement measures.</td>
</tr>
<tr>
<td>Mr. SunTemple Helgren</td>
<td>Planner</td>
<td>B.S. degree in Geography with 10 years experience providing graphic, cartographic, GIS, and analytical support.</td>
</tr>
<tr>
<td>Mr. Stephen Hinks</td>
<td>Archaeologist</td>
<td>M.A. degree in Anthropology (Historical Archaeology emphasis) with 20 years experience in conducting historical and archaeological studies.</td>
</tr>
<tr>
<td>Dr. Claudette Jenkins</td>
<td>Senior Environmental Scientist</td>
<td>Ph.D. degree in Ocean, Earth &amp; Atmospheric Sciences with 15 years experience in natural resource investigations.</td>
</tr>
<tr>
<td>Mr. Michael T. Freidank, E.I.T.</td>
<td>Transportation Engineer</td>
<td>B.S. degree in Civil Engineering with 14 years experience in design of highways, roadways, rail transit and general civil engineering.</td>
</tr>
<tr>
<td>Mr. Christopher B. Owen</td>
<td>Architectural Historian</td>
<td>M.S. degree in Historic Preservation with 17 years experience in historic preservation, mitigation planning, cultural resource management, and historical research.</td>
</tr>
<tr>
<td>Mr. James D. Peyton, P.G.</td>
<td>Environmental Geologist</td>
<td>B.A. degree in Geology with 15 years experience in property inspections, samples collection, data analysis, regulatory recommendations and report preparation.</td>
</tr>
<tr>
<td>Mr. J. Kenneth Robinson, III</td>
<td>GIS Coordinator/Systems Analyst</td>
<td>Associates degree in Biology with 12 years experience in mapping and graphics.</td>
</tr>
<tr>
<td>Mr. Joseph Seppi</td>
<td>GIS/Mapping Manager</td>
<td>M.R.P. degree in Regional Planning with 17 years experience with transportation alignment studies, topographic engineering, environmental site restoration, and geophysical investigations.</td>
</tr>
<tr>
<td>Mr. Dave Vachet</td>
<td>GIS/Mapping</td>
<td>B.S. Geography with 15 years experience in public outreach, planning, GIS NEPA analysis, and socio economic analysis.</td>
</tr>
<tr>
<td>Dr. William C. Johnson</td>
<td>Senior Archaeologist</td>
<td>Ph.D. degree in Anthropology with 36 years experience in prehistoric and historic archaeology and cultural resource management in the Northeast and Middle Atlantic.</td>
</tr>
</tbody>
</table>
Mr. Allen Lane, L.S.
Roadway Manager

Attended Virginia Commonwealth University, various technical studies with 35 years experience in all phases of engineering design.

Ms. Lorna Parkins, AICP
Senior Planner

M.S. degree in applied Economics with 16 years experience in socioeconomic impact analysis.

Ms. Carol J. Peterson
Architectural Historian

M.U.R.P. degree in Urban and Regional Planning with 23 years experience in historical research.
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SECTION VI: DISTRIBUTION LIST

Copies of this SFEIS have been distributed to the following agencies and organizations:

6.1 FEDERAL AGENCIES
1. Environmental Protection Agency Office of Federal Activities (A-104) - Washington, D.C.
2. Environmental Protection Agency - Philadelphia, PA
3. Federal Highway Administration - Charleston, WV
5. U.S. Army Corps of Engineers - Pittsburgh, PA
7. U.S. Department of Agriculture, Natural Resource Conservation Service - Elkins, WV

6.2 STATE OF WEST VIRGINIA
1. WV Development Office, Community Development Division - Charleston, WV
2. WV Division of Environmental Protection - Charleston, WV
3. WV Division of Culture & History - Charleston, WV
4. WV Division of Natural Resources Operations Center - Elkins, WV
5. WV Division of Natural Resources - Charleston, WV

6.3 OTHER GOVERNMENT AGENCIES - WEST VIRGINIA
1. Mayor of Davis, WV
2. Mayor of Thomas, WV
3. Tucker County Chamber of Commerce - Buckhannon, WV
4. Tucker County Clerk - Parsons, WV
5. Tucker County Commissioner - Parsons, WV
6. Tucker County Planning Commission - Davis, WV

6.4 UNITED STATES POST OFFICES
1. Post Master - Davis, WV
2. Post Master - Thomas, WV

6.5 LIBRARIES
1. Mountain Top Library – Thomas, WV

6.6 HIGH SCHOOLS
1. Tucker County High School - Hambleton, WV

6.7 INTEREST GROUPS
1. West Virginians for Corridor H - Elkins, WV
2. Sierra Club - Morgantown, WV
3. Corridor H Alternatives Central West Virginia - Kerens, WV
4. Corridor H Alternatives Eastern West Virginia - Wardensville, WV
5. Corridor H Alternatives Northern West Virginia - New Creek, WV

6.8 PLAINTIFFS IN SETTLEMENT AGREEMENT
CORRIDOR H ALTERNATIVES V. SLATER, 96-CV-2622 (TFH)
1. Andrea Ferster, Esq. - Washington, DC
2. Lee Wakefield, Corridor H Alternatives - Wardensville, WV
3. Pamela Moe-Merritt, Corridor H Alternatives, Inc. - Elkins, WV
4. Hugh Rogers, West Virginia Highlands Conservancy - Kerens, WV
5. Norm Steenstra, West Virginia Citizen Action Group - Charleston, WV
6. Donald S. Garvin, Jr., West Virginia Environmental Council - Buckhannon, WV
7. Vivian Stockman, Concerned Citizens Coalition - Spencer, WV
8. Matt Evans, Harrison County Environmental Citizens Organization - Salem, WV
9. Dianne Bady, Ohio Valley Environmental Coalition - Huntington, WV
10. Dave Houser, Downstream Alliance - Moatsville, WV
11. Alison Cochran, Heartwood - Bloomington, IN
12. Margaret Janes, Potomac Headwaters Resource Alliance - Mathias, WV
13. Laura Spadaro, West Virginia Sierra Club - Wheeling, WV
14. Leah Divine, Student Environmental Network - Elkins, WV
15. Sarah Faulconer, N. Shenandoah Valley Audubon Society - Strasburg, VA
17. Suzanne Lewis, Cedar Creek Battlefield Foundation - Middletown, VA

6.9 COMMUNITY ADVISORY GROUP (CAG) MEMBERS
1. Mayor Debbie Snyder - Thomas, WV
2. City Councilman Matt Quattro - Thomas, WV
3. Mayor Joe Drenning - Davis, WV
4. City Councilman Lester Dempsey - Davis, WV
5. Karen Bonner, Tucker County Planning Commission - Davis, WV
6. Murray Dearborn, Tucker County Convention and Visitors Bureau - Davis, WV
7. Sam Eichelberger, Tucker County Development Authority - Thomas, WV
8. Thomas DiBacco, Region VII Planning and Development Council - Thomas, WV
9. Reid Gilbert, Tucker Gateway Initiative - Thomas, WV
10. Chuck Nichols, Friends of the 500th - Davis, WV
11. Dottie Wilson, Alpine Heritage Preservation, Inc.
12. Chuck Merritt - Corridor H Alternatives
13. Mike Ledden - Highlands Trail Foundation
14. Kiena Smith, Canaan Valley Institute, Davis, WV

6.10 SDEIS COMMENTORS
1. John and Kate Bright, Purple Fiddle - Davis, WV
2. Roger Lilly, Blackwater Bikes - Davis, WV
3. Walt Rinaldi - Thomas, WV
4. Jeffrey Petrich, Committee on Resources - Washington, D. C.
In accordance with FHWA guidance, this Supplemental Final Environmental Impact Statement (SFEIS) incorporates by reference the Final Environmental Impact Statement (FEIS) and the subsequent Record of Decision (ROD) for the Appalachian Corridor H Project, both issued in 1996. The Parsons-to-Davis Project Supplemental Draft Environmental Impact Statement (SDEIS) was signed and circulated for public and agency comment in December 2002.

In 2003 and 2004, Preferred Alternative Reports were prepared and circulated for agency concurrence. The Revised Original Preferred Alternative (ROPA) has been identified as the preferred alternative for the Parsons-to-Davis Project. This SFEIS incorporates updated information and analysis since the December 2002 SDEIS, as appropriate. Substantive comments received on the SDEIS, are addressed throughout the document and corresponding responses are provided in Appendix A. Substantive comments received on this SFEIS will be addressed in the Amended Record of Decision.

7.1 NOTICE OF INTENT

On May 2, 2000, the Federal Highway Administration (FHWA) issued a Notice of Intent (NOI) in the Federal Register to advise the public that a Supplemental Environmental Impact Statement (SEIS) would be prepared for the Thomas-Davis portion of the Parsons-to-Davis Project of the proposed Appalachian Corridor H (Corridor H) highway. The only agency to respond to the NOI was the United States Fish and Wildlife Service (USFWS) in a letter dated July 14, 2000. The letter “reflect[ed] the concerns of the [Service] and [were] offered as technical assistance in accordance with the provisions of the Fish and Wildlife Coordination Act”.

On September 27, 2001, FHWA issued a revised NOI to advise the public that the limits of the Study Area for the SEIS were expanded to include the entire Parsons-to-Davis Project. As the NOI states, “expansion of the study area [was] required due to new information obtained during the Endangered Species Act, Section 7 consultation regarding a federally listed, endangered species; the West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus).” The USFWS concurred with the expansion of the Study Area of the Parsons-to-Davis Project in a letter dated December 6, 2001. In response to the revised NOI, USFWS stated, “The Service has no objection to the expansion of the study limits will allow for the consideration of additional alternatives to avoid impacts to the endangered West Virginia northern flying squirrel”.

Copies of the NOI and revised NOI and USFWS letters in response to the NOIs are included in Appendix A.

7.2 AGENCY COORDINATION

The Corridor H Project, in its entirety, including the 1994 Alignments Selection Draft Environmental Impact Statement (ASDEIS), the subsequent Final Environmental Impact Statement (FEIS) in 1996 was conducted following the guidelines and philosophy of the integrated NEPA/404 process as detailed in FHWA Region 3’s agreement with various federal agencies (i.e. USFWS, USEPA and USACE) entitled Integrating NEPA/404 for Transportation Projects (1992) and USDOT’s publication Applying the Section 404 Permit Process to Federal-Aid Highway Projects (1988).

 Appropriately, the Parsons-to-Davis SEIS process (including this SFEIS) continues to follow the integrated NEPA/404 process. As summarized in the 1996 FEIS, “This process integrates requirements of the National Environmental Policy Act as they pertain to highway projects with
those requirements of Section 404 of the Clean Water Act to facilitate highway planning activities while encouraging the avoidance and minimization of encroachments into waters of the U.S., particularly wetlands. Additionally, state agencies were coordinated with and made part of the process. State and federal agencies were involved at all concurrence points of the project.” A complete list of all coordination meetings, subjects and attendees at those meetings can be found in Section VII: Comments and Coordination. All agency and public comments are provided in Appendix A.

As part of the Integrated NEPA/404 Process, a Section 404 permit application was submitted to the USACE. Additionally, the USACE's public review process and comment period was integrated into the public review and public hearing process for the proposed highway project. This information is incorporated by reference; detailed information including recordation of the extensive agency coordination and public involvement process, including all meeting dates and comment letters are provided in the 1996 FEIS.

7.2.1 EARLY COORDINATION / AGENCY SCOPING MEETING – JUNE 14, 2000

A resource agency scoping meeting was conducted on June 14, 2000 at Canaan Valley Resort & Conference Center located at Canaan Valley State Park in Davis, West Virginia. Representatives from 11 appropriate federal and state resource agencies were invited. Of those agencies, five attended. (A list of agency invitees and attendees is provided in Table VII-1). The purpose of the scoping meeting was to:

- Invite resource agency participation early in the project;
- Delineate the project Study Area;
- Identify key issues and level of analysis within the framework of the SEIS analysis;
- Integrate the Section 106 of the National Historic Preservation Act agency coordination and public participation processes;
- Continue coordination of the United States Army Corps of Engineers (USACE) Section 404 Permit process; and,
- Initiate preparation of the Supplemental Draft Environmental Impact Statement (SDEIS).

Information packets (including maps, graphics and tables) were prepared and distributed at the meeting. This information was also presented on large information boards at the meeting. Agencies that could not attend were mailed information packets. All agencies were asked to provide written comments before July 14, 2000. Agencies that responded are noted in Table VII-1 and their response letters are included with correspondence in Appendix A.
Table VII-1
Agency Scoping Meeting - June 14, 2000 - Canaan Valley Resort & Conference Center

<table>
<thead>
<tr>
<th>Agency Invited</th>
<th>Attendees</th>
<th>Formal Comment Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>WV Department of Transportation Division of Highways</td>
<td>Norse Angus, Jim Colby, Mike Wilson, Neal Carte</td>
<td>N/A</td>
</tr>
<tr>
<td>WV Department of Transportation Division of Highways - District 8</td>
<td>Mike Phillips, Tom Staud</td>
<td>N/A</td>
</tr>
<tr>
<td>U.S. Department of Transportation Federal Highway Administration WV Division</td>
<td>Ed Compton, Ron Krofcheck</td>
<td>N/A</td>
</tr>
<tr>
<td>WV Division of Natural Resources</td>
<td>Keith Krantz</td>
<td>July 12, 2000</td>
</tr>
<tr>
<td>WV Division of Environmental Protection Office of Air Quality</td>
<td>DNA</td>
<td>NLR</td>
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<tr>
<td>WV Division of Culture and History State Historic Preservation Officer</td>
<td>Susan Pierce, Mark Holma</td>
<td>NLR</td>
</tr>
<tr>
<td>WV Division of Tourism and Parks</td>
<td>DNA</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers Pittsburgh District</td>
<td>Fred Pozzuto, Bob Neill</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Environmental Protection Agency</td>
<td>Denise Rigney</td>
<td>NLR</td>
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<tr>
<td>U.S. Department of Agriculture Forest Service</td>
<td>Lynn L. Hicks</td>
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<tr>
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<td>U.S. Department of the Interior National Park Service</td>
<td>DNA</td>
<td>Jeffrey K. Towner</td>
</tr>
<tr>
<td>Natural Resource Stewardship and Science</td>
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<td>NLR</td>
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<tr>
<td>Advisory Council on Historic Places</td>
<td>DNA</td>
<td>NLR</td>
</tr>
<tr>
<td>Michael Baker Jr., Inc.</td>
<td>Bill McCartney, Katry Harris, Mary Keith Higginbotham, Wendy L. Zelencik, John Vandergriff, Jennifer Talbott</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: DNA = Did Not Attend, NLR = No LetterReceived, N/A = Not Applicable.

7.2.2 AGENCY STATUS MEETING - DECEMBER 14, 2000
An agency status meeting was held December 14, 2000 at the West Virginia Division of Natural Resources (WVDNR) headquarters in Elkins, West Virginia. The Blackwater Avoidance Alternatives, as they were developed to that point, were presented to the agencies. The Study Area had not yet been expanded to include the entire Parsons-to-Davis Project, and so the western terminus of the alternatives was further east than that of the alternatives presented in this SEIS. The meeting included a review of comments received during the scoping and public involvement process. Agencies were asked to provide comments on this meeting before January 5, 2001. A list of agencies, their attendance and whether an agency responded is provided in Table VII-2. Additional information regarding the public involvement process is provided later in this section. The agency response letters are also included in Appendix A.
**Table VII-2**

<table>
<thead>
<tr>
<th>Agency Invited</th>
<th>Attendees</th>
<th>Formal Comment Received</th>
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</thead>
<tbody>
<tr>
<td>WV Department of Transportation</td>
<td>Norse Angus, Jim Colby</td>
<td>N/A</td>
</tr>
<tr>
<td>Division of Highways</td>
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</tr>
<tr>
<td>WV Department of Transportation</td>
<td>Tom Staud, Mike Moran</td>
<td>N/A</td>
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<tr>
<td>Division of Highways</td>
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<td>U.S. Department of Transportation</td>
<td>Ed Compton, Ron Krofcheck</td>
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<tr>
<td>Federal Highway Administration</td>
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<td>WV Division</td>
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</tr>
<tr>
<td>WV Division of Natural Resources</td>
<td>Keith Krantz</td>
<td>December 20, 2000</td>
</tr>
<tr>
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<td>DNA</td>
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<td>State Historic Preservation Officer</td>
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<td>WV Division of Tourism and Parks</td>
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<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Rich Sobol</td>
<td>NLR</td>
</tr>
<tr>
<td>Pittsburgh District</td>
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<tr>
<td>U.S. Environmental Protection Agency</td>
<td>DNA</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Department of Agriculture</td>
<td>Roy Ryan</td>
<td>NLR</td>
</tr>
<tr>
<td>Forest Service</td>
<td></td>
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<tr>
<td>Monongahela National Forest</td>
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<tr>
<td>U.S. Department of Agriculture</td>
<td>DNA</td>
<td>NLR</td>
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<td>Natural Resource Conservation Service</td>
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<tr>
<td>U.S. Department of the Interior</td>
<td>DNA</td>
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<td>Fish and Wildlife Service</td>
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<td>U.S. Department of the Interior</td>
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<td>Michael Baker Jr., Inc.</td>
<td>Bill McCartney, Wendy Vachet,</td>
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</tr>
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<td></td>
<td>Claudette Jenkins, Katry Harris</td>
<td></td>
</tr>
</tbody>
</table>

Note: DNA = Did Not Attend, NLR = No Letter Received, N/A = Not Applicable

**7.2.3 ADDITIONAL AGENCY MEETING REGARDING WVNFS - AUGUST 9, 2001**

An additional agency meeting was held August 9, 2001 at the WVDNR offices in Elkins, West Virginia to inform agencies of new information regarding the distribution of the endangered West Virginia northern flying squirrel (WVNFS) in the region of the Parsons-to-Davis Project. It was subsequent to this meeting that the Study Area was expanded with the revised NOI issued in October 2001.

Posterboards and handouts at this agency meeting showed the areas where the WVNFS had been captured in the region of the Parsons-to-Davis Project. Displays were presented that showed the
Original Preferred Alternative (OPA) for Corridor H along the Parsons-to-Davis route intersected areas where the endangered squirrel had been found. Additionally, displays showed that the Blackwater Avoidance Alternatives did not intersect any of the capture areas; however, the OPA crossed a capture area to the west of where the Blackwater Avoidance Alternatives begin.

Agency representatives discussed expanding the Parsons-to-Davis Project Study Area so that it could encompass the capture area overlapping the OPA to the west of the Blackwater Avoidance Alternatives as they existed to that point in time. The United States Environmental Protection Agency (USEPA) responded in a letter regarding this agency meeting with concurrence that additional alternatives and alignment shifts should be considered for the Parsons-to-Davis Project (letter dated September 10, 2001 in Appendix A).

The schedule for producing a Biological Assessment (BA) for the WVNFS was also discussed at this meeting. A draft BA has since been produced and submitted to the USFWS in August, 2002 with a final BA produced and submitted in August 2004. Formal consultation on the WVNFS began in October 2005.

A list of agencies, their attendance and whether an agency responded is provided in Table VII-3. The response letter is also included in Appendix A.

### Table VII-3
Additional Agency Meeting Regarding WVNFS - August 9, 2001 - WVDNR Headquarters

<table>
<thead>
<tr>
<th>Agency Invited</th>
<th>Attendees</th>
<th>Formal Comment Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>WV Department of Transportation Division of Highways</td>
<td>Norse Angus, Jim Colby</td>
<td>N/A</td>
</tr>
<tr>
<td>U.S. Department of Transportation Federal Highway Administration WV Division</td>
<td>Ed Compton, Ron Krofcheck</td>
<td>N/A</td>
</tr>
<tr>
<td>WV Division of Natural Resources</td>
<td>Roger Anderson, Keith Krantz</td>
<td>NLR</td>
</tr>
<tr>
<td>WV Bureau of Environment Water Resources Section</td>
<td>DNA</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Environmental Protection Agency</td>
<td>Jessica Greenwood</td>
<td>September 10, 2001</td>
</tr>
<tr>
<td>U.S. Department of the Interior Fish and Wildlife Service</td>
<td>Bill Tolin, John Schmidt, Carol Whetsell</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Department of Agriculture Forest Service Monongahela National Forest</td>
<td>Dan Arling, Liz Schuppert, Richard Cook, Scott Groenier</td>
<td>NLR</td>
</tr>
<tr>
<td>WV Division of Culture and History State Historic Preservation Officer</td>
<td>DNA</td>
<td>NLR</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers Pittsburgh District</td>
<td>DNA</td>
<td>NLR</td>
</tr>
</tbody>
</table>

Note: DNA = Did Not Attend, NLR = No Letter Received, N/A = Not Applicable
7.2.4 USFS MNF COORDINATION – MEMORANDUM OF UNDERSTANDING (MOU)- JUNE 2003

During agency coordination, the USFS MNF entered into a Memorandum of Understanding (MOU) with the FHWA and WVDOH. A copy of the MOU is included in Appendix E. The purpose of the MOU:

“is to document measures that have been or will be employed to facilitate continued coordination among the WVDOH, FHWA and the Monongahela National Forest during the development and implementation of the Appalachian Corridor H highway project. This MOU will outline project specific measures to minimize and mitigate the effects of Appalachian Corridor H to the MNF and to outline review processes for activities that cannot be defined until final design activities have been undertaken (e.g., excess excavation sites, trail relocations, trailhead parking areas, etc.). In addition, the MOU will document actions that have been or will be taken by the respective parties for the redevelopment of the existing abandoned railway corridor located within the Blackwater Canyon area into a bicycle/pedestrian path.”

According to the MOU, WVDOH (with use of approved federal funds) will provide funding to the MNF over a five-year period to be used “exclusively for personnel and equipment costs to investigate, evaluate, interpret, and curate archaeological and historic resources under the stewardship of the MNF, production costs associated with disseminating the results of archaeological and historical fieldwork, and the design, installation, and production of interpretive signing, displays, and other devices for public dissemination.”

The MOU also provides that: “upon successful completion of the environmental process for the Parsons to Davis project, the WVDOH will construct a bicycle/pedestrian trail on the existing railroad grade through the Blackwater Canyon area. Trail design will accommodate any outstanding rights and reservations existing along the trail to be determined by the WVDOH. In addition, access to private properties located along the trail will be accommodated in trail design and construction to the extent that MNF lands are required for that access.” After completion of the path by WVDOH, the MNF agrees to maintain the trail. An agreement to this effect will be executed between WVDOH and MNF upon final acceptance of the project.

The agreement also states that the WVDOH will provide additional funds to MNF “to conduct a boundary survey with monumentation of the existing abandoned railway corridor from Parsons to Thomas.”

Finally, certain terms and conditions regarding construction impacts in the MNF are included in the MOU and shall apply if FHWA selects an alternative located within the MNF for any portion of Corridor H including:

- “The WVDOH will work with the MNF to establish any excess excavation and/or borrow sites or construction access roads within the Forest to minimize environmental impacts. The WVDOH/MNF will agree during the project development projects to areas within the MNF that may be suitable locations for development of these ancillary facilities. The final construction plans will depict these agreed upon areas.

- In addition to any stipulations outlined in the Letter of Consent (the document that allows access to the MNF for construction of the highway), all preliminary construction plans for projects located within or near the forest boundaries will be submitted to MNF for review.
• The WVDOH will work with the MNF to establish appropriate replacement and/or relocation sites for any trails crossed and/or relocated by Corridor H. Additionally, the WVDOH will establish parking areas and trailheads as mutually agreed upon by the MNF.
• The MNF will provide timely comments on all plan submissions and related information.
• The WVDOH will use natural stream design for all high quality streams relocations within the boundaries of the Forest.
• The WVDOH will use Best Management Practices for all erosion control within the Forest. The MNF staff will be invited to attend all erosion control reviews, comment on erosion control plans and participate in field views of the construction projects as needed.”

7.3 SECTION 106 CONSULTATION

Under the Settlement Agreement, the Amended Record of Decision (ROD) for the Parsons-to-Davis Project cannot be issued until the FHWA and West Virginia Division of Highways (WVDOH) have completed all of the studies and consultation required for historic properties under Section 106 of the National Historic Preservation Act (NHPA) (see Appendix B, Settlement Agreement, p. 33). Section 106 determinations were conducted under the terms of the September 1995 Corridor H Programmatic Agreement (Appendix D).

Consistent with the Section 106 regulations, FHWA and WVDOH defined the Area of Potential Effect (APE) for the project as the area within 1,000 feet of each side of any proposed alternative. Two historic resources were identified within the APE: the West Virginia Central and Pittsburgh Railroad Grade (WVC&P Railway); and the Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex).

WVDOH and FHWA consulted with the West Virginia State Historic Preservation Office (WVSHPO), as required by Section 106 of the National Historic Preservation Act, on Corridor H on a section-by-section basis. At the time of the SDEIS, the Parsons-to-Davis section was the final section that required evaluation. In June 2002, a draft Criteria of Effects (COE) Report was circulated. The Draft COE Report found that the Parsons-to-Davis Project would have “no effect” on the Blackwater Industrial Complex Archaeological and Historic District (Blackwater Industrial Complex). The WVSHPO, USFS MNF, and Corridor H Alternatives (a plaintiff in the lawsuit), which were all consulting parties in the Section 106 process, submitted comments on the Draft COE Report as follows:

• In a letter dated October 30, 2002, WVSHPO found that the project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO commented, however, that the evaluation should focus on “the relative change” to the district, rather than the Draft COE Report’s evaluation of the percentage of the district that would experience visual or noise impacts.
• In a letter dated July 26, 2002, the USFS MNF expressed concerns related to Project’s potential visual, auditory, and physical impacts on the Monongahela National Forest. Following the receipt of the USFS MNF comments, in October 2002, the USFS MNF, WVDOH, and FHWA executed a Memorandum of Understanding (MOU) that included measures to mitigate these potential effects. In a letter dated October 24, 2002, the USFS MNF found that the project would have no adverse effect on historic resources within the Monongahela National Forest.
• In a letter dated December 12, 2003, counsel for Corridor H Alternatives disagreed with the Draft COE Report’s finding of “no effect,” and recommended a finding of “adverse effect” based on visual and auditory effects to the historic district and its setting.
In March 2004, the Final COE Report was issued. The Final COE Report revised and updated the Draft COE Report to address the agency and consulting party comments received on the report, and changes to the ROPA that occurred after the publication of the Draft COE Report. The Final COE Report found that the Parsons-to-Davis Project would have “no adverse effect” on the Blackwater Industrial Complex.

On March 23, 2004, the Final COE Report was submitted to the WVSHPO for review and concurrence and to the USFS MNF and Corridor H Alternatives for comments, in accordance with the September 1995 Section 106 Programmatic Agreement for Corridor H (Appendix D). WVDOH and FHWA received comments on the Final COE Report as follows:

- In a letter dated June 23, 2004, the WVSHPO affirmed its earlier opinion that the Parsons-to-Davis Project would have “no adverse effect” on the Blackwater Industrial Complex. The WVSHPO stated that the “historic nature of the site will not adversely change” as a result of the project and that the proposed bridge “will not adversely effect” the interpretation of the physical remnants of the site.
- In a letter dated April 14, 2004, the USFS MNF concurred with the findings of the Final COE Report. The USFS MNF letter stated that the Parsons-to-Davis Project “would have no effect to contributing elements of the District, and recommend[ed] that project activities proceed as planned.”
- Corridor H Alternatives did not submit comments on the Final COE Report.

On May 13, 2004, at the request of Advisory Council on Historic Preservation (ACHP) staff, FHWA transmitted a copy of the Final COE Report to the ACHP, and requested concurrence from the ACHP with the Final COE Report’s “no adverse effect” finding. To date, the ACHP has not responded to the findings of the Final COE Report.

Correspondence related to the Section 106 process is included in Appendix A.

**7.4 SECTION 7 CONSULTATION**

Throughout the development of the environmental documentation for Corridor H, FHWA and WVDOH consulted with the USFWS pursuant to Section 7 of the Endangered Species Act (ESA). The environmental documentation was considered sufficient by the USFWS to address effects on threatened and endangered species at the time the 1996 Corridor H ROD was signed (August 1996). However, in June 2000, FHWA and WVDOH re-initiated informal consultation with the USFWS during agency coordination for the preparation of this SEIS. As a part of the informal consultation process for the Parsons-to-Davis section of Corridor H, live-trapping surveys were conducted for the WVNFS (*Glaucomys sabrinus fuscus*). In the summer of 2001, populations of the WVNFS were found within the Study Area boundary.

Based on ensuing coordination with the USFWS and the FHWA, WVDOH developed Squirrel Avoidance Alignments (SAAs) to attempt to avoid, if practicable, known or potential WVNFS populations. These new alternatives included Alternatives 1D East and West, 1E, and 1G East and West. After further coordination with the USFWS, including an initial submission of a Biological Assessment (BA) for the WVNFS in August of 2002, a second BA was prepared and submitted to the USFWS in August 2004. The August 2004 BA evaluated the direct, indirect, and cumulative effects of the Build Alternatives. Because the ROPA had been identified as the Preferred Alternative after circulation of the SDEIS and coordination with the cities of Thomas and Davis, the BA compared potential impacts of the Preferred Alternative (the ROPA) and the SAAs. The BA concluded that all alternatives would likely adversely affect the WVNFS, but that the ROPA would be the least damaging to the WVNFS. In a letter dated October 14, 2004, the USFWS concurred
with the BA conclusions, thus completing informal ESA Section 7 consultation. This USFWS letter is included in Appendix A.

Formal section 7 consultation was initiated on October 25, 2005 by FHWA and WVDOH. USFWS confirmed the initiation of formal consultation and the completeness of the Initiation Package on November 18, 2005. On March 22, 2006 the USFWS requested an extension for the completion of formal consultation; the request was granted by FHWA on March 30, 2006. A draft BO was issued by USFWS on May 5, 2006. The final BO was issued on November 6, 2006. The BO provides:

- a complete consultation history,
- biological background research and baseline summary,
- confirms the proposed conservation measures,
- terms and conditions associated with the Incidental Take Statement, including Reasonable and Prudent Measures (RPMs) for compliance and
- a conclusion to the formal consultation process with the detailed reinitiation requirements.

The USFWS has stated that, “...FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of *G. s. fuscus* habitat. ....Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO specifically states, “After reviewing the current status of the *G. s. fuscus*, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ Biological Opinion that constructing Corridor H, Parson to Davis, as proposed, is not likely to jeopardize the continued existence of the *G. s. fuscus.*” The issuance of the final BO concludes the formal consultation process.

### 7.5 PREFERRED ALTERNATIVE REPORTS

#### 7.5.1 DECEMBER 2003 PREFERRED ALTERNATIVE REPORT

Consistent with the Integrated NEPA/404 Permit process, the SDEIS was approved and circulated for review and comment in December 2002. The comments received on the SDEIS were taken into consideration in modifying the alternatives studied and in identifying the Preferred Alternative.

Additional engineering was performed on the alternatives carried forward for detailed analysis. Earthwork, cost, and key environmental impacts were re-examined. Additional information regarding surface water resources and further analysis of water quality impacts was evaluated for all alternatives carried forward in the SDEIS.

As a result of this new information and further analysis, changes were made to the OPA presented in the SDEIS. These changes included:

- Development of a connection to Tucker County High School (TCHS);
- Incorporation of the Middle Run shift, originally associated in the SDEIS only with Alternative 2; and
- Incorporation of the Truck Route (a two-lane roadway that would reduce truck traffic in the City of Thomas).

The alternative that incorporates these changes is referred to as the Revised OPA, or ROPA. (In addition, the OPA and Alternative 2 also incorporated the truck route as an integral part of these alignments. After the analysis in the SDEIS and assessment of comments on the SDEIS, it became clear that the Truck Route should no longer be an option for these alternatives that otherwise did not offer a bypass for trucks traveling through downtown Thomas.) The individual elements of the ROPA were examined in the SDEIS as elements of the OPA and/or Alternative 2. However, there
was no single alternative in the SDEIS that incorporated all of these elements. Thus, an updated comparison of alternatives was conducted to select the Preferred Alternative.

The alternatives were compared based upon environmental impacts, including a finer analyses of streams and wetlands than those presented in the SDEIS; ability to meet purpose and need; and cost. Section 2.5.1 and individual sections throughout Section III: Existing Environment and Environmental Consequences of this SFEIS provide details on the updated comparison of alternatives.

After consideration of engineering and environmental constraints, and public and agency comments, the ROPA was identified as the Preferred Alternative for the Parsons-to-Davis Project based on the following summarized information:

- It best achieves the purpose and need for the project;
- It is similar to the other alternatives in terms of its overall environmental impacts;
- It is $16 million to $70 million less expensive than any other alternative; and, in particular, is at least $46 million less expensive than any of the Blackwater Avoidance Alternatives; and
- It is consistent with applicable regulatory requirements, including Section 4(f) of the Department of Transportation Act of 1966.

A Preferred Alternative Report was assembled to present these new findings to resource agencies and for coordination with the cities of Thomas and Davis (see Section 7.10 Additional Coordination with City Councils). The purpose of the Preferred Alternative Report was to discuss the information and the process that resulted in the identification of the ROPA as the Preferred Alternative for the Parsons-to-Davis Project, and to present the remaining steps required at the time (after approval of the SDEIS) to complete the environmental review process for the project. A summary of agency response letters to the report is provided in Table VII-4 below.

WVDNR, WVDEP, WVDCH and the USACE did not submit comments letters on the December 2003 Preferred Alternative Report. All agency letters received are included in Appendix A.
Table VII-4
Agency Responses to Comments on the Parsons-to-Davis January 2004 Preferred Alternative Report*

<table>
<thead>
<tr>
<th>Agency</th>
<th>Topic of Concern</th>
<th>Comment</th>
<th>Response</th>
</tr>
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</table>
| USEPA, Region III letter dated February 12, 2004 | Reconsideration of the ROPA as the Preferred Alternative due to environmental impacts. | 1. USEPA's February 12, 2004 comment letter outlines specific concerns related to the identification of the ROPA as the Preferred Alternative by stating that “…the ROPA, when compared to the other feasible alternatives examined in the SDEIS, has considerably more environmental impacts and suggests that WVDOH reconsider identifying the ROPA as the Preferred Alternative.” USEPA further found the ROPA to be “the most environmentally impacting alternative.”
2. USEPA also expresses concerns that the “…Preferred Alternative Report also lacks any comparisons addressing how and to what degree the West Virginia Northern Flying Squirrel habitat is impacted by various alternatives.”
3. “We understand that the wetland impacts for the OPA have already been permitted and mitigated for, and that the WVDOH is not required to select for implementation the alternative identified in the EIS as being “environmentally preferable.” However, the environmentally preferred alternative does need to be identified in both the Final SFEIS and the Record of Decision, whether or not that is the alternative which DOH actually chooses to pursue.” | 1. Following a comprehensive evaluation of alternatives that included considering comments received from resource agencies and the public, the ROPA was selected as the preferred alternative. As detailed in the Preferred Alternative Report and the Amended Preferred alternative Report, the ROPA best meets the purpose and need for the project, is similar to the other alternatives in terms of its overall environmental impacts, where its impacts are greater, the impacts will be mitigated according to the terms and conditions of Volume III of the 1996 FEIS and the current Section 404 permit. The ROPA/Preferred Alternative also has the least direct and indirect potential impact on the WVNFS. With respect to wetland and stream impacts specifically, the Blackwater Avoidance Alternatives generally result in lower total impacts than the Blackwater Alternatives. However, the ROPA’s impacts are generally small impacts on small, low quality emergent systems and, as noted by EPA’s comment, these impacts have already been permitted and mitigated. On balance, the wetland and stream impacts did not outweigh the other factors that favored selecting the ROPA as the preferred alternative, including its cost, ability to best meet purpose and need and its impact on the WVNFS. Following additional analysis by WVDOT of wetland and stream impacts, in a letter dated February 7, 2005, USEPA concurred with the selection of the ROPA as the preferred alternative.
2. Detailed impact analysis associated with WVNFS habitat has been conducted as part of the Section 7 consultation process. These impacts are fully documented in the Biological Assessment (BA) and in Section III of the Parsons-to-Davis SFEIS. Based upon this additional analysis, WVDOH concluded that of the alternatives under consideration, the ROPA is likely to have less overall direct and indirect effects on the WVNFS than those other alternatives because (i) the ROPA requires the
removal of the fewest number of acres of either suitable or highly suitable habitat, (ii) the ROPA’s removal of highly suitable habitat primarily occurs on the highly suitable habitat’s edge and minimizes removal of core highly suitable habitat, and (iii) the ROPA has less of a barrier effect and better preserves landscape permeability than the other alternatives because the magnitude of cut/fill slopes s less. WVDOH presented this analysis to USFWS and in a letter dated October 14, 2004 USFWS agreed that as compared the other alternatives, selection of the ROPA would minimize impacts to WVNFS habitat.

3. Comment noted.

- **USFWS letter dated February 4, 2004**

Potential impacts associated with the WVNFS

USFWS indicated in its comments on the DEIS that the Preferred Alternative Report does not provide the information necessary to allow for a comparison of alternatives in regard to impacts to the WVNFS. USFWS requests that “these impacts should be accurately compared and evaluated so that they can be fully considered in the NEPA evaluation/Alternative Selection process.” For this reason, USFWS indicated that it “can not concur” with the selection of a preferred alternative until WVDOH “conducts an accurate evaluation of the alternative’s impacts on the WVNFS and incorporates that information into the NEPA evaluation /Preferred Alternative Report.

Following the end of the comment period on the DEIS, WVDOH circulated a Preferred Alternative Report, which identified the ROPA as the preferred alternative. The Preferred Alternative Report was sent to the USFWS and other agencies for comment in December 2003. In their comments on that report, USFWS stated that the report did not provide an adequate basis to allow the agency to compare the impacts of the alternatives on the WVNFS and requested that WVDOT perform additional analysis to support a comparison.

As a result of the USEPA and USFWS comments on the December 2003 Preferred Alternative Report, additional studies were conducted relative to Section 7 Consultation on the WVNFS. The differences among the alternatives in their impacts on the WVNFS and its habitat were reevaluated. These impact differences and updated information related to WVNFS highly suitable and suitable habitat were presented to the USFWS in an August [OR OCTOBER] 2004 Biological Assessment (BA). This analysis was also documented in the November 2004 Preferred Alternative Report. The USFWS concurred with the findings in the October 2004 revised BA and found that WVDOT’s additional WVNFS impacts analysis provided an adequate basis for USFWS to compare impacts of the alternatives on the WVNFS. USFWS concurred that of the alternatives considered, the ROPA would have the least impact on the WVNFS. Formal Section 7
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<th>Agency</th>
<th>Topic of Concern</th>
<th>Comment</th>
<th>Response</th>
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<tbody>
<tr>
<td>USDA, Forest Service, Monongahela National Forest (MNF)</td>
<td>Potential Impacts to MPA 8.0</td>
<td>The MNF is concerned that the roadway footprint “may impact a few acres of two areas with Management Prescription 8.0,” specifically (i) the area around the Big Run Bog National Landmark and Botanical Area (but outside of the watershed of the bog) and (ii) the Olsen Tower Rotation Study Area used by the Fernow Experimental Forest. MNF requests that WVDOH more closely review available electronic maps regarding these potential issues.</td>
<td>GIS information regarding MNF MPA boundaries within the Study Area was obtained from the MNF as part of the agency coordination process early in the development of the Parsons-to-Davis SEIS (approximately 2001). This GIS information has been consistently used in both the Kerens-to-Davis SEIS (Battlefield) as well as the Parsons-to-Davis SEIS, including this SFEIS. Updated GIS information was received in September 2006 to reflect changes in the 2006 MNF Plan update. The new information was used to evaluate impacts to the various MNF MPA’s. Available mapping shows that the mainline of the ROPA/Preferred Alternative is located outside of the watershed of BRB (MPA 8.0). In addition, the Fernow Experimental Forest, an MPA 8 area, will not be impacted by the ROPA or any other Build Alternative. Per the 2000 Settlement Agreement and 2003 MOU, the WVDOH will continue coordination with the MNF regarding the development of Canyon Rim Road and pertinent trail systems within the Study Area. While the mainline of Corridor H falls outside of the BRB watershed, an upgrade of Canyon Rim Road may impact a small portion of the BRB watershed.</td>
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<tr>
<td>Invasive, non-native plant species</td>
<td>“The Forest [Service] has a concern for the likely spread and introduction of non-native invasive species because of the road construction. The document reviewed did not include mitigation measures. The Forest [Service] is interested in the seed mixtures to be used on the highway and associated disturbed areas, and recommends that aggressive non-native species not be used unless absolutely necessary to control erosion.”</td>
<td>WVDOH acknowledges the concerns of the MNF related to non-native invasive plant species. Consistent with agency coordination measures outlined in the 1996 FEIS Volume III and the 2003 MOU between WVDOH, FHWA and MNF, WVDOH will work in consultation with the MNF to address these concerns as the project proceeds through final design and ultimately, construction.</td>
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<td>Hydrology</td>
<td>1. The MNF is concerned about sedimentation effects on streams within and adjacent to MNF lands, specifically, Mill Run and Slip Hill Mill Run which function as native trout</td>
<td>1. Slip Hill Mill Run is a native brook trout stream, and the Build Alternatives will cross headwater tributaries of this stream. While there have been no reproductive studies conducted on the brook trout populations within Slip Hill Mill Run or Mill Run,</td>
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<td>Agency</td>
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<td>streams and which have existing fine sediment levels above the “threshold” level of impairment of trout reproduction. These concerns are related to both the construction of the roadway itself as well as potential waste/borrow areas within the watersheds of both Mill Run and Slip Hill Mill Run.</td>
<td>communications with USFS MNF and WVDNR fisheries biologists stated that the results of electrofishing surveys conducted on these streams in the early 1990’s provided enough data to conclude that the native brook trout populations within Slip Hill Mill Run and Mill Run are hardy and robust reproducing populations. To address specific concerns related to sediment and its potential effects on the native brook trout in Slip Hill Mill Run, the WVDOH conducted additional stream surveys to determine the baseline physical and biological condition of Slip Hill Mill Run. The results of the study have shown that Slip Hill Mill Run is a stable stream that is capable of efficiently transporting a large sediment supply, and that the methodology to assess fine sediment within potential brook trout spawning habitat yields highly variable results. The study also identified two barriers to fish passage that are located downstream of the Build Alternatives that likely prohibit brook trout from utilizing the habitat within the area of potential stream impact.</td>
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<td>2. The MNF further commented that mitigation measures proposed for the highway and WVDNR comments regarding “wasting areas” need to be closely reviewed and monitoring of the effects of the new highway in Mill Run should be considered.</td>
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<td>2. The USFWS inquired if potential excess excavation areas were to be located within the Slip Hill Mill Run watershed, and if mitigation plans had been developed to include the monitoring of sediment within Slip Hill Mill Run. As a result of Section 7 consultation for the WVNFS, WVDOH has conducted additional preliminary engineering on the ROPA to reduce the impact of the Parsons-to-Davis Project on the WVNFS habitat. As a result of this additional engineering, the amount of material placed within the Slip Hill Mill Run watershed was reduced by 48 percent, and the total amount of excavation was reduced to an amount that could be placed within the proposed construction limits of the highway. In addition, Volume III of the 1996 Appalachian Corridor H FEIS and the MOU among the FHWA, WVDOH, and the USFS provides for water chemistry and turbidity monitoring prior to, during, and post construction, and provides for agency comment during all stages of final engineering design of the highway.</td>
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<tr>
<td>Soils</td>
<td>1. MNF has provided detailed information</td>
<td>1. WVDOH acknowledges the concerns of the MNF related to soils</td>
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<td>Agency</td>
<td>Topic of Concern</td>
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<td>related to the sensitivity of highly erodible soils on Backbone Mountain and the underlying geology of the Mauch Chunk formation, stating that “Areas underlain by Mauch Chunk geology should be considered for special mitigation in order to address highly weatherable bedrock and instability of the bedrock once exposed to water and air. No mitigation measures were mentioned in the document. Also, . . . appropriate mitigation, in our estimation, consist not of choosing revegetative option that accounts for the potential stabilization of cut banks; rather, appropriate mitigation consists of the design of the cut and fill slopes that will account for instability, erosion, and water drainage off these cuts and fills. We should like to see this concern specifically addressed when crossing the Mauch Chunk geologic formation. We would also like the opportunity to review and comment on sedimentation designs and plans…”</td>
<td>and sedimentation issues and associated mitigation in connection with highway construction. Additional information will be required as the project moves into final design (i.e. geotechnical investigations) and further consultation with the MNF will be beneficial to project engineers and construction contractors. Consistent with agency coordination measures outlined in the 1996 FEIS Volume III and the 2003 WVDOH, FHWA and MNF MOU, WVDOH will work in consultation with the MNF to address these concerns as the project proceeds through final design and ultimately, construction.</td>
<td>2. Comment noted.</td>
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*WVDOH requested that USEPA and USFWS concur in WVDOH’s selection of the ROPA as the Preferred Alternative. USEPA and USFWS responded to this request and provided comments during the Preferred Alternative Report comment period. WVDOH provided detailed responses to these comments in its Amended Preferred Alternative Report, issued in November 2004.*
7.5.2 NOVEMBER 2004 AMENDED PREFERRED ALTERNATIVE REPORT

Following receipt of USFWS concurrence on the August 2004 BA, WVDOH circulated an Amended Preferred Alternative Report (November 2004) to resource agencies that are parties to the West Virginia Department of Transportation’s (WVDOT’s) July 1992 Consensus on Integrating NEPA/Section 404 Process for Transportation Projects. The purpose of the Amended Preferred Alternative Report was to ‘respond specifically to the comments submitted by USEPA and USFWS on the 2003 Preferred Alternative Report’ particularly those associated with potential impacts to the WVNFS and surface water impacts. Based on the August 2004 BA and USFWS’ concurrence regarding impacts, the Amended Preferred Alternative Report re-affirmed WVDOT’s decision to identify the ROPA as its Preferred Alternative for the Parsons-to-Davis Project. WVDOT found that the ROPA:

After exhaustive alternative development, environmental and engineering analysis and continuous coordination with the resource agencies, the public, and the CAG, the ROPA has been identified as the Preferred Alternative for the Parsons-to-Davis Project (Exhibit II-5). As a result of the refined engineering performed on the ROPA during Section 7 consultation, the ROPA/Preferred Alternative’s current length is 10.47 miles (versus 9.99 miles as reported in the Preferred Alternative Reports), its footprint is currently estimated at 396 acres (versus 375 reported in the Preferred Alternative Reports and its current preliminary costs are approximately $101 million (versus $147 million reported in the Preferred Alternative report). The reduction in cost is the result of the 10 million cubic yard reduction in excavation. The additional avoidance and minimization measures associated with the continued development of the ROPA/Preferred Alternative after the Preferred Alternative Reports does not significantly change the updated alternatives analysis detailed in those reports. Alternative 2 and all of the Blackwater Avoidance Alternatives carried forward for detailed analysis would still negatively impact the Slip Hill Mill Run watershed and would require complex (and expensive) structures to negotiate the western slope of Backbone Mountain. Further, the Blackwater Avoidance Alternatives will continue to be substantially more expensive than the ROPA/Preferred Alternative as they are ultimately longer (the current approximate cost per mile of roadway for Corridor H average approximately $11M per mile) and they require more complex structures (bridges and over-sized culverts) which also add to project costs.

Of all of the alternatives considered during the SEIS process, the ROPA:

- Best achieves the purpose and need for the project;
- Is similar to the other alternatives in terms of its overall environmental impacts;
- Is currently $41 million to $117 million less expensive than any other alternative; and, in particular, is at least $117 million less expensive than any of the Blackwater Avoidance Alternatives
- Of the alternatives analyzed, it is likely to have the least overall direct and indirect effects on the WVNFS;
- Minimizes impacts to both Big Run Bog and Slip Hill Mill Run watersheds; and
- Has received support from the public via the Town of Davis, and the CAG.

While the ROPA has been identified at this stage of the SEIS process as the Preferred Alternative, its identification does not preclude WVDOT from changing the Preferred Alternative’s identification at a later stage based on comments on the SFEIS or other new information or changed circumstances (Settlement Agreement, III(C)(b)(2)).

Concurrence on the ROPA as the preferred alternative has been received from USFWS and USEPA. In its comment letter, USEPA concurred with the selection of the ROPA as the Preferred Alternative. WVDNR’s comment letter did not support nor did it oppose the identification of the ROPA as the
Preferred Alternative. WVDNR continues to cite concerns about the environmental impacts of the ROPA while acknowledging WVDOH’s need to acknowledge cost considerations and savings. USFWS’s letter stated that it did not oppose the ROPA as the Preferred Alternative and acknowledged that the ROPA has the least amount of impact to suitable and highly suitable WVNFS habitat. The USFWS letter encouraged moving into formal Section 7 consultation on the WVNFS. A summary of agency response letters to the report is provided in Table VII-5 below.

USDA MNF, WVDCH, USACE, and WVDEP did not submit comment letters regarding the Amended Preferred Alternative Report.
Table VII-5
Agency Responses to Comments on the Parsons-to-Davis November 2004 Amended Preferred Alternative Report

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<th>Agency</th>
<th>Topic of Concern</th>
<th>Comment</th>
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<tr>
<td>• WVDNR, Wildlife Resources Section letter dated January 19, 2005</td>
<td>Secondary impacts associated with waste and borrow requirements/estimates</td>
<td>WVDNR reiterates its concerns from its SDEIS comments letter (WVDNR, Wildlife Resources Section letter dated April 9, 2003) related to waste/borrow requirements/estimates and the secondary impacts associated with these areas, based upon the inaccurate estimates that were provided for the Elkins to Kerens section of Corridor H. WVDNR is concerned that the waste/borrow estimates may not be correct, and suggests that all wasting and borrowing areas be identified (e.g., not only those affecting WVNFS habitat).</td>
<td>WVDOH performed additional and more detailed engineering design on the preferred alternative to reduce/address the excess waste material issue. The additional engineering determined that excess waste material generated as the result of required highway cuts could be placed within the proposed highway construction limits. This adjustment eliminates the need to place large quantities of excess material into waste areas located outside of the highway construction limits. If waste/borrow sites located outside of the construction limits of the highway are required as part of final design engineering and/or construction, WVDOH will consult with the USFWS and other resource agencies to identify wasting and borrowing areas that minimize potential direct and secondary impacts.</td>
</tr>
<tr>
<td></td>
<td>Perennial Stream Crossings</td>
<td>“DOH should be well aware of our concerns relative to culverts and their impacts to wildlife. We strongly encourage DOH to utilize oversized and embedded culverts whenever such installation is feasible and appropriate.”</td>
<td>WVDOH is aware of WVNDR’s concerns related to culverts associated with perennial stream crossings. Suggestions related to culvert design are noted.</td>
</tr>
<tr>
<td></td>
<td>Concurrence on Preferred Alternative Selection</td>
<td>WVDNR “does not oppose, but cannot agree with the selection of the ROPA alternative.”</td>
<td>Position on concurrence noted. WVDOT will continue to coordinate with WVDNR to seek agency concurrence on the selection of the ROPA as the preferred alternative.</td>
</tr>
<tr>
<td>• USEPA, Region III letter dated February 7, 2005</td>
<td>Concurrence with the Preferred Alternative</td>
<td>USEPA concurs with the selection of the ROPA as the Preferred Alternative for the Parsons-to-Davis Project, as requested.</td>
<td>Concurrence noted.</td>
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<td>Agency</td>
<td>Topic of Concern</td>
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<tr>
<td>USFWS letter dated March 18, 2005</td>
<td>Concurrence with the Preferred Alternative</td>
<td>USFWS does not object to the selection of the ROPA as the Preferred Alternative for the Parsons-to-Davis Project, as requested. USFWS reiterates that Formal Section 7 Consultation under the ESA is required for FHWA/WVDOH to proceed with construction of the Preferred Alternative.</td>
<td>Position on concurrence noted. WVDOH and FHWA entered into Formal Section 7 consultation regarding the WVNFS in October 2004. Formal consultation was concluded on November 6, 2006, with the issuance of a Biological Opinion by the USFWS for the project. The USFWS stated that “…FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of <em>G. s. fuscus</em> habitat. …Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO specifically states, “After reviewing the current status of the <em>G. s. fuscus</em>, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ Biological Opinion that constructing Corridor H, Parson to Davis, as proposed, is not likely to jeopardize the continued existence of the <em>G. s. fuscus</em>. ”</td>
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7.6 PUBLIC INVOLVEMENT

7.6.1 PUBLIC INFORMATION WORKSHOP - JUNE 14, 2000

A public information workshop was conducted following the agency scoping meeting on June 14, 2000 at Canaan Valley State Park in Davis, WV. The purpose of the workshop was to share the information provided at the agency meeting and to solicit public comment regarding the project. All written comments were requested by July 14, 2000.

Approximately 34 comment letters were received from the public during the comment period. An overview of the comments received and the WVDOH responses is provided in Table VII-6. The comment letters are also provided in Appendix A.

Table VII-6
General Public Comments and WVDOH Responses - June 14, 2000 Public Meeting

<table>
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<tr>
<th>Comment</th>
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<tr>
<td>Re-examine traffic demands, conduct revised cost benefit analysis for this study and Corridor H project as a whole.</td>
<td>Both traffic and socio-economic concerns have been evaluated in this SEIS. Detailed information regarding traffic conditions and related socio-economic factors is provided in Section I. A detailed analysis of socio-economic conditions and impacts is discussed in Section III of this SFEIS.</td>
</tr>
<tr>
<td>Consider a reasonable range of alternatives, particularly the No-build and IRA.</td>
<td>A range of reasonable alternatives was considered, including a No-Build Alternative. The consistency of this analysis with NEPA and the Settlement Agreement is detailed in Section II of this SFEIS.</td>
</tr>
<tr>
<td>Build the OPA.</td>
<td>All comments will be considered in the selection of the preferred alternative. Section II of this SFEIS details the alternative screening and selection process.</td>
</tr>
<tr>
<td>Choose the IRA.</td>
<td>The IRA does not fulfill the project's purpose and need, as described in Section I. Section II of this SFEIS presents the selection of alternatives carried forward for detailed analysis, which does not include the IRA.</td>
</tr>
<tr>
<td>Avoid Big Run Bog.</td>
<td>The OPA was shifted in 1998 to avoid the watershed of the Big Run Bog. All other Build Alternatives avoid impacts to the Big Run Bog as well.</td>
</tr>
<tr>
<td>Hydrology concerns, particularly for wetlands, streams, Clean Water Act requirements and flooding issues in and beyond the study area.</td>
<td>An analysis of the study area’s mountainous terrain and abundant water resources is an important component of the Parsons-to-Davis SFEIS. Extensive descriptions of these resources and potential impacts are discussed in detail in Section III of this SFEIS.</td>
</tr>
<tr>
<td>Concern for impacts to the Monongahela National Forest (MNF), particularly Management Prescription Area (MPA) 6.1, and compensation for impacts to publicly owned land.</td>
<td>Coordination with the USFS MNF has been on-going since the agency scoping meeting in June 2000. Discussion of the MNF and its resources and potential impacts is provided in Section III of this SFEIS. The USFS MNF, WVDOH and FHWA entered into a Memorandum of Agreement (MOU) to address future impacts and mitigation within the forest. Agency coordination letters are provided in Appendix A.</td>
</tr>
<tr>
<td>Form letter (5 commenter's) regarding the use of public lands to recognize private property rights.</td>
<td>These comments are noted. The vast majority of the Study Area is privately owned by Western Pocahontas Properties.</td>
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<td>Request to minimize overall construction “footprint” of roadway.</td>
<td>Potential impacts associated with the overall “footprint” of each alternative considered has been included as part of the alternative screening process detailed in Section II of this SFEIS. The ROPA/Preferred Alternative was refined to further reduce potential waste material and attempts to further minimize the footprint of the roadway.</td>
</tr>
<tr>
<td>Concerns about noise and visual quality impacts.</td>
<td>Section III of the SFEIS includes consideration of impacts to both viewers of and viewers from the proposed highway and a detailed Traffic Noise Impact analysis.</td>
</tr>
<tr>
<td>Concerns about excess waste, waste sites, balancing of cut and fill material.</td>
<td>Potential impacts associated with excess excavation of each alternative considered have been included as part of the alternative screening process detailed in Section II of this SFEIS. The ROPA/Preferred Alternative was refined to further reduce potential waste material.</td>
</tr>
<tr>
<td>Acid drainage potential and impacts and erodible soils.</td>
<td>The potential for acid drainage resulting from mining activities and acid producing soils is discussed in Section III of this SFEIS. WVDOH will continue to coordinate with the MNF regarding erodible soils and other surficial geology.</td>
</tr>
<tr>
<td>Impacts to wildlife, particularly Rare, Threatened and Endangered species.</td>
<td>Detailed discussions of wildlife resources are provided in Section III of this SFEIS and in the Biological Assessment reports for the Indiana bat and the West Virginia Northern Flying Squirrel. Coordination with WVDNR and USFWS has been on going in regard to this and other issues. USFWS has concurred that the project will not adversely effect the following species: Indiana bat, Running buffalo clover, Virginia big-eared bat and the Cheat Mountain salamander. The BO for the WVNFS states, “After reviewing the current status of the G. s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ Biological Opinion that constructing Corridor H, Parson to Davis, as proposed, is not likely to jeopardize the continued existence of the G. s. fuscus.” The issuance of the final BO concludes the formal consultation process. Agency coordination letters are provided in Appendix A.</td>
</tr>
<tr>
<td>Requests were made to complete the study as soon as possible.</td>
<td>The WVDOH and FHWA are doing everything possible to expedite the study process.</td>
</tr>
<tr>
<td>Concern for changes to social dynamics.</td>
<td>Detailed analysis of the potential impacts to various aspects of the socio-economic environment are provided in Section III of this SFEIS.</td>
</tr>
<tr>
<td>Concerns regarding the public involvement process, requests for additional information, too many abbreviations in materials, etc.</td>
<td>FHWA and WVDOT have provided information upon request throughout the life of the Corridor H project and will continue to do so throughout the Parsons-to-Davis SEIS process. A glossary of terms and acronyms is provided in the beginning of this SFEIS. The public involvement process for NEPA, Section 106 and Section 404 activities was initiated in June 2000 and will continue until the study is complete.</td>
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</table>
Another public information workshop was held on January 18, 2001 at the Blackwater Lodge in Davis, WV. Participants were introduced to the Blackwater Avoidance Alternatives as they were developed to that point. The Study Area had not yet been expanded to include the entire Parsons-to-Davis Project, and so the western terminus of the alignments were further east than that of the alignments presented in this SEIS analysis.

Approximately 45 comments were received from the public during the comment period of January 18, 2001 to February 13, 2001. A summary of the general comments received and the WVDOH responses to them is presented in Table VII-7. The comment letters are also provided in Appendix A.

**Table VII-7**

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<td>Several commentors either supported or opposed certain alternatives. Support was expressed for Alternative A (formerly named “Dark Blue”) due to natural environment impacts of other options and concern for noise impacts close to Thomas. Support was expressed for alignments passing close to Thomas (Alternatives G and H pass the closest to Thomas). One commentor expressed support for the IRA. The majority of commentors (24) supported the Original Preferred Alternative (OPA or “Blackwater Alternative”), primarily because it is the most cost effective and direct.</td>
<td>All comments will be considered in the selection of the preferred alternative. Section II of this SFEIS details the alternative screening and selection process.</td>
</tr>
<tr>
<td>Concerns about increasing noise near Cortland Acres.</td>
<td>Cortland Acres nursing home was included as a noise sensitive receptor in the Traffic Noise Analysis <em>(Section 3.5.5)</em>. None of the alternatives exceed Noise Abatement Criteria (NAC) or West Virginia substantial increase impact at this location. In the design year, the greatest noise level would occur in the No-Build Alternative, and all of the Build Alternatives would either affect no change or would result in a decrease in the projected noise level.</td>
</tr>
<tr>
<td>Concerns for natural environment (wetlands, streams and wildlife).</td>
<td>Section III of this SFEIS provides details on all NEPA required elements of study. Coordination with the USFWS, WVDNR, USACE and USEPA has been on-going throughout the study process. All agency coordination letters are provided in Appendix A.</td>
</tr>
<tr>
<td>Request that aesthetics be considered with passage near landfill.</td>
<td>Visual impacts (both to viewers of and to viewers from the highway) are discussed in <em>(Section 3.2.8)</em>. Only the East options of the Alternatives 1D and 1G will present travelers a view of the Tucker County Landfill.</td>
</tr>
<tr>
<td>Requests were made to complete the study as soon as possible.</td>
<td>The WVDOH and FHWA are doing everything possible to expedite the study process.</td>
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7.6.3 PUBLIC INFORMATION WORKSHOP - OCTOBER 23, 2001

A third public information workshop was held at Canaan Valley State Park on October 23, 2001 to share information and gather comments on the avoidance alignments developed in response to the new information on the habitat of the WVNFS. Both alternatives (represented by Alternative numbers 1 and 2 in the text of this SEIS) provide a shift to the north in the western Study Area to avoid WVNFS habitat.

An additional purpose of the meeting was to discuss views on historic district issues. The WVDOH had recently received determination from the Keeper of the National Register of Historic Places (NRHP) declaring Coketon Study Area and the Blackwater Industrial Complex Archaeological and Historic District eligible for the National Register. Therefore, the WVDOH was also studying the potential impacts of the project on the Coketon area (correspondence with the Keeper is provided in Appendix A).

In response to the information revealed at this meeting, two comments were received during the public comment period lasting until December 7, 2001. One commenter expressed support for the OPA, and the other supported a modified OPA that would avoid WVNFS habitat and emphasized that preservation of the Coketon area should be a low priority.

7.7 SDEIS NOTICE OF AVAILABILITY AND COMMENT PERIOD

In December 2002, the SDEIS was approved and circulated for review and comment. The FHWA and WVDOT initially established a comment period ending on February 21, 2003. However, as requested by Corridor H Alternatives (a plaintiff in the Corridor H lawsuit), the comment period was later extended to April 22, 2003 (letter provided in Appendix A). Formal comments were taken via a certified court reporter (at the public hearing, see below), in written form, and on the project website. Comments from the comment period and corresponding WVDOH responses are provided in Appendix A.

7.7.1 PUBLIC HEARING - FEBRUARY 6, 2003

The public hearing for presenting the findings in the SDEIS was held at the Blackwater Lodge in Davis, West Virginia on Thursday, February 6, 2003. Information was presented in the form of display poster boards, handout packets, and available copies of the SDEIS itself. Additionally, project personnel were available to provide information and answer questions. Formal comments were taken via a certified court reporter, and attendees were also encouraged to provide comments in written form or on the project website.

7.7.2 SDEIS COMMENTS

Three agencies provided comments letters relative to the SDEIS: USEPA Region 3, WVDNR and DOI (Table VII-8). These comments and WVDOH’s responses are provided in Appendix A. Generally, the agency comments continued to focus on emphasizing concern for the WVNFS and waste/borrow and excess excavation issues regarding the project.
### Table VII-8
Agency Responses to Comments on the December 2002 SDEIS

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<th>Agency</th>
<th>Topic of Concern</th>
<th>Comment</th>
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<tr>
<td>USEPA, Region III letter dated April 21, 2003</td>
<td>Potential impacts associated with the West Virginia Northern Flying Squirrel (WVNFS)</td>
<td>1. “EPA is concerned with the potential impacts of the proposed project to the endangered West Virginia Northern Flying Squirrel. Potential habitat exists within the entire study area. We encourage the continued coordination already underway with the U.S. Fish and Wildlife Service to identify the most appropriate alternative to limit the impact to such an important species as well as valued resources in the area.”</td>
<td>1. WVDOH and FHWA have been in consultation with DOI, USFWS regarding potential impacts to the WVNFS. Informal Section 7 consultation was initiated during agency scoping in 2001 and concluded with USFWS concurrence on the revised Biological Assessment (BA) in 2004. WVDOH and FHWA entered into Formal Section 7 consultation regarding the WVNFS in October 2005. In November 2006, USFWS issued a final Biological Opinion (BO) on the WVNFS. In the BO, the USFWS has stated that, the BO states, “Most significantly, the FHWA and WVDOH have selected the least damaging practicable project construction alternative in regards to direct removal of G. s. fuscus habitat.” “…FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to direct removal of G. s. fuscus habitat. …Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.”</td>
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<tr>
<td>WVDNR, Wildlife Resources Section letter dated April 9, 2003</td>
<td></td>
<td>2. The WVDNR expressed concerns relative to potential impacts associated with the WVNFS. WVDNR indicated that “[m]inimizing the road footprint and its attendant cut/fill slopes and wasting areas will be critical to minimizing the impact on these endangered squirrels.”</td>
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<td>3. To further reduce potential habitat impacts by commercial development along Corridor H, WVDNR suggested that the roadway alignment “closely follow” SR 219.</td>
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2. As part of the consultation related to the WVNFS throughout 2005, additional engineering was performed on the ROPA to further reduce overall environmental impacts.
and to continue to reduce impacts to suitable and highly suitable habitat for the WVNFS. The location of the ROPA along Backbone Mountain (western portion of the Study Area) was reevaluated to determine if excess excavation could be further reduced though additional engineering analysis. The additional analysis was successful in adjusting the excess excavation. The amount of excess excavation that will be generated in the western portion of the study area has been reduced by approximately 10 million cubic yards. This reduction reduces impacts to the habitat of the WVNFS and other potential indirect and cumulative impacts to sensitive resources. Another change resulting from the additional engineering includes the addition of the bifurcation in the area of the Middle Run Shift, which will provide for a divided roadway that will better accommodate WVNFS movement by increasing the landscape permeability in the area of highly suitable habitat. The refined ROPA has been presented to USFWS as part of the Initiation Package for Formal Section 7 Consultation.

3. Additional engineering on the ROPA has moved the relocated US 219 closer to the mainline to minimize terrestrial impacts. Based upon this additional engineering and a comparison of the impacts of each

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<td>and to continue to reduce impacts to suitable and highly suitable habitat for the WVNFS. The location of the ROPA along Backbone Mountain (western portion of the Study Area) was reevaluated to determine if excess excavation could be further reduced though additional engineering analysis. The additional analysis was successful in adjusting the excess excavation. The amount of excess excavation that will be generated in the western portion of the study area has been reduced by approximately 10 million cubic yards. This reduction reduces impacts to the habitat of the WVNFS and other potential indirect and cumulative impacts to sensitive resources. Another change resulting from the additional engineering includes the addition of the bifurcation in the area of the Middle Run Shift, which will provide for a divided roadway that will better accommodate WVNFS movement by increasing the landscape permeability in the area of highly suitable habitat. The refined ROPA has been presented to USFWS as part of the Initiation Package for Formal Section 7 Consultation.</td>
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<td>3. Additional engineering on the ROPA has moved the relocated US 219 closer to the mainline to minimize terrestrial impacts. Based upon this additional engineering and a comparison of the impacts of each</td>
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<td></td>
<td>Secondary impacts associated with waste and borrow requirements/estimates</td>
<td>1. WVDNR and USEPA expressed concerns related to secondary impacts associated with waste and borrow areas required for construction. The comment letter from USEPA specifically states that “disposal of excess waste or the borrowing of fill for the earthmoving activities of highway construction can lead to potential secondary impacts. Clearly, efforts have been made to avoid and minimize the impacts of the highway on ecologically sensitive areas. It is important that borrow and waste methods not impact those same resources. Obviously, no specific designs have been developed for this project; however, to the extent possible, potential staging areas should be identified and their impacts assessed and evaluated”</td>
<td>1. Waste and borrow estimates were used as a screening criteria in the SDEIS and continue to be an important factor in the development of the ROPA. WVDOH performed additional engineering on the ROPA to further reduced excess excavation by approximately 10 million cubic yards. This will reduce impacts to WVNFS habitat and other potential indirect and cumulative impacts to sensitive resources. Efforts to avoid and minimize impacts associated with waste and borrow estimates/requirements, including on ecologically sensitive areas, will continue as outlined in the 1996 FEIS Volume III, the 2003 MOU between WVDOH, FHWA and USDOA, Forest Service, MNF and per the terms and conditions of the BO issued by USFWS in November 2006. 2. While the degree of accuracy associated with waste and borrow estimates may change as the project moves through design and construction, WVDOH is using the best available information to prepare the estimates provided in the environmental and preliminary</td>
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<td>2. WVDNR expressed concern about its ability to draw conclusions about project impacts due to discrepancies in earthwork balances in other project sections. WVDNR stated that earthwork balances on the Elkins to Kerens segment had been underestimated by 6.7 million cubic meters; the estimated waste volumes</td>
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| USEPA, Region III letter dated April 21, 2003 | Relative natural resource impacts of alternatives | 1. Based upon the information in the SDEIS regarding impacts to natural resources, USEPA and WVDNR raised concerns about the Blackwater Alternatives and indicated preferences for the selection of an avoidance alternative.  
2. USEPA’s letter stated: “the OPA and Alternative 2 have too many significant impacts to the natural resources of the area, especially when compared to the avoidance alternatives.”  
3. WVDNR’s letter identified Alternative 1D East as the least environmentally impacting alternatives, stating that (i) while costing “considerably less than the other alternatives,” the OPA is “the most environmentally impacting;” (ii) assuming that the | The SDEIS did not identify a preferred alternative. Following a comprehensive evaluation of alternatives that included considering comments received from resource agencies and the public, the ROPA was selected as the preferred alternative. As detailed in the Preferred Alternative Report and the Amended Preferred Alternative Report, the ROPA best meets the purpose and need for the project, is similar to the other alternatives in terms of its overall environmental impacts, where its impacts are greater, the impacts have been mitigated and permitted, and has the least direct and indirect potential impact on the WVNFS. |
| WVDNR, Wildlife Resources Section letter dated April 9, 2003 | | | |
| | | were 2.7 million cubic meters but the actual volumes were 9.4 million cubic meters.  
3. WVDNR stated that discrepancies were a particular concern in the Parsons to Davis section because this segment “is surrounded by occupied endangered species habitat, making wasting areas extremely difficult to establish. Given the sensitivity of this area, we request that the Division of Highways, in coordination with the WRS and U.S. Fish and Wildlife Service (Service), identify approved wasting areas or areas where wasting is prohibited prior to final design.”  
3. Prior to final design WVDOH will coordinate with the WRS and USFWS to identify approved wasting areas and areas where wasting is prohibited. Identification of approved wasting areas at this stage of project development is premature as waste quantities and borrow material needs may change during final design and construction. | engineering documentation. In addition, WVDOT performed additional engineering on the ROPA to reduce/redress excess excavation on the Parsons to Davis project. |
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<td>natural resource impacts identified in the document are accurate, “alternatives 1D east and west and 1G east and west have attempted to reduce project impacts;” and (iii) based upon surface water impacts 1G has the least impacts followed by 1D, however WVDNR prefers 1D due to its small earthwork balance and decrease in forest fragmentation.</td>
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A total of 31 public comments were received on the SDEIS during the formal comment period: two (2) via the certified court reporter at the public hearing, twenty-five (25) comment letters and four (4) e-mail comments. Generally, attendees at the public hearing expressed concerns about the project costs and the lack of a connection to TCHS given the safety issues associated with US 219. The comments received on the SDEIS were taken into consideration in modifying the alternatives studied and identifying the Preferred Alternative. All comments received and WVDOH’s responses are included in Appendix A.

7.8 COMMUNITY ADVISORY GROUP (CAG)

In accordance with the 2000 Settlement Agreement (Appendix B), WVDOH has established and consulted with a Community Advisory Group (CAG) composed of 12-13 members representing a cross-section of the interests potentially affected by the location of Corridor H in the Thomas and Davis areas. Per the Settlement Agreement, “The role of the CAG will be to broaden the opportunities for public involvement is all phases for the Thomas-Davis Section, from the initial scoping stage through the final selection of a preferred alternative.’ The CAG’s membership list is presented in Table VII-9:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Council of the City of Thomas (up to two members)</td>
<td>Debbie Synder (Mayor), Matt Quattro (councilman)</td>
</tr>
<tr>
<td>City Council of the City of Davis (up to two members)</td>
<td>Randy Schiedeknecht replaced by Joe Denning (Mayor), Lester Dempsey (councilman)</td>
</tr>
<tr>
<td>Tucker County Planning Commission (one member)</td>
<td>Karen Bonner</td>
</tr>
<tr>
<td>Tucker County Convention and Visitors Bureau (one member)</td>
<td>Murray Dearborn</td>
</tr>
<tr>
<td>Tucker County Development Authority</td>
<td>Sam Eichelberger</td>
</tr>
<tr>
<td>Region VII Planning and Development Council (one member)</td>
<td>Thomas DiBacco</td>
</tr>
<tr>
<td>Alpine Heritage Preservation, Inc (one member)</td>
<td>Walt Renaili and Dottie Wilson (alternate)</td>
</tr>
<tr>
<td>Tucker County Gateway Project (one member)</td>
<td>Reid Gilbert and Eleanor Palko (alternate)</td>
</tr>
<tr>
<td>Highlands Trail Foundation (one member)</td>
<td>Buzz Durham and Mike Ledden (alternate)</td>
</tr>
<tr>
<td>Friends of the 500th (one member)</td>
<td>Chuck Nichols</td>
</tr>
</tbody>
</table>

The CAG held 11 meetings attended by WVDOH staff and moderated by a professional facilitator. Representatives from the Canaan Valley Institute managed the CAG meeting facilitation process including the recoradation of meetings. Ms. Kiena Smith serves the CAG facilitator and Ms. Paula Worden performed meeting recordation and administrative activities for the group. For each meeting, an agenda was developed and meeting minutes prepared.
The CAG prepared three comment letters that are considered part of the public comment record for the project (Appendix A). The CAG has provided feedback to the study team that has been integrated in the development of alternatives (see Section II: Alternatives Analysis and Section 3.2.1: Economic Environment).

7.9 CITY OF THOMAS RESOLUTION ON JOINT DEVELOPMENT OF PARK

The City of Thomas’ Development Strategy (City of Thomas, 1998) identified a 162-acre area to the northwest of downtown Thomas for development as a park. The proposed park is illustrated on exhibits throughout this SEIS (See Exhibit IV-1). On March 22, 2001, the Thomas City Council adopted a resolution expressing the City’s desire to develop the park “jointly with the WVDOH and FHWA such that Corridor H may be located within property boundaries” of the park. There are no facilities on this property at the present time. The resolution is included Appendix A.

During the public comment period, community leaders from Thomas expressed support for the detailed analysis of Blackwater Avoidance Alternatives that passed the farthest to the north of downtown Thomas as possible. Alternative 1A would have best fulfilled this request, yet it was eliminated from detailed analysis as described in Section II: Alternatives Analysis of the SDEIS. One of the reasons expressed for favoring Alternative 1A was that it appeared from mapping to impact the proposed Thomas Park area the least (Snyder, 2002).

7.10 ADDITIONAL COORDINATION WITH CITY COUNCILS

The 2000 Settlement Agreement also requires that after completion of the standard public comment period on the SDEIS, WVDOH must transmit a letter to the City Councils of Thomas and Davis identifying its Preferred Alternative for the project and its reasons for selecting that alternative. (WVDOH provided this information in the form of a “Preferred Alternative Report.”) WVDOH presented its findings to the Cities and the CAG. Under the Settlement Agreement, if, during a 60-day period, either City Council adopts a resolution opposing all of the Blackwater...
Avoidance Alternatives or supporting the OPA, FHWA and WVDOH would have the right, but not the obligation, under the Settlement Agreement to discontinue the Blackwater Avoidance Study (see Settlement Agreement, p. 31). However, this agreement did not have an effect on the need for study necessary to investigate avoidance of the WVNFS.

On July 28, 2003, WVDOT transmitted letters to the Mayors of Thomas and Davis, West Virginia initiating the additional 60-day review period prescribed in the 2000 Settlement Agreement. The letters described the ROPA and stated that it was WVDOH’s Preferred Alternative for the Parsons-to-Davis Project. Copies of these letters are provided in Appendix A. Within the 60-day period prescribed in the 2000 Settlement Agreement, the Davis City Council adopted a resolution that supported construction of the ROPA (September 10, 2003), and the Thomas City Council adopted a resolution supporting a Blackwater Avoidance Alternative (September 23, 2003). Copies of these resolutions are also provided in Appendix A.

Pursuant to the terms of the 2000 Settlement Agreement, since one of the City Councils (Davis) passed a resolution during the 60-day review period supporting the ROPA, FHWA and WVDOT had the right to discontinue consideration of the Blackwater Avoidance Alternatives and proceed with the ROPA without preparing an SFEIS. As explained in Section II: Alternatives Analysis, FHWA and WVDOT chose to eliminate the Blackwater Avoidance Alternatives from further consideration. However, the FHWA and WVDOT prepared this SFEIS in order to provide the necessary documentation supporting the selection of the ROPA as the preferred alternative. In particular, the SFEIS was needed in order to ensure a complete analysis of the ROPA’s potential impacts on the WVNFS and the impacts associated with alignment shifts.

7.11 OTHER ACTIVITIES

In October 1999, the WVDOH prepared an update on the entire Corridor H Project, which was distributed to members of the media, local officials and residents. Officials from the WVDOH visited with local media explaining the status and recent developments of the project.

The WVDOH also provides information about the entire Corridor H on its official website at www.wvcorridorh.com. The website provides a timeline, maps, information regarding public meetings, and a means of submitting comments on the project. Since May 2003, an additional thirty-three comments/requests for information, have been received through the project website. All comments received and WVDOH’s responses are included in Appendix A. Public involvement will continue throughout the Parsons-to-Davis SEIS process.
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Community Design Team, Davis, West Virginia. (1998) *Davis: Can’t Top It!* Davis, WV.


Stadelman, Chris. (2005a) "CVI Changes Choice for Building Site" in The Parsons Advocate vol. 109, no. 18, January 26, 2005, Parsons, WV.

Stadelman, Chris. (2005b) "Authority Considers 2 Requests" in The Parsons Advocate vol. 109, no. 35, May 25, 2005, Parsons, WV.


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APPENDIX A

Comment and Coordination Letters
SDEIS

Public Comments & Responses
Comment from Murray Dearborn (transcript page 7-8):
Response:
As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the preferred alternative.

Comment from John Bright (page 8-9):
Response:
As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative.
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<td>1. historic town that is slowly</td>
</tr>
<tr>
<td>2. developing into a little touristy area</td>
</tr>
<tr>
<td>3. with shops and restaurants and it</td>
</tr>
<tr>
<td>4. would benefit the entire State to have</td>
</tr>
<tr>
<td>5. an exit near such a historic town and</td>
</tr>
<tr>
<td>6. also the northern route, yeah, divers</td>
</tr>
<tr>
<td>7. traffic around Thomas.</td>
</tr>
<tr>
<td>8. Oh, yeah, we would like to see</td>
</tr>
<tr>
<td>9. if there’s any way of getting funds</td>
</tr>
<tr>
<td>10. from Corridor H to develop the park in</td>
</tr>
<tr>
<td>11. Thomas because the northern routes</td>
</tr>
<tr>
<td>12. will cut right through the middle of</td>
</tr>
<tr>
<td>13. the park, and we think that</td>
</tr>
<tr>
<td>14. esthetically that the park should</td>
</tr>
<tr>
<td>15. benefit somehow and, and receive some</td>
</tr>
<tr>
<td>16. money because otherwise the park may</td>
</tr>
<tr>
<td>17. not be revamped for decades.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Page 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. COURT REPORTER: II</td>
</tr>
<tr>
<td>2. make sure I put that down that those</td>
</tr>
<tr>
<td>3. names...</td>
</tr>
<tr>
<td>4. MR. ANGUS: Yeah, I</td>
</tr>
<tr>
<td>5. wanted to give you that because, you</td>
</tr>
<tr>
<td>6. know that, the spelling I’m sure is</td>
</tr>
<tr>
<td>7. tough on names.</td>
</tr>
<tr>
<td>8. COURT REPORTER: Yes.</td>
</tr>
<tr>
<td>9. you, some of them are, okay. Thank</td>
</tr>
<tr>
<td>10. you.</td>
</tr>
<tr>
<td>11. NORSIE ANGUS: All right.</td>
</tr>
<tr>
<td>12. thank you.</td>
</tr>
<tr>
<td>13. (WHEREupon, the Workshop was concluded</td>
</tr>
<tr>
<td>14. at 7:05 p.m.)</td>
</tr>
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<table>
<thead>
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<th>Page 10</th>
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</thead>
<tbody>
<tr>
<td>1. Well, we have a normal time, which is</td>
</tr>
<tr>
<td>2. 7 to 10 days.</td>
</tr>
<tr>
<td>3. MR. ANGUS: Okay.</td>
</tr>
<tr>
<td>4. COURT REPORTER: So,</td>
</tr>
<tr>
<td>5. I'll put you down for that.</td>
</tr>
<tr>
<td>6. MR. ANGUS: Okay.</td>
</tr>
<tr>
<td>7. That's fine.</td>
</tr>
<tr>
<td>8. COURT REPORTER: And you</td>
</tr>
<tr>
<td>9. just want a regular transcript, right?</td>
</tr>
<tr>
<td>10. Do you want anything specific on it,</td>
</tr>
<tr>
<td>11. like any special...</td>
</tr>
<tr>
<td>12. MR. ANGUS: Just make</td>
</tr>
<tr>
<td>13. sure that the title of the meeting</td>
</tr>
<tr>
<td>14. and all that is there...</td>
</tr>
<tr>
<td>15. COURT REPORTER: All</td>
</tr>
<tr>
<td>16. this stuff, the names.</td>
</tr>
<tr>
<td>17. MR. ANGUS: Yeah, and</td>
</tr>
<tr>
<td>18. that the names are on there and other</td>
</tr>
<tr>
<td>19. Court Reporters have like attached a</td>
</tr>
<tr>
<td>20. copy of this or they've actually, you</td>
</tr>
<tr>
<td>21. know, taken it verbatim from my</td>
</tr>
<tr>
<td>22. statement and then, but now one thing</td>
</tr>
<tr>
<td>23. I don't. In my statement put these</td>
</tr>
<tr>
<td>24. two people in there but I want, you</td>
</tr>
<tr>
<td>25. know, to add those on...</td>
</tr>
</tbody>
</table>
Public comments on
December 2002 SDEIS

Response:

Mar 25 03 11:41a BRKRE 7574676503 p. 8

West Virginia Department of Transportation
Division of Highways

1906 Kanawha Boulevard East, Building Four, Room 110
Charleston, West Virginia 25305-4480
304/993-5202

Appalachian Corridor H
Phases I & II

This is in response to Mr. James E. Sothien's December 14, 2002, comment letter regarding Appalachian Corridor H. In response to your inquiry, the West Virginia Division of Highways (WVDOT) has reviewed the project files, and based on the information we have developed, we believe Corridor H Alternatives (along with other consultant partners) have been offered appropriate opportunities to participate in both the National Environmental Policy Act and Section 106 phases of project development.

Notes for project public meetings and hearings have been provided to local newspapers, press releases have been issued, and Environmental Impact Statement documents with public involvement notices have been sent to the affected public. There have been five public meetings held in Tucker County to discuss the project. In addition, there have been several meetings held in the Tucker County of the affected citizens. For the purposes of the Corridor H preliminary agreement, the meeting for the Appalachian Corridor Group (ACG) has been held to members of the group. The Citizens Action Group (CAG) has been held to members of the CAG. The meetings were the only one member of the organization to attend all of the public meetings. The meetings were four out of ten of the CAG meetings. Furthermore, in order to encourage public meeting attendance, an additional opportunity for members of the organization to attend was given for the Appalachian Corridor Group (ACG) meeting. The new meeting was held on April 7, 2003, and Citizens Action Group (CAG) meeting on April 25, 2003, in the new meeting the date for the Appalachian Corridor Group (ACG) meeting.

In addition, as requested in a list of all Section 106 architectural reports that have been completed since 1997, please review the enclosed list and let us know if there are any of these documents that your organization has not received. Copies of any report not in your possession...
compliance with federal laws is taking place, we are interested in acquiring waste and fill documentation to compare actual amounts with predicted, and the specific locations of all fill placements. In spite of assurances given in the past, we fear excess waste and fill will occur with the steep terrain of the proposed Kerensa-to-Parsons segment. It is clear that we need time to do more research in the area of excess waste and fill and other Clean Water Act matters before submitting our comments.

We are also concerned about the lack of activity by the Monongahela National Forest (MNF). In addition to National Environmental Policy Act requirements, it would appear that the MNF is also bound to do further public consultation under National Forest Management Act requirements before this project can proceed any further. This is an area in which we also need time to do additional research.

The arrival of the BA SFEIS is again during the holiday season, an untimely situation compounded by the arrival of the P-D DEIS shortly thereafter and also during the holiday season. This unfortunate timing has made it additionally burdensome for the public to review the documents and develop meaningful comments. This perennial behavior of the WV DOT is one that implies a strong lack of interest in and consideration for public input.

For all of the reasons cited above and more, we believe our request is a reasonable one. We ask that you reply regarding this matter as soon as possible. Please send copies of your reply to Hugh Rogers, President, Corridor H Alternatives, Moon Run, Kerensa, WV 26276 and to Andrea Ferster, Esq. 1100 17th Street NW, 10th Floor, Washington DC, 20036.

Please note our Freedom of Information request for the additional materials mentioned will follow shortly. Please call me at (304) 657-4082 if you have any questions or require clarification of this request. Thank you for your prompt attention to this matter.

Sincerely,

Pamela C. Mass-Merritt
Secretary, Corridor H Alternatives

cc:
Don Kilima, Advisory Council for Historic Preservation
Jeff Towner, US Fish and Wildlife Service, Elkkins Field Office
Michael Kulik, US Environmental Protection Agency
Clade Thompson, Monongahela National Forest
Elizabeth Merrill, National Trust for Historic Preservation
Andrea Ferster, Esq.
Mark Drobney, Heartwood
Judith Rodd, Friends of the Blackwater
Jeremy Muller, WV Rivers Coalition

Mr. Hugh Rogers
January 13, 2003

Page 2

will be provided to you, if requested. We also encourage you to review the currently available environmental documentation to determine if there are any additional documents referenced to the request that would be of interest to your organization. If requested, copies of the pertinent documents can be provided to your organization.

In regard to your questions concerning excess excavation, the 1996 environmental studies estimated the excess excavation on the Kerensa to Parsons project to be 3,664,450 cubic meters. The total estimated quantity of the construction plan that were bid is 5,445,211 cubic meters. The actual quantities in the as-built plans and the quantities that are being developed will be provided to you when available.

The WVDOH has received your January 10, 2003, e-mail Freedom of Information Act request and is in the process of preparing a reply.

The WVDOH continues to work cooperatively with the Monongahela National Forest (NFS) on issues related to the Corridor H highway project; however, it would be inappropriate for us to comment on questions related to Forest Service regulations. Therefore, we suggest any questions your organization has regarding hours in the forest be directed to the MNF.

I would be glad to discuss these issues with you. We will be glad to discuss these issues with Ms. Mass Merritt upon her return. In the meantime, if you have any further questions or require additional information, please do not hesitate to let us know.

Very truly yours,

James L. Jeffries, P.E.
Director
Engineering Division

cc:
Mr. Andrew Frame, ES
Ms. Edith Compton, Federal Highway Administration
Ms. Randall Blume, National Park Service

11/13/02
Apalachian Corridor H

Submitted Cultural Resource Reports for Kentuckiana and Parsons to Davis Sections

Archaeological Reports

Furet, Martin T., Denise L. Graetz, Stephen J. Hinks, Jonathan Gleece, and Regina J. Hart

Gleece, Jonathan, Martin T. Furet, and Stephen J. Hinks

Hinks, Stephen J., and Martin T. Furet
1997 Phase II Archaeological Investigations in the Apalachian Corridor H Project Area, Management Summary Addendum - Section 15. Submitted by Michael Baker Jr., Inc., Coraopolis, Pennsylvania, to the West Virginia Department of Transportation, Division of Highways, Charleston.

Hinks, Stephen J., Martin T. Furet, Denise L. Graetz, William C. Johnson, and Regina J. Hart
1997 Phase II Archaeological Investigations in the Apalachian Corridor H Project Area, Management Summary - Section 15. Submitted by Michael Baker Jr., Inc., Coraopolis, Pennsylvania, to the West Virginia Department of Transportation, Division of Highways, Charleston.

Hinks, Stephen J., Katelyn M. Lombardi, William F. Blythe, Andrea D. Griffin, J. Steven Kite, William C. Johnson, and Deborah E. Cassellbery

Hinks, Stephen J., Bruce L. Munsnow, William F. Blythe, Denise L. Graetz, and Regina J. Hart

Munsnow, Bruce L., William F. Blythe, Edward J. Sieben, Ute Regina J. Hart, Denise L. Graetz, and Stephen J. Hinks

Munsnow, Bruce L., Eric J. Filiat, Stephen J. Hinks, William C. Johnson, and Regina J. Hart

Munsnow, Bruce L., Mark C. Johnson, Bruce L. Munsnow, Martin T. Furet, Denise L. Graetz, William F. Blythe, and Regina J. Hart
Corridor II Architecture Reports Prepared from 1997 to January 2000

Michael Baker Jr., Inc.

Michael Baker Jr., Inc.

Michael Baker Jr., Inc.

Michael Baker Jr., Inc.

Michael Baker Jr., Inc.
February 11, 2003

Mr. Hugh Rogers, President
Corridor H Alternatives
Moon Run
Kerens, West Virginia 26276

Appalachian Corridor H
311 North Washington Avenue
Charleston, West Virginia 25301

This is a follow-up to our January 22, 2003, letter and your December 14, 2002, request. Attached is a list of excess excavation for each Corridor H construction project from Elkins to Kerens in Randolph County.

Very truly yours,

[Signature]

James E. Sothman, P.E., Director
Engineering Division

JES/Hs

Attachment

cc: Ms. Andrea Ferster, Engr.
Mr. Ed Compton, Federal Highway Administration
Mrs. Sheila Jones; Akin, Gump, Strauss, Hauer, and Feld, LLP

b/c: DBE, DDR, DD(MF), HD

WASTE SITES FOR CORRIDOR H PROJECTS IN RANDOLPH COUNTY

Project: ADD-0484(645)
Location - 211 meters right of center line at station 78+617 to 212 meters right of center at station 78+706. Waste = 533,033.40 cubic meters.
Location - 97 meters left of center at station 78+698. Waste = 518,006.10 cm.
Location - wide fill on DOH right of way between station 78+140 and 78+560. Waste = 902,500.00 cm.

Project: ADD-0494(645)
Location - 100 meters right of center at station 75+990. Waste = 1,733,062 cm.
Location - 75 meters right of center at station 80+500. Waste = 237,814 cm.
Location - 188.13 meters left of center at station 80+512.97 to 70.65 meters left of center at station 80+704.58. Waste = 279,157 cm.
Location - 26 to 70 meters left of center at station 80+449 to 80+630. This is a sub-cut fill. Waste = 57,165 cm.

Project: ADD-0484(644)
Location - 50 meters right of center at station 81+690 to 81+760. Waste = 35,519.62 cm.
Location - 35 meters right of center at station 81+690. Waste = 462,532.53 cm.
Location - 168 meters right of center at station 82+033.44. Waste = 244,758.77 cm.
Location - 165 meters right of center at station 82+033.44. Waste = 213,877.05 cm.

Project: ADD-0484(633)

Waste Sites for Corridor H Projects in Randolph County
WASTE SITES FOR CORRIDOR H PROJECTS IN RANDOLPH COUNTY

Location – 122 meters left of center at station 83+599. Waste = 723,303.22 kg.

Location – 233 meters right of center at station 83+645 to 558 meters right of center at station 84+167. Waste = 1,931,409.11 kg.

Location – 50 meters left of center at station 85+000. Waste = 46,633.80 kg.

Project: APD-048(142)
Location – Within DOH project limits between station 86+000 and 87+140 left of center. Waste = 37,431 kg.

Location – 50 meters left of center at station 85+550 to 85+910. Waste = 473,160 kg.
Location – placed additional 20,000 cm of waste on site #2 on project HIDL-0444 (141).

Project: HIDL-048(141)
Location – 60 meters left of center at station 87+020. Waste = 55,663.32 kg.

Location – 45 meters left of center at station 86+180 to 65 meters left of center at station 87+200. Waste = 234,000 kg.

Project: APD-048(147)
Location – 380 meters right of center at station 90+775 to 740 meters right of center at station 90+915. Waste = 293,881.80 kg.

* Note this waste site was shared with project HIDL-048(149).

Project: HIDL-048(149)
Location – 265 meters right of center at station 91+200. Waste = 32,893.20 kg.

Location – 160 meters right of center at station 91+100 to 180 meters right of center at station 91+200. Waste = 245,047.80 kg.

Location – 280 meters right of center at station 90+775 to 740 meters right of center at station 90+915. Waste = 293,881.80 kg. Note: this site was shared with project APD-048(147).

Location – 160 meters right of center at station 91+000 to 180 meters right of center at station 91+160. Waste = 154,760.70 kg.
Response:

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The Truck Route (TR) has been incorporated into the preferred alternative.

WVDOT has completed consultation with the USFWS regarding the impacts and concerns associated with the WVNFS. Additional information regarding the results of the consultation process is provided in Section III of this SFEIS.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative.

Section III of this SFEIS provides detailed information regarding socio-economic and environmental impacts associated with the project.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Truck Route; developed to reduce heavy truck traffic in downtown Thomas.

Section III of this SFEIS provides detailed information regarding socio-economic and environmental impacts associated with the project.
Response:

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Further, the USFWS has determined that the ROPA/Preferred Alternative is the least damaging alternative in regard to the WVNFS habitat.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative.

WVDOH will continue to coordinate with USFWS regarding impacts and concerns associated with the WVNFS. The USFWS has determined that the ROPA/Preferred Alternative is the least damaging alternative in regard to the WVNFS habitat. Additional information regarding the WVNFS is provided in Section III of the SFEIS.
Response: General comments noted.

3. Potential impacts associated with the excess earthwork have been considered and included as part of the alternatives’ screening process included in Section II of both the SDEIS and this SFEIS. While the degree of accuracy associated with waste and borrow estimates may change as the project moves through design and construction, WVDOH is using the best available information to prepare the estimates provided in the environmental and preliminary engineering documentation. In cooperation with the USFWS and the Monongahela National Forest, WVDOH has developed detailed mapping of West Virginia Northern Flying Squirrel (WVNFS) habitat. Following the development of this detailed habitat mapping, WVDOH performed additional and more detailed engineering design on the ROPA/preferred alternative to further minimize direct impact of highway footprint on WVNFS habitat and to address the excess waste material issue that might indirectly impact WVNFS habitat. The additional engineering determined that excess waste material generated as the result of required highway cuts could be placed within the proposed highway construction limits. This adjustment eliminates the need to place large quantities of excess material into waste areas located outside of the highway construction limits. If waste/borrow sites located outside of the construction limits of the highway are required as part of final design engineering and/or construction, the WVDOH will consult with the USFWS and other resource agencies to minimize potential impacts to WVNFS habitat and high quality streams. This approach is consistent with Vol. III of the 1996 FEIS.
Public comments on December 2002 SDEIS

Response (con’t):

The USFWS concurs that the ROPA is the least damaging of the Build Alternatives considered in the Parsons-to-Davis SEIS. The USFWS has stated that, “…FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of G.s.fuscus habitat. ….Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO states, “After reviewing the current status of the G.s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ biological opinion that constructing Corridor H, Parson to Davis, as proposed, is likely to jeopardize the continued existence of the G.s.fuscus.” Please refer to Section VII of this SFEIS for agency comments and responses for additional information related to agency comments regarding waste/borrow estimates and coordination regarding the WVNFS. Agency letters are provided within this appendix (Appendix A) and the Biological Opinion issued by USFWS is provided in Appendix C.

As discussed in the 1996 FEIS and Record of Decision, the WVDOH and FHWA have and will continue to work cooperatively with the Monongahela National Forest (MNF) to further minimize and mitigate impacts to forest resources during final engineering design and construction. This commitment resulted in a formal Memorandum of Understanding (MOU) among the MNF, FHWA, and WVDOH. The MOU was executed in June 2003. The MOU specifically addresses trails, streams and cultural resources within the MNF on MNF owned properties. Concerns related to invasive species, soils, and other construction related activities will be addressed through the agency coordination/mitigation coordination processes outlined by both the 1996 FEIS (Vol. III) and the MOU.

you predicted in the 1996 FEIS. As a result, your estimate of many environmental impacts, such as habitat loss, watershed impairment, and visual effects, was completely inadequate. How can we be sure you won't get it wrong again? How can you choose the alternative with the least environmental impacts if you can't predict the size of the project? How will you control the waste disposal problem on this section?

Remember, the estimate in the 1996 FEIS Mitigation Document was supposed to be much more accurate than the figure in the Alignment SDEIS. To satisfy the resource agencies, especially EPA and the Department of Interior, Fish and Wildlife Service, which had expressed concern over the amount of waste that would have to be disposed of, WVDOH had done preliminary design work on certain sections including Elkins to Kerens, then known as Section 16. As a result of that work, the earlier estimate had been raised by 43%, from 2,708,448 cubic meters to 3,882,265 cm. Now we learn that the actual figure was 9,406,240 cm.

After the Record of Decision, when the project had been cleared by all agencies, the number was raised again, by 71%, to 6,647,793 cm. in the construction plans that were bid. Still that figure was way too low. Mistakes on this scale call into question all your estimates and assurances.

There are superficially more precise statistics in this FEIS, but they are problematic. If a more accurate estimate of excess waste would reveal that the construction and disturbance footprint was twice as large, that would affect every part of this document.

The Parsons to Davis project will traverse valuable portion of the Monongahela National Forest. The Supplemental FEIS purports to compare the damage to that area from various alignments, and claims to choose the least bad alternative. The discussion is mostly superficial and in some places absurd. To give just two examples: on page III-44, “Hunting and fishing are popular recreational activities that would be able to continue regardless of the Alternative selected.” That unsplod area would be bisected, and habitat carved up, yet there is no word about the drastic effects on hunting. On page III-51, Table III-20, the visual impact of the highway on the National Forest is said to be “minimal.” This hardly deserves serious attention. Many other examples could be given.

We request that the severe gross errors made on the adjacent section, and that have been carried forward to the alternative analysis in this and the BA SFEIS, be brought to the attention of the associated responsible agencies, including EPA, US Fish and Wildlife Service, WV DNR and DEP.

We also request that an accurate estimate of the significant amounts of excess waste anticipated for the Parsons to Davis section be provided to us and the agencies mentioned above.

This is a very critical issue. To underestimate waste predictions so severely has extreme environment impacts. It alters the considerations for each of the alternatives prematurely screened out in the Level Two Alternatives analysis upon which the P-D SFEIS is built to such a degree that there is no accurate foundation upon which to make any decisions. All of the alternatives must be reconsidered with accurate waste figures, and not prematurely eliminated for consideration by a faulty analysis. We ask that all the alternatives be presented to the public, with maps and the accurate waste figures, prior to the elimination of any of the alternatives.
Response:

An analysis of the study area’s mountainous terrain and water resources is an important component of the Parsons-to-Davis SEIS. Extensive descriptions of these water resources and potential impacts are discussed in Section III of this SFEIS document.

As one component of the comprehensive mitigation commitments detailed in the 1996 FEIS and Record of Decision, agency coordination and comment resolution will continue throughout final engineering design and construction. Since the 1996 Record of Decision, and consistent with those commitments, resource agency personnel have been invited to all final design field views to create continuous opportunities for input and improvement in the design and construction process of Corridor H. WVDOH and FHWA will continue to monitor all of the commitments detailed in the 1996 FEIS and the Record of Decision.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Further, the USFWS has determined that the ROPA/Preferred Alternative is the least damaging alternative in regard to the WVNFS habitat.
As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative.

WVDOH has concluded its coordination with the USFWS regarding impacts and concerns associated with the WVNFS. The USFWS has stated in the biological opinion that, “…FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to the direct removal of G.s.fuscus habitat. ....Anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.” Further, the BO states, “After reviewing the current status of the G.s. fuscus, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Services’ biological opinion that constructing Corridor H, Parson to Davis, as proposed, is likely to jeopardize the continued existence of the G.s.fuscus.” Additional information regarding the WVNFS is provided in Section III of this SFEIS.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
General comments are noted.

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Section III of this SFEIS provides detailed information regarding socio-economic, specifically regarding the tourism and recreational resources, and environmental impacts associated with the project.

In regard to the Tucker County Planning Commission, Karen Bonner was involved as a valued member of the Community Advisory Group (CAG) for the project.
over to Davis and pick up Route 95. This allows for (2) two intersections or exits and better access to both.

Thomas and Davis. It will eliminate the US 219 truck traffic from downtown Thomas and allow for economic development of this historic district. Other plus points are the commercial development of those exits and allows for better growth and development between Davis and Thomas. This route will not cut these two communities apart and allow for school children to get to Thomas Elementary without having to cross a four lane highway from Davis. I served with many common facts in these communities and have been a member of the Citizens Advisory Board, sometimes members of our community will not allow persons to have a different opinion and make it without being ridiculed or made to feel that you are not for community growth. I am for quality community growth and development and best enhances this wonderful part of West Virginia, and feel that this section...
Public comments on December 2002 SDEIS

The corridor should be spectacular with amenities that are left natural view sheds that embellish this already beautiful place that we call home.
This natural beauty is a driving force behind one of our popular and viable industries, which is tourism. I co-own a small restaurant "Swami's" Denim which has seen great growth over the past 15+ ten years. This growth has been in tourism. With the completion of Corridor H, this place will continue to be a destination and we as a community need to be planning for this growth. The Tucker County Planning Commission has already completed a guide for Corridor H, then the county and this should be followed by the Dept of Highways. It discusses all the issues for growth development and planning and design of the corridor then Tucker County. Please contact Karen Bormen, president of the planning commission, if you need to refresh your memory or see for the first time these guidelines.
Public comments on December 2002 SDEIS

The building of Corridor H can benefit our economy of tourism, but if we design, engineer and place this corridor such to enhance this reason we will have a win-win situation for all involved.

Thank you for allowing me to comment on this project and certainly look forward to working with the Division of Highways on this matter. If you have any questions I can be reached by phone at 304-255-5346 or 304-735-6513 (H).

My address is Walt Russell:
PO Box 571
Thomas, W.V. 26282

Sincerely,
Walt J. Russell

P.S. Please continue work on the bike trail in this region because it will too be another nice amenity for the area. Thanks.
Response:

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Section III of this SFEIS provides additional detailed information regarding socio-economic and environmental impacts associated with the project.
My preferred alternative is 411D and Truck East.

My reasons are as follows:

1. The 101/Davie circumvents the majority of the community/teams & Davie’s threat although it impacts San Bruno.

2. By having Thomas/Davie intact, the opportunity for the teams to go towards each other exists.

3. The noise + pollution level will be kept at a minimum for both.

4. Consider the economics of tourism. A continuous Thomas/Davie is much more appealing to tourists. A split between the two teams in a visible + economic division is a detriment not helpful.

5. Environmentally - scenically, this route makes sense. By keeping the corridor it project as much as possible up out of the Southside canyon, less...
Public comments on December 2002 SDEIS

Streams will be replaced by one or more similar cut and fill areas, leaving an intact canyon area.

6. The scenic values of the Backwater Canyon, Blackwater Falls, and other areas will be further protected with this route ID 497.

7. Truck East does not impact the landfill as currently described.

8. It makes sense to me to use ID 70, which is closer to Jenkins Mountain and the existing roads and ridges and also allows the highway to be completed as it stands today. It creates a transportation corridor, conserving the visual impacts, environmental impacts.

I don't believe that the OPA clearly focuses on a cost-benefit to the project overall with regard to the quality of life in the area.
Thomas Way with minimal regard to the scenic and environmental values and the economic potential of protecting these values to foster the tourism of the local area.

I believe that Alternative 10 Truck Route 1 is still more than meets the stated objectives on page 2 of the Public Hearing Hearing Document April 6, 1983. The Alternative 10 meets many objectives which were not stated, but which I have outlined in my letter and which I would consider.

Thank you sincerely for your time and consideration of these additional comments on the Thomas Way project.

Maria Jaster 15 Heritage Square Harpers Ferry Wv 25425

Representing self.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.
Response:

As discussed in detail in Section II of this SFEIS, additional studies were conducted on each of the alternatives following circulation of the SDEIS and receipt of comments. Following these detailed studies, it was determined that a modified OPA (the Revised OPA or ROPA) should be adopted as the preferred alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Additional information regarding recreational resources such as trails, is provided in Section III of this SFEIS.
Response:

As discussed in detail in Section II of this SFEIS, a modified OPA (the Revised OPA or ROPA) was selected as the Preferred Alternative. The ROPA/Preferred Alternative includes the Tucker County High School Connection and the Truck Route; the Truck Route will help to reduce heavy truck traffic in downtown Thomas.

Section III of this SFEIS provides additional detailed information regarding socio-economic resources, including potential commercial development in the area.
Email/website public comments received during the December 2002 SDEIS comment period

Corridor H Web site e-mail comments
Parsons to Davis

1. Jeffrey Petrich
February 19, 2002
Jeff.Petrich@mail.house.gov
Parsons to Davis Documents

Please send me the SDEIS for the Parsons to Davis segment and add me to your mailing list for the SFEIS and the ARCD related materials. Thank you.

Jeffrey Petrich
Committee on Resources
1329 Longworth HOB
Washington, D.C. 20515

Response: The information you have requested from Parsons to Davis will be sent to you.

2. Dave Markgraf
April 14, 2002
dmarkgraf@mindspring.com
corridor H information

I am interested in any information you might have regarding the construction of corridor H thru the Davis/Thomas area. I am considering opening a business in this area and want consider the impact of the highway.

Response: The WVDOH is looking at several possible alignments in this area. No preferred alignment has been identified at this time. Public meetings are to be held this summer to allow for public comment prior to making a decision. If you will provide a mailing address, the alignments currently being studied will be sent to you.

3. Dave Markgraf
April 17, 2002
dmarkgraf@mindspring.com
corridor H information

I would like the current alignment possibilities of corridor H thru and near Davis and Thomas.

Dave Markgraf
806 Heritage Dr
Mt Lake park, MD 21550

Responses:
See responses below individual comments.
Email/website public comments received during the December 2002 SDEIS comment period

Corridor H Web site e-mail comments
Parsons-to-Davis

Thank you very much

Response: The maps you have requested will be sent to you.

4. Pete Beck
   August 20, 2002
   hpbeck@carr.org
   Corridor H

I would like a detailed map of corridor H from Parsons to Davis and Davis to Bismark.

Response: Please provide a mailing address and the maps you have requested will be sent to you.

5. Tonette Beckwith
   September 16, 2002
   netguest47@yahoo.com
   Corridor H at Davis, WV

Would you please send me detail of this road in relation to the county plat of Davis? I want to see how close and exactly where Corridor H will be in relation to Davis.

Thank You

Tonette Beckwith
19 Ericen Road
Cabin John, MD 20818

Response: The maps you have requested in the vicinity of the Tucker Industrial Park will be sent to you.

6. Ron Dove
   December 6, 2002
   RonDove@earthlink.net
   Blackwater Center, Davis, WV

Hi, Can you please let me know whether the route of Corridor H will have any impact on Blackwater Center in Davis, WV? Specifically, are there any plans to tear down this building or will the road even pass the Center? Thanks in advance for you help!
Email/website public comments received during the SDEIS comment period

Corridor H Website e-mail comments
Parsons-to-Davis

Response: The Blackwater Center in Davis will not have to be acquired as part of the construction of Corridor H.

7. Ron Dove
   December 10, 2002
   RonDove1@earthlink.net
   Blackwater Center, Davis, WV

Thanks for the response. Will the highway pass in front of the Center? How close will the route be? Thanks!

Response: WVDOH is currently studying alternate alignments in this area. A draft supplemental EIS (SDEIS) has been approved and will be available for comments. A public meeting will be held in early February to discuss the various alternates. The distance to the Center will vary depending upon the alternate selected. If you will provide a mailing address the SDEIS will be sent to you.

8. Helen McGinnis
   February 24, 2003
   helemcginns@msn.com
   Wildlife Underpasses/Overpasses

We suggested that these be part of the overall plan for the Parsons-Davis segment because freeways of this type are an almost insurmountable barrier to dispersal of terrestrial wildlife. Are such under or overpasses included in the current plan?

Response: Thank you for your comments and recommendations. WVDOH works with the various state and federal resource agencies on this issue. Your comments will be considered in the final design phase of this project.

9. Rodney Sauter
   April 21, 2003
   sauters2@earthlink.net
   Alternative for Parsons to Davis Segment

I recently purchased real estate in Davis, WV. Please consider Alternative 1D, East Option. This is the option I would vote for were it possible to vote for the options.

Response: Thank you for your comment. It will be considered in the decision making process.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

10. Craig Smith
April 29, 2003
cas21@comcast.net
Bike Route

1) Are there any maps of the bike route between Parsons and Elkins? How could I get one?

2) Is the bike route paved?

Thanks!

Response: Please provide a mailing address and the maps will be sent to you. The bike route is paved on certain segments and stone based on the remaining segments.

11. Lynn Kelley
May 22, 2003
craftyssgannon@hotmail.com
corridor h

Does this funding include the area from Elkins to Bismarck...when will construction begin in this area?

Response: The funding can be used on any section of Corridor H. The section between Davis and Bismarck is in final design and could go to construction in 2004. The section between Parsons and Davis is in the environmental phase and different alignments are being considered. The final EIS for this section will not be completed until early 2007. Final design on this section can begin after the environmental phase. The Amended Record of Decision has just been approved from Kerens to Elkins. Final design can begin on this section as funds become available. The schedule for the next construction projects will be from Monniefiel to Forman to Bismarck.

12. Tom Howard
September 1, 2003
tohowards@adelphia.net
Corridor H Map

Your web site offered a map of the Corridor H project(s). I'm particularly interested in the VA line to Davis/Thomas portion of Corridor H. My address: Tom Howard, 10306 Lexington Ct, Fredericksburg, VA 22408. Thanks.

Response: The maps you have requested will be sent to you.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

13. Rolando Ray
   September 21, 2003
   rolando@gato-gordo.com
   Corridor H Route Thru Davis

Please send me a DETAILED map of the presently proposed route of corridor H through the area of Davis and Thomas in Tucker County.

Response: Please provide a mailing address and the maps you have requested will be sent to you.

14. Rolando Ray
   September 23, 2003
   rolando@gato-gordo.com
   Corridor H Route Thru Davis

Please send me a DETAILED map of the presently proposed route of corridor H through the area of Davis and Thomas in Tucker County.

Please mail the maps to:
Rolando Ray
20635 Glenmere Square
Potomac Falls, VA 20165

Thank you.

Response: The maps you have requested will be sent to you.

15. Jim Smith
   October 15, 2003
   jsmith@advamed.org
   Corridor H

I was hoping for an update on the proposed route(s) and schedule(s) for Corridor H in Tucker Co. Thanks for your help.

Response: Final design is underway on Corridor H between Davis and the Tucker/Grant County Line and will be completed in the Spring of 2004. Construction start depends upon the availability of funding in the new transportation bill. The final alignment between Kerens and Parsons has been approved and final design can proceed as additional funding becomes
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Responses:
See responses below individual comments.

Corridor H Web site e-mail comments
Parsons-to-Davis

available. Studies of various alignments in the Thomas-Davis area are continuing and should be completed in the Spring of 2004.

16. Hugh Rogers
November 2, 2003
rogers@wvhighlands.org
Parsons to Davis route

What is the difference between the OPA for this route and the Revised OPA that you have chosen?

Response: The Revised OPA (ROPA) has some revisions to the alignment from the OPA. The first is in the area of the Big Run Bog and Tucker County High School, where the alignment has been shifted north towards the High School and provides a direct connection to US 219 at the school. The second area is at the crossing of Middle Run where the ROPA has been shifted slightly to the south of the OPA. The other difference is that the ROPA includes a truck route located east of Thomas to allow trucks to bypass Thomas.

17. Hugh Rogers
December 2, 2003
rogers@wvhighlands.org
Parsons to Davis route

Thanks for your response on 12-2-03.
We note that the connection to Tucker County H.S. was an important reason for choosing the ROPA. We're wondering why it wasn't feasible to make the same connection and then join Alt 1 east and south of US 219.

Response: As stated in Section III of this SFEIS, "The ROPA/Preferred Alternative offers an access point closer to the TCHS than any of the Blackwater Avoidance Alternatives, and one that has fewer adverse environmental impacts. Because it offers a direct connection to the Tucker High School entrance, movement to and from the high school would be best accommodated with the ROPA/Preferred Alternative. A TCHS connection from others alternatives carried forward for detailed analysis is not desirable due to additional environmental impacts. Further, a TCHS connection associated with the Blackwater Avoidance Alternatives and Blackwater Alternative 2 would most likely require additional upgrades to US 219, to improve sight distance, eliminate substandard curves and generally improve safety since they would approach the school from the east. The direct connection associated with the ROPA/Preferred offers the best engineering approach to TCHS. The TCHS connection, while beneficial to the project is not a factor in the selection of the ROPA/Preferred Alternative; it is an additional engineering feature to better serve the access needs of the community."
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

18. S. Beaford
   December 6, 2003
   skb_700@hotmail.com
I am interested in the section of corridor H between Parsons and Davis. Could you please send me a map of the full project.

Response: Please provide a mailing address and the maps will be sent to you.

19. Terry Turner
   March 5, 2004
   twttlather@earthlink.net
   Corridor H
I need a detailed route map of Parsons to Davis and Kerens to Parsons. I'm especially looking for information on the bridge for the Cheat River. My address:

   Terry W Turner
   PO Box 1498
   Hedgesville, WV
   25427

   Thanks...

Response: No response

20. Krista Cunningham
   March 17, 2004
   krista07995@hotmail.com
   Dates of expected completion

   I am doing a marketing analysis for Canaan Valley Resort and would like to know where Corridor H stands. Is there an approximate date of completion set for the Davis/Canaan Valley area? What effects can be expected after the completion?

Response: The completion date for the entire length of Corridor H depends upon the availability of funding. If funding were available Corridor H could be constructed and open to traffic within the next 6 to 7 years. Upon completion Corridor H will provide an east-west corridor that will connect the Midwest with the Washington DC area and provide for reduced travel times and increase safety along the entire route.

21. John Hare
   March 24, 2004
   jhare@massimo.com
   map

   Please send me a map of Corridor H from Parsons East. Thanks.

Response: Please provide a mailing address and the maps will be sent to you.

22. Karin and Phillip Nelson
   April 6, 2004
   kbnelle@solcom.com
   Corridor H in Blackwater Canyon area

Response: See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

This website is undated, so far as I can see. Can you tell me whether Corridor H will go north or south of Thomas, WV? that is, will it avoid Blackwater Canyon area?? Thank you, F and K Nelson (owners of property in Douglas, WV)

Response: The section of Corridor H in the Thomas-Davis area is being studied currently to determine the location of Corridor H. A preferred alternate has not been approved at this time. The amended record of decision is not expected on this section until early 2005.

23. Jean LeClare
August 13, 2004
jlecler@twnet.com

wondering how close the highway will come to Blackwater river, and the exact route through this section.

Response: Thank you for visiting the Corridor H Web site. The current preferred alternative for this section has Corridor H crossing over the River just south of Thomas. A final environmental impact study is being prepared and the Record of Decision for this section is due for approval early in 2005.

24. Kevin Mangis
September 8, 2004
kmangis00@yahoo.com

I would appreciate receiving a map of Corridor H and an update on the current status, particularly the section between Parsons and Wardensville. Your website has not been updated in quite some time — is it possible to get some new information on the web site?

Response: Thank you for visiting the Corridor H Web site. The maps you have requested will be sent to you. Additional updates will appear in the next few days.

25. Elizabeth Gooding-McDonald
September 22, 2004
dwmcy2234@bellsouth.net

Area map of routing through Parsons to Davis

Responses:
See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

I am a property owner in the Thomas Corp., Parcel lot #640 on Euclid Avenue, Thomas, WV and need to know the intended routing of the Corridor H that is intending to go through the area. I am located in Louisiana and would like some information on this matter. Was the new plan around Blackwater area approved by the city council? What exact subdivisions are/will be affected? I would like a routing map to be sent to our residential address of:
Elizabeth and Lowell McDonald
2250 South Woodcrest Avenue
Denham Springs, Louisiana, 70726

Response: Thank you for visiting the Corridor H Web site. The current preferred alternative is the original alignment for Corridor H, not one of the alternatives that went north of Parsons. The maps you have requested will be sent to you.

26. Bart Massey
   September 28, 2004
   bcmassey@juno.com
   Corridor H

When do you expect the section to the Davis and Thomas area to be completed. Thanks, Bart Massey

703-582-7556

Response: Thank you for visiting the Corridor H Web site. The environmental process for the Thomas-Davis area is scheduled to be completed by February 2005. Final design can commence after this and will take 18 to 24 months to complete. Construction of this section depends upon the availability of funding after final design has been completed.

27. Charlie Winfree
   October 9, 2004
   charlie@mtnhomes4u.com
   Corridor H Davis alignment

I have a residential property listed for sale near the intersection of Rt 93 and Rt 32, in Davis. Please send me a detailed alignment map for that area that I can use with our property disclosure to provide to potential buyers. Thank you.

Response: Thank you for visiting the Corridor H Web site. Please provide a mailing address and the maps you have requested will be sent to you.

Responses:
See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

28. Charlie Winfree
   October 13, 2004
   charlie@mtnhomeedu.com
   Corridor H Davis alignment

Please send maps of Rts 93 and 32 alignment near Davis to:

Charlie Winfree
HC 84 Box 10
Patterson Creek Road
Burlington, WV 26710

Thank you

Response: The maps will be sent to you. Thanks!

29. Ron Mochinski
   October 26, 2004
   rmochinski@yahoo.com
   Outstanding Highway!

I just had to send a quick comment on the highway construction going on for Corridor H. We are from No. VA and have just purchased a second home in Green Valley, WV. We had the pleasure of driving the short distance on Corridor H yesterday between Hwy 81 and Moorefield. It was truly one of the most beautiful highways I been on. The views of the fall colors were outstanding. And the peace and quiet while driving on that new stretch of road was a wonderful change of pace from the hectic No. VA traffic. We can only ask, “When is the segment extending out to David going to be completed?” This will knock about an hour of drive time off our current route of Hwy 55, Hwy 42, Hwy 93. Though these roads offer a spectacular view of the countryside as well, there is just far too many large vehicles crowding this road to make it pleasurable and safe. Great job so far guys!

Sincerely,
Ron Mochinski

Response: Thank you for visiting the Corridor H Web site, and thank you for your comments concerning Corridor H. WVDOH is proceeding with construction from Moorefield west toward Davis. Two new projects are currently under construction in the Moorefield area. Additional construction projects are scheduled to begin shortly between Moorefield and Foreman and will then proceed westward. Based upon current funding levels it would take approximately 5 years to complete the section to Davis.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

30. Charlie Winfree
November 2, 2004
charlie@mtshomedc.com
Parsons-to-Davis SFEIS

Wondering whether the Parsons-to-Davis SFEIS has been issued yet and if not, when it is likely to be issued. The August 2004 big map book indicates a Fall 2004 completion for that document.

Thank you
Charlie Winfree
HC 94 Box 10
Patterson Creek Road

Response: Thank you for visiting the Corridor H Web site. The SFEIS has not been issued on the Parsons to Davis section. The SFEIS is scheduled to be ready in May 2005.

31. Sharon Weeks
January 26, 2005
sweeks@martekglobal.com
Davis/Canaan Valley

Could you tell me the approx. or estimated date of completion of Corridor H near Canaan Valley (Davis)? Or the approx. end date of the entire project. Thanks so much.

Response: Thank you for visiting the Corridor H Web site. Based upon current funding levels it will take approximately 10 years to complete Corridor H.

32. Sharon Weeks
February 2, 2005
sweeks@martekglobal.com
Davis/Canaan Valley

Thank you for your earlier response. Would you please send a copy of a detailed map (address below) outlining how much has been completed, and what parts are under construction.

Mark Tornillo
Martek Global Services, Inc.

Responses:
See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

**Corridor H Web site e-mail comments**

**Parsons-to-Davis**

7920 Norfolk Avenue, Suite 9

**Response:** Thank you for visiting the Corridor H Web site. The maps you have requested will be sent to you.

33. James Stensland
   February 27, 2005
   onthede@asl.com
   Map of Corridor H

Please send me a detailed map of Corridor H. My address is:
8235 The Midway
Annandale, VA 22003

I currently own property in Canaan Valley, and am considering opening a business in Davis. My interest in the progress and route of Corridor H is very keen. Thank you very much.

**Response:** Thank you for visiting the Corridor H Web site. The maps you have requested will be sent to you.

34. Lowell Rothschild
   March 7, 2005
   rlrothschild@earthlink.net
   Davis to Parsons section

The "March Status" for this section of the project states that "The Supplemental Final Environmental Impact Statement on this segment is expected in January 2005." I presume it hasn't issued yet? Is there a new expected date for the SFEIS?

Thanks,

Lowell Rothschild

**Response:** Thank you for visiting the Corridor H Web site. The Supplemental Final Environmental Impact Statement for the Davis to Parsons section will be ready in June 2005.

35. Robert Anderson
   March 13, 2005
   raanderson22@rcn.com
   Thomas

Responses:
See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Corridor H Web site e-mail comments
Parsons-to-Davis

When will this project be done? I would also like some more info on the Thomas/Davis area.

Response: Thank you for visiting the Corridor H Web site. The ultimate completion date for Corridor H depends upon the availability of funding. Based upon current funding levels it will take approximately 8 years to complete. Please specify the type of information you need for the Thomas/Davis area.

36. Robert Anderson
   March 13, 2005
   raanderson22@hotmail.com
   Thomas

When will this project be done? I would also like some more info on the Thomas/Davis area.

Response: No response.

37. Karin B. Nelson
   March 14, 2005
   kbnellie@fuel.com
   Corridor H

What is the current status of the Corridor H route between Parsons and Davis? (I ask as a potentially affected property-owner.) Thank you. Karin Nelson

Response: Thank you for visiting the Corridor H Web site. The Supplemental Final Environmental Impact Statement is currently being prepared. This will be completed and a Record of Decision for this section will be received this summer.

38. Lowell Rothschild
   March 15, 2005
   lrothschild@earthlink.net
   Parsons to Davis SFEIS

Is there some sort of distribution list I could get on to be notified when the Parsons to Davis Supplemental Final Environmental Impact Statement is released for public comment?

Thanks,

Lowell Rothschild

Responses:
See responses below individual comments.
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Responses:
See responses below individual comments.

Corridor H Web site e-mail comments
Parsons-to-Davis

Response: Thank you for visiting the Corridor H Web site. Please provide a mailing address to Mr. Ben Bark, Environmental Section, and he will add your name to the mailing list. He may be reached at bhark@dot.state.wv.us.

39. CJ Appleton
   March 17, 2005
   cjappleton@verizon.net
timeline
I was interested in moving to Davis West Virginia... with anticipated funding, what is the projected timeframe for connection into Davis? thanks

Response: Thank you for visiting the Corridor H Web site. Based upon current funding levels, it could take 6 to 8 years to complete Corridor H to Davis.

40. Peter C Johnson
    August 15, 2005
    pjjohnson@bix.com
    Parsons-Davis-Bismarck
I am a small developer interested in Davis. I have heard the route is now possibly going north of Thomas. Please provide updated information showing the current planned route for these two segments. Thank you:

Pete Johnson
HC70 Box 572, Davis, WV 26260

Response: Thank you for visiting the Corridor H Web site. No final decision has been made on the location of Corridor H in the Thomas-Davis section. The preferred alignment is the same as the original preferred alignment which would pass south of Thomas and north of Davis. The maps showing all alignments including the preferred will be sent to you.

41. Dennis Mazza
    August 22, 2005
    demazzawv@aol.com
    Details on New roads
I was wanting information on the road between Kerens and Parsons. I was wanting to know if there was an estimated date as to when this was supposed...
Email/website public comments received after the SDEIS comment period (Dec 2001-June 2006)

Responses:
See responses below individual comments.

Corridor H Web site e-mail comments
Parsons-to-Davis
to be started and completed. Also, the Road between Parsons and Davis. when will this begin and end, thank you

Response: Thank you for visiting the Corridor H Web site. Construction on the Kerns to Parsons segment is currently scheduled to begin in 2010. Construction of the segment from Parsons to Davis would begin in 2012.

42. Pete Johnson
October 18, 2005
pjohnson@his.com
Davis details

Greetings, I would like to find out if the route is likely to be rerouted be north of Thomas or whether the originally planned route is still most likely, and approximately where the nearest exit(s) to Davis will be.
Thanks, Pete Johnson, 301-602-12104

Response: Thank you for visiting the Corridor H Web site. The current recommended alignment is the original alignment that passes between Davis and Thomas. The nearest exit to Davis will be in the vicinity of the current intersection of WV 93 and WV 32.
Original Notice of Intent
May 11, 2000

and

Revised Notice of Intent
October 9, 2001
DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Notice of Safety Advisory 2000–1

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of Safety Advisory.

SUMMARY: FRA is issuing Safety Advisory 2000–1 addressing safety concerns involving Model B1 relays, manufactured by General Railway Signal (GRS), between the years 1960 and 1985, and their potential to stick and remain in the energized position. ALSTOM Signaling, Inc., which has acquired GRS, estimates that approximately 2,000,000 relays are affected worldwide.

FOR FURTHER INFORMATION CONTACT: William E. Goodman, Staff Director, Signal and Train Control Division, Office of Safety Assurance and Compliance, FRA, 1120 Vermont Avenue, NW, RRS–13, Mail Stop 25, Washington, DC 20590 (telephone 202–493–6325) or Mark Tessler, Trial Attorney, Office of Chief Counsel, 1120 Vermont Avenue, NW, RCC–12, Mail
Mr. Henry E. Compton  
Division Environmental Coordinator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301

Dear Mr. Compton:

This responds to the Notice of Intent (NOI) to prepare a Supplemental Draft Environmental Impact Statement (SDEIS) for the Appalachian Corridor H, Thomas to Davis portion of the Parsons to Davis Project, and Tucker County, West Virginia. The NOI was published in the May 11, 2000 Federal Register. These comments reflect the concerns of the U.S. Fish and Wildlife Service (Service) and are offered as technical assistance in accordance with the provisions of the Fish and Wildlife Coordination Act.

The Service was unable to attend a June 14, 2000 scoping meeting for the proposed project due to a lack of available staff. West Virginia Field Office (WVFO) staff are, however, quite familiar with the habitat in the proposed project area. We have detailed our concerns below to assist you in preparing the SDEIS.

Endangered Species Comments

The endangered Indiana bat, _Myotis sodalis_, may occur during the spring and summer throughout the study block. The endangered Virginia big-eared bat, _Corynorhinus townsendii virginiensis_ may also forage in portions of the study block and day roost in cliff/rock outcrop overhangs, especially in the Blackwater and North Fork of Blackwater Canyons. Both the threatened Cheat Mountain salamander, _Plethodon nettingi_, and the endangered West Virginia northern flying squirrel, _Glaucomys sabrinus fuscus_, occur in the Blackwater and North Fork Blackwater Canyons, and in the vicinity of Blackwater Falls State Park.

The Service recommends that an analysis of the habitat be conducted to determine the likelihood of these species occurring in the new alignments. If suitable habitat does occur for
any of these species, appropriate surveys to determine their presence should be conducted. If species are found to be present, a biological assessment (BA) must be prepared pursuant to Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). The Service recommends that the following steps be taken in preparation of the BA.

1. Conduct recent interviews of recognized experts on the species at issue, including those within the Service, West Virginia Division of Natural Resources (WVDNR), U.S. Forest Service, universities and others who may have data not yet found in scientific literature.

2. Review up to date literature and other scientific data to determine the species distribution, habitat needs, and other biological requirements.

3. Analyze the effects of the action on individuals and populations of the species and its habitat, including indirect and cumulative effects of the action.

4. Analyze alternative actions that may provide conservation measures.

5. Conduct any studies necessary to fulfill the requirements of (1) through (4) above.

6. Review any other relevant information.

If you determine that the proposed action "may affect" the endangered Indiana bat you must request, in writing, formal consultation with our office, pursuant to Section 7(a) of the ESA. If the determination is "no effect," no further consultation is necessary, unless requested by the Service. Regardless of your findings you should provide this office a copy of the BA and any other relevant information that assisted you in reaching your conclusion.

In addition to the federally listed species, the following species of concern may occur in the study block.

- Eastern small-footed bat, *Myotis liebii*
- Southern rock vole, *Microtus chrotorhinus*
- Southern water shrew, *Sorex palustris punctulatus*
- Eastern woodrat, *Neotoma floridana magister*
- Appalachian cottontail rabbit, *Sylvilagus obscurus*
- Northern goshawk, *Accipiter gentilis*
- Cerulean warbler, *Dendroica cerulea*
- Hellbender, *Cryptobranchus alleganiensis*
- Cheat minnow, *Rhinichthys boweri*
- Darlington's spurge, *Euphorbia purpurea*
- Butternut, *Juglans cinerea*
Species of Concern, formerly Category 2 candidates, are those for which the Service has information indicating that protection under the Endangered Species Act may be warranted, but for which it lacks sufficient information on status and threats to proceed with preparation of a proposed listing. On December 5, 1996 the Service announced our final decision to discontinue efforts to maintain a national list of these species. While species of concern lack formal recognition as candidates for possible future listing under the Endangered Species Act, the Service and the West Virginia Division of Natural Resources encourage continued consideration of these species in environmental planning.

Clean Water Act/Fish and Wildlife Coordination Act Comments

The Service recommends that all wetland and stream crossings be identified in the SDEIS so that potential impacts to these resources can be assessed and plans made to avoid them where practicable. Following demonstration of avoidance and minimization, compensatory mitigation would normally be required. The 404(b)(1) guidelines state that wetlands and other aquatic sites may only be filled if there are no practicable alternatives. Floodplain impacts must be avoided to the maximum extent practicable as required by Executive Order 11988 on Floodplain Management.

The study area has numerous native brook trout streams. The Service considers native trout streams to be Resource Category 1 resources in accordance with the our Mitigation Policy (Federal Register, Volume 46, No. 15, January 23, 1981). The designation criteria for Category 1 is the habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion. The Service's mitigation goal for Category 1 resources is to allow no loss of existing habitat value.

Impacts to other aquatic resources and floodplains habitat from highway construction must be avoided to the extent practicable. Impacts to perennial streams, wetlands, floodplains, and threatened and endangered species habitat from waste fill disposal should be totally avoided.

Compensatory mitigation will be required to replace unavoidable impacts to terrestrial wildlife habitat associated with highway construction. Service personnel may participate in an inter-agency terrestrial HEP study of the alignments to determine these impacts, depending on staff availability. All (terrestrial and aquatic) mitigation costs associated with each alignment should be internalized in overall project/alignment costs.

The Service also recommends that all reasonable and practicable alternatives and the No-Build alternative be studied. An alternative is practicable if it is capable of achieving the basic purpose of the proposed activity. The alternatives should include use of existing alignment as well as construction measures (bridging, retaining walls, gabions, etc.) to avoid or minimize encroachment into high quality resources. The SDEIS should also indicate a preferred alternative.
This letter provides technical assistance only and does not constitute the review of the Secretary of the Interior within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act (P.L. 83-624), the National Environmental Policy Act of 1969 (42 U.S.C. 4231 et seq.), the Clean Water Act of 1977, as amended (P.L. 95-217), the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or other pertinent legislation.

Please have your staff contact John Schmidt of my staff or contact me directly at (304) 636-6586 if you have any questions regarding these comments.

Sincerely,

Jeffrey K. Towner
Field Supervisor
DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Napa and Solano Counties, CA

AGENCY: Federal Highway Administration (FHWA); DOT.

ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an Environmental Impact Statement will be prepared for a proposed highway project in Napa and Solano Counties, California.

FOR FURTHER INFORMATION CONTACT: Mr. Bill Wong, Acting Team Leader, Project Delivery Team, Federal Highway Administration, 980 9th Street, Sacramento, California 95814–2724. Telephone: [916] 498–5042.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation (Caltrans), will prepare an Environmental Impact Statement (EIS) for a proposal to convert an existing two-lane conventional highway into a four-lane divided expressway from the intersection with state Route 29 south of the City of Napa (Napa County) to a point 0.3 kilometer (0.2 mile) west of Interstate 80 in the City of Fairfield (Solano County). The existing highway, State Route 12, is a major east-west link in the interregional road system of the northern Bay Area. The section of highway under consideration is 9.5 kilometers (5.9 miles) long.

FHWA considers it necessary to increase capacity of this highway to provide for existing and projected traffic demand. The existing facility currently operates at full capacity during commute hours and other high-demand hours. By the year 2025, peak period volume is expected to double.

Alternatives currently under consideration are: (1) taking no action; (2) construct a parallel alignment north of the existing roadway to be used for westbound traffic and correct the existing roadway alignment and use it for eastbound traffic; (3) construct a parallel alignment south of the existing roadway to be used for eastbound traffic and correct the existing roadway alignment and use it for westbound traffic; and (4) construct AN alignment that closely follows the existing alignment, with the additional roadway constructed to the north in some sections and the south in some sections, depending on the terrain. Incorporated into and studied with the various build alternatives will be design variations of grade and alignment.

Letters describing the proposed action and soliciting comments will be sent to appropriate federal, state, and local agencies and to private organizations and citizens who have previously expressed or are known to be interested in this proposal. Public scoping meetings will be held in Napa County and in Solano County in October and November 2001. Public notice will be given of the time and place of the scoping meetings. After the draft EIS has been completed, a public hearing will be held. The draft EIS will be available for public and agency review before the public hearing, and public notice will be given of the time and place of the hearing.

To ensure that the full range of issues related to this proposed action is addressed and that all significant issues are identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address provided above.


DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Tucker County, WV

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Revised notice of intent.

SUMMARY: On May 2, 2000, the FHWA issued an NOI to advise the public that a Supplemental Environmental Impact Statement (SEIS) would be prepared for the Blackwater Avoidance area of the Thomas-to-Davis portion of the Parsons-to-Davis project of the proposed Appalachian Corridor H highway in Tucker County, West Virginia. This purpose of the revised NOI is to advise the public that the limits of the study area for the SEIS will be expanded to include the entire Parsons-to-Davis project. Expansion of the study area is required due to new information obtained during Endangered Species Act, Section 7 consultation regarding a federally listed, endangered species: the Northern Flying Squirrel (Glaucomys sabrinus fuscus).


SUPPLEMENTARY INFORMATION: In accordance with a court-approved settlement agreement, the FHWA published an NOI on May 2, 2000, that indicated the FHWA, in cooperation with the West Virginia Department of Transportation (WVDOCT), would prepare an SEIS to examine one or more potential alignment shifts for the Thomas-to-Davis portion of the Parsons-to-Davis project of the proposed Appalachian Corridor H highway in Tucker County, West Virginia. A Record of Decision (ROD) for the entire Appalachian Corridor H highway (FHWA–WV–EIS–92–01–7) from Aggregates to the WV/VA state line, a distance of approximately 100 miles, was approved on August 2, 1986.

During Endangered Species Act, Section 7 consultation with the United States Fish and Wildlife Service, populations of the federally listed, endangered, Northern Flying Squirrel (Glaucomys sabrinus fuscus) were found within the current study limits of the Parsons-to-Davis project. Due to this discovery, it was determined that in order to review a full range of potential alignments that may avoid the newly discovered populations, the study limits of the SEIS must be expanded to include the entire Parsons-to-Davis project.

The proposed Parsons-to-Davis project will provide a divided four-lane, partially controlled access highway on new location for a distance of approximately 9 miles. The purpose of this project is to provide safe and efficient travel between population centers in Tucker County (Parsons Area and Thomas/Davis Area), while also contributing to the completion of Corridor H in West Virginia.

Alternates under consideration in the SEIS will be: (1) The no-action alternative, (2) the preferred alternative that was approved in the 1996 ROD, and (2) one or more alternatives that avoid the Blackwater Area, as identified in Exhibit 4 of the court approved Corridor H Settlement Agreement.
preliminary studies, it is expected that the avoidance alternatives considered in the SEIS will include one or more alignments that would shift the project to the north, resulting in additional connections to US 239, WV Route 32, and WV Route 93 in the vicinity of the towns of Thomas and Davis.

Letters describing the proposed action and soliciting comments will be sent to appropriate federal, state, and local agencies, and to private organizations and citizens who have expressed or are known to have an interest in this proposal.

To ensure the full range of issues related to the proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action should be directed to the FHWA at the address provided above.

(Catalog of Federal Domestic Assistance Program Number 20.020, Highway Research Planning and Construction. The regulations implementing Executive Order 12257 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: September 27, 2001.

Henry E. Compton,
Environmental Coordinator, Charleston, West Virginia.

[FR Doc. 01-25112 Filed 10-5-01; 8:45 am]
BILLING CODE 4910-02-M

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Petition for Waiver of Compliance

In accordance with Part 211 of Title 49 Code of Federal Regulations (CFR), notice is hereby given that the Federal Railroad Administration (FRA) received a request for a waiver of compliance with certain requirements of its safety standards. The individual petition is described below, including the party seeking relief, the regulatory provisions involved, the nature of the relief being requested, and the petitioner’s arguments in favour of relief.

Finger Lakes Railway Corporation
(Docket Number FRA–2001–10215)

The Finger Lakes Railway Corporation seeks a waiver of compliance from the requirements of the Safety Glazing Standards-Passenger Car, 49 CFR 223.15, which requires all windows be FRA certified Glazing and a minimum of four emergency windows. The petitioner requests the waiver for four cars recently purchased from Via Rail Canada, Inc. The coaches were built between 1954 and 1956, and were equipped with tempered glazing which met the Canadian glazing requirements. The coaches would be utilized in charter service in the rural Finger Lakes Region of New York State. Finger Lakes Railway Corporation anticipates the charter trips to be 15 to 20 miles in length and operated at a speed not to exceed 15 miles per hour.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested party desires an opportunity for oral comment, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number (e.g., Waiver Petition Docket Number FRA–2001–10215) and must be submitted to the Docket Clerk, DOT Central Docket Management Facility, Room P-401, Washington, DC 20590.

Communications received within 45 days of the date of this notice will be considered by FRA before final action is taken. Comments received after that date will be considered as far as practicable. All written communications concerning these proceedings are available for examination during regular business hours (9 a.m.–5 p.m.) at the above facility. All documents in the public docket are also available for inspection and copying on the Internet at the docket facility’s Web site at http://dms.dot.gov.

Issued in Washington, DC on October 2, 2001.

Grady C. Cothen, Jr.,
Deputy Associate Administrator for Safety Standards and Program Development.

[FR Doc. 01–25223 Filed 10–5–01; 8:45 am]
BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Petition for Waiver of Compliance

In accordance with Part 211 of Title 49 Code of Federal Regulations (CFR), notice is hereby given that the Federal Railroad Administration (FRA) received a request for a waiver of compliance with certain requirements of its safety standards. The individual petition is described below, including the party seeking relief, the regulatory provisions involved, the nature of the relief being requested, and the petitioner’s arguments in favour of relief.

Little Kanawha River Railroad Corporation
(Docket Number FRA–2001–10569)

Marietta Industrial Enterprises, Inc, of Marietta, OH, has petitioned on behalf of the Little Kanawha River Rail (LKR) for a permanent waiver of compliance for one locomotive from the requirements of the Locomotive Safety Standards, 49 CFR Part 229.23, which requires the time interval between periodic inspections not exceed 92 days.

The petitioner indicates that the locomotive is in switching service over a 2.5 mile short line at a speed not to exceed 10 mph. They state that the locomotive is used an average of 29 hours a week and would like to extend the 92 day periodic requirement to 184 days.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested party desires an opportunity for oral comment, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number (e.g., Waiver Petition Docket Number FRA–2001–10569) and must be submitted to the Docket Clerk, DOT Central Docket Management Facility, Room P-401, Washington, DC 20590.

Communications received within 45 days of the date of this notice will be considered by FRA before final action is taken. Comments received after that date will be considered as far as practicable. All written communications concerning these proceedings are available for examination during regular business hours (9 a.m.–5 p.m.) at the above facility. All documents in the public docket are also available for inspection and copying on the Internet at the docket facility’s Web site at http://dms.dot.gov.

Issued in Washington, DC on October 2, 2001.

Grady C. Cothen, Jr.,
Deputy Associate Administrator for Safety Standards and Program Development.

[FR Doc. 01–25223 Filed 10–5–01; 8:45 am]
BILLING CODE 4910–06–P
Mr. Henry E. Compton  
Division Environmental Coordinator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301

Dear Mr. Compton:

This responds to the Revised Notice of Intent (NOI) to prepare a Supplemental Draft Environmental Impact Statement (SDEIS) for the Appalachian Corridor H, Parsons to Davis (in its entirety) Tucker County, West Virginia. The NOI was published in the October 9, 2001 Federal Register. The expansion of the study area is required due to new information obtained during the Endangered Species Act, Section 7 consultation regarding a federally listed, endangered species; the West Virginia Northern Flying Squirrel (*Glaucomys sabrinus fuscus*). These comments reflect the concerns of the U.S. Fish and Wildlife Service (Service) and are offered as technical assistance in accordance with the provisions of the Fish and Wildlife Coordination Act.

**Endangered Species Comments**

The Service has no objection to the expansion of the study area for the project. The expansion of the study limits will allow for the consideration of additional alternatives to avoid impacts to the endangered West Virginia northern flying squirrel.

Please have your staff contact John Schmidt of my staff or contact me directly at (304) 636-6586, or at the letterhead address, if you have any questions regarding these comments.

Sincerely,

Jeffrey K. Towner  
Field Supervisor
June 14, 2000
Agency Scoping Meeting
Canaan Valley Resort & Conference Center
Davis, West Virginia
NOTICE
OF
NEPA/SECTION 106 SCOPING MEETING
APPALACHIAN CORRIDOR H
KERENS TO PARSONS AND THOMAS TO DAVIS
RANDOLPH AND TUCKER COUNTIES

The West Virginia Division of Highways will hold a scoping meeting Wednesday, June 14, at the Canaan Valley Resort and Conference Center off WV 32 in Canaan Valley State Park in Tucker County to advise the public of studies being initiated for Appalachian Corridor H under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act.

Scheduled in a workshop format from 4 to 7 p.m., the meeting will include discussion of a Supplemental Environmental Impact Statement (SDEIS) to be prepared to examine potential alignment shifts for the Kerens-to-Parsons project and a second SDEIS to be prepared for the Thomas-to-Davis portion of the Parsons-to-Davis project.

Those wishing to file written comments may send them to Jim Sothen, P.E. Director, Engineering Division, West Virginia Division of Highways, Capitol Complex Build 5, 1900 Kanawha Boulevard East, Charleston, West Virginia 25305-0430 on or before July 14, 2000.
Mr. Roger Anderson  
WV Division of Natural Resources  
Post Office Box 67  
Elkins, West Virginia 26241

Dear Mr. Anderson:

Appalachian Corridor H  
Kerens to Parsons and Thomas to Davis  
NEPA/Section 106  
Randolph and Tucker Counties

You are invited to attend an agency scoping meeting from 10:00 a.m. to 12:00 p.m. on June 14, 2000, at the Canaan Valley Resort and Conference Center off WV 32 in Canaan Valley State Park, Tucker County. A public workshop portion will be from 4-7:00 p.m.

Studies are being initiated on a Supplemental Draft Environmental Impact Statement (SDEIS) for potential alignment shifts on the Kerens to Parsons project, and a second SDEIS for potential line shifts on the Thomas to Davis portion of the Parsons to Davis project. The purpose of this meeting is to identify issues of importance to your agency in order that they may be addressed in the studies. Location maps and a copy of the public meeting workshop notice are attached.

Should you have any questions, please contact Mr. Norse Angus at (304)558-2885.

Very truly yours,

[Signature]

James E. Sothen, P.E., Director  
Engineering Division

JES: Hs

Enclosures

bce: DDE(NA), DDR, DD(MF)
Mr. Roger Anderson  
WV Division of Natural Resources  
Post Office Box 67  
Elkins, West Virginia 26241

Mr. Lyle Bennett  
WV Department of Environmental Protection  
Water Resources Section  
1201 Greenbrier Street  
Charleston, West Virginia 25311

Mr. Michael Castle  
Director  
Division of Environmental Protection  
10 McJunkin Road  
Nitro, West Virginia 25143-2506

Mr. Steve DeBarr  
WV Division of Tourism and Parks  
Room 451, Building 6  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305-0315

Mr. Lynn Hicks  
US Department of Agriculture  
Monongahela National Forest  
200 Sycamore Street  
Elkins, West Virginia 26241

Mr. Ed Kesecker  
US Department of Agriculture  
Natural Resource Conservation Service  
HC 85, Box 301 Industrial Park  
Moorefield, West Virginia 26836

Mr. Edward Kropp  
Office of Air Quality  
1558 Washington Street, East  
Charleston, West Virginia 25311

Mr. Charles Meyers  
Supervisor  
Monongahela National Forest  
200 Sycamore Street  
Elkins, West Virginia 26241

Ms. Maryann Naber  
Room 809  
1100 Pennsylvania Avenue  
Washington, DC 20004

Mr. Robert Neill  
US Army Corps of Engineers  
Pittsburgh District  
1000 Liberty Avenue  
Pittsburgh, Pennsylvania 15222

Mr. Mike Phillips  
District Eight  
West Virginia Division of Highways  
Post Office Box 1516  
Elkins, West Virginia 26241

Ms. Susan Pierce  
State Historic Preservation Officer  
WV Division of Culture and History  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305

Mr. Jim Pifer  
US Department of Agriculture  
200 Sycamore Street  
Elkins, West Virginia 26241

Mr. John Rader  
Director  
Division of Natural Resources  
Building 3, Room 669  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305-0660
Ms. Denise Rigney  
Environmental Protection Agency  
Region 3  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

Mr. Jeffrey Towner  
Field Supervisor  
US Fish and Wildlife Service  
Post Office Box 1278  
Elkins, West Virginia 26241

Mr. John Schmidt  
US Fish and Wildlife Service  
Post Office Box 1278  
Elkins, West Virginia 26241

Mr. Lynn Shutts  
US Department of Agriculture  
Natural Resource Conservation Service  
75 High Street  
Morgantown, West Virginia 26505

Mr. McDonald Smith  
WV Division of Tourism and Parks  
Post Office Box 67  
Elkins, West Virginia 26241

Mr. Thomas Smith  
Division Administrator  
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Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301

Mr. Michael Sou lup  
Associate Director  
Natural Resource Stewardship and Science  
National Park Service  
1849 C Street, Northwest  
Washington, DC 20240

Mr. Tom Sta ud  
Director of Engineering  
District Eight  
West Virginia Division of Highways  
Post Office Box 1516  
Elkins, West Virginia 26241
United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
West Virginia Field Office  
Post Office Box 1278  
Elkins, West Virginia 26241  

July 14, 2000  

Mr. James E. Sothen, P.E., Director  
Engineering Division  
West Virginia Department of Transportation  
Division of Highways  
1900 Kanawha Boulevard East  
Building Five, Room 110  
Charleston, West Virginia 25305-0430  

Dear Mr. Sothen:  

This responds to your May 10, 2000 letter inviting the U.S. Fish and Wildlife Service (Service) to a scoping meeting for the Supplemental Draft Environmental Impact Statement (SDEIS) for the Appalachian Corridor H, Kerens to Parsons portion and Thomas to Davis portion, Randolph and Tucker Counties, West Virginia. The Service was unable to attend a June 14, 2000 scoping meeting for the proposed project due to a lack of available staff.  

West Virginia Field Office (WVFO) staff are very familiar with the habitat in the proposed project area. These comments reflect the concerns of the Service, and are offered as technical assistance in accordance with the provisions of the Fish and Wildlife Coordination Act.  

Endangered Species Comments  

Kerens to Parsons: Big Springs Cave, located in the Fernow Experimental Forest south of Parsons, serves as a hibernaculum for the endangered Indiana bat, Myotis sodalis. Summer foraging has been documented in an approximate radius of 2.9 miles around the cave in the summer and fall swarming periods. Cave Hollow Arbogast Cave system occurs to the southeast of the study block and serves as a hibernaculum for the Indiana bat. It also supports a large summer and winter colony of the endangered Virginia big-eared bat, Corynorhinus townsendii virginianus. Bats from this cave are expected to forage and roost within the study block. The Indiana bat could be found roosting and foraging throughout the study block. The endangered running buffalo clover is known to occur in the Fernow experimental forest and in two locations along the Shavers Fork near Porterwood and Parsons. The West
Virginia northern flying squirrel, *Glaucomyys sabrinus fuscus* may occur in the higher elevations of the study block in areas such as the Otter Creek Wilderness area and Blackwater Canyon in the mixed northern hardwoods and red spruce/hemlock forest type. The threatened Cheat Mountain salamander, *Plethodon nettingi* occurs on both sides of the Blackwater Canyon in the study block.

Thomas to Davis: The Indiana bat may occur during the spring and summer throughout the study block. The Virginia big-eared bat may also forage in portions of the study block and day roost in cliff/rock outcrop overhangs, especially in the Blackwater and North Fork of Blackwater Canyons. Both the Cheat Mountain salamander and the West Virginia northern flying squirrel occur in the Blackwater and North Fork Blackwater Canyons, and in the vicinity of Blackwater Falls State Park.

The Service recommends that an analysis of the habitat be conducted to determine the likelihood of these species occurring in the new alignments. If suitable habitat does occur for any of these species, appropriate surveys to determine their presence should be conducted. If species are found to be present, a biological assessment (BA) must be prepared pursuant to Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). The Service recommends that the following steps be taken in preparation of the BA.

1. Conduct recent interviews of recognized experts on the species at issue, including those within the Service, West Virginia Division of Natural Resources (WVDNR), U.S. Forest Service, universities and others who may have data not yet found in scientific literature.

2. Review up to date literature and other scientific data to determine the species distribution, habitat needs, and other biological requirements.

3. Analyze the effects of the action on individuals and populations of the species and its habitat, including indirect and cumulative effects of the action.

4. Analyze alternative actions that may provide conservation measures.

5. Conduct any studies necessary to fulfill the requirements of (1) through (4) above.

6. Review any other relevant information.

If you determine that the proposed action "may affect" the endangered Indiana bat you must request, in writing, formal consultation with our office, pursuant to Section 7(a) of the ESA. If the determination is "no effect," no further consultation is necessary, unless requested by the Service. Regardless of your findings you should provide this office a copy of the BA and any other relevant information that assisted you in reaching your conclusion.
In addition to the federally listed species, the following species of concern may occur in the study block.

- Eastern small-footed bat, *Myotis liebii*
- Southern rock vole, *Microtus chrotorrhinus*
- Southern water shrew, *Sorex palustris punctulatus*
- Eastern woodrat, *Neotoma floridana magister*
- Appalachian cottontail rabbit, *Sylvilagus obscurus*
- Northern goshawk, *Accipiter gentilis*
- Cerulean warbler, *Dendroica cerulea*
- Hellbender, *Cryptobranchus alleganiensis*
- Cheat minnow, *Rhinichthys boweri*
- Darlington’s spurge, *Euphorbia purpurea*
- Butternut, *Juglans cinerea*

Species of Concern, formerly Category 2 candidates, are those for which the Service has information indicating that protection under the Endangered Species Act may be warranted, but for which it lacks sufficient information on status and threats to proceed with preparation of a proposed listing. On December 5, 1996 the Service announced our final decision to discontinue efforts to maintain a national list of these species. While species of concern lack formal recognition as candidates for possible future listing under the Endangered Species Act, the Service and the West Virginia Division of Natural Resources encourage continued consideration of these species in environmental planning.

**Clean Water Act/Fish and Wildlife Coordination Act Comments**

The Service recommends that all wetland and stream crossings be identified in the SDEIS so that potential impacts to these resources can be assessed and plans made to avoid them where practicable. Following demonstration of avoidance and minimization, compensatory mitigation would normally be required. The 404(b)(1) guidelines state that wetlands may only be filled if there are no practicable alternatives. Floodplain impacts must be avoided to the maximum extent practicable as required by Executive Order 11988 on Floodplain Management. Impacts to intermittent and perennial streams should be avoided.

The study areas have numerous native brook trout streams. The Service considers native trout streams to be Resource Category 1 resources in accordance with the our Mitigation Policy (Federal Register, Volume 46, No. 15, January 23, 1981). The designation criteria for Category 1 is the habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion. The Service's mitigation goal for Category 1 resources is to allow no loss of existing habitat value.

Impacts to aquatic resources and floodplains from highway construction must be avoided to the extent practicable. Impacts to these resources from waste fill disposal should be avoided totally.
Compensatory mitigation will be required to replace unavoidable impacts to terrestrial wildlife habitat associated with highway construction. Service personnel may participate in an inter-agency terrestrial HEP study of the alignments to determine these impacts, depending on staff availability. All (terrestrial and aquatic) mitigation costs associated with each alignment should be internalized in overall project/alignment costs.

The Service also recommends that all reasonable and practicable alternatives and the No-Build alternative be studied. An alternative is practicable if it is capable of achieving the basic purpose of the proposed activity. The alternatives should include use of existing alignment as well as construction measures (bridging, retaining walls, gabions, etc.) to avoid or minimize encroachment into high quality resources. The SDEIS should also indicate a preferred alternative.

This letter provides technical assistance only and does not constitute the review of the Secretary of the Interior within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act (P.L. 83-624), the National Environmental Policy Act of 1969 (42 U.S.C. 4231 et seq.), the Clean Water Act of 1977, as amended (P.L. 95-217), the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or other pertinent legislation.

Please have your staff contact John Schmidt of my staff or contact me directly at (304) 636-6586 if you have any questions regarding these comments.

Sincerely,

Jeffrey K. Towner
Field Supervisor
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Phone #</th>
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<tr>
<td>Bill McCartney</td>
<td>Michael Baker Jr., Inc.</td>
<td>757-463-8770</td>
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<td>Katry Harris</td>
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<td>757-463-8770</td>
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<td>Michael J. Phillips</td>
<td>DOH - O-8</td>
<td>304-637-0226</td>
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<td>Tom Staud</td>
<td>WVDOT, Elkins</td>
<td>304-637-0226</td>
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<tr>
<td>Lynn L. Hicks</td>
<td>USDI Forest Service, Monongahia NF</td>
<td>(304)656-1830 x12</td>
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<td>Fred Pozzuto</td>
<td>U.S. Army Corps - Env.</td>
<td>(412)275-7275</td>
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<td>Bosner</td>
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<tr>
<td>Mary Keith Highcockham</td>
<td>Michael Baker</td>
<td>304-282-1821</td>
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<td>Susan Rotenstein</td>
<td>Michael Baker Jr.</td>
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<tr>
<td>Virginia Blank</td>
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<td>(757)422-8473</td>
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<td>Mike Wilson</td>
<td>DOH - Env.</td>
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<td>Jim Colby</td>
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<td>Neal Carte</td>
<td>FHWA</td>
<td>304-347-5268</td>
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<td>Ed Compton</td>
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<td>Keith Knatz</td>
<td>WVDNR</td>
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<td>Ron Krafcheck</td>
<td>FHWA</td>
<td>304-558-2458</td>
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<td>John Vandergriff</td>
<td>Michael Baker</td>
<td>204-282-1826</td>
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<td>Mark Holma</td>
<td>WSHPO</td>
<td>304-558-0220 OX</td>
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<td>Susan Pierce</td>
<td>WVSTPO - DCH</td>
<td>304-558-0220 X11</td>
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<td>Morse Angus</td>
<td>WVDOT, DO-ENV</td>
<td>304-558-2585</td>
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Mr. Roger Anderson  
WV Division of Natural Resources  
Post Office Box 67  
Elkins, West Virginia 26241

Dear Mr. Anderson:

Appalachian Corridor II  
Kerens to Parsons and Thomas to Davis  
Agency Scoping Meeting  
Randolph and Tucker Counties

Enclosed is a summary of the scoping meeting held on June 14, 2000, at Canaan Valley Conference and Resort Center for the subject Supplemental Environmental Impact Statements. For those who attended, please review the summary and provide any corrections as necessary. If your agency was not able to attend, the attached information should assist in your understanding of the studies. Comments are due July 14, 2000.

Should you have any questions concerning this information, please contact Mr. Norse Angus at (304)558-2885.

Very truly yours,

James E. Sothen, P.E., Director  
Engineering Division

JES:Hs

Enclosures

cc: Mr. Bill McCartney, Michael Baker, Jr., Incorporated

bcc: DDE(NA), DDR, DD(MF)
Meeting Minutes
Agency Scoping Meeting - Corridor H
Battlefield Avoidance SEIS
Blackwater Avoidance SEIS
Canaan Valley Conference and Resort Center
Wednesday June 14, 2000

Agency Scoping Meeting Attendees:

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<td>Jim Colby</td>
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<td>Ed Compton</td>
<td>FHWA</td>
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<td>Ron Krocheck</td>
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<td>Mike Wilson</td>
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<td>Neal Carte</td>
<td>WVDOH</td>
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<td>Mike Phillips</td>
<td>WVDOH-District 8</td>
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<td>Tom Straud</td>
<td>WVDOH-District 8</td>
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<td>Lynn L. Hicks</td>
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<td>Wendy L. Zelencik</td>
<td>Michael Baker Jr.</td>
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<td>John Vandergriff</td>
<td>Michael Baker Jr.</td>
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<td>Jennifer Talbot</td>
<td>Michael Baker Jr.</td>
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<tr>
<td>Denise Rigney</td>
<td>EPA - Philadelphia, PA (arrival delayed - post meeting summary provided)</td>
</tr>
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Minutes:

Welcome and Introductions:

Jim Colby, WVDOH

Mr. Colby opened the meeting by explaining its purpose. Following this, each attendee introduced themselves and the agency or organization that they represent. Mr. Colby then turned the meeting over to Bill McCartney, Michael Baker Jr., Inc., Corridor H Project Manager

Purpose of Meeting:

Bill explained that the purpose of this meeting was to initiate both NEPA and Section 106 scoping processes as required by FHWA and CEQ regulations. He also explained that because a Notice of Proposed Rule Making (NPRM) had been published by FHWA revising its NEPA regulations, that the projects will follow both current (23 CFR 771) and proposed (23 CFR 1420 and 1430) regulatory guidance.

Overview of Projects in the Context of Corridor H

Bill "how we got here" by summarizing the Corridor H project milestones since the issuance of the Record of Decision of August 1996. The milestones were:

- November, 1996  Plaintiffs file in Federal District Court on 2 counts. Count one was violation of NEPA by failing to adequately investigate the Improved Roadway Alternative and Count 2 that FHWA violated its Section 4(f) regulation by premature findings of no use.

- October, 1997  Court found for Defendants on both counts

- October, 1997  Plaintiffs file appeal in U.S. Court of Appeals

- September, 1998  Plaintiffs file second suit in Federal District Court on "findings of no constructive use"

- February, 1999  U.S. Court of Appeals issues opinion finding for Defendants on Count one and for Plaintiffs on Count two
Meeting Minutes
Agency Scoping Meeting - Corridor H
Battlefield Avoidance SEIS
Blackwater Avoidance SEIS
Canaan Valley Conference and Resort Center
Wednesday June 14, 2000

- May, 1999 Federal District Court refers case to court's
  mediation program
- February, 2000 Mediation Settlement Agreement files with
  Federal District Court

Bill McCartney explained that the settlement agreement called for, among other things, the re-designation of sections (dropping the old numbering scheme and substituting separate projects each with logical termini and independent utility) and completion of two supplemental EIS's (SEIS). These will be known as the "Battlefield [Corricks Ford] Avoidance Study" and the "Blackwater [Canyon] Avoidance Study". He further pointed out that doing these supplemental EIS's were not only consistent with the Federal Court supervised and accepted Settlement Agreement but also with FHWA regulations, specifically, 23 CFR 771.130(2)(f).

Battlefield Avoidance Study

Using maps and graphics prepared for the meeting, Bill outlined the project study area and the avoidance area which was defined as part of the Settlement Agreement. He further explained that the NEPA class of action was a SEIS. It was also explained that the only alternatives to be considered would be 4-lane build alternatives because the improved roadway alternative and others were previously studied and dismissed and that those studies and dismissals were found to be valid in the court cases cited above. It was also explained that Section 106 determinations of eligibility would be completed for all historic structures within the entire study area. A graphic showing project schedule, and integration of NEPA and Section 106 processes was used during this presentation.

Discussion then turned to the identification of key issues and the proposed methodology and level of analysis for each. Bill presented a matrix that WVDOH had developed identifying the key issues, methodology and levels of analysis and briefly described each

Battlefield Avoidance SEIS (Kerens-to-Parsons Project)

Joint NEPA and Section 106 Process (graphic)

Notice of Intent (NOI), Federal Register- April 2000
Scoping/Public Meeting- June 2000
Section 106:

New approach- Area of Potential Effect (APE) is entire study area. Determination of Eligibility (DOE) will focus on all eligible and potentially eligible properties in defined study area. Criteria of Effects (COE) will be submitted PRIOR to DEIS. Archeology will be conducted on Preferred Alternative selected by FHWA after circulation and comment period of DEIS.

Schedule and Process- graphic

Susan Pierce, WVSHPO: (comments apply to both Battlefield Avoidance Area SEIS and Blackwater Avoidance Area SEIS).
Committed to schedule and proper review periods
Will predictive modeling be used in the DEIS for Archeology as before?
Were there test areas in the Project Study Area used for the Predictive Model information presented in the ASDEIS/FEIS?
WVSHPO will review previous Predictive Model and make determination.

Preliminary/draft DOE will be circulated to WVDOH and FHWA for comment to expedite process.

COE will require development of Alternatives to be carried forward for detailed study (reasonable number of alternatives, per CEQ regulations). Baker will begin to develop alternatives (line and grade engineering) post Scoping/public meeting.

NEPA:

(Refer to “Key Issues” Information Table)

Environmental Justice: Methodology (no comment)

Monagahela National Forest: Methodology

Lynn Hicks, US Forest Service:

Old PA involved mostly privately held parcels of National Forest Land; whereas New Study Area involves a bulk of federally owned National Forest Land.
Therefore, amount of federal land taken will require mitigation. This may entire purchase of privately held parcels (willing sellers, Eminent Domain not encouraged). Forest Service has list of potential sellers and "preferred" parcels to purchase. Mitigation "purchase" could take place anywhere in Mon Forest, but local area preference is noted, particularly northern and western portion of Mon Forest in Tucker, Grant and Randolph Counties. Forest Service has completed the development of it GIS system. Data sharing of GIS is encouraged and will be arranged in the near future. Based upon the Mon Forest Plan, Section 6(f) analysis does not appear to be warranted. New Roadless Area designations should not be a concern in the study area. MP 6.2 and MP 8.0 designations are not subject to current Roadless Area designations. Majority of study area falls within MP 3- managed for roads and timber production. Previous 4(f)-clarification letter for USFS will be reviewed, but stands as valid. Secondary data analysis indicates Trails in the area, however, 4(f) analysis does not appear to be necessary.

Rare, Threatened and Endangered Species: Methodology

Section 7 letters sent to WVDNR and USFWS. Comment letter received from WVDNR. Presence of Running Buffalo Clover is known in the Clover Run area. It is assumed a RBC survey will be performed. The Project Study area lies within the 5-mile radius, Indiana Bat Swarm Area, centered upon Big Spring Cave. Indiana Bat Biological Assessment (BA) remains valid at this time.

Surface Waters:

Rapid Bio-Assessment Methodology used in ASDEIS and FEIS will be applied.

Wetlands:

Avoidance and minimization will be a priority. Original encroachment (ASDES/FEIS) of Corridor H Preferred Alternative was approximately 32 acres; with many encroachments being less than 1/4 acre, low value, low functioning wetlands. Mitigation being prior to encroachment was determined to warrant 1 to 1 ratio replacement. 50 acres of wetland replacement has been created and is performing well in function and anticipated growth, even under drought conditions. Can the approximate 18 additional acres of mitigation be applied as a potential buffer to any encroachment resulting from the Preferred Alternative in the SDEIS? The approved 11 year 404 permit stands and may be amended, if necessary. Corp. of Engineer representatives concurred and requests updates and future coordination for timely review.
Meeting Minutes  
Agency Scoping Meeting - Corridor H  
Battlefield Avoidance SEIS  
Blackwater Avoidance SEIS  
Canaan Valley Conference and Resort Center  
Wednesday June 14, 2000

Floodplains:

Given the recent and historic flood events in Tucker County, particularly the Town of Parsons, this analysis is a key community issue. Previous comments made during the ASDEIS/FEIS questioned the accuracy of the Cheat River Flood gauge. Therefore, an analysis of the accuracy will be conducted. The Cheat River Avoidance build alternatives will require a bridge crossing over the Cheat; visual analysis will be conducted using GIS.

Conclusion of Battlefield Avoidance SEIS:

All participant encouraged to provide written comment to WVDOH by July 14, 2000. All organizations invited, which did not attend, will receive the information packet provided for the meeting.

Additional Comments:

Susan Pierce, WVSHP:

Will previous survey reports apply to the Determination of Eligibility (DOE) submitted as a result of the SEIS study? Will surveying and presenting new photos be required? To be decided.

Blackwater Avoidance Study

Using maps and graphics prepared for the meeting, Bill outlined the project study area and the avoidance area which was defined as part of the Settlement Agreement. He further explained that the NEPA class of action was a SEIS. It was also explained that the only alternatives to be considered would be 4-lane build alternatives because the improved roadway alternative and others were previously studied and dismissed and that those studies and dismissals were found to be valid in the court cases cited above. It was also explained that Section 106 determinations of eligibility would be completed for all historic structures within the entire study area. A graphic showing project schedule, and integration of NEPA and Section 106 processes was used during this presentation.

Discussion then turned to the identification of key issues and the proposed methodology and level of analysis for each. Bill presented a matrix that WVDOH had developed identifying the key issues, methodology and levels of analysis and briefly described each
Meeting Minutes
Agency Scoping Meeting - Corridor H
Battlefield Avoidance SEIS
Blackwater Avoidance SEIS
Canaan Valley Conference and Resort Center
Wednesday June 14, 2000

Blackwater Avoidance Area (Parson to Davis Project):

Joint NEPA and Section 106 Process (graphic)

NOI- April 2000
Scoping/Public Meeting- June 2000
Study Area Definition and rational

General:

Avoidance area includes the Coketon Industrial Complex, eligible for the national register and the Blackwater Canyon State Park, potentially eligible for National park status. Current Preferred Alternative runs west to east in between the Towns of Thomas and Davis. Study is driven by settlement agreement. Avoidance has already occurred in the Big Run Bog and Olsen Fire Town areas. Per the settlement agreement, a Citizens Action Group (CAG) has been formed for the Blackwater Avoidance Area SEIS. The CAG is comprised of 12 people with a facilitator, Ms. Keena Smith of Canaan Valley Institute. The CAG has had three meetings to date. Per the settlement agreement, both Town Councils must approve the selected Preferred Alternative as the result of the DEIS. Therefore, a 60-day comment period has been added to the NEPA and Section 106 process. (See graphic)

Section 106:

See general comments noted during Battlefield avoidance Area study discussion.

Benbush Area is included in the Project Study Area, and is included in the APE. A fieldview of the area will be conducted after the scoping meeting.

NEPA:

Mon. Forest:

Lynn Hicks, US Forest Service:

Amount of Federal land in the Project Area significantly smaller than the Battlefield Avoidance Project Study Area, therefore, mitigation (purchase of additional land) may not be warranted. Very few trails are located within the Project Study Area.
Meeting Minutes  
Agency Scoping Meeting - Corridor H  
Battlefield Avoidance SEIS  
Blackwater Avoidance SEIS  
Canaan Valley Conference and Resort Center  
Wednesday June 14, 2000  

Rare, Threatened and Endangered Species:  
Section 7 letters sent to WVDNR and USFWS. Comment letter received from WVDNR. Presence of the Cheat Mountain Salamander is known in the area and the previous survey conducted with Dr. Pauly will be reviewed. It is assumed a Northern Flying Squirrel survey conducted with Dr. Michaels will be reviewed and a trapping survey may be required. The Project Study area lies within the 5-mile radius, Indiana Bat Swarm Area, centered upon Big Spring Cave. Indiana Bat Biological Assessment (BA) remains valid at this time.

Acid Mine Drainage:  
Given the history of Acid Mine Drainage impacts in the Project Study Area (resulting from historic mining activities), this is a key community issue. The Mitigation Plan approved (FEIS, Vol. 3) is incorporated by reference to both projects, and accounts for acid mine drainage control with an approved methodology as well as partnership with WVU under the direction of Dr. Jeff Scousen. No commitments to this course of action had occurred as a result of this re-evaluation. WVU will be contacted.

Hazardous Materials:  
Two known land fills lie within the Project Area: The Old Tucker County Landfill (exact location will be determined) and the New Tucker County Landfill located off Route 219, west of Thomas.

Jim Colby, WVDOH, Conclusion:  
Both studies are required via the settlement agreement (February 2000), sensitive area(s) constraints will be noted as a result of this scoping meeting and comments provided in writing.

Request written comments be submitted to WVDOH no later than July 14, 2000.
Mr. James E. Sothen
Director Engineering Division
WVDOT, Division of Highways
1900 Kanawha Blvd. E.
Bldg. 5, Room 110
Charleston, WV 25305-0430

Re: Appalachian Corridor H, Kerens to Parsons
and Thomas to Davis; Agency Scoping Meeting,
Randolph and Tucker counties.

Dear Mr. Sothen:

We have reviewed your letter of 7 July 2000 regarding the scoping meeting of 14 June 2000 held in Canaan Valley. The purpose of this meeting was to discuss new alignments of Corridor H from Kerens to Parsons and Thomas to Davis. In answer to the question on page 5 regarding impacts to wetlands, the Division of Highways has 18 useable acres of mitigation that it may draw from to offset impacts created on these new sections. We urge DOH engineers, however, to practice avoidance and minimize impacts to our wetland resources before drawing on these reserves.

We look forward to working with you on future alignments of Corridor H. Should you have any questions regarding this project, please contact Mr. Keith Krantz at 304-637-0245.

Sincerely,

Roger J. Anderson, Supervisor
Environmental Review & Coordination
June 14, 2000
Public Information Meeting
Canaan Valley Resort & Conference Center
Davis, West Virginia
May 10, 2000

Grant County Development Authority
5 Highland Avenue
Petersburg, West Virginia 26241

Dear Sir/Madam:

Appalachian Corridor II
Kerens to Parsons and Thomas to Davis
Randolph and Tucker Counties

You are invited to attend a public workshop on June 14, 2000, from 4-7:00 p.m. at the Canaan Valley Resort and Conference Center off WV 32 in Canaan Valley State Park, Tucker County.

Studies are being initiated on a Supplemental Draft Environmental Impact Statement (SDEIS) for potential alignment shifts on the Kerens to Parsons project, and a second SDEIS for potential line shifts on the Thomas to Davis portion of the Parsons to Davis project. The purpose of this meeting is to identify issues of importance to agencies and the public in order that they may be addressed in the studies. A copy of the public meeting workshop notice is enclosed.

Should you have any questions, please contact Mr. Norse Angus at (304)558-2885.

Very truly yours,

[Signature]

James E. Sothen, P.E., Director
Engineering Division

JES: Hs

Enclosures

bcc: DDE(NA), DDR, DD(MF)
Bill McCartney, Baker
Bill Malley, C&S
Ms. Dianne Bady  
Ohio Valley Environmental Coalition  
Post Office Box 6753  
Huntington, West Virginia  25773-6753

Ms. Karen Bonner  
Tucker County Planning Commission  
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Davis, West Virginia  26260

Mr. Tom Cain  
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Elkins, West Virginia  26241

Mr. Dwight Calhoun  
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Petersburg, West Virginia  26847

Ms. Alison Cochran  
Executive Director  
Heartwood  
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Bloomington, Indiana  47403

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President  
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Cookman Insurance Group  
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Ms. Leah Divine  
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Elkins, West Virginia  26241

Ms. Fran Endicott  
Northern Shenandoah Valley  
Audubon Society  
3355 Calmes Neck Lane  
Boyce, Virginia  22720

Mr. Matt Evans  
Harrison County Environmental Citizens' Organization  
Route 4, Box 1154  
Salem, West Virginia  26428

Ms. Andrea Ferster  
Attorney at Law  
Corridor H Alternatives  
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1100 17th Street, Northwest  
Washington, DC  20036

Mr. Donald Garvin  
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Buckhannon, West Virginia  26201

Grant County Development Authority  
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Mr. Roger Harrison  
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Mr. David Houser  
President  
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Moatsville, West Virginia  26405
Ms. Margaret James
Potomac Headwaters Resource Alliance
HC 67, Box 27 AA
Mathias, West Virginia 26812

Mr. Paul Lewis
Hardy County Planner
Room 100
204 Washington Street
Moorefield, West Virginia 26836

Ms. Suzanne Lewis
Cedar Creek Battlefield Foundation
8437 Valley Pike
Middletown, Virginia 22645

Ms. Elizabeth Little
President
WV Environmental Council
324 Virginia Street, East
Charleston, West Virginia 25301

Ms. Bonnie McKeown
President
Corridor H Alternatives
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Wardensville, West Virginia 26851

Ms. Elizabeth Merritt
National Trust for Historic Preservation
1785 Massachusetts Avenue, Northwest
Washington, DC 20036

Ms. Pamela Moe-Merritt
Corridor H Alternatives
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Elkins, West Virginia 26251

Mr. David Pancake
Hampshire County Planning Commission
Post Office Box 883
Romney, West Virginia 26757

Randolph County Chamber of Commerce
200 Executive Plaza
Elkins, West Virginia 26241

Ms. Cindy Rank
President
WV Highlands Conservancy
Post Office Box 306
Charleston, West Virginia 25321

Region VII Planning & Development Council
40 Chancery Street
Buckhannon, West Virginia 26201

Mr. Hugh Rogers
WV Highlands Conservancy
Moon Run
Kerens, West Virginia 26276

Mr. James Schoonover
Route 2, Box 11
Montrose, West Virginia 26283

Mr. Jim Schoonover
Davis Trust Company
Post Office Box 1429
Elkins, West Virginia 26241

Mr. Michael Slimak
Reynolds Estates Landowners
9207 Shotgun Court
Springfield, Virginia 22153

Ms. Laura Spadaro
Chapter Chair
WV Sierra Club
76 Fifteenth Street
Wheeling, West Virginia 26003
Mr. Norm Steenstra
WV Citizen Action Group
1324 Virginia Street, East
Charleston, West Virginia  25301

Ms. Vivian Stockman
Concerned Citizens Coalition
249 Millstone Run
Spencer, West Virginia  25276

Mr. Paul Trianosky
State Director
The Nature Conservancy of WV
Post Office Box 3754
Charleston, West Virginia  25339

Tucker County Chamber of Commerce
Post Office Box 565
Davis, West Virginia  26260

Mr. Lee Wakefield
Corridor H Alternatives
HC 68, Box 78A
Wardensville, West Virginia  26851

WV Scenic Trails Association
633 West Virginia Avenue
Morgantown, West Virginia  26505
NOTICE
OF
NEPA/SECTION 106 SCOPING MEETING
APPALACHIAN CORRIDOR H
KERENS TO PARSONS AND THOMAS TO DAVIS
RANDOLPH AND TUCKER COUNTIES

The West Virginia Division of Highways will hold a scoping meeting Wednesday, June 14, at the Canaan Valley Resort and Conference Center off WV 32 in Canaan Valley State Park in Tucker County to advise the public of studies being initiated for Appalachian Corridor H under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act.

Scheduled in a workshop format from 4 to 7 p.m., the meeting will include discussion of a Supplemental Environmental Impact Statement (SDEIS) to be prepared to examine potential alignment shifts for the Kerens-to-Parsons project and a second SDEIS to be prepared for the Thomas-to-Davis portion of the Parsons-to-Davis project.

Those wishing to file written comments may send them to Jim Sothen, P.E. Director, Engineering Division, West Virginia Division of Highways, Capitol Complex Build 5, 1900 Kanawha Boulevard East, Charleston, West Virginia 25305-0430 on or before July 14, 2000.
<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Organization</th>
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<tbody>
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<td>Mimi Kibler</td>
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<td>Karen Bannister</td>
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<td>Edward Mother</td>
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<td>Debbie Snyder</td>
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<td>Wyoming Power</td>
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<td>Mrs. Minkey Easte</td>
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</tr>
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<td>P.O. Box 173, Davis, WV 26260</td>
<td>L.T.</td>
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<tr>
<td>Sam C.</td>
<td>P.O. Box 317, Thorne, WV 26272</td>
<td>T.C. Commission</td>
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<tr>
<td>Ruth Blackwell/Roger Moon Run, Kerens, WV 26276</td>
<td>CHA</td>
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<tr>
<td>Hugh Scott</td>
<td>P.O. Box 98, Montrose, WV</td>
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<tr>
<td>Andrew Montgomery</td>
<td>2528 P.O. Box 26243</td>
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<tr>
<td>Marian Smith</td>
<td>Parsons Advocate, Parsons, WV</td>
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<tr>
<td>Ellen Cone</td>
<td>511 Main St., Parsons, WV</td>
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<tr>
<td>Dr. Stiles</td>
<td>President, Tucker Co. Chamber of Commerce, Charleston Valley, A.C.A.L.</td>
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<tr>
<td>Terry Miller</td>
<td>Montrose, WV</td>
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<tr>
<td>Rudy Yellee</td>
<td>Elkins, WV</td>
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<tr>
<td>Samantha Zuniga</td>
<td>Elkins, WV</td>
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# Public Meeting Sign-In Sheet

**Appalachian Corridor H**  
(Battlefield & Blackwater Avoidance Studies)  
**June 14, 2000 ~ 3 - 7 p.m.**

By signing this sheet, you indicate that you attended this Public Workshop on the above stated date. If you wish to receive additional information as it becomes available, please provide us your mailing address.

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
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<tr>
<td>June Harman</td>
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<td>Tony Belcher</td>
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<td>Michael Roseman</td>
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<td>Charles Preston</td>
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<td>Mayor of Davis</td>
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<tr>
<td>Randy Schmiedl&lt;edet</td>
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<td>Mayor of Davis</td>
</tr>
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<td>Matt Atwood</td>
<td>PO Box 667, Thomas, WV 26577</td>
<td>Concern - City of Thomas</td>
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<td>George Smith</td>
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<td>Cass Matthew</td>
<td>HC 70 Box 356, resident</td>
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<td>Walt Panelli</td>
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<td>Alan June</td>
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<tr>
<td>Keith McMullen</td>
<td>P.O.B 214, Montrose</td>
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[Signature]
# Public Meeting Sign-In Sheet

**Appalachian Corridor H**  
(Battlefield & Blackwater Avoidance Studies)  
June 14, 2000 ~ 3 - 7 p.m.

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<tbody>
<tr>
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<td>KEBERS, WV</td>
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<tr>
<td>Alice Phillips</td>
<td>81 Hamilton, WV</td>
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<td>Janene P. Helms</td>
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<td>Bill Harman</td>
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<td>Roger Vares</td>
<td>1825 Martha Ave, Fairmont</td>
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<tr>
<td>Rebecca L. Harker</td>
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<td></td>
</tr>
</tbody>
</table>
James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston WV 25305-0430

RE: Comments on Scope of Corridor H Supplemental Draft EIS
Battlefield and Blackwater Avoidance Studies

Dear Mr. Sothen:

Please consider the following comments.

Purpose and need
WVDOH has justified the need for a four-lane Corridor H by adding a “latent demand” of 5500 vehicles per day to the 20-year projected traffic on US 219 and WV 55. According to the Transportation Needs Study (1991), projected traffic on US 219 in Tucker County would not require four lanes. The EIS should re-examine previous claims of additional “latent” or “induced” traffic, in light of the criticisms of Dr. Henry Beale which were attached to our comments on the ASDEIS in February, 1995.

The project’s dead-end at the Virginia state line demonstrates that “gaps” in Corridor H are acceptable. Therefore, the EIS should consider the “No-Build” alternative.

A 1998 study by Wilbur Smith Associates for the Appalachian Regional Commission found that seven of eleven ARC corridors had a negative cost-benefit ratio. Comparing Corridor H to Corridor E, it appears that H would be the most wasteful of all. A more recent study, announced on June 28, 2000 by the House Transportation and Infrastructure Committee, showed that the ARC’s non-highway spending was much more effective at creating jobs. In fact, such infrastructure spending was 338 times more productive than highway spending. The EIS should include a cost-benefit analysis for the avoidance areas, and should reconsider the entire project’s cost-benefit ratio in light of these studies.

EIS study area
The boundary of the Battlefield Avoidance Study, as shown at the scoping workshop, would unreasonably focus impacts on an especially sensitive area of the National Forest.
(See “National Forest,” below.) The least destructive alignment would follow the US 219 corridor, but so far WVDOH has refused to consider that course. In order to find the next least damaging alignment, the study area should be extended to the west and north.

Ecosystem-scale impacts
The EIS must be broad enough to account for cumulative and secondary impacts to the regional landscape mosaic of forests, streams, wetlands, grazing land, meadows, etc.

Minimizing the highway’s “footprint”
The EIS should consider whether narrowing the median and shoulders could reduce the highway’s impacts on sensitive areas. In 1990, during the scoping process for the first SDEIS, the FHWA said the four-lane project was “overbuilt” for both the projected traffic and the terrain. The agency suggested that the corridor’s size—and even the number of lanes—could be reduced in certain areas.

National Forest issues
On maps of the Monongahela National Forest, the Laurel Run Opportunity Area appears as a relatively coherent patch of green SW of Parsons, just south of US 219 between Montrose and Porterwood. Laurel Run OA, with 7800 acres of public land plus 3000 acres of private land, is larger than Dolly Sods Wilderness. Its primary purpose is remote habitat for wildlife species “intolerant of disturbance,” as well as non-motorized recreation and logging on long rotations. It has been recognized as a biological reservoir in support of the Otter Creek area. It should not become a target for the new alignment of Corridor H.

The EIS should consider the Forest Service’s management prescriptions for affected and adjacent areas. There should be no net loss of public land at each prescription level. Less remote or less sensitive land should not be offset or traded for land with the 6.1 prescription that Laurel Run carries. All EIS and highway planning maps should include OA’s as well as wetlands and other features. The EIS should also consider which FS lands may be candidates for “roadless area” designation, and those should be avoided.

Clean Water Act issues
The EIS should consider all immediate, long-term, and cumulative effects of corridor construction on the area’s hydrology. Special notice should be taken of the Cheat River’s history of flooding. Studies should be done on potential sediment loads from highway construction—with impacts on streams and wetlands that could include further flooding. Seasonal benthic surveys should be conducted on all streams as a preliminary effort to assess the potential effects of construction. Streams on the National Rivers Inventory should be identified and avoided.

Excess waste problems should be given close scrutiny in light of the disposal problems that have been encountered on the construction projects south of Kerens. Previous estimates of waste should be revised. The EIS should study specific sites that would be proposed for and impacted by dumping. What would be the cumulative hydrological impacts of so much fill?
Acid drainage
There should be careful study and mapping of all mines in the area, especially on Backbone Mountain and around Thomas and Davis. Some old mines have never been mapped. The EIS must consider the likelihood of acid drainage from previously mined sites, as well as from exposure of acid-bearing shales.

Air pollution and noise
What would be the air pollution impacts on Otter Creek Wilderness, a Class 1 area? The EIS should consider the likely damage to people, streams, and vegetation from any projected increase in traffic in the area. Similarly, noise impacts should be studied, including the effects on wildlife and remote recreation areas such as Otter Creek.

Wildlife
Baseline data should be collected and comprehensive surveys done to determine the wildlife population and migration patterns. What are black bear habitat requirements? How can the corridor avoid such habitats? The EIS should include proposed designs for minimizing impacts on wildlife and preserving migration routes. A standard mitigation tactic, the use of high fences to keep deer off the highway, exacerbates the fragmentation of habitat. What other techniques are possible?

Impacts on neotropical songbirds should be studied. According to the scientific literature, loss of large areas of contiguous forest and fragmentation of breeding bird habitat has had a drastic impact on migrant and interior forest species. Corridor H should not be allowed to worsen the problem. The EIS must consider the likely impacts on all Threatened & Endangered Species known to live in the area: Indiana bats, Cheat Mountain salamanders, flying squirrels, various birds, and plants such as Running Buffalo Clover. The study area includes Indiana bat nesting sites. How can these be avoided?

Additional substantive issues
Cultural resources, visual impacts, and geology, including subsidence and erosion, are among the additional issues that should be addressed in the EIS.

Procedural issues
The study should not go forward until all resource agencies have actually commented. There should be no size or time limits on the EIS. Mitigation costs should be more accurately stated than they were in the FEIS; for instance, the cost of land to add to the Canaan Valley National Wildlife Refuge was grossly understated.

Thank you for the opportunity to comment on the scope of the Corridor H EIS.

Sincerely,

Hugh Rogers
Mr. James E. Sothen, P.E.  
Director, Engineering Division  
West Virginia Division of Highways  
1900 Kanawha Boulevard East  
Charleston WV 25305-0430  

10 July 2000

RE: Comments on Scope of Corridor H Supplemental Draft EIS  
Battlefield and Blackwater Avoidance Studies

Dear Mr. Sothen:

It seems as if certain salient points have been overlooked or glossed over in prior EIS of the proposed corridor H through Tucker county, and I respectfully urge consideration of the following in the Supplemental Draft.

There has been a “latent demand” justification (5500 vehicles per day over a 20-year projection of traffic on US 219 and WV 55) for a 4 lane highway through Tucker County. According to the Transportation Needs Study (1991), projected traffic on US 219 in Tucker County would not require four lanes. The EIS should re-examine previous claims of additional “latent” or “induced” traffic, in light of the criticisms of Dr. Henry Beale. I can assure you that there are "raised eyebrows" among lifetime residents of this county regarding claims of increased traffic burdening the existing 219 corridor, and am told that the burden has in fact decreased with the demise of the coal industry in the area.

It is common belief among residents of Tucker County that Corridor H will bring economic prosperity to Tucker County. A 1998 study by Wilbur Smith Associates for the Appalachian Regional Commission found that seven of eleven ARC corridors had a negative cost-benefit ratio. Comparing Corridor H to Corridor E, it appears that H would be the most wasteful of all. A more recent study, announced on June 28, 2000 by the House Transportation and Infrastructure Committee, showed that the ARC’s non-highway spending was much more effective at creating jobs. I submit that the short term boom of construction, and the accompanying loss of terrain and wildlife, will be damaging to the depressed economy, and far outweighs any economic benefit to Tucker County from a limited access 4 lane highway. The EIS should include a cost-benefit analysis for the avoidance areas, and should reconsider the entire project’s cost-benefit ratio in light of these studies.

The project’s dead-end at the Virginia state line demonstrates that “gaps” in Corridor H are acceptable and might be particularly applicable in Tucker County at the end of the corridor, especially in light of the value and delicacy of the eco-system surrounding the corridor. The EIS should consider the “No-Build” alternative, or the improvement and incorporation of the 219 corridor.
The real value of Tucker County to its residents lies in its landscape and wildlife. Future development towards tourism and parkland would be irrevocably damaged by inconsiderate highway construction. The EIS must be broad enough to account for cumulative and secondary impacts to the regional landscape, including resident wildlife, bird migration and hydrological issues. In 1990, during the process for the first SDEIS, the FHWA said the four-lane project was “overbuilt” for both the projected traffic and the terrain. The agency suggested that the corridor’s size—and even the number of lanes—could be reduced in certain areas.

Laurel Run Opportunity Area, with 7800 acres of public land plus 3000 acres of private land, is larger than Dolly Sods Wilderness. Its primary purpose is remote habitat for wildlife species “intolerant of disturbance,” as well as non-motorized recreation and logging on long rotations. It has been recognized as a biological reservoir in support of the Otter Creek area. It should not become a target for the new alignment of Corridor H. Much of the forested area, both public and private, surrounding Otter Creek Wilderness, is similarly recognized, and would be well considered in the same light. Otter Creek Wilderness is a Class 1 area. The EIS should consider the likely damage to people, streams, and vegetation from any projected increase in traffic in the area. Baseline data should be collected and comprehensive surveys done to determine the wildlife population and migration patterns.

The EIS should include proposed designs for minimizing impacts on wildlife and preserving migration routes. The EIS must consider the likely impacts on all Threatened & Endangered Species known to live in the area. Once these resources are damaged they may not be recoverable in a time frame suitable to aid the economy of Tucker County, and benefit its residents in any substantial fashion.

Thank you for the opportunity to present these concerns.

Michael McClintock
Hendricks, Tucker County
West Virginia
July 7, 2000

Mr. Sam Beverage
Commissioner
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
Building Five, Room 109
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Re: Proposed Relocation of Corridor H in Davis-Thomas Area

Dear Mr. Beverage:

We believe the original Corridor H route is the preferred location in the Davis-Thomas area for the following reasons:

1. It is the most direct route through the area.

2. Because it is the most direct route, it will be less costly to build. The local community leaders have expressed their desire that interchanges be built at all major road crossings. Any location of the road, other than the original route, would require three (3) such interchanges as opposed to one (1) on the original route.

3. There is less potential for environmental damage. Alternatives in the area will require more stream crossings and more "wetlands" to mitigate.

4. There are no sites on the original route that local residents have identified as avoidance areas.

5. The original route offers better and more direct access to Davis, Blackwater Falls State Park and the Canaan Valley area.

6. The reasons to change the original location, such as avoiding a bridge across the so-called Blackwater Canyon, the perceived impact on the old coke ovens, and the bike trail, do not justify the added time and expense to change the route. Until the opposition is held financially accountable for the increased costs associated with delays in construction and route changes, then they will never stop.

We believe it is time to stop these delay tactics and BUILD THE ROAD at the original preferred route.

Sincerely,

Nick Carter

NC:DNT/db
Mr. Nick Carter  
Western Pocahontas Properties  
1035 3rd Avenue  
Post Office Box 2827  
Huntington, West Virginia 25727-2827

Dear Mr. Carter:

Thank you for your letter to Commissioner Beverage, dated July 7, 2000, expressing your support for the subject project.

The West Virginia Division of Highways (WVDOH) developed the original preferred alignment with the intent of minimizing environmental impacts in the area. As you are aware, a recent settlement agreement requires that we study other alternatives in the area due to opposing opinions concerning potential impacts to the Blackwater Canyon. Until a Supplemental Draft Environmental Impact Statement (SDEIS) is completed for this new study area, an alternative for construction cannot be selected. This SDEIS is scheduled for completion this fall. Public meetings will be held, and additional public comments will be accepted on the alternatives developed. The original preferred alternative has not been ruled out as a viable alternative. If similar or greater environmental issues are found to exist in the study area north of Thomas, there remains the possibility that the original preferred alternative could be selected and built in accordance with the settlement agreement.

Thank you for your interest in this project. Should you require additional information, you may contact Mr. Norse Angus of our Environmental Section at (304) 558-2885.

Very truly yours,

Joseph T. Deneault, P.E.  
State Highway Engineer

JTD:SS  
bcc: TRC, DDE(NA), DDR, DD(VW, MF), THSAM
July 13, 2000

HC 80, Box 69
Maysville, WV 26833

James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston WV 25305-0430

RE: Comments on Scope of Corridor H Supplemental Draft EIS
Battlefield and Blackwater Avoidance Studies

Dear Mr. Sothen:

I encourage WVDOH to give full consideration and study to the following issues in determining the scope of the New Corridor H EIS.

**Alleged Purpose and Need**
The Department of Highways justified the need for a four-lane Corridor H by adding a "latent demand" of 5500 vehicles per day to the 20-year projected traffic on US 219 and WV 55. According to the *Transportation Needs Study* (1991), projected traffic on US 219 in Tucker County would not require four lanes. The EIS should re-examine previous claims of additional "latent" or "induced" traffic.

The project's dead-end at the Virginia state line demonstrates that "gaps" in Corridor H are acceptable. Therefore, the EIS should consider improved road/no build alternatives.

A 1998 study by Wilbur Smith Associates for the Appalachian Regional Commission found that seven of eleven ARC corridors had a negative cost-benefit ratio. Comparing Corridor H to Corridor E, it appears that H would be the most wasteful of all. A more recent study, announced on June 28, 2000 by the House Transportation and Infrastructure Committee, showed that the ARC's non-highway spending was much more effective at creating jobs. In fact, such infrastructure spending was 338 times more productive than highway spending. The EIS should include a cost-benefit analysis for the avoidance areas, and should reconsider the entire project's cost-benefit ratio in light of these studies.
EIS Study Area
The boundary of the Battlefield Avoidance Study, as shown at the scoping workshop, would unreasonably focus impacts on an especially sensitive area of the National Forest. (See “National Forest,” below.) The least destructive alignment would follow the US 219 corridor, but so far WVDOH has refused to consider that course. In order to find the next least damaging alignment, the study area should be extended to the west and north.

Ecosystem-Scale Impacts/Footprint
The EIS must be broad enough to account for cumulative and secondary impacts to the regional landscape of forests, streams, wetlands, farms, pastures, and cropland. According to the Federal Highway Administration in 1990, a 4-lane highway is not in accord with projected traffic or the terrain.

Impact on National Forest
The Laurel Run Opportunity Area should not become a target for the new realignment of Corridor H. On maps, it appears as a relatively coherent patch of green SW of Parsons, just south of US 219 between Montrose and Porterwood. Laurel Run OA, with 7800 acres of public land plus 3000 acres of private land, is larger than Dolly Sods Wilderness. Its primary purpose is remote habitat for wildlife species “intolerant of disturbance,” as well as non-motorized recreation and logging on long rotations. It has been recognized as a biological reservoir in support of the Otter Creek area.

I encourage the EIS’ consideration of the Forest Service’s management prescriptions for affected and adjacent areas. There should be no net loss of public land at each prescription level. Less remote or less sensitive land should not be offset or traded for land with the 6.1 prescription that Laurel Run carries. All EIS and highway planning maps should include OA’s as well as wetlands and other features. I also urge consideration and avoidance of those National Forest lands that are candidates for roadless area designation.

Clean Water Act
The EIS should consider all immediate, long-term, and cumulative effects of corridor construction on the area’s hydrology. Special notice should be taken of the Cheat River’s history of flooding. Studies should be done on potential sediment loads from highway construction—with impacts on streams and wetlands that could include further flooding. Seasonal benthic surveys should be conducted on all streams as a preliminary effort to assess the potential effects of construction. Streams on the National Rivers Inventory should be identified and avoided.

Excess waste problems should be given close scrutiny in light of the disposal problems that have been encountered on the construction projects south of Kerens. Previous estimates of waste should be revised. The EIS should study specific sites that would be proposed for and impacted by dumping. What would be the cumulative hydrological impacts of so much fill?
Mine Acid Drainage
There should be careful study and mapping of all mines in the area, especially on
Backbone Mountain and around Thomas and Davis. Some old mines have never been
mapped. The EIS must consider the likelihood of acid drainage from previously mined
sites, as well as from exposure of acid-bearing shales.

Air and Noise Pollution
What would be the air pollution impacts on Otter Creek Wilderness, a Class I area? The
EIS should consider the likely damage to people, streams, and vegetation from any
projected increase in traffic in the area. Similarly, noise impacts should be studied,
including the effects on wildlife and remote recreation areas such as Otter Creek.

Wildlife
Baseline data should be collected and comprehensive surveys done to determine the
wildlife population and migration patterns. What are black bear habitat requirements?
How can the corridor avoid such habitats? How can migration routes be preserved?

Impacts on neotropical songbirds should be studied. According to the scientific literature,
loss of large areas of contiguous forest and fragmentation of breeding bird habitat has had
a drastic impact on migrant and interior forest species. Corridor H should not be allowed
to worsen the problem. The EIS must consider the likely impacts on all Threatened &
Endangered Species known to live in the area: Indiana bats, Cheat Mountain salamanders,
lying squirrels, various birds, and plants such as Running Buffalo Clover. The study area
includes Indiana bat nesting sites. How can these be avoided?

Additional Issues
Cultural resources, visual impacts, and geology, including subsidence and erosion, are
among the additional issues that should be addressed in the EIS.

Procedural Issues
The study should not go forward until all resource agencies have actually commented.
There should be no size or time limits on the EIS. Mitigation costs should be more
accurately stated than they were in the FEIS; for instance, the cost of land to add to the
Canaan Valley National Wildlife Refuge was grossly understated.

Thank you for the opportunity to comment on the scope of the Corridor H EIS.

Sincerely,

Carroll B. Cook
July 12, 2000

Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston WV 25305-0430

Re: Corridor H Environmental Impact Statements for the Kerens-to-Parsons and Parsons-to-Davis sections

Dear Mr. Sothen:

The following are my comments on the scope of the Environmental Impact Statements and the significant issues it must address:

* purpose and need

predicted traffic is low, especially in Tucker County

project's dead-end at Va. line shows "gaps" in four-lane are acceptable

Appalachian Regional Commission studies demonstrate few corridors have a positive cost-benefit ratio, a 100-mile Corridor H would be the most wasteful

* EIS study area should be extended

"blue-line" boundaries on maps shown at scoping workshop would unreasonably focus impacts on an especially sensitive area of the National Forest

* minimize highway's "footprint"-narrow median and shoulders

at 1990 scoping, FHWA called the 4-lane "overbuilt" for sensitive areas

* range of alternatives should include US 219 upgrade as well as "No-Build"

* National Forest issues, including:

consider management prescriptions for impacted and adjacent areas--

no net loss of public land at same prescription level

planning maps should include OA's as well as wetlands, other features
avoid candidates for "roadless area" designation

* Clean Water Act issues:

floodplains-Cheat River area is prone to flooding already

sediment loads from highway construction-impacts on streams, flooding
wetlands

streams on National Rivers Inventory

excess waste problems-no dumping in streams; cite problems S of Kerens

* acid drainage

old mines in Backbone Mt., Thomas-Davis area

exposure of acid-bearing shales

* air pollution

impacts on Otter Creek, a Class 1 area

damage to people, streams, and vegetation from increased traffic in area

* noise-especially impacts on wildlife and remote recreation areas

* wildlife

full-scale research and design for migration routes

high fences for deer ensure habitat fragmentation

black bear habitat requirements

impacts on neotropical songbirds

Threatened & Endangered Species: salamanders, bats, squirrels, birds, plants

bats: mist-netting has been inadequate; known presence of Indiana bats nearby

* ecosystem-scale impacts

cumulative & secondary impacts to landscape mosaic: forests, streams,
wetlands

* cultural resources, visual impacts, geology (including subsidence and erosion)

* procedural issues

study can't go forward until all resource agencies have commented

no size or time limits on EIS

mitigation costs must be more accurately stated

Sincerely,

Mr. Francis D. Slider

Rt 1 Box 163-A2
Middlebourne, WV 26149
James E. Sothen, P.E.
Director, Engineering Division
 Division of Highways
 1900 Kanawha Boulevard East
  Charleston  WV  25305-0430

Re: Scope of New Environmental Impact Statement for Corridor H

Dear Mr. Sothen:

Please allow me to take this opportunity to communicate to you my views on the scope of this forthcoming EIS for the Kerens-to-Parsons and Parsons-to-Davis sections and on significant issues that must be addressed. A thorough job can and must be done. There are no size or time limits on the study, which should go forward based on comments from all resource agencies and the general public.

The purpose and need of these sections must be established, in light of the predicted low traffic in Tucker County and Appalachian Regional Commission studies demonstrating low cost-benefit ratios for the more sparsely utilized Corridors. An accurate analysis of mitigation costs is needed. The anticipated dead-end at the VA state line establishes precedent for improved two-land gaps in the intended four-lane highway. Since it is unlikely that a full four-lanes would be used to capacity in the foreseeable future, it is important to avoid land wastage through overly wide shoulders and median strip on four-lane segments.

The EIS study area should be extended to include the USFS Laurel Run “Opportunity Area, south of US 219 between Montrose and Porterwood. This 10,000-plus acre is managed as remote habitat for wildlife species “intolerant of disturbance,” as well as non-motorized recreation and logging on long rotations, and as biological support for the Otter Creek wilderness area. An alignment that protects these values is needed. Other National Forest issues that should be included in the study’s scope are (i) management prescriptions for impacted and adjacent areas, (ii) avoidance of any net loss of public land at each management prescription level, (iii) avoidance of areas that are candidates for National Forest “roadless area” designation. Proper consideration of these issues can be facilitated by development of planning maps that include USFS Opportunity areas as well as wetlands, and other important natural features.
Because of the sensitivity of the areas involved and the anticipated light traffic on these sections, the alternatives considered should include using the existing US 219, with upgrades such as truck turnouts and an accelerated snow removal program.

Full consideration must be given to all Clean Water Act issues. These include (i) floodplain management along the Cheat River and other areas prone to present or future flooding already, (ii) protection of streams on the National Rivers Inventory, (iii) wetlands preservation and (iv) avoidance of any excess waste problems such as dumping in streams. There have already been problems of this nature in the area south of Kerens.

Issues of air and noise pollution are very important also. Noise impacts wildlife and impairs the suitability of remote recreation areas. Air pollution impacts on the Class I Otter Creek area would be very unfortunate as would any damage to people, streams, and vegetation from increased traffic.

Careful study of wildlife issues must be included. Comprehensive research and design for migration routes is necessary. Impacts on neotropical songbirds must be considered as must the black bear's need for large contiguous areas of suitable roadless habitat. Certainly all threatened and endangered species must be protected, as the law requires. These include salamanders, squirrels, birds, plants and bats. In particular the presence of Indiana bats near this area has been established, as has been the inadequacy of mist-netting for protection.

Any possibility of new or increased acid mine drainage must be addressed. These include the possible exposure of acid-bearing shales and the uncovering of old mines in the Backbone Mountain, Thomas, and Davis areas.

Finally, the study must consider cumulative and secondary impacts to the landscape mosaic, other visual impacts and geology, including subsidence and erosion.

Thank you again for the opportunity to comment on this most important project.

Sincerely yours,

Peter Shoenfeld
July 11, 2000

James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

I am writing to you about my concerns of Corridor H. There seems to be a lot of alternatives that need to be looked at on building this highway. This has been referred to as the ROAD TO NO WHERE! Virginia has no plans to build a highway where this one ends. So I’m not sure the expense of this road is justified!

Then we have the issues of destruction to natural areas in the Monongahela National Forest (Laurel Run area). This has been a remote habitat for wildlife, with no motorized disturbance. Now there is the plan of a section of this highway to run through this area. I feel the impact of this on our precious forest is out of the realm of reality. There is not enough traffic to justify this destruction. In the Cheat River area where it is prone to flooding already there is the question of the sediment run off that will impact the stream. There is also the question of the acid drainage from the old mines at Backbone Mt. in the Thomas-Davis area. Otter Creek wilderness area will be impacted with the noise and the air pollution. All of the wildlife will be affected in a negative way. The term over engineered comes to mind. Take into consideration a simple upgrade to the existing road US 219. In the 4 lane sections that are under construction now narrow the median and the shoulders. Please consider the impact of this road to our wild and wonderful state. This is an area that draws people from all over the world to see the untouched, unspoiled landscape. The impact of this road will have a negative effect on tourism, not a positive one! Please do all that you can to lessen the affect of the destruction that comes with building this highway to NO WHERE!!!!

Sincerely,

Barb Haynes

[Signature]

[Stamp]
RECEIVED
JUL 13 73
ENGINEERING DIVISION
WV DOH
July 6, 2000

Marilynn Cross
160 Elkins W. 26241

Attr: Candida T Scoping Comments:

My comments do not mean an endorsement of a Completed Candida H 4 Lane to the Va State Line Improvements to existing Rte 219 are preferable to any new 4-lane alignment. Meaning passing lanes widening do not impairments especially through the heart of Randolph Co when so much destruction of land will change thing dramatically -

Also: Heres to Persons

1 Avoid Candida four battlefield & stay out of the Sharkey Fork Valley!

2 As little as possible a NO Monongahela National Forest land should be taken, if taken replaced at a ratio of 2-1 with new purchased land within the same ranger district of the NF.

3 Stay Out of the Forks Haddix Run Watershed! Fragmentation of forest needs to be helped with Migratory corridor, and clear fencing is not ensuring attention wildlife issues. The need already
9. Building significant damage and/or other
underpass or overpass or tunnel such as
recreational trails like Sharp's Inn and Old Western
Maryland railroad rail trail.

Blackwater Canyon Avoidance Supplemental EIS
9. Great area on Westerly today called
and would cross the N Fork of the Blackwater N Y Shores
9. Completely avoid the watershed of Big Run
Boy. Also no exit should be at a new
Forest Service Rd #18 (Canyon Rim Rd) which
Serious Big Run Boy & Oasis Area Tower!

These are a few concerns that now watching
the 4-lane being built out of Elk City. I can now
how awful the destruction of fields, mountain
sites, streams, & wildlife is. So final.
Just upgrade the road & people will still
be happy. Including Corporate America.

Thank you,

Marilyn Rungs

P.S. Remember, a lot of people live in the
Mountain State with different views
try to imagine peaceful settlement. There are
so many issues in a fast-changing environment
to consider that a lesson even mentioned last
The purpose when traffic is low, Dead end at Va
Corridor H Scoping Committee  
WV Department of Highways  
1900 Kanawha Blvd. East Building 5  
Charleston, WV 25305-0430

Dear Sirs and Madams,

We are writing this letter to bring attention to concerns we have about the rerouting of Corridor H between Kerens and Thomas West Virginia. Please share these comments with the engineers who are drawing plans for this road.

Just as a surgeon must know the location of nerves, blood vessels, bones and organs of a body before he begins surgery, so must one study the body of land before a road is constructed. We know that the engineers have studied the topographic and geologic maps, and the population maps, and the existing road maps of this area, but we think it is also important that they understand the living map of this section of land.

We will have attended the scoping meeting in Canaan, and will have passed along just such a living map to the folks there. We will request that this map be passed to the engineers. The map was made with the help of the Lands Committee of the northern half of the Monongahela National Forest. We also obtained input from the Department of Natural Resources, our retired game warden, biologists and Davis and Elkins College, the Fish and Wildlife Service, and the biologists at the research lab in Parsons, to confirm our opinions with real science. We have lived surrounded by the Monongahela for 24 years, and have had a cooperative relationship with all of these scientists and civil servants during that time.

We are concerned about the potential disturbance of the opportunity areas marked Clifton Run, Laurel Run, Rattlesnake Run, McGowan Mountain and Pheasant Mountain on the map. Most fragile of these are the Laurel Run, McGowan Mountain and Rattlesnake Run areas, which are marked with a 16.1 designation on the map. This area designation was made specifically because of its outstanding timber production, and its uninterrupted wildlife habitat suited for bear, turkey, raptors, owls and native trout, which are sensitive to disturbances. Although there are a series of experimental logging roads for the harvest of this prime timber, these were designed to be permanent, allowing minimal erosion and stream disturbance, and are not open to other public motorized vehicles.

These areas are full of small well maintained trails, and are used by horseback riders, hikers, backpackers, hunters and Forest Service employees. Bird studies have frequently conducted, and the game harvest has been rich. Laurel Run area is in close proximity (across a shallow Shaver’s Fork River ford), to McGowan Mountain and Rattlesnake Run areas, which are contiguous with Ottercreek Wilderness Area, creating a large and rich wildlife and timber
habitat. The game migrate and breed freely between these areas. It is not just our opinion, but also the opinions of the biologists and scientists we conferred with, that these are vital and irreplaceable, and should not be disrupted or fragmented by this highway. These are intact sensitive watershed, which a highway would violate.

There also is a wide trail and mountain road network through the Pheasant mountain area designated in the map, which is highlighted Area Q - for handicapped accessability. Hunters are allowed motorized access to parts of the Pheasant Mountain area. All areas marked 13.0 on the map are considered less sensitive, but still have been managed for more than 25 years as wildlife and timber habitat that should not be fractionalized.

As residents of Tucker county, we also have concerns that any new road should provide good access to the Kingsford Charcoal Plant, since huge amounts of raw materials and finished products are transported daily out of that plant. We are concerned that any new road should provide better access to the High School on Backbone Mountain, since every child in this county will be transported long distances daily to this site for at least four years, and are in jeopardy with heavy truck traffic in foul weather as the road lies now.

We feel that the least disturbing route would be to utilize the existing corridor of 219 and the old railway beds, expanding 219 to 4 lanes and straightening it whenever possible. We appreciate the complexity of Route 70 through the Rocky Mountains in Colorado, which provides excellent access through the mountains, but still allows biking, canoeing, kayaking and hiking beside the highway which runs not far from the river. Route 33 east of Elkins utilized deeper steeper cuts which took up less acreage in a similar way. The existing Route 219 is already a disturbed area, already is a noise and visual disturbance, and would provide better access for existing businesses and development.

To summarize, we do not feel that fragmentation of the Laurel Run, Rattlesnake Run, Ottercreek management areas is at all justified, and should be avoided. This is both for public recreation purposes, wildlife management, watershed quality, future timber harvest, and for the benefit of our counties future development.

Sincerely,

Barbara Weaner

Scott Weaner
June 14, 2000

Corridor H Committee
WV Department of Highways
1900 Kanawha St. East Bldg. #5
Charleston, West Virginia 25305-0430

Dear Corridor H Committee,

As a resident of Tucker County I am opposed to Corridor H as it is currently proposed. I believe that improving the existing roadways Rt. 219 & 50 etc. would be a better use of the funds available and would achieve the goals in a more fiscally responsible and environmentally respectful way.

West Virginia's main asset in the eyes of this new state resident is its' mountains, trees and its people. The National Forests and protected wilderness areas should above all else be assured that it is the state's most valuable resource and therefore it's strength. Tourism as the leading growth industry in the state means that getting people into this region will help to create economic growth from within. Tourist dollars are largely based in the visual surroundings that will make people want to linger and therefore will help create opportunities for local people to develop our economies from within. Travel safety on these mountainous roads is important but so is the existing landscape.

With this in mind if Corridor H is to proceed the following issues are essential.

The landscape surrounding this road should be developed in a forest respectful manner. Wide swaths of cut forest in order to expedite the project should be avoided. There are many skilled engineers on this project and the challenge should be to protect wildlife and natural resources that make Tucker County so beautiful and extraordinary. The local beauty rivals that of Yosemite National Park. States in the western part of this country could be used as a model for environmentally sensitive roadways that will draw people to the area.

I think it crucial that there be a ban on billboards or advertising of any kind anywhere visible from the roadway.
The following areas should be excluded from any type of development or inclusion of this project: Clifton Run; Laurel Run; McGowan Mountain, Rattlesnake Run; and Pheasant Mountain.

The South Haddix Run Watershed and Big Run Bog should be avoided.

Sensitivity to wildlife areas within forested areas should be emphasized and land bridges provided for access.

Access should be provided for Parsons, Kingsford Charcoal Corp. and The Tucker County High School.

The Blackwater Canyon and Canyon Run Road should be avoided at all costs.

I appreciate your consideration in the above issues.

[Signature]

Robin McClintock
DEAR SIR

I AM IN THE ENGINEERING DIVISION WOODY THOMAS

WE ARE HAPPY THAT CORRIDOR H IS FINALLY MOVING AHEAD TO REALITY. MY ONE SUGGESTION TO YOU,

REQUEST TO THE LOCAL NEWSPAPERS (OUR AREA, THE ELKINS INTER-NT.) THAT EVERY TWO WEEKS THEIR PHOTOGRAPHER'S TAKE PHOTOS OF PROGRESSING OF CORRIDOR H CONSTRUCTION - STRUCTION / ELKINS - KERENS, KERENS - PARSONS, PARSONS - THOMAS, CITY HOME TOWN DAVIS, AND ON.

THIS WAY LOCAL AREA PEOPLe CAN BE INFORMED BETTER BY SEEING PHOTOS OF WHERE THE ROAD IS PROGRESSING, HOW THE ROAD IS LOOKING, ETC. HOPE TO HEAR FROM YOU ABOUT THIS REQUEST. MY NAME IS ON LIST FOR FUTURE
CORRIDOR H INFORMATION
CONTINUE SENDING, THANK YOU SIR.

SINCERELY
Joseph Sagace
103 Pineview Dr.
THOMAS WV 26292-9702

Joseph Sagace
103 Pineview Dr.
Thomas, WV 26292-9702
Dear Mr. Sothen:

I am writing this letter in regard to the Supplemental Environmental Impact Statement currently being prepared for Corridor H. I feel it is important for the West Virginia Division of Highways to make a concerted effort to restrict Corridor H to public land. Public ownership which is nearly 40% in some counties, erodes local tax bases. Environmental groups continue to ignore private property rights guaranteed by the Fifth Amendment of the Bill of Rights and clamor for more public ownership.

I hope you will consider private property rights and restrict Corridor H to public land.

Sincerely,

Blanche Seminoff
Rt. 2 Box 155
Montrose, WV 26283
Dear Mr. Sothen:

I am writing this letter in regard to the Supplemental Environmental Impact Statement currently being prepared for Corridor H. I feel it is important for the West Virginia Division of Highways to make a concerted effort to restrict Corridor H to public land. Public ownership which is nearly 40% in some counties, erodes local tax bases. Environmental groups continue to ignore private property rights guaranteed by the Fifth Amendment of the Bill of Rights and clamor for more public ownership.

I hope you will consider private property rights and restrict Corridor H to public land.

Sincerely,

[Signature]
Dear Mr. Sothen:

I am writing this letter in regard to the Supplemental Environmental Impact Statement currently being prepared for Corridor H. I feel it is important for the West Virginia Division of Highways to make a concerted effort to restrict Corridor H to public land. Public ownership which is nearly 40% in some counties, erodes local tax bases. Environmental groups continue to ignore private property rights guaranteed by the Fifth Amendment of the Bill of Rights and clamor for more public ownership.

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Sincerely,

Helda Kochendörfer
Dear Mr. Sothen:

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I hope you will consider private property rights and restrict Corridor H to public land.

Sincerely,

Jeff Kochenderfer
Lil Mail Rd
Sutton WV 26601
Dear Mr. Sothen:

I am writing this letter in regard to the Supplemental Environmental Impact Statement currently being prepared for Corridor H. I feel it is important for the West Virginia Division of Highways to make a concerted effort to restrict Corridor H to public land. Public ownership which is nearly 40% in some counties, erodes local tax bases. Environmental groups continue to ignore private property rights guaranteed by the Fifth Amendment of the Bill of Rights and clamor for more public ownership.

I hope you will consider private property rights and restrict Corridor H to public land.

Sincerely,

[Signature]

JAMES N. KOCHENDERFER
Rt. 1, Box 48
Hambleton, WV 26269
Mr. Jim Sothen, P.E. Director  
Engineering Division  
WV Division of Highways  
Capitol Complex Building 5  
1900 Kanawha Blvd. East  
Charleston, WV 25305-0430

Dear Mr. Sothen:

I am a native West Virginian and a 1960 graduate of WVU’s Division of Forestry. As a young boy I spent many days in the Cheat Mountains and along the rivers of eastern West Virginia camping, fishing and hiking with family and friends. Although I spent my career in natural resource management elsewhere, I retain a strong interest in protecting West Virginia’s natural resources. I have traveled a great deal in West Virginia and while I have seen significant economic improvement increased environmental degradation is also obvious, i.e., mountaintop mining, development on floodplains, increased logging and livestock production – and Corridor H!

I am deeply concerned about Corridor H as I believe the adverse environmental impacts that it will cause and the tremendous costs involved will strongly negate any positive benefits that can be reasonably anticipated. I will not recite the long list of reasons why Corridor H should not be built, but wish to add my name to the long and growing list of people who believe the project has been a tremendous mistake from the beginning and should now be drastically revised.

Given the dearth of public lands and the huge population in the eastern United States the Monongahela National Forest, every acre of it, must be viewed as a tremendously valuable resource. I urge you to keep Corridor H out of it, the Blackwater Canyon and Shavers Fork of the Cheat. Go north from Kerens, tie into US 50 and work with Maryland and Virginia to improve/upgrade it for the tie to I 81, I 66 and Washington D.C.

I hope that WVDOT works to keep West Virginia “Wild and Wonderful.”

Sincerely,

Charles L. Thomas

cc: CHA
TO: West Virginia Department of Transportation
FROM: Marjorie Keatley
DATE: June 10, 2000
SUBJECT: Corridor H Routes

I am unable to attend the meeting at Canaan Valley State Park on June 14 but I wish to send my comments.

I travel to Davis on a regular basis and have done so for several years. There is no other place in the state that has the flora and fauna that the Davis/Canaan Valley area has. One of the places I visit often to bird and to study the plants is the section of Rt. 93 that comes into Davis. Those wetland scrub areas are priceless. It seems exceedingly careless and short-sighted to me that the WVDOT would consider running a 4-lane highway through land that exists nowhere else. I go to this area because of the natural beauty and to bird. I spend money on gas, food, and shopping. When the natural beauty and quiet of this area is forever gone because of Corridor H, I will not be spending money there.

Rt. 93 is straight and sparsely traveled. Why in the name of good sense and taxpayer money is another set of lanes necessary? I recently went to Parsons by way of Rt. 219 and was appalled to see the beginnings of Corridor H running parallel to Rt. 219. Why are you not using roads already in place? I haven't been on a road from Elkins to Davis that couldn't be improved by creating turnout lanes such as those used to preserve the Sierra Nevada range. Turnouts eliminate the problem of traffic jams, yet preserve the beauty of the area.

It seems to me that the motto of the WVDOT should be that of physicians: "First do no harm." Once the cuts are made, the mountains can never be put back. In all the talk about economic development, I have never heard any mention by the state on the importance of preservation of these scenic areas for ecotourism. As species become rare, and as it becomes harder to find undeveloped, quiet places, the mountains in this state will become more and more valuable. Having a noisy, 4-lane highway slashing through the area will destroy the greatest potential for economic development—ecotourism—for this area of the state.

Building big highways creates jobs for the WVDOT, but bypassing small towns will drain jobs from those areas. Why not create a win-win situation by improving the roads into the towns, thus having jobs for road builders and keeping or adding jobs within the towns?

Corridor H needs to be reduced to a common-sense problem, not a political one. I urge you to take a hard look at your decisions. Once made, some changes can never be undone.
June 7, 2000

Jim Sothen, P.E. Director
Engineering Division
West Virginia Division of Highways
Capitol Complex Building 5
1900 Kanawha Blvd. E.
Charleston, W.V. 25305

I am in favor of the construction of Corridor H.

In my opinion, the original route was O.K.
The excuse not to go that was used an example of
a poor compromise.

However, the completion of the route is
more important than any more delays.

Build It

Bradley A. Ramsey
Box 9, Route S
Parsons, W.V. 26287
July 14, 2000

James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston WV 25305-0430

RE: Comments on Scope of Corridor H Supplemental Draft EIS
Battlefield and Blackwater Avoidance Studies

Dear Mr. Sothen:

The Shavers Fork Coalition, a non-profit watershed organization dedicated to the ecological health, natural appeal, and cultural heritage of the Shavers Fork Watershed, wishes to submit the following comments.

1. **Study Area Boundary.** The Study Area on the "Battlefield Avoidance" map is drawn just outside the "Avoidance Area" east, on Fork Mountain. This implies that the highway could be proposed for that very line, placing it above the mainstem of the Shavers Fork River. We would be very concerned about such a choice of alignment which would likely have a large sediment impact on the river and would definitely negatively impact the long-time cultural heritage of the area. We urge you to re-draw that study area line as you drew the Blackwater Avoidance area map, that is, do not include the "Battlefield Avoidance Area" in the Study Area.

2. **EIS.** We request that you include both a no-build alternative and an upgrade of US 219 alternative in the EIS. Studies may find that a four-lane highway would simply have too many damaging impacts on the Shavers Fork Watershed as opposed to a two-lane upgrade.

3. **Clean Water Act Issues.** a.) Shavers Fork Coalition has been working on sediment issues in the lower Shavers Fork watershed, particularly along Pheasant Run and its tributaries. We chose that watershed as an area of concern based on streambank erosion and loss of property, especially since serious flooding in 1996. Canaan Valley Institute and the Monongahela National Forest are working on larger watershed restoration efforts to reduce erosion. Both existing secondary roads and many miles of logging roads have caused/are causing serious stream instability and erosion problems in the entire Pheasant Run watershed. (See "Shavers Fork Coalition Begins Watershed Project," Elkins Inter-Mountain, P.2, June 11, 1999.) We request that the EIS study the overall cumulative impacts of the watershed's sediment problems vis-a-vis new highway construction.
b.) We further request that the EIS study the cumulative impacts of projected development induced by a four-lane highway. We ask this after observing that Corridor H-induced development appears to be filling a floodplain just north of Elkins, setting up a scenario for flooding downstream. Tucker County has, if anything, fewer places than Randolph County which are conducive to the "development" that requires large flat terrain. The community of Parsons deserves to know the scope of possible flooding problems they will be facing from the combined effects of increased sedimentation due to highway construction* and to subsequent development.

c.) We request that any proposed alignment(s) be designed based on detailed and realistic studies of a balance of cut and fill. The lower Shavers Fork watershed has proved itself to be particularly flood-prone. Stream restoration and stabilization by the Forest Service and other organizations in the watershed are just beginning and will take time. Further disturbance, particularly large fill areas, could throw the system out of its fragile balance.

We are aware that some Corridor H construction projects south of Kerens have had problems finding suitable "waste" sites. We request that the highway in the Battlefield Avoidance study area and the Blackwater Avoidance study area be designed with either (1) NO waste, or (2) waste sites that are approved prior to the alignment selection and Record of Decision.

*Despite the black sediment-catching fences, we are able to observe sharply increased sediment loads entering Leading Creek from current Corridor H construction projects.

Thank you for the opportunity to comment on the scope of the Corridor H EIS.

Sincerely,

Ruth Blackwell Rogers
Ruth Blackwell Rogers, chair
Shavers Fork Coalition
Shavers Fork Coalition Begins Watershed Project

Broad-based collaboration marked the successful work day coordinated by the Shavers Fork Coalition on April 10 in the first stage of a watershed restoration project.

A stream gage and a crest stage recorder were installed near the mouth of Slabcamp Run and trees were planted on a section of the streambank in an effort to reduce further erosion from flooding. The project is part of a larger restoration effort on the Pheasant Run subwatershed of the Shavers Fork of the Cheat River.

The Shavers Fork Coalition (SFC) chose Pheasant Run as an area of concern based on streambank erosion and loss of property in the area. For the past two years, volunteers have developed long-term stream monitoring stations in the watershed to assess stream movement due to flooding and erosion. The steam gage and crest stage recorder will help the local community and the Shavers Fork Coalition more fully understand the processes of this particular watershed.

Both the Canaan Valley Institute (CVI) and the Monongahela National Forest (MNF) are working on larger watershed restoration efforts which tie into the SFC’s project. CVI will provide technical assistance for the assessment and restoration of the Slabcamp Run watershed similar to “budging” successes in other areas.

“Erosion and sedimentation is the most pervasive problem in West Virginia’s streams. It’s going to take partnerships with resource providers to help solve the problems,” said Gary Berti of CVI.

The MNF will engage in a number of watershed restoration projects in tributaries of Pheasant Run to reduce erosion and help prevent loose stream materials from moving downstream.

Jim Knibbs of the MNF said his agency has completed a preliminary assessment of Aaron’s Run, another tributary of Pheasant Run. They plan restoration work on the stream channels, side drain opening on old logging roads and some road closings to prevent further erosion stimulated by flooding in 1996.

“We are treating the ‘open bleed-
ing’ problems first,” Knibbs said. “The cumulative effects of our agency’s work and the SFC’s work should help in our overall goal of reducing sediment in the Shavers Fork.”

The trees were planted on the property of Martin and Jean Wilmoth. Flooding in recent years has caused damage to their farm, which has been in their family for nearly a century.

“We didn’t have any idea other than what we’d already done, until the SFC approached us,” said Mrs. Wilmoth. “I’m pleased if someone wants to use our property to try to work something out that’s beneficial. The trees do seem to be growing and it looks like the bank held some during the last few storms, including the storm where we got two inches of rain in thirty minutes.”

Zach Henderson, president of the SFC, said, “Based on our studies in the area, we feel that streambed revegetation may be one of the best and cheapest remedies for bank erosion. We appreciate the Wilmoth’s willingness to ‘experiment’ on their property and we will continue to work in the area until people are not unnecessarily losing property due to flooding.”

Other collaborators on the project were the U.S. Fish and Wildlife Service, which donated equipment and revegetation materials; the West Virginia Division of Forestry, which donated equipment and trees; the Randolph County Extension Service, which donated equipment; the West Virginia Division of Highways, which donated labor and equipment; Boy Scouts Troop 84 members, who worked; Randolph County 4-H Club members, who worked; Shavers Fork Coalition members, who worked Rolling Thunder Organics, which donated equipment and materials and The Retreat Bed and Breakfast which donated stream revegetation materials.
James E. Sothen, P.E.  
Director, Engineering Division  
West Virginia Division of Highways  
1900 Kanawha Boulevard East  
Charleston, WV 25305-0430

RE: Corridor H; Kerens-to-Parsons and Parsons-to-Davis Sections

Dear Mr. Sothen:

I am writing this letter to provide input on issues I feel are essential to include in the Kerens-to-Parsons and Parsons-to-Davis Environmental Impact Statements. It is my sincere hope that this study is approached in a comprehensive way that is fair, complete, and ethical so that it will result in the most desirable outcome for all West Virginians.

The most logical place to begin the assessment is asking "what benefit would completing the Kerens-to-Parsons and Parsons-to-Davis sections of the corridor actually have for West Virginia?" Of course, to answer that question a thorough cost-benefit analysis must be completed that includes relevant variables. Important variables to integrate into the discussion include economic, sociological/cultural, and natural considerations.

What convincing evidence exists to indicate that the people and communities surrounding the two proposed corridor sections would benefit economically if the segments were built? Recall, not building the segments always remains an option. Research indicates that new roads do not bring new jobs with them. Are claims of economic benefits substantiated? Ethically, is it the proper course of action to take advantage of the economic vulnerability of some residents by leading them to believe that economic benefits would be realized by developing the corridor? The EIS must critically assess whether economic benefits will actually emerge with the development of the corridor. And, if such benefits have the potential to emerge, to what segments of the population will these opportunities be extended? If federal funds are included in the project, this is a valid question indeed.

If the advancement of the economic interests of West Virginians is in fact listed as a concern of road developers, have other options been considered? There are other courses of action to examine that have greater potential for securing West Virginia's economic interests than building a road whose economic potential has yet to be thoroughly substantiated. How much concentration has been focused upon the federal Workforce Investment Act? July 1st was the deadline for states to implement provisions of this legislation that was designed to consolidate the process of becoming trained for and finding jobs by calling upon local organizations to form partnerships with other agencies offering employment and training services. The goal of the legislation has been to increase state and local involvement in the training and employment process which has potential to increase employment, retention and earnings for job seekers in areas experiencing high levels of poverty. The federal government plans to cut programs that
are not up to speed. What is the state doing, or what can it do better, to heighten employment opportunities through commitment to the principles of this legislation?

What types of jobs are envisioned as emerging for local communities due to construction of the two segments of the corridor? The people of West Virginia deserve to have jobs that are sustainable and that do not detract from the rugged beauty that characterizes the state. Jobs constructing roads are not sustainable and fail to provide for the future security of West Virginians. Old mindsets toward development, "build a road and the strip malls will follow", must be supplanted with new approaches for economic success. Fast food and road construction jobs provide short-term prosperity at best. Enough West Virginians have lost their jobs in the past by working in extracting finite natural resources which generally cannot enable sustainable employment. Are jobs in strip-mall settings that most likely offer limited benefits at best what West Virginians want or need? Thus the logical question emerges; "Is innovative thinking being applied to locate more sustainable potential job sources for West Virginians?"

As an Information Specialist for a public agency, we are seeing two trends in current technological research. One is a movement away from the consumption of goods to the marketing of services provided over the Internet. What types of efforts are being made to examine the infrastructure of West Virginia to see if it is compatible with supporting the potential capabilities of the Internet and the services it could provide? Are education and training opportunities being examined that could assist West Virginians with learning Internet technologies so that they will be better qualified for jobs that demonstrate greater potential for sustainability?

A second trend seen in the field of technology is that as more people become exposed to "cyberspace" in their daily interactions, the more important physical space becomes to them. There is growing concern about urban sprawl and renewed emphasis is being placed upon undeveloped natural spaces, clean air, and communities with a small town feel. As such, communities are taking innovative approaches to incorporating these principles into their planning strategies. A great part of the allure of the state is its undisturbed beauty. If people want to come to West Virginia to experience natural beauty and small towns, do we really want to potentially turn the area into another "strip mall" that people can go anywhere to experience? And, do West Virginian's want to live in areas whose small-town feel has been lost?

In looking at the costs associated with building both segments of the corridor, will transportation money be spent in the most useful manner that it can be? Will other roads needing repair throughout the state be neglected as a result? Is the transportation spending that is necessary to build the segments of the corridor benefiting the advancement of transportation needs of all West Virginians, or will many transportation needs elsewhere go unmet? Do traffic projections actually substantiate corridor development?

In the analysis, are the externalities associated with road building/increased access and how local communities will deal with those issues being examined? Will the local
infrastructure be prepared to deal with potentially increased demands placed upon the police/fire/EMS systems? Numbers from the Department of Labor's Bureau of Labor Statistics suggest that approximately two thirds of population growth in the next fifty years will come from immigration. Are local communities prepared to deal with the cultural diversity issues that increased access will inevitably bring? If potential sources of revenue for construction of segments of the corridor come from federal dollars, what are the hiring requirements accompanying those dollars? Often, if federal money is involved in projects, hiring procedures that reflect a commitment to diversity are in place along with the expectation that those principles be strictly adhered to. If there is the potential for change in the cultural/religious makeup of local communities due to increased access, is there a framework in place that encourages diversity? Are efforts being made to expose and train local communities to become more bilingual? If someone from a protected class were to feel their civil rights were violated, there are of course many avenues of recourse open to them. Are local areas outfitted to deal with the potential for increased litigation of this nature, in the event that it would occur?

With the two aforementioned segments of the corridor being within close proximity to the Monongahela National Forest, it is imperative to examine extensively how construction will impact the ecosystem. Are wetlands being threatened? Will water quality be compromised due to increased sedimentation, runoff, and acid mine drainage? With less than two percent of the earth's water being fresh water (and a majority of that tied up in glaciers), close attention must be paid to this issue. What Threatened and Endangered Species will be impacted? Will soils, plant life, and wild life be adversely impacted?

How will the aesthetics of the forest be impacted? Will construction of segments of the corridor degrade wilderness recreation opportunities for people? People currently visit the area to enjoy the tranquility of the National Forest. What do you envision their reaction to be if the character of the forest is adversely altered? There is the potential that they may choose to seek solitude in different surroundings altogether. As such, it is important to examine in the analysis whether we want to introduce development pressures into an area that has aesthetic values that are not conducive to development.

There are of course economic issues that could arise from adversely affecting the forest's natural resources. If water quality diminishes, there could be adverse impacts on fish. Do people fish in the waters of the watershed that would be impacted by building the road? If the fish are adversely affected, the potential for a decline in fishing could result (and subsequent decline in revenue from fishing fees). If other wildlife is similarly affected, how will this impact hunting license revenues? Recreational opportunities in general could diminish, affecting many businesses that might currently rely upon people visiting the area who come to enjoy the natural beauty of the area.

How might the road impact local communities culturally? In working at New River Gorge National River in the past (part of the National Park System whose mission is to preserve and protect our nation's cultural heritage and natural history), I have conducted research and presented programs on the
cultural heritage of rural West Virginia, in addition to living in various rural communities in Fayette, Summers, and Preston counties. One theme that I recall encountering both in my professional research and as a private resident is the self-sufficiency of many rural residents, coupled with their loyalty to their land and ties to their roots. Small town rural life that presents a way of life not ruined from the hustle and bustle of the world is what gives West Virginia much of its unique character. That and its unspoiled natural beauty. People visit West Virginia to see just that. If we start using the public's money to build roads that are not substantiated, the potential exists to turn local communities into cement and chain stores and the very character and charm of the state, as well as a way of life, is lost.

The question remains: should we impact the culture of people to advance the interests of a few? In my graduate school studies in Political Science we often discussed the concept of "the greatest good for the greatest number" and how governments adhering to principles of democracy strive to attain this goal. The vital issue is this: will construction of the two sections of Corridor H (Kerens-to-Parsons and Parsons-to-Davis) result in the greatest good for the greatest number?

It is my sincere hope that you will examine all necessary variables thoroughly when conducting the Environmental Impact Statement so that a complete, fair, and ethical analysis may result; one that will give rise to the most feasible option for all involved.

Thank you for your time.

Sincerely,

Cara L. DeAngelis
Cara L. DeAngelis, M.P.A.
Ben Hark

From: Jim Sothen
Sent: Monday, July 17, 2000 6:39 AM
To: Ben Hark
Subject: FW: Corridor H comments

Ben,

Please handle. This is quite a lengthy letter.

Jim S.

----Original Message----
From: Nathan Fetty [SMTP:nfetty@neumed.net]
Sent: Friday, July 14, 2000 3:48 PM
To: jsothen@wv.state.wv.us
Subject: Corridor H comments

July 13, 2000

James E. Sothen, P.E.
Director, Engineering Division
WV Division of Highways
1900 Kanawha Blvd. East
Charleston, WV 25305-0430

RE: Comments on Scope of Corridor H Supplemental Draft EIS

Dear Mr. Sothen:

On behalf of myself, please accept the following scoping comments on the Corridor H Supplemental Draft Environmental Impact Statement (SDEIS).

I am a resident of Buckhannon, W.Va., and work in Elkins, W.Va., and recreate in and around the areas that would be affected by Corridor H. I am hopeful you will fully address and incorporate these comments into the SDEIS:

1) The SDEIS should consider all primary, secondary and cumulative hydrologic effects of corridor construction as required by the federal Clean Water Act (CWA). [Note: I will be specifically discussing some CWA issues in particular, but the SDEIS should incorporate all aspects of the CWA as appropriate and as legally mandated.]

2) Antidegradation & Continuing Planning Process - The Clean Water Act goals of maintaining and protecting existing uses of those potentially impacted waterways must be upheld as a basis for any alternatives developed in the EIS. Compliance with our state's water quality standards, and with the antidegradation and continuing planning process sections of the CWA must take place as the study process moves forward. In particular, I request the identification of, and adequate protection of those waters identified as Tier 1, 2, 2.5 and 3, and that the WV Division of Transportation pursues proper consultation with the appropriate state and federal agencies regarding this matter.

3) Excess Waste & Floodplains - Problems in this area should be given even closer scrutiny in light of the underestimates of excess waste projected in the earlier environmental impact studies, and the disposal...
problems that have been encountered during current construction. I request that waste estimates be revised, that the specific locations for proposed fill be evaluated for impacts, and that the cumulative hydrologic impacts of this activity be studied during the consideration of alternatives.

One need only look at a couple of examples in the area of this proposed project that shows how fill effectively encroaches on the floodplain, reduces floodplain areas and increases flooding risks. For example, the fill that is currently being placed along US 219 north of Elkins on the Polino property and on the property of the adjacent truckwash. This activity will certainly place the homeowners in-between these two fill areas at great risk in the next high water event and add to the flooding problems already occurring in the Crystal Springs area (which FEMA, Project Impact and the state are spending much effort, resources and money to mitigate).

A second example in the same watershed is the way that fill was placed in the Leading Creek floodplain to create US 33. This fill wall/roadway altered the ability for water to pass under. Because the waters of the Leading Creek are not allowed to rise and recede as river systems naturally do, Crystal Springs suffers from far more severe flooding impacts than need be.

I urge WVDOT to allow no filling in 500-year floodplains and that no roadbuilding be considered in any floodplains. This sensitive project area can sustain no additional major floodplain impacts or increases in flood elevation levels. If any floodplain alternatives are to be considered, then proper detailed hydraulic studies of all floodplain impacts must be studied. [The prior FEIS claimed to have done this, including studies for Leading Creek, but in fact these studies do not exist, and there are major floodplain impacts and increases in flood elevation levels occurring.] Again, appropriate coordination with federal, state and local agencies regarding both the floodplain impacts and detailed hydraulic studies, i.e. FEMA, US FWS, US EPA, US ACOE, Project Impact and local county floodplain managers is warranted for this issue.

4) Acid Mine Drainage (AMD) - The EIS needs to give adequate consideration to the potential of each alternative to create significant amounts of AMD due to the exposure of pyritic materials. This includes the exposure of reclaimed coal lands, and acid-producing shale seams. Additionally, there should be a careful study and mapping of all mines in the area, especially on Backbone Mountain, and around Thomas and Davis, as some of these old mines have never been mapped. The EIS should consider AMD from both of these sources.

5) Sediment Loads & Cross Drainage - Sediment is one of the main water quality issues currently impacting the state's waterways. The Monongahela National Forest has found a number of streams within its boundaries to be at threshold levels of sediment load for aquatic life. This should also be considered in the realm of antidegradation (mentioned above). Sedimentation is an important issue in highway construction because the construction not only directly adds sediment to the waters, but the associated erosion changes the watershed's flow patterns as well.

As it does not take a lot of water to create erosion very quickly, and
and the frequent erosion and flooding that occurs even with normal rain and thunderstorm events in this area, I urge WVDOT to reference both the WV Soil Survey and Monongahela National Forest soil maps to identify those soils that are highly erodible, ex. Mauchunk and Belmont, and that these be avoided when determining alternatives. If alternatives are in areas with highly erodible soils, then WVDOT should study the utilization of a system of cross-drain culverts with a frequency of every 75 feet.

In other areas, I request the WVDOT study a culvert frequency of 100-150 feet. This is due to the numerous locations where we see highways in our state built without sufficient cross-drainage. Too often the roadways are built-up, shutting down subsurface drainage in the process. Unfortunately these un-natural low-lying areas are often called "naturalized areas" or "wetlands". It is unfortunate because there is nothing natural about them and we have yet to see any evidence that they indeed function as a wetland.

With the current knowledge available on hydraulics and soil engineering, as well as knowing how current practices impact erosion, there is no reason to have poor drainage. A higher frequency of culverts should be incorporated into the analysis of alternatives. [Please note that I do not view simply enlarging the culvert size as a solution — this only exaggerates the problem.]

6) It is my understanding that due to the settlement agreement that lead to this supplemental EIS, that WVDOT has agreed to stay out of the headwaters of and have no impact on Big Run Bog. Currently, it appears that only the topographical boundary of this sensitive resource is being considered. It is important that the geological boundary of this watershed also be studied in order to assure that any blasting done on Backbone Mountain would not change the groundwater flow and alter this nationally important wetland. Further geological studies should be done to see how the geology is connected, how it fractures and how blasting could ultimately de-water the bog.

7) Section 5(d) of the federal Wild and Scenic Rivers Act requires the continuing consideration of the eligibility and suitability of rivers for inclusion in the Wild and Scenic Rivers system in the planning stages of all development. Hence, I believe WVDOT must examine the values of Cheat River to determine its eligibility and suitability for inclusion in the Wild and Scenic Rivers system in the SDEIS.

8) Seasonal benthic surveys should be conducted on all streams as a preliminary effort to assess the potential effects of construction.

9) Appropriate surveys should also be conducted to assess potential impacts to wildlife, in particular threatened, endangered and endemic species, and species of special concern. Specific to the Indiana Bat, annabat surveys should be utilized instead of, or in addition to, the mist-netting techniques which are currently used.

10) The SDEIS must be broad enough to account for cumulative and secondary impacts to the regional ecosystem landscape mosaic features.

11) The SDEIS needs to address the impacts on the Monongahela National Forest. In particular, the Laurel Run Opportunity Area (7,800 acres public land, 3,000 acres private land) is managed as a remote habitat for wildlife species "intolerant of disturbance". It also serves as a
biological reservoir supporting the nearby Otter Creek Wilderness area. We urge that Laurel Run O.A. not be considered for potential alignment alternatives.

12) The National Environmental Policy Act (NEPA) requires the development of a reasonable range of alternatives for environmental impact studies. Regarding your public notification for scoping comments, two basic alternatives are absent: the no-build alternative, and upgrading U.S. 219. While the no-build alternative is mandated by NEPA, I believe both of these alternatives must be added to the range of alternatives considered in the SDEIS, and that all the alternatives must have adequate and equitable examination.

13) Finally, the SDEIS study process should not go forward until all federal and state resource agencies have provided their scoping comments.

Thank you for your attention and consideration to my comments and recommendations.

I look forward to your addressing these issues.

Sincerely,

Nathan Fetty

P.O. Box 302

Buckhannon, WV 26201
July 13, 2000

James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston WV 25305-0430

Dear Director Sothen,

I would like to register several comments towards the development of Environmental Impact Statements for the Kerens-to-Parsons and Parsons-to-Davis sections of Corridor H. Although I currently live in Montana, I grew up in Morgantown and have hiked and fished many of the areas in question. I am currently a graduate student in the Division of Biological Sciences at the University of Montana, where I am focusing on watershed management and fisheries conservation.

The EIS(s) should address potential impacts to wildlife, particularly threatened, endangered, and endemic species. Surveys for Indiana bat hibernacula, endemic salamanders, mussels, and rare plants should accompany the assessment. If these surveys do not exist, they must be conducted as part of the development of the EIS. Moreover, it is important that the documents quantitatively assess the impact of the road on the local populations and regional metapopulations of these species. Consider demographic and distributional data for Population Viability Analyses (PVA) of these rare, sensitive, and endangered taxa. For federally listed species under the Endangered Species Act (16 U.S.C.A. §§ 1531-1534), your analyses should describe the compliance of Corridor H to regional recovery plans.

The National Environmental Policy Act (NEPA, 42 U.S.C.A. § 4321 et seq.) requires the development of a reasonable range of alternatives for EISs. Based on your request for scoping comments, two basic alternatives are missing from consideration: a) upgrading U.S. 219 and b) a no-build alternative. NEPA compels development of a “No Action” alternative which, in this case, requires the inclusion of the “No Build” option. Any EIS that lacks a “no action” alternative also lacks a base line for comparison of the alternatives. Congress recognized this fact and specifically required this type of analysis under NEPA.

The EIS(s) need to address the impacts on National Forests. For example, the Laurel Run Opportunity Area (Monongahela National Forest) is currently managed for disturbance-intolerant wildlife. The impacts of Corridor H on the management direction of this area need to be considered. I share the sentiments of many West Virginians that this area should not be subjected reckless development by Corridor H.

Thank you for your consideration. Please do not hesitate to contact me with questions.

Sincerely,

[Signature]

Nathaniel P. Hitt

cc. WVEC
Bryan K. Moore
Mountaineer Chapter of Trout Unlimited
787 Twin Oaks Dr.
Bridgeport, WV 26330-1645

Mr. James E. Sothen, P.E.
Director, Engineering Division
WV Division of Highways
1900 Kanawha Blvd. East
Charleston, WV 25305-0430

July 14, 2000

Dear Mr. Sothen,

The Mountaineer Chapter of Trout Unlimited (MCTU) is sending this letter to you today to provide comments on the Corridor II Supplemental Environmental Impact Statement (SDEIS). Trout Unlimited is a national non-profit organization dedicated to working to conserve, protect, restore and enhance coldwater fisheries and their watersheds.

We request that you fully address and incorporate the following comments into the SDEIS:

1) The SDEIS should consider all primary, secondary and cumulative hydrologic impacts potentially expected from the highway construction as required by the Clean Water Act (CWA). The proposed route will cross a large number of high-quality coldwater streams. Viable populations of the native Eastern Brook Trout (WV State Fish) are recognized in a large number of the streams in this region, and there is strong evidence of populations in streams not yet officially recognized. It is of utmost importance to the members of MCTU that these fragile streams are not detrimentally impacted in any way by the proposed construction. Allowing sediment to enter these pristine streams could be disastrous to the brook trout populations. Sediment entry would have a negative impact on food supply, habitat and areas suitable for spawning. We must keep in mind that these brook trout exist here naturally, and great care must be taken to protect these populations because they can't be replaced. We would strongly request that the Division of Natural Resources perform a complete fish and benthic survey on all streams in the path of the planned road construction. It is important that these surveys be done in advance of any construction to allow the monitoring of the individual fishery's health and integrity during construction.

2) We believe that the SDEIS needs to clearly address the impacts to the Monongahela National Forest. In particular, the Laurel Run Opportunity Area. This O.A. is comprised of 7,800 acres of public land and 3,000 acres of private land. The Forest Service manages this land as a remote habitat for wildlife species considered to be intolerant of disturbance. It is also closely integrated biologically to the nearby Otter Creek Wilderness area. We strongly urge that the Laurel Run O.A. not be considered for potential alignment alternatives.

3) We would strongly favor a two lane upgrade in many sections as opposed to a four-lane highway. A two-lane upgrade, with an up-mountain passing lane, would be far less intrusive than a four-lane, much more scenic, and would be our preferred alternative. Based on surveys that have been provided, there is not enough volume of traffic through this area to justify a four-lane highway. A four-lane highway will do no more to enhance local
economies than a scenic upgraded two-lane highway, and as an example one merely has to look at the U.S. Rt. 50 four-lane corridor between Clarksburg and Parkersburg. That corridor has been in use for approximately 30 years and the areas along the highway have realized minuscule economic improvement during that period of time. We believe that the upgrading of U.S. 219 is unacceptably absent from the range of alternatives considered in the SDEIS.

4) We feel it to be very important that the SDEIS consider the potential of each alternative to expose significant amounts of heavy metals to possible stream and groundwater entry. This includes the exposure of reclaimed coal lands and acid-producing shale seams. The exposed metals will readily attach to sediment and be carried into nearby streams. A Total Maximum Daily Load (TMDL) program, under the Clean Water Act, is presently being developed for the Cheat River Basin by the WVDEP and the USEPA. Any new introduction of AMD and heavy metals within this watershed could prove to be very detrimental to the proper development and implementation of the TMDL. The expected potential for further impairment should be taken into consideration if there is soil disturbance anywhere within the Cheat River watershed.

5) In closing, the SDEIS process should not go forward until all federal and state resource agencies have provided full and complete scoping comments.

Thank you for your time and consideration to our comments and concerns regarding these issues. We are confident that you will fully address these concerns.

Sincerely,

Bryan K. Moore
Secretary

cc:
Mr. Bernie Dowler, Chief of Wildlife Resources, WVDNR
Ms. Allyn Turner, Chief of Office of Water Resources, WVDEP
Mr. Robert Koroncai, EPA Region III
Mr. Charles Myers, Supervisor, Monongahela National Forest
Mr. Jeffery Towner, Field Supervisor, US Fish & Wildlife Service
Mr. Albert Rogalla, Chief of Regulatory, US ACOE
July 11, 2000

James E. Sothen, P. E.
Director, Engineering Div.
West Virginia Division of Highways
1900 Kanawha Blvd. East
Charleston, WV 25305

Dear James E. Sothen,

I am writing in regards to the Corridor H alignment between Kerens and Parsons, West Virginia. I am very concerned about sensitive wild life in this region as well as beautiful areas I often visit and hike. I love the waters of the Monongahela National Forrest and canoe them often. I am concerned with acid mine drainage that may erupt from disturbing sensitive shales in the Parsons region. The Cheat Basin can not survive much more intrusion by man.

Please consider less invasive measures in this area. Expanding the existing road from Kerens and crossing Backbone Mountain seem much more acceptable given the traffic volume that this stretch of highway will carry.

Sincerely,

Garland S. Roberts
186 Summit Street
Elkins, WV 26241

RECEIVED
JUL 1 2000

ENGINEERING DIVISION
WV DOH
July 13, 2000

James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston, WV  25305-0430

To Whom It May Concern and Mr. Sothen,

I am interested in preserving as much land as possible in the Corridor H Process. I am sure you agree that the days of massive road building in this country are reaching an end. Therefore it is very important what you do here.

First, please protect the Laurel Run "Opportunity Area" which consists of 7800 acres set aside as a biological reservoir. The opportunities to preserve wildlife in this area mean nothing if they can be impinged upon for Any Reason.

Also, please ensure minimal loss of habitat by fragmentation. As my fence need replacing I am using non-inhibiting boundary markers, using a fencing which serves just as a marker. Now, that I know better, I would never have put up chain link fencing. When one walks through housing developments one sees signs and fences all over as if people are afraid. It is time for all people with responsibility for land usage to realize putting up fencing impinges on the ability of other creatures to survive. Doing this one little thing will help wildlife survive and lessen the pressure on public areas and the need for more of them.

Please protect all endangered and threatened species as if I needed to remind you it is your duty to do so anyway.

Thank you,
Erica Louise Francks
2417 Chinn St.
Ashland, Ky.  41101-4411
606-324-7859
DATE: 7-6-00

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Kerls to Parsons
STATE PROJECT X142 - H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Randolph and Tucker Counties

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

Corridor H is not needed. Waste Tax Payers Money! Big Highways will bring in more crime and disrespect. Just fix the roads we now have. Put in some passing lanes. This County is made up of the retired people who don't want the Big Super Highway and we are killing our people. Leave things alone or make modifications to our present roads.

(Please print the following information)

NAME: ARLENE PRICE

ADDRESS: 511 Main Street
Parsons, W. V. 26287

ORGANIZATION (IF ANY): Retire
DATE: 6-14-2000

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Thomas to Davis
STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Tucker County

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

- Make sure Scoping site in Davis is visited
- Make sure site in Davis is visited
- This project must proceed ASAP to ensure
  economic sustainability
- Let's keep real and we have possible
  industry ready to move here as soon as
  sufficient highways are built
- Noise abatement for both towns is needed

(Please print the following information)

NAME: Randy Schneidecker
ADDRESS: 16444 14th Ave SW
            Seattle, WA 98198

ORGANIZATION (IF ANY):
DATE: June 14, 2000

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
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Thomas to Davis
STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Tucker County

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

[Handwritten content]

(Please print the following information)

NAME: Troy Arbogast
ADDRESS: RT 3, BOX 284
E/Kings WV 26241

ORGANIZATION (IF ANY): ________________
DATE: 6/14/00

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
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Supplemental Draft Environmental Impact Statement for
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STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHID - 0484(059)
Tucker County

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

Why can't Corridor H segment already approval be started now. Section Downs to Briscoe, Section North of Way Run up the mountain to Downs Ridge.

_____________________________________

_____________________________________

_____________________________________

_____________________________________

_____________________________________

_____________________________________

(Please print the following information)

NAME: TAB STILES

ADDRESS: 1650 LIMESTONE RD

PARSONS WLD

ORGANIZATION (IF ANY): Tucker County Chamber (President)
DATE: 0/14/99

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Kerfs to Parsons
STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Randolph and Tucker Counties

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

Improve Existing Roads
First

(Please print the following information)

NAME: O. Widor
ADDRESS: Canaan Valley

ORGANIZATION (IF ANY): ____________________________
DATE: June 14, 2000

SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)

PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Thomas to Davis
STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Tucker County

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000

Please consider the following comments:

I have lived near Parsons WV since 1988 and have rarely noticed heavy traffic between Thomas and Davis (or anywhere between Elkins and Berkeley County). I strongly believe that construction of a 4-lane highway through this area is an outrageous unnecessary expense and will be detrimental to our quality of life. The most valuable resource we possess is the natural environment (forest land, specifically) and efforts to

improve our (Please print the following information) economic situation

NAME: Mimi Kibler

ADDRESS: 208 2nd St

Parsons WV 26287

ORGANIZATION (IF ANY): Corridor H Alternatives
DATE: 7/14/00

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Kerris to Parsons
STATE PROJECT X142 – H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Randolph and Tucker Counties

PLEASE PROVIDE COMMENTS ON OR BEFORE July 14, 2000
Please consider the following comments:

1. If there is an official community input group or rather groups in the Davis-Thomas area, then it stands to reason that other community groups should be given the same opportunity. Montrose has a strong town government and many involved individuals as illustrated by its movement to re-route Corridor H outside in the 1990s. Today, with the support of the Randolph County Housing Authority and Mountain Partners in Community Development, it has also undertaken major new steps in social and economic development, with a major effort being recently awarded by HUD. Montrose should be accorded the right to participate officially in sharing its voice.

2. When carrying out the provisions for public involvement the state and its consultants should invest in learning about how to make their processes truly participatory and locally appropriate. If you have questions, I am happy to talk with you.

3. Why was the Monongahela National forest left off of the maps presented at the scoping meeting? Who devised the study area boundaries?

4. How will you analyze current and future input? What are your goals/anticipated results? How will you diffuse the results? analyses? Who is carrying out the "various assessment?"

(Please print the following information)

NAME: Suzanne Warsinsky-High
ADDRESS: PO Box 98
Montrose, WV 26283

ORGANIZATION (IF ANY): Individual/Regional Dynamics
DATE: 7-14-00

Mr. James E. Sothen, P.E.
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: June 14, 2000
SUBJECT: INFORMATIONAL PUBLIC WORKSHOP (DD)
PROJECT: Appalachian Corridor H
Scoping Meeting for preparation of a
Supplemental Draft Environmental Impact Statement for
Kerns to Parsons
STATE PROJECT X142 - H - 38.99
FEDERAL PROJECT CHHD - 0484(059)
Randolph and Tucker Counties

Mr. Sothen

I am writing concerning the Scoping for proposed Corridor H. In Tucker Co.
there are three points that must be considered in scoping for the EIS.
They are:
1) The presence of known Native American archeological sites in the Cheat
River Valley below Parsons and in Left Fork of Clover Run. The History of
Tucker Co. and other documents make it clear that Holly Meadows of the
Cheat River and Clover Run were the location of the "Iroquois Highway" and
the sites of Indian settlements. The cultural and historic importance of
these sites must be investigated and considered in the EIS.

2) The presence of a high quality wetland at the ridge of Backbone Mt.
This wetland appears to be similar to Big Run Bog but less disturbed by
beaver activity. It is 1/2 mile SSE from Tucker Co. High School and 3/4
miles N of Big Run Bog. There may be other high quality wetlands that were
either unidentified or inadequate characterized in previous EIS work.
Impacts to wetlands and ground and surface hydrology must be fully
considered in the EIS

3) Noise and visual pollution. A highway on the mountain ridge will
project highway noise across much of Tucker County. It will also be
visible from many points in the county. The adverse effects of this
pollution on tourism, recreation, wildlife, and quality of life must be
carefully considered in the EIS

Thank you for this opportunity to comment.
John Coleman
Rt. 2 Box 142
St. George, W.Va. 25287

representing myself
December 14, 2000
Agency Coordination Meeting
WVDNR Office
Elkins, West Virginia
Appalachian Corridor H
Agency Coordination Meeting
Battlefield and Blackwater Avoidance Alternatives

Thursday, December 14, 2000, 9 am
WV DNR Offices, Elkins, WV

AGENDA

Introduction ______________________________ Jim Colby, WVDOH

Battlefield Avoidance Study—Alternatives Update ______ Wendy Vachet, Baker

Blackwater Avoidance Study ______ Katry Harris and Claudette Jenkins, Baker

Environmental Constraints Identified
  General
  Endangered Species Habitats
  Wetlands

Alternatives Developed

Preliminary Impact Assessment
  General
  Wetlands

First Stage of Alternatives Analysis

Summary and Wrap-Up ___________________________ Bill McCartney, Baker

Request Comments Regarding:
  Identification Efforts
  Alternatives Developed
  Elimination of Alternatives from Further Detailed Study

Field View (if requested by Review Agency attendees)
<table>
<thead>
<tr>
<th>Name</th>
<th>Agency</th>
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<tbody>
<tr>
<td>Keith Krantz</td>
<td>WV DNR</td>
<td>(304) 637-0245</td>
</tr>
<tr>
<td>B.J. McCandless</td>
<td>Baker</td>
<td>757-631-54166</td>
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<tr>
<td>Wendy Vachet</td>
<td>Baker</td>
<td>757-631-5472</td>
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<td>Jim Colby</td>
<td>WVDot</td>
<td>304-558-2885</td>
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<td>Ron Krotcheck</td>
<td>FHWA</td>
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<td>Ed Compton</td>
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<td>Kathy Harris</td>
<td>USDFR Forest Service</td>
<td>787-631-5418</td>
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<td>Roy Ryan</td>
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<td>Mike Moran</td>
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<td>304-637-0220</td>
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Ms. Wendy L. Vachet  
Senior Environmental Scientist  
Michael Baker Jr., Inc.  
770 Lynnhaven Parkway, Suite 240  
Virginia Beach, VA  23452

Dear Ms. Vachet:

Pursuant to your request, we are providing preliminary general comments on the Battlefield and Blackwater Avoidance Alternatives we discussed at our December 14 meeting. We were pleased to see that Baker developed alignments that avoided and minimized wetland impacts. Conscientious consultants streamline the review of these environmental documents and your staff is to be commended. To prevent confusion with the different alternatives, we will address the projects separately.

**Battlefield Avoidance Study**

Of the alternatives presented at our 14 December 2000 meeting, alignments DF, GF and M appear to be the least environmentally impacting. Our cursory review reveals all three alignments avoid wetlands. Alignment GF impacts four streams and employs 12 bridges. Alignment M and DF impacts 6 and 7 streams, respectively. Simply based on number of streams impacted, GF appears to be the least impacting, however, of critical importance is stream quality and length of impact. In other words, impacting five low quality streams may be preferable to impacting one extremely high quality one. Without this information (stream name and feet of impact), establishing levels of impact between these three alignments is impossible. Terrestrial impacts are initially evaluated utilizing road length. Both DF and GF alignments are of similar length (15.35 vs. 15.81), but M is 17.6 miles long (11.6 % more terrestrial impact). The greater length of M may reflect an increase in secondary and cumulative impacts based on additional borrow and wasting areas. Our concern with this alignment’s terrestrial impact would not exclude it from consideration, however, other alignments appear more acceptable. Without knowing stream types, names, length, and proposed waste/borrow areas we are unable to select a preferred alternative.
Blackwater Avoidance Area

Unlike Battlefield, the segment passing Thomas to Davis has a court ordered allowance which gives final alignment selection to the local communities. It would be our hope that they recognize the importance of maintaining or improving the environmental quality that they currently enjoy. Alignments dark blue, green and grey appear to be the least impacting. Purple has less wetland impact than grey but is primarily PFO/PSS and also may impact northern flying squirrel habitat. Evaluating these alternatives (dark blue, green and grey) strictly on wetland impacts, alignment green has the least amount of impact. Both grey and green minimize the impact to the HJ 1 watershed which is preferable to dark blue. We suggest considering the combination of the relatively short connectors of dark blue with the alignment of green east of S.R. 219. Confounding additional alternative analysis is the lack of stream and road length data which aids in evaluating impact (direct, secondary and cumulative). Until such time that this information is made available to us further analysis is speculative.

We appreciate the opportunity to participate in the planning process. If we can be of further assistance please contact me or Keith Krantz (304-637-0245) of my staff.

Sincerely,

Roger J. Anderson, Supervisor
Environmental Review and Coordination

RJA/kkj
August 9, 2001
Agency Coordination Meeting
WVDNR Office
Elkins, West Virginia
Mr. Roger Anderson  
Division of Natural Resources  
West Virginia Bureau of Commerce  
Operations Center, Ward Road  
Post Office Box 67  
Elkins, West Virginia 26241

Dear Mr. Anderson:

Appalachian Corridor H  
Parsons to Davis  
Tucker County

The West Virginia Division of Highways (DOH) is considering potential alignment shifts in the subject project area to address recent endangered species issues on current alternatives being studied for this section of Corridor H. We have scheduled a meeting for Thursday, August 9, 2001, at 10:00 a.m. at the West Virginia Division of Natural Resources Operations Center in Elkins, West Virginia, to inform your agency of the recent findings and to discuss the alternatives being considered to avoid and/or minimize potential endangered species impacts. Also, we would like to discuss any environmental constraints that your agency may have knowledge of associated with these proposed alternative areas. Attached is a map showing the general location of the Parsons to Davis project termini.

Should you require additional information, please contact Mr. Norse Angus of our Environmental Section at (304)558-2885.

Very truly yours,

James E. Sothen, P.E., Director  
Engineering Division

JES:Hs

Attachments

cc: Ms. Wendy Vachet, Baker  
Mr. Bill McCartney, Baker  
Mr. Bill Malley, Akin Gump

bcc: DDE(NA), DD(MF)
Mr. Roger Anderson  
Division of Natural Resources  
West Virginia Bureau of Commerce  
Operations Center, Ward Road  
Post Office Box 67  
Elkins, West Virginia 26241

Mr. David Rider  
US Environmental Protection Agency  
2nd Floor  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

Mr. Lyle Bennett  
Water Resources Section  
West Virginia Bureau of Environment  
1201 Greenbrier Street  
Charleston, West Virginia 25311

Mr. Tom Smith  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301

Mr. Jeff Towner  
US Fish and Wildlife Service  
694 Beverly Pike  
Elkins, West Virginia 26241-9475

Mr. Lynn Hicks  
USDA Forest Service  
200 Sycamore Street  
Elkins, West Virginia 26241

Mr. Fred Pesudo  
US Army Corps of Engineers  
Pittsburgh District  
1000 Liberty Avenue  
Pittsburgh, Pennsylvania 25222-4186

Ms. Susan Pierce  
State Historic Preservation  
Officer for Resource Protection  
Building 9  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305-0300
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<tr>
<th>Name</th>
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<tr>
<td>Jim Colby</td>
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<td>WVDNR</td>
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<td>Keith Kranz</td>
<td>(304) 539-0245</td>
<td>DNREC</td>
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<td>John Schmidt</td>
<td>304 636-6586 x16</td>
<td>USFS</td>
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<td>Jonathan Davis</td>
<td>304 769 2116</td>
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<td>Ed Compton</td>
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<td>Bill Toliv</td>
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<td>USFS</td>
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<tr>
<td>Dan Arling</td>
<td>304-636-1800</td>
<td>USFS</td>
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<tr>
<td>Liz Schuppert</td>
<td>304-478-3251 ext 104</td>
<td>USFS</td>
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<tr>
<td>Richard Cook</td>
<td>304 636 1800 ext 242</td>
<td>USFS</td>
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<tr>
<td>Mindy Hamilton</td>
<td>304 769 2159</td>
<td>Baker</td>
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<tr>
<td>Jessica Greenwood</td>
<td>205-344-5144</td>
<td>USEPA Region III</td>
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<td>Ron Ketchenck</td>
<td>304-555-2458</td>
<td>FHWA</td>
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<td>Scott Groenveld</td>
<td>304-636-1800</td>
<td>USFS</td>
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<td>Roger Anderson</td>
<td>704-677-0245</td>
<td>WVDNR</td>
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<tr>
<td>Bill McCartney</td>
<td>757-631-5466</td>
<td>Baker</td>
</tr>
</tbody>
</table>
August 20, 2001

Mr. Lyle Bennett
Water Resources Section
West Virginia Bureau of Environment
1201 Greenbrier Street
Charleston, West Virginia 25311

Dear Mr. Bennett:

Attached are meeting minutes and location maps from an interagency meeting held at the West Virginia Division of Natural Resources Elkins field office on August 9, 2001, at 10:00 am. The purpose of the meeting was to discuss potential shifts to the current Parsons to Davis Project alignment, including the alternatives developed for the Blackwater Avoidance SEIS. The purpose is to avoid an area in which the Federally endangered northern flying squirrel (NFS) was captured, and to identify any constraints that may lie in the areas of the potential shift. During the course of the meeting it was established that the occurrence of the NFS would require additional alternatives to be developed and studied to identify an alignment that is not likely to adversely affect or result in an incidental take of the species. These alternatives would generally be located north of the capture area and would impact those alternatives developed for the pre-draft Blackwater SDEIS.

Your comments concerning the potential alignment shifts are requested no later than September 17, 2001. The Federal Highway Administration anticipates filing a Notice of Intent (NOI) to the Federal Register regarding an expansion of the Blackwater Avoidance Study Area (as described in the 2000 Settlement Agreement) to include the alignments and surrounding areas shown on the attached exhibit.

As always, thank you for your cooperation and attention to this matter. If you have any questions, please contact Norse Angus at (304) 558-2885.

Very truly yours,

[Signature]

James E. Sothen, P.E., Director
Engineering Division

JES: Hs

Attachments
bcc: DDE(NA), DD(MF)
Meeting Minutes
August 9, 2001
WVDNR Elkis Field Office
10:00 am

Purpose: To discuss potential alignments shifts of the Parsons to Davis Project due to recent endangered species discovery.

In attendance: Roger Anderson, WVDNR
Keith Krantz, WVDNR
John Schmidt, USFWS
Bill Tolin, USFWS
Dan Arling, USFS
Liz Schuppert, USFS
Richard Cook, USFS
Scott Groenier, USFS
Carol Whetsell, USFS
Jessica Greenwood, USEPA Region III
Ed Compton, FHWA
Ron Krotchek, FHWA
Norse Angus, WVDOH
Jim Colby, WVDOH
Bill McCartney, Michael Baker Jr., Inc. (Baker)
Jonathan Danz, Baker
Mindy Hamilton, Baker

Norse Angus opened the meeting with greetings and introductions.

Bill McCartney then gave a brief history of Corridor H. He explained that the environmental studies started as a Tiered EIS process in which a Corridor Selection DEIS was first prepared, followed by a Decision Document. The Decision Document recommended developing an alignment within a 2000-foot corridor. At which point an Alignment Selection DEIS was prepared prior to a preferred alignment being selected. In 1996, an FEIS was completed and a ROD signed for the preferred alignment. Immediately, opposition groups sued, holding up any further developments until the release of the 2000 Settlement Agreement. Bill continued to explain that the Parsons to Davis Project, including the Thomas to Davis Section, is currently under study as directed by the 2000 Settlement Agreement to identify alternatives that could potentially avoid crossing the Blackwater Avoidance Area. A Pre-draft SDEIS has been completed for the study area following agency and public meetings. As part of the studies and requirements to complete the SDEIS, identification of habitat and subsequent trapping for the Virginia northern flying squirrel (NFS), a federally listed endangered species, was conducted as recommended by the United States Fish and Wildlife Service (USFWS).

Dr Ed Michael, a recognized NFS expert, conducted the trapping in suitable habitat throughout the Blackwater Avoidance Study Area and on those portions of the Parsons to Davis Project, which had been realigned to avoid impacts to the Big Run Bog. The NFS was captured in two areas along the original preferred alignment. Bill McCartney referred to exhibits showing the areas of captures. Those exhibits were also distributed to each meeting attendant.

Keith Krantz and others posed questions concerning the captures and habitat, answered by Mindy Hamilton, who has been actively assisting Dr. Michael in trapping and coordinating habitat studies. After which the meeting was refocused to identify any other constraints that may lie to the north of the squirrel capture area.
along Big Run. Bill Tolin explained that trapping to determine if the squirrel occupies suitable habitat or not is currently permitted. However, with the acceptance of Recovery Plan revisions, all suitable habitats contiguous with known populations will be protected. He suggested looking at the area to determine if additional suitable habitat exists for the squirrel.

Ed Compton asked if the species would likely be adversely affect if the road were constructed in its present alignment and if the road were to be shifted to the north and west would there be a potential that the NFS or suitable habitat may be encountered. Ed explained that there needs to be an iron clad reason to consider an alignment which falls outside of the original 2000-foot corridor recommended in the Decision Document.

Bill Tolin answered that he did not believe that there would not be a way to construct the highway in its current alignment without adversely affecting the NFS. Norse Angus explained that the WVDOH had been informally consulting with Bill Tolin from the time of the captures and had agreed to delineate the population and study the surrounding areas. They further explained that a determination of the impacts to the NFS to the west and north of the present alignment could not be made until the studies of the habitat were complete. Given this information the study area for the Parsons to Davis project should be altered to include these potential shifts.

Ed Compton asked if the eastern terminus would change. Bill McCartney answered that the terminus would not change, nor would the current alignments being considered in the Blackwater Avoidance Area.

Following questions, Bill Tolin continued, explaining that under the revised Recovery Plan all suitable habitats would be protected. He clarified by saying that this would be suitable habitat within the NFS “box” (this refers to the area now known to contain the squirrel). Bill tentatively believes that Route 219 could act as the northern boundary of the box and that he expects to see additional alternative studies to determine if an alignment could shift outside of the box to avoid having an adverse affect on the NFS, prior to considering an incidental take permit.

 Norse again opened the discussion for other constraints that the realignment may face. Ed Compton stated that it has been established that the highway is to be constructed outside of the Big Run Bog watershed. Bill McCartney gave preliminary findings from the engineers that directing the highway to the west and north of the population around the edge of Backbone Mountain could result in large cuts and excess waste material.

Bill Tolin stated that if other constraints exist and if there is no avoidance possible, then formal consultation would be required and he could potentially grant an exemption to construct the highway through or near the capture area.

Roger Anderson stated that he understands important of the NFS, but that he has concerns about the waste material that will be deposited into high quality streams. Bill Tolin reminded Roger that an endangered species was given more protection than trout streams. At which point a discussion began concerning the NEPA process and the consideration of all constraints and the federal laws for each.

The schedule for producing a Biological Assessment (BA) for the NFS was discussed. Ed Compton said that he would need to see a letter from the USFWS before signing a SDEIS for the Parsons to Davis project. The Settlement Agreement does not allow for a preferred alignment to be chosen until the FEIS, as a result the BA would need to encompass a range of alternatives and conditions for each. This would allow flexibility when choosing the preferred alternative that best considers all constraints.

Ed Compton ended the meeting by summarizing the issues of the meeting and upcoming process needed to expand study area, such as public involvement and a letter from USFWS warranting the shift due to the
knowledge of the NFS. He reiterated that a DEIS would not be signed, until the USFWS accepted the BA for the potential alternatives.
James E. Sothen, P.E., Director
Engineering Division
Division of Highways
1900 Kanawha Boulevard East
Building Five, Room 110
Charleston, West Virginia 25305-0430

Dear Mr. Sothen:

On August 9, 2001 EPA attended an interagency meeting to discuss potential shifts to the current Parsons to Davis Project alignment for Appalachian Corridor H to avoid an area in which the Federally endangered northern flying squirrel was recently captured. The purpose of the meeting was to discuss the alternatives being considered to avoid and/or minimize any adverse impacts or incidental take of the endangered species.

Due to the presence of the northern flying squirrel within the preferred alternative, EPA concurs with the discussions of the meeting that further investigation and development of additional alternatives and potential alignment shifts is warranted.

Sincerely,

Jessica Greenwood
Environmental Protection Specialist
January 18, 2001
Public Information Meeting
Blackwater Lodge
Davis, West Virginia
NOTICE
OF
WORKSHOP PUBLIC MEETING
APPALACHIAN CORRIDOR H
PARSONS TO DAVIS
TUCKER COUNTY

The West Virginia Division of Highways will hold an informational public meeting on Thursday, January 18, in the Convention Room of Blackwater Lodge in Davis on preliminary alignments proposed for the Parsons-to-Davis segment of Appalachian Corridor H.

Scheduled in a workshop format from 4 to 7 p.m., the meeting will afford participants an opportunity to ask questions and state their views and opinions on the advantages and disadvantages of several alternatives being considered to avoid impacts to the Blackwater area by shifting to the north, resulting in additional connections to US 219 and WV 32 and 93 in the vicinity of Thomas and Davis. Highways officials will present information and receive public input.

Those wishing to file written comments may send them to Jim Sothen, P.E., Director, Engineering Division, West Virginia Division of Highways, Capitol Complex Building Five, 1900 Kanawha Boulevard East, Charleston 25305-0430 on or before February 13, 2001.
# Public Workshop Sign-In Sheet

**Appalachian Corridor H**  
(Blackwater Avoidance Study)  
January 18, 2001 ~ 4 - 7 p.m.

By signing this sheet, you indicate that you attended this Public Workshop on the above stated date. If you wish to receive additional information as it becomes available, please provide us your mailing address. Addresses will not be used for any other purposes.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Organization (if any)</th>
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<tr>
<td>1. Tracy Knotts</td>
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<td>2. Missouri Smith</td>
<td>Barnes Advocate, Parsons</td>
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<tr>
<td>3. Brenda Minton</td>
<td>1155 1/2 S Kirk Ave, Elkins, WV</td>
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<td>4. Evan Ford</td>
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<td>5. Mark Corey</td>
<td>34 N Kanawha St, BK, WV</td>
<td>R.D. Zendeck Ass.</td>
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<td>6. Georgiaanna Heath</td>
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<td>7. Mike Jonesland</td>
<td>Davie, WV</td>
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<td>8. Victor England</td>
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<td>Glass case</td>
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<td>9. Ted Hollepel</td>
<td>Davie, WV</td>
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<tr>
<td>10. Senator Jon Blank</td>
<td>14th District</td>
<td>WV Senate</td>
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<td>11. Harold Berry</td>
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<td>12. Charles Coles</td>
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<td>14. Mike Hellig</td>
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<td>15. Ellen Voss</td>
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<td>16. Joan Emmons</td>
<td>Beverly Hills, WV</td>
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<td>17. Matt Quarrelo</td>
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<td>18. Mike Moran</td>
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<td>DOH Elkins</td>
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<td>19. Tom Staud</td>
<td>WVDOH, Elkins</td>
<td>DOH Elkins</td>
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<tr>
<td>20. Mike Laddem</td>
<td>313 Walnut St, Parsons</td>
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**Appalachian Corridor H**  
*(Blackwater Avoidance Study)*  
**January 18, 2001 ~ 4 - 7 p.m.**

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<tr>
<td>Pat Caire</td>
<td>349 Parson Rd, WV</td>
<td>R. H. N. Inc</td>
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<tr>
<td>Jerry V. Wilson</td>
<td>P.O. Box 365, Thomas, WV</td>
<td>MT. TOP Hunting</td>
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<tr>
<td>Ron Clark</td>
<td>PO Box 231, Thomas, WV 26292</td>
<td>MT. TOP Hunt Club</td>
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<tr>
<td>Doug DeWane</td>
<td>Rt 1 Box 141, Hambleton, WV</td>
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<tr>
<td>Allen Killebrew</td>
<td>HC 60 Box 496, Thomas, WV</td>
<td>Mayor of Davis</td>
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<tr>
<td>Randy Schmiedeix</td>
<td>PO Box 72, Davis, WV 26260</td>
<td>Tucker Co. Chamber &amp; CVB</td>
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<td>Wm Smith</td>
<td>PO Box 565, DAUS, WV 26260</td>
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<tr>
<td>John H. Mooney</td>
<td>596 Fairwood Rd, Huntington, WV 25705</td>
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<td>Ralph Rutar</td>
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<td>David Lucette</td>
<td>HC 70 Bigby, Davis, WV</td>
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<td>Greg Coburn</td>
<td>900 Head Rd</td>
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<td>Paul Wilson</td>
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<td>Marty McGee</td>
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<tr>
<td>Sam Eichler</td>
<td>7 Avenue, WV 26260</td>
<td>Tucker Co. Commissions</td>
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<td>Greg Schumacher</td>
<td>48 Kennedy Dr., Elkins, WV</td>
<td>Century Engineering</td>
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<tr>
<td>Ken Sturm</td>
<td>Canaan Valley NWR, Box 202, Danis, WY</td>
<td>USFWS</td>
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## Appalachian Corridor H

(Blackwater Avoidance Study)

January 18, 2001 ~ 4 - 7 p.m.

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<tr>
<td>1. Karen Bormann</td>
<td>HC 70 Box 501 DAVIS, WV 26260</td>
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<td>2. Don Black</td>
<td>Box 284 DAVIS 26260</td>
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<td>3. Murray Dobson</td>
<td>Box 37 DAVIS 26260</td>
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<td>4. Dan Cathell</td>
<td>1 Depot St Romney, WV 26757</td>
<td>DEP EF</td>
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<td>5. Jeeny DiBacco</td>
<td>304 Main St Parsons 26267</td>
<td>County Comm.</td>
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<tr>
<td>6. Jim Kochenderfer</td>
<td>Route 1 Box 48 Hamberton 26269</td>
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<td>7. Heldre Kochenderfer</td>
<td>P.O. Box 49 Hamberton 26269</td>
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<td>8. Allison Reamer</td>
<td>HC 70 R0X450 Davis 26250</td>
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<td>9. Ruben Rundell</td>
<td>CV 1 R0 Box 1075 Decatur, W. 26260</td>
<td>Canyon Valley Institute</td>
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<td>10. Allen Burns</td>
<td>511 Main St. Parsons, WV</td>
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<td>11. Dick Coonley</td>
<td>RFD Box 950 Kamas, W. 26260</td>
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<td>12. Vicki Common</td>
<td>HC 70 Box 501 Davis, WV 26260</td>
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<td>13. Greg Fair</td>
<td>PO Box 212 Thomas, WV 26292</td>
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<td>14. Robin Lee Pyle</td>
<td>PO Box 26 Red Creek, WV 26289</td>
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<td>15. L. Reid Gilleson</td>
<td>P.O. Box 451 Thomas, WV 26292</td>
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<td>16. Kelly R. Kennedy</td>
<td>HC 70 Box 232 Thomas 26282</td>
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<td>17. David S. Miller</td>
<td>PO Box 2132 Fenton, WV 26280</td>
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<td>18. Thomas M. Dillon</td>
<td>119 Glade Ave Winona, WV 26280</td>
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<td>19. Walt Hanafi</td>
<td>P.O. Box 371 Thomas, WV</td>
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<td>20. Robert Hyatt</td>
<td>PO Box 371 Davis, WV</td>
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(Handwritten Signature)
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**Appalachian Corridor H**  
(Blackwater Avoidance Study)  
**January 18, 2001 ~ 4 - 7 p.m.**

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<tr>
<td>Lowell Moore</td>
<td>P.O. Box 554 St. George</td>
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<td>Pierre Smith</td>
<td>PO Box 673 Davis WV</td>
<td>CVI</td>
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<td>Dan Quehl</td>
<td>Parsons WV</td>
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<td>Gary Luzier</td>
<td>PO Box 214 Davis WV</td>
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<tr>
<td>Amy Thompson</td>
<td>PO Box 334 Hedgesville WV</td>
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<tr>
<td>Linda Poore</td>
<td>PO Box 110 Davis WV</td>
<td>CVI/MIRCORP</td>
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<tr>
<td>Sallie Smith</td>
<td>P.O. Box 204 Hinton WV 26279</td>
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<tr>
<td>Jackie Burns</td>
<td>HC 70 PO Box 50 Davis WV 06260</td>
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<td>Maria Ross</td>
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<td>Ron T. Dano</td>
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<td>Charlene Lewis</td>
<td>Doorsy Road, #1.2, Davis WV 26260</td>
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<td>Ruth Blackwell</td>
<td>Moon Point, Kanawha WV 26274</td>
<td>CVI</td>
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<td>Jan Garrett</td>
<td>P.O. Box 351, Beverly, WV 26253</td>
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DATE: Feb. 5, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I would like to take this opportunity to voice my statement in favor of the Appalachian Corridor Road System. WV needs this infrastructure in order that we may continue to grow and prosper. The completion of this highway will enhance business and industry in our state and provide for access to coastal areas for export/import. Let's move forward and not waste tax dollars in seeking alternate Routes!

(Please print the following information)

NAME: George E. Angus
ADDRESS: 351 Cherokee Trail
Huntington, WV 25705

ORGANIZATION (IF ANY): Tax Payer

Comments are due February 13, 2001
DATE: February 11th 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis Tucker County

Please consider the following comments:

Please see accompanying pages.

(Please print the following information)

NAME: Greg Bair
ADDRESS: PO Box 212
Thomas, WV 26152

ORGANIZATION (IF ANY):

Comments are due February 11, 2001

FEB 20 2001
ENGINEERING DIVISION
WV DOH
Dear Mr. Sothen,

I would like to first make it clear that I am opposed to the construction of Corridor H. If it is going to be built, with the information presented to me at the Public workshop at Blackwater Falls State Park on January 18, 2001, I believe that the Dark Blue route is the preferred route.

The Dark Blue route:

- causes the least amount of disturbed total wetlands
- causes the least amount of disturbances to the endangered squirrel habitat
- does not disturb endangered salamander habitat
- does not disturb the landing strip
- does not disturb known historic properties
- disturbs little ground through excavation when compared to other routes
- is one of the least expensive to build because it has the lowest construction cost per mile of any route

Being a resident of Thomas WV I believe the Dark Blue route will keep the highway noise down to a minimum due to the distance of Corridor H from town. The Dark Blue route will diminish truck traffic through town. The original preferred route would increase truck traffic through the town of Thomas by forcing all traffic coming off of Rt. 219 to pass through town to reach Corridor H. The trucks that pass through town at present cause noise and air pollution, decreasing the quality of living in town and I believe devalue property.

I also believe that the Dark Blue route, or any route chosen, should not run toward the town of Davis but should connect to Rt. 93 north of the proposed plan. Once again the noise and pollution caused by a major Highway especially at an interchange where trucks are braking and accelerating will be an irritation to the people of Davis and once again devalue residential property. Running the route north of its proposed location as mentioned above would also hopefully keep it from disrupting any structures at the Tucker Co. Land Fill.

Thank you for considering these comments.

Sincerely,

[Signature]

R. Greg Bair
DATE: 2/1/2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I am in favor of the present Route for Corridor H: Parsons to Davis route. The others are really not the best.

(Please print the following information)

NAME: George R. Bennett
ADDRESS: 1150 Ochre Shell Rd.
          Elk Garden, WV

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis Tucker County

Please consider the following comments:

Use the original route

(Please print the following information)
NAME: Harold Perry
ADDRESS: PO Box 261
Thomaston WV 26292

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 30, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I would like to comment on the proposed route for the section of Corridor H from Parsons, WV to Davis, WV. With economics always in mind, the most direct route, crossing the Blackwater River, would be the most economical route. I'm sure the money and time saved by taking this route could benefit other needed projects.

(Please print the following information)

NAME: Donnie J. Bias
ADDRESS: 1035 Third Avenue
Huntington, WV 25701

ORGANIZATION (IF ANY): ____________________________

Comments are due February 13, 2001
February 7, 2001

Mr. James E. Sothen
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Dear Mr. Sothen:

I am writing representing the residents, staff, and Board of Directors of Cortland Acres Association. Cortland is a community outside Thomas providing services for the elderly which is made up of a nursing home and independent living apartments. Our board has directed me to express to you its concern regarding the location of the proposed 'brown,' 'grey,' and 'red' routes. These routes are located extremely close to our facilities and may encroach on what is now our property.

In no way do we want to compromise the progress of this effort. During the last three years, Cortland has had to undergo the grieving process resulting from the death of four staff/family members resulting from automobile accidents on Route 219 between Thomas and Parsons.

Cortland Acres Nursing Home is under heavy scrutiny by the offices of licensure and certification of West Virginia. The regulations which we follow include under area 4.4 which is "Site Characteristics and Accessibility." It is my interpretation of those rules that if that road was in one of the places I mentioned and we were requesting authorization to build on our current location, authorization to construct would be denied because "The facility shall be located in an environment which is free from ...excessive noise such as...traffic arteries..." WV Division of Health Legislative Rules, Title 64, Series 13 – 4.4C and also published in the Federal Register – Department of Health and Human Services, 42CFR-483 (B).

Therefore we request that routes other than those which are located close to Cortland be developed as soon as possible. Traffic could be both seen and heard from what is now our very peaceful and quiet neighborhood.

Please contact us if you have any questions regarding our position.

Thank you.

Sincerely,

Don Black
DATE: January 18, 2001

SUBJECT: INFORMATIONAL PUBLIC MEETING

PROJECT: Appalachian Corridor H: Parsons to Davis Tucker County

Please consider the following comments:

I am in favor of the present Route for Corridor H. Parsons to Davis Route.

(Please print the following information)

NAME: Devereaux C Bressler III
ADDRESS: P O Box 178
          Mt. Storm WV 26739

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001

SUBJECT: INFORMATIONAL PUBLIC MEETING

PROJECT: Appalachian Corridor H: Parsons to Davis
           Tucker County

Please consider the following comments:

The original route is the proper way to go!

(Please print the following information)

NAME: Patrick Carriz

ADDRESS: P.O. Box 349
         Parsons, W. Va.

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

As a 31 yr. resident and property owner in Canaan Heights, and the Canaan Valley, member of a fourth generation plus property owning family in Montgomery Co., MD, 30 plus licensed Real Estate experience, Trained Real Estate Appraiser at a high level in MD and Delaware I would say:

That changing the originally proposed much shorter and cheaper original route in question would not alleviate any possible environmental hazard. All seem to be in the Blackwater drainage area. As far as pollution from cars, truck at a very extra mile such a highway adds to such possible effect on the Blackwater River (Please print the following information)

NAME: Henry and Carter
ADDRESS: P.O. Box 239, Davis W. V. 26260

ORGANIZATION (IF ANY): That of common sense.

Comments are due February 13, 2001
February 5, 2001

Mr. James E. Sothen  
Director, Engineering Division  
West Virginia Division of Highways  
STATE OF WEST VIRGINIA  
State Capitol Complex  
1900 Kanawha Boulevard, East  
Charleston, WV 25305-0430

Dear Mr. Sothen:

Western Pocahontas Properties is the owner of all of the property affected by the original routing of Corridor-H and all alternatives considered in the Blackwater Avoidance Supplemental Environmental Impact Statement. As the only landowner affected by this decision, we believe that significant weight should be given to our opinion.

After reviewing the Supplemental Environmental Impact Statement of the Blackwater Avoidance Alternatives, Western Pocahontas Properties is convinced that the original preferred route should be selected for the following reasons:

1. It is the most economical and practical of any alternative throughout the area.

2. It is the most direct route.

3. It offers access to Thomas and Davis, Blackwater Falls State Park and the Canaan Valley area, at the best location for development, at the only diamond interchange proposed along the route for miles.

4. There is less overall impact on the landscape.

5. All the alternatives have an adverse impact on the Tucker County landfill, through either the taking of buildings or affecting access to the landfill. Five of the alternatives are too close to the landfill from a visual perspective.

6. There is less impact on the Pendleton Run Watershed, which flows through the Blackwater Falls State Park and feeds the lake and swimming area.

7. Right-of-way acquisition costs and utility relocation costs would be less.
Western Pocahontas Properties has always supported and promoted Corridor H and its completion as soon as possible. Common sense should dictate that the original preferred route is where it should be built.

The economic prosperity of the area is dependent upon a timely completion of the highway. If tourism is so good for a local economy, why has Tucker County not prospered in the last 20 or 30 years?

Corridor-H -- build it now on the original preferred route.

Sincerely,

Nick Carter

NC:DNT/g
February 9, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
          Tucker County

Please consider the following comments:

Mr. Sothen, I think any of the routes to the north of Thomas would be strategically significant as they would effectually eliminate the tremendous truck traffic that comes down Rt219 and must traverse the town of Thomas. Personally I think the closer the road lies to the city boundaries to the north the less trouble the construction will be, this is based on personal knowledge of the terrain in the area.

I would also like to make a further comment, the new road should cross Rt93 a little further east, in the area where Beaver Creek crosses. This would accomplish several things, first it would be shorter and it would eliminate the large dangerous curve in the area of the land fill. Second it would cross Beaver Creek at right angles, which I understand is of importance. Third it would eliminate any interference with the land fill or the junction of Rt93 and Rt32 or the new road into Davis from Rt93.

Knowing the area as I do I would also like to comment on the western side of Thomas. The new road should stay up hill between Benbush and Pierce and swing around to the west a little further which would avoid a lot of construction problems you are going to run into by going through the town of Benbush. You will also miss the wet lands behind the nursing home, and cross Snyder Creek in a little better place.

Francis R. Clark
P.O. Box 231
Thomas, WV. 26292-0231

Affiliated with, but not representing: Mountain Top Hunting Club, Thomas, WV.
DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

Build it.

(Please print the following information)

NAME: [Signature]
ADDRESS: [Address]

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 29, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

The Board of Director's of the Tucker County Chamber of Commerce are of the opinion that the original preferred routing for Corridor H would be the best option. As you have documented, it would be the most economical and direct routing under consideration

(Please print the following information)

NAME: M. G. Dearborn, Chairman
ORGANIZATION (IF ANY): Roads and Transportation Committee

Comments are due February 13, 2001
Please consider the following comments:

The original Corridor H route is the only cost effective route to consider. All the others will prove to be much more expensive and take much longer to accomplish. Also, the original route will not have as heavy impact on wildlife and the environment as the other proposed study routes.

(Please print the following information)

NAME: William H. Dignan
ADDRESS: PO Box 201
Bayard, WV 26707
ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 2/1/01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I AM in FAVOR of the Corridor H to come
form jobs and city and to get some where.

(Please print the following information)

NAME: Rocky W. Evans
ADDRESS: A/K Garden wv E1 Box 143

26717

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Vicki Fenwick  
HC 70 Box 501  
Davis, WV 26260  

February 9, 2001  

Dear Mr. Sothen,  

First, let me introduce myself. I'm 29 years old, a West Virginia native and my career is in seasonal tourism and outdoor recreation. I oppose the spending of our tax dollars on one of the most expensive highways to ever be built in our nation. However, if the politicians of the mountain state see it necessary to build another road, the route I find to be the optimal choice is the Dark Blue route.  

After reviewing all the information on the preliminary comparison and the topographical maps, the Dark Blue route would be most compatible with my beliefs. The Dark Blue route:  

- causes the least amount of disturbed total wetlands  
- causes the least amount of disturbances to the endangered squirrel habitat  
- does not disturb endangered salamander habitat  
- does not disturb the landing strip  
- does not disturb known historic properties  
- disturbs little ground through excavation when compared to other routes  
- is one of the least expensive to build because it has the lowest construction cost per mile of any route  

I would like to see Corridor H built even further away from Davis and Thomas to minimize air and noise pollution. I also hope that the area will NOT develop into another "strip mall" with discount stores and gas stations lining the new corridor. This area is very historic, provides charm to our visitors and needs the growth to occur within the town. I feel that an interchange north of the proposed plan should be evaluated. This may be able to reduce large truck traffic and provide in-town growth instead of sprawl. Thank you for considering my comments.  

Sincerely,  

Vicki A. Fenwick  

Vicki A. Fenwick
DATE: January 23, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

The "original preferred" Parsons to Davis routing is the most cost-effective and the most environmentally sound location for the roadway. This "original preferred" location is obviously the best stewardship of tax payer's funds and provides the greatest public interest benefits.

The basis for the Blackwater Adovocates Study is ludicrous and public funds should not be used to appease the agenda of a few environmental radicals.

(Please print the following information)

NAME: Robert Forney

ADDRESS: 2015 Mona Court
Milton, WV 25541

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 1-23-2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
          Tucker County

Please consider the following comments:

I strongly support the Original Preferred location:
for Corridor H from Parsons to Davis. This location:
best serves the public interest, is much less costly
and makes more sense environmentally.

Bridges do not detract from the amenities of the
New River gorge or Bladet Creek canyon Bridging
Blackwater river will do no harm to the canyon
and will actually access the view scope to
many more people.

(Please print the following information)

NAME: Ruthann Forney

ADDRESS: 2015 More Court

                        Milton, W.V. 25841

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Bldg. 5
1900 Kanawha Boulevard, East
Charleston, WV 25305-0430

Re: Informational Public Meeting
Project: Appalachian Corridor H: Parsons to Davis, Tucker County, WV

Mr. Sothen:

Please consider the following comments:

I would like to recommend that the WV DOH seriously consider the original preferred route relative to the proposed route for Corridor-H from Parsons to Davis; i.e., that which crosses the Blackwater River below Thomas via a bridge. This direct route would not only be the most rational but first, the most cost-effective for me as a taxpayer of the state.

I am an employee of Western Pocahontas Properties, and although all proposed routes would conceivably transverse WPP lands, the original preferred route would make the most logic. Therefore, I trust you will sincerely consider this option as the most feasible when making the final decision for the above project.

Sincerely,

Paddy Sue Gay

/psg
Kerens to Parsons:
The proposed highway will cut through a relatively large, intact block of National Forest land in Management Prescription 6.1. This area was designed to provide remote habitat for wildlife species intolerant of disturbance. It was put into this management prescription because it was good wild turkey and black bear habitat. Semiprimitive and nonmotorized transportation is emphasized. A major 4-lane highway is inappropriate in this area. Bears and other wildlife populations in the north end of the forest will be negatively impacted by isolation and habitat reduction, in addition to being killed on the road. The highway will cut through some endangered Indiana bat swarming grounds and pass near a hibernaculum. Bats will be killed by traffic and their foraging area and food base reduced. Many forest streams will be negatively impacted. The highway should not be built through the National Forest.

Parsons to Davis:
The highway will negatively affect Big Run Bog, or if it is moved north, it will negatively affect Slip Hill Mill Run Creek, which is a native trout stream. The proposed route will cut through a steep hill above the creek and a lot of sediment will end up at the bottom of the hill in the creek.

Some of the alignments will cut through Northern Flying Squirrel habitat. The squirrel has very specific habitat requirements that we don’t fully understand. We can’t just create additional habitat elsewhere. It is important to keep what little we have left to prevent extinction of the species.

The highway will create a huge scar on the landscape. A massive corridor will be cut through one of the most expansive patches of unbroken forest left in the northeast. Mountains will be gouged and massive amounts of earth will be moved, valleys will be filled in. This area has not been thoroughly surveyed for threatened and endangered species and the Forest will be permanently fragmented. The roadless initiative has just come out and direction is away from building new roads. National direction is away from permanent human marks on the land. Many forests are spending a lot of time and money undoing past projects, such as roads and dams. This highway could never be undone. The National Forest is West Virginia’s greatest asset. It should not be compromised for a highway to nowhere. Move the highway north out of the Monongahela National Forest boundary.

The highway will provide a corridor for exotic plants and other pests to enter the Forest. They thrive in disturbed environments such as this and, even if not planted on the roadside, will take up residence there and invade the Forest. Open areas nearby such as Big Run Bog will be negatively impacted the most.

Davis, Thomas and Coalton are historical towns with a distinctive culture. This culture will be destroyed by a major highway coming near by. It is inaccessibility that allows it to
exist. Economic opportunities should be sought that capitalize on and preserve their uniqueness, rather than destroy it.

The highway will have an irreparable effect on the land that our children and grandchildren inherit. We must weigh the short term gains with the long term effects. "West Virginians perceive the Forest as a special, even unique place. It is highly valued. A great contrast is seen between the essentially natural appearing Forest and most of the remainder of the state where development, mining, and timber operations have resulted in a heavily man-influenced, disrupted, and often polluted environment. There is a major public opinion that the Forest is an oasis of undisturbed land which should be left just as it is" (The Land and Resource Management Plan for the MNF, page 24). This undisturbed and undeveloped Forest will become even more highly valued as an oasis as development escalates elsewhere. A large, remote Forest in an area of the country with high population density is a thing that is becoming scarce. What we have here is an threatened and endangered environment that needs to be preserved for our recreation and sanity. We are making choices that limit those available to our children. Do we know what they will value the most?

If the road must be built, please at least keep it out of our Forest. To continue to develop the corridor in the direction of the Forest is in violation of NEPA 1506.1 which states that "no action concerning the proposal shall be taken which would limit the choice of reasonable alternatives."

Jan Garrett
DATE: February 13, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

As I am a landlord with rental property (stores &
apartments) on Front Street in Thomas, I strongly urge
The DOH to build north of Thomas to avoid the track
Traffic down Front St. The tracks disturb the tenants
and frighten customers visiting the stores. If DOH
builds in their original corridor, they must also build
a 219 feeder line around Thomas, and this should
already be calculated in the estimated cost of the
original plan.

(Please print the following information)

NAME: E. Reid Gilbert

ADDRESS: Box 757
Thomas, WV 26292

ORGANIZATION (IF ANY): Thomas Education Center, Tucker County
Gateway Initiative

Comments are due February 13, 2001
DATE: 1/19/01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

Please consider the people of Thomas/Davis area.

We have basically no industry in our county. Our largest employers are the ski areas and state parks.

They exist on minimum wage/no benefit jobs.

We need the road to come in its original route to save what is left of businesses in Thomas/Davis.

Our schools are losing enrollment yearly and if you shut out Thomas/Davis you are dooming our schools to smaller/smaller enrollments.

(Please print the following information)

NAME: CYNTHIA L. HEDRICK

ADDRESS: PO Box 1100 BLACKWATER AVE

DURV, WV 26206

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
January 12, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Dear Sir:

twenty years.

I would like to introduce myself. My name is T.L. Holipski, I am President and CEO of The National Bank of Davis, and owner of The Davis Plaza located in Davis, WV, at the entrance to Blackwater Falls State Park. I have lived in Tucker County for twenty years.

I have reviewed the new alternatives for the Blackwater avoidance area and have concluded that the only one that merits justification is the original route! It is the most cost effective and certainly the most safe and direct route. If any of the other routes are used, this will eliminate traffic thru the towns of Davis and Thomas thereby reducing the monetary flow to all business in these towns.

I am sure that if you conducted a survey of the people of Tucker County that the majority would approve of the original route selected. It is time for the residents of Tucker County to get something they want and decide for ourselves without interference from outsiders.

In conclusion the original route is the route that should be selected by your department. Thank you for your Consideration.

T.L. Holipski
DATE: January 30, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

Please leave the proposed route for Corridor H as is. It is the best and cheapest route. It will also be quicker to access the state parks (Blackwater & Canaan) as well as the Timberline Ski Resort.

(Please print the following information)

NAME: Terri Kelley
ADDRESS: 8930 South Belmont Street
Ashland, KY 41102

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 2/1/01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I am in favor of the present Route for Corridor H. Parsons to Davis route, the others are not the best and more expensive.

(Please print the following information)

NAME: Donald Kessel Jr.
ADDRESS: Rt 1 Box 210G
Germantown WV 26720

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
I agree with using the existing Rt. 93 due to the impact of cutting trees and destroying wildlife on the other Rts. It would be less of affect on the environment by using existing highways when possible.

(Please print the following information)

NAME: Robert P. Kitzmiller
ADDRESS: 96 Jacks Ln. Oakland, MD
ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

See attached. Very pleased to see Northern Route.

In my estimation the dark blue alternative would be the best alternative, as those listed. Why not use 219 as the way to Benbush then as North of Benbush to William Ten?

Is it realistic to with a connection to 79? This would make use of existing road alignments.

(Please print the following information)

NAME: LAIRD KNIGHT
ADDRESS: P.O. BOX 313
Davis, WV

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Proposal for Improved Routing of Corridor-H and the effects on the Davis-Thomas Community

In Brief: Upon closer inspection, many of the citizens of the Davis-Thomas community who support the construction of Corridor-H have discovered an alternative to the current routing that would greatly enhance the benefits of the new highway, while reducing or eliminating several of the possible negative side effects. The alternate route would save substantial construction costs in the process. Basically, these improvements can be achieved by rerouting Corridor H to the North of Thomas and creating an intersection with Rt. 219 and Rt. 90 before joining back up with the current alignment along Rt. 93. (See attached map)

In Detail: The following points demonstrate the positive effects of this alternative plan. Each of these points become rather obvious when one compares the alternatives with current route as shown on the attached map.

Traffic Flow:
♦ Currently, without the construction of a bypass of Thomas, all heavy truck traffic access to Corridor H from 219 North would have to pass through Thomas. This alternative would place the interchange North of Thomas, allowing heavy truck and other through-traffic to access Corridor H prior to Thomas, making the City of Thomas more pedestrian and business friendly.
♦ The North of Thomas interchange would provide a direct and inexpensive connector to the proposed four-lane development of Rt. 219.
♦ Currently, Corridor H is routed between Davis and Thomas, which would require several relatively dangerous on-grade intersection for access to Davis, Thomas and Blackwater Falls State Park. The alternative routing would eliminate these dangers and make it safer for local families and tourist to travel between Davis, Thomas and Blackwater Falls State Park.

Economic Development
♦ Currently all tourist traffic to Canaan Valley from Corridor H would pass through the Town of Davis only. The alternative would have tourist traffic passing through Thomas and Davis.
♦ The current alignment of Corridor H between Davis and Thomas would negatively impact a large area of relatively flat land (a rare commodity in this area) that lies between these two towns and Blackwater Falls State Park. The alternative route would avoid this, freeing up these lands for economic development and growth for these communities. These lands have been considered for expansion of Blackwater Falls State Park with a golf course and new formal entrance to the Park.

-continued-
Economic Development continued

- The current routing would consume 10 acres of land (nearly half of the land) that the Tucker County Development Authority has slated for an industrial park near Davis.
- The current routing would put a high speed four-lane highway directly through the heart of the Davis, Thomas and Blackwater Falls State Park area. The alternative route would leave this area intact by skirting it to the North. This would preserve the character of this beautiful mountain community which is it’s single most important tourist draw.
- The alternative routing would also preserve the new residential areas that have been developed on the outskirts of Davis as well as eliminate the substantial noise pollution that would be created by the current routing. This would expand the town’s tax and utility base while ensuring a peaceful quality of life for its' current and future residents.
- One of the most important new economic developments for these communities is the development of the rail-trail corridor that will link Elkins with Parsons and then in turn, link Parsons with Thomas and Davis. This new recreational infrastructure will attract tens of thousands of additional tourists to the area. Unfortunately, the current routing of Corridor H would cut through the grade that connects Thomas, Blackwater Falls and Davis. The alternative routing will preserve this scenic rail grade.

Reduced Costs of Construction:

- The alternate routing uses more of the existing Rt. 219 and Rt. 90 road beds, saving construction and land acquisition costs.
- The alternate route eliminates the cost of bridging Big Run, Tub Run, Long Run and Middle Run, as well as environmental impact mitigation costs of these sensitive areas.
- The alternate routing will eliminate the enormous costs of constructing a 150’-200’ high elevated four-lane bridge over The North Fork of The Blackwater River.
- The alternate routing will eliminate the cost of relocating the Tucker County Landfill which in the current plan would place the highway too close for legal operation of the landfill facility. (More likely than relocation, the Tucker County Landfill would probably be forced to close. Citizens of Tucker County would be forced to truck their garbage to a distant landfill at great expense.)
- The highway mileage for the alternative plan is the same as the current proposal and the overall cost of land acquisition should be lower as the alternate route uses undeveloped property.

In Summary: After reviewing the map and comparing the various cost/benefits of the different routings it is clear that this alternate proposal represents a true win-win situation for both the tax payer and the citizens and businesses of Tucker County. The construction of corridor H has been touted as an economic boon to this county. Many of the county’s citizens believe this will be the case, but only through intelligent planning will we be able to maximize the positive economic impact of the new highway. It is with this goal in mind that this alternative is being proposed. This plan is the product of the people who live and work in the county and who have a real sense of the impact that the siting of this new highway will have on their community. They will have to live with the consequences, positive or negative, one way or the other.
Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
          Tucker County

Please consider the following comments:

The original route (crossing vicinity of Coketown) is the best route - cost wise & disturbance wise.

(Please print the following information)

NAME: Michael Leeden

ADDRESS: 313 Walnut St.
          Parsons WV 26287

ORGANIZATION (IF ANY): ________________________________

Comments are due February 13, 2001
DATE: 1-2-01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I agree with the existing route that is the planned route. The study area is one and would be a greater impact on the environment if utilized.

(Please print the following information)

NAME: Scott A. Mable
ADDRESS: BAYARD, WV 26707

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Please consider the following comments:

I am in favor of the present route for Corridor H: Parsons to Davis. This is the most cost effective considering all the other alternatives.

(Please print the following information)

NAME: John Martin
ADDRESS: P.O. Box 153
MT. Storm WV 26739

ORGANIZATION (IF ANY): ________________

Comments are due February 13, 2001
DATE: JAN. 30, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I SUPPORT THE ORIGINAL PREFERRED BRIDGE ROUTE.

AFTER REVIEWING THE MAP OF PROPOSED ROUTES AND SEEING THE COSTS OF THESE
VARIOUS ROUTES, I CAN'T COMPREHEND CONSIDERING ROUTES WHICH COST TWICE
AS MUCH AND REQUIRE MUCH MORE TRAVEL TIME. NOT ONLY WILL THE DIRECT
ROUTE SAVE CONSTRUCTION TIME AND MONEY, IT WILL CONTINUE TO SAVE OUR
TOURISTS TIME AND MONEY FOR YEARS TO COME.

(Please print the following information)

NAME: BRENDA J. MCCOMAS

ADDRESS: P. O. BOX 2827
         HUNTINGTON, WV 25727

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001

SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

[Handwritten note: Original plan less costly and sooner completion]

(Please print the following information)

NAME: [Handwritten name]
ADDRESS: [Handwritten address]

ORGANIZATION (IF ANY): 

Comments are due February 13, 2001
DATE: January 24, 2001

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I am opposed to all routes except line A – The old preferred route.
My reasons follow: 1) The old route is the cheapest and shortest 2) There are zero displacements 3) The old structures in Thomas can’t handle any increased traffic. Quite recently, the good people of Thomas requested that trucks not travel through their town when a local company planned to move coal via truck to a power plant 4) It is absurd to avoid the North Fork of the Blackwater for any reason. All money has been well spent. The site (garge at the proposed bridge site) has been reclaimed. Another AML job is pending on the North side of the original proposed route at Thomas. Most important, I am a tax payer who sees no benefit whatsoever of avoiding the area at increased cost. The road is a must because existing RB 219, 90 and 93 are hazardous to drive. If I am killed in a wreck on RB 219, what a good road needs to be constructed. I have instructed my wife to see every environmental group involved in attempting to delay present or otherwise stop corridor.

NAME: John H. Moore
ADDRESS: 59I Fairwood Road
Huntington, WV 25705

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 2-01-01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I am in favor of the present route for Corridor H. This is the most cost efficient and I feel from knowing the areas involved to be least destructive to our present environmental conditions.

(Please print the following information)

NAME: James Morris
ADDRESS: P.O. Box 167
Bayard, WV 26707

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 1-29-01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I would like to express my support for the “Original Preferred” route for Corridor H. This route is more direct, less expensive to build, and will better serve the local areas. Any adverse environmental impacts are imagined rather than real. It is a no-brainer, build the road as originally planned in this area.

(Please print the following information)

NAME: Joseph R. Newton
ADDRESS: 2001 Olive Court
Milton, WV 25541

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Mr. James E. Southern  
WV DOT Division of Highways  
1900 Kanawha Blvd  
Charleston, WV

Dear Mr. Southern

As a member of the Corridor H Community Advisory Group  
based in the Davis/Thomas area, I would like to pass on to you  
some opinions of the group which I represent on this committee.  
After attending the meeting on Jan. 25 where Baker Associates  
explained the pros and cons of the Blackwater Avoidance  
Alternatives, I relayed this information to the board of directors  
of the Friends of the 500th on Feb 9. After discussion following  
my presentation I was requested to formally pass on the opinions  
of this board to the WV DOT.

1. The Blackwater Avoidance Area should be avoided.  
   Therefore the 'original Preferred Route' should no  
   longer be considered.

2. All efforts should be made to avoid the Tucker Co.  
   Landfill. Not only should Highway and interchange  
   construction not disturb the landfill but: aesthetic  
   consideration should be given to insure that visual  
   exposure would not occur.

Thank you for your efforts in ascertaining what the public  
opinions are concerning these matters.

Respectfully yours,

Chuck Nichols  
Friends of the 500th  
Corridor H Community  
Advisory Group
Mr. Jim Sothen, PE  
Director, Engineering Division  
WV DOH, Capitol Complex  
Building 5 1900 Kanawha BLVD East  
Charleston, WV 25305-0430

January 24, 2001

Dear Mr. Sothen,

Recently my husband and I read information in the local papers concerning Corridor-H. We live a mile out of Parsons on RT. 72. We have been reviewing and compiling information on Corridor-H for some time now. We attended the workshop at the elementary-middle school on September 26, 2000. We reviewed the maps and talked to Mr. Clevenger who was very informative and helpful. He answered many questions and told us it looked like all the alternative routes would affect us one way or another, some of which would take our home. He mailed us the maps and the complete booklet outlining and explaining effects to us.

We have lived in our home for almost 14 years now and we like it here very much. We bought this land and built our home after the flood in 1985, in which we were flooded. It is very peaceful, private, and we feel safe. We own almost 39 acres and it is a wooded area with many trees and animals.

The worst fear we have is that the road will be located beside our home and it will ruin our peace, quiet and privacy. I realize the road will bring safety, better access and maybe new businesses and or help the existing ones that our here. I agree we need Corridor-H and I realize that someone is going to have to give something up. We would rather give up our home and land than be located beside the road itself. The best route would be the original and preferred one, which would not cause as much distress to others. I realize you are up against very hard circumstances with the environmentalists and their concerns for themselves, with no regard for human life and their livelihood.

I know there are many other people who do not want to give up their homes, which I can understand how they feel. Parsons is a small community and there are not many homes and or land left here to purchase or rent. We don't have the answers and realize it is a hard decision to make, and you can't please everyone all the time. I do ask that you consider all the options carefully.
We do appreciate you letting us voice our opinions. At this time our lives are standing still until a decision is made on the route. Suspense is hard, and you feel like you can’t go on with your life until you have answer. We don’t know whether to make improvements, plant trees, a garden, etc. The sooner the results and the answer we all will be able to get on with our lives, whatever that brings.

Thank-You for your time and consideration,

Sincerely,

Kathy Phillips
Mr. Jim Sothen, Director  
Engineering Division  
WV Division of Highways  
Capitol Complex Building Five  
1900 Kanawha Blvd East  
Charleston, WV 25305-0430

Dear Mr. Sothen:

I have reviewed the Corridor H route alternatives in Tucker County. I prefer the southern route that has a path between Thomas and Davis.

Thank you for your efforts. You have our full and enthusiastic support to continue pursuing Corridor H full speed ahead.

Best regards,

Neal W Rohr
MY ADDRESS
JOSEPH SAGACE
103 PINETREE DR.
THOMAS, WV 26292-9702

MR JIM SOTHEEN
PE DIR. WV DOH

DEAR SIR,

WILL YOU PLEASE SEND ME A
(COLORED MAP) OF THE THOMAS-DAVIS
SECTION / CORRIDOR H. / THANK YOU

J.S.

MY COMMENT
MR DAVID E CLEVINGER MADE A
STATEMENT IN A MEETING AT
"BLACKWATER FALLS STATE PARK"
HE HOPED THAT THE HIGHWAY WILL
BE OPEN FOR TRAFFIC THROUGH THE
COUNTY IN TWO TO THREE YEARS, BUT
WHEN ASKED WHAT THE REALISTIC DATES
WOULD BE, HE ADDED THAT FIVE TO
SEVEN YEARS IS REALLY MORE PROBABLE
WE (THOMAS-DAVIS RESIDENTS) HAVE WAITED 36
YEARS FOR CORRIDOR H. LET GET THIS
HIGHWAY DONE AS SOON AS POSSIBLE

Sincerely,

Joseph Sagace
DATE: 2-6-01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

The original route would provide the safest and most efficient interchange.

The bridge near Douglas would be a tourist attraction. This area needs to have a beautiful intersection to promote the area and encourage development.

(Please print the following information)

NAME: Randy Schmiedekercht
ADDRESS: PO Box 92
Davis, WV 26260

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

BUILD IT

ORIGINAL ROUTE

(Please print the following information)

NAME: Sandy SchmiedeKnecht
ADDRESS: PO Box 92
Davis WV 26260

ORGANIZATION (IF ANY): ____________________________

Comments are due February 13, 2001
DATE: January 18, 2001

SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis Tucker County

Please consider the following comments:

The Tucker County Chamber of Commerce has taken a position regarding finishing Corridor "H" in as timely fashion as possible. Personally, the "Brown" route appears to be the most cost effective and less "invasive".

The forum was very informative!

(Please print the following information)

NAME: William Smith
ADDRESS: PO Box 146
DAVIS, WV 26260
ORGANIZATION (IF ANY): Chamber of Commerce & CVB

Comments are due February 13, 2001
DATE: 2/01/01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

_I AM IN FAVOR OF THE ORIGINAL ROUTE FOR Corridor H: Parsons to Davis, this seems to be the MOST FEASIBLE OF ALL ROUTES THAT ARE IN CONSIDERATION AND MOST COST EFFECTIVE!!_


(Please print the following information)

NAME: Nathan Thompson
ADDRESS: #072 Box 87
            New Creek, WV 26743

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis Tucker County

Please consider the following comments:

I would like to express my opinion for support of the original preferred route for Corridor H in the Parsons to Davis section. The eight (8) alternatives studied and recently presented at the public meeting prove that the original route is the best, the most practical, the only logical route, and the most cost effective. The alternatives are more expensive, produce and cause (4) conflict with the landfill. The landfill is an important part of the area but should not be shoehorned by having a 4-lane road in such close proximity.

(Please print the following information)

NAME: Douglas N. Toothman
ADDRESS: 105 Woodfield Dr
          Milton, WV 25541

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
DATE: 2-2-01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: January 18, 2001
SUBJECT: INFORMATIONAL PUBLIC MEETING
PROJECT: Appalachian Corridor H: Parsons to Davis
Tucker County

Please consider the following comments:

I agree with the Existing Route for
Corridor H. Parsons to Davis.
It would be less of an impact
on the environment, and a much quicker
and easier route to put in.

(Please print the following information)

NAME: Theodore Weasenforth
ADDRESS: PO Box 23
Mt. Storm, WV 26739

ORGANIZATION (IF ANY):

Comments are due February 13, 2001
October 23, 2001
Public Information Workshop
Canaan Valley Resort & Conference Center
Davis, West Virginia
NOTICE

OF

WORKSHOP PUBLIC MEETING

ENDANGERED SPECIES AVOIDANCE ALTERNATIVES

APPALACHIAN CORRIDOR H

PARSONS TO DAVIS

TUCKER COUNTY

The West Virginia Division of Highways will hold an informational public meeting on Tuesday, October 23, in the Pine Room of Canaan Valley Resort and Conference Center off WV 32 in Canaan Valley State Park in Tucker County on endangered species avoidance alternatives proposed for the Parsons-to-Davis segment of Appalachian Corridor H.

Scheduled in a workshop format from 4 to 7 p.m., the meeting will afford participants an opportunity to ask questions and state their views and opinions on the advantages and disadvantages of two alternative alignments being considered to avoid an area where the federally endangered northern flying squirrel was captured during summer 2001 surveys. Both alternatives begin to shift in the area north of or paralleling US 219 in the Big Run Bog, Tucker County High School area, with one generally paralleling US 219 to the Benbush area and the other looping back to the south to connect with the original preferred alignment at the western edge of the Blackwater Avoidance study area. Highways officials will present information and receive public input.

Those wishing to file written comments may send them to Jim Sothen, P.E., Director, Engineering Division, West Virginia Division of Highways, Capitol Complex Building Five, 1900 Kanawha Boulevard East, Charleston 25305-0430 on or before December 7, 2001.
FOR IMMEDIATE RELEASE
October 23, 2001

WVDOH CONDUCTS PUBLIC WORKSHOP ON PARSONS TO DAVIS SECTION OF CORRIDOR H

Tucker County, W.Va. - The West Virginia Division of Highways (WVDOH) today hosted an informational public workshop to address additional avoidance alternatives and historic district issues for the Parsons to Davis section of the Corridor H project.

The meeting took place in the Pine Room of Canaan Valley Resort and Conference Center in Canaan Valley State Park from 4 to 7 p.m.

Representatives from both the WVDOH and Michael Baker, Jr., Inc., the environmental consulting firm for Corridor H, were available to address the proposed alternatives to avoid habitat of endangered species and address questions and comments from local residents.

State Highway Engineer Joe Deneault said, “In accordance with the 1999 Corridor H Settlement Agreement, we are developing the Supplemental Draft Environmental Impact Statement (SDEIS) for this section of the project. While we were completing the studies for the SDEIS, we found evidence of an

-more-
endangered species, the West Virginia Northern Flying Squirrel. As a result, we have added a new alignment study area to avoid and minimize impacts on the endangered species."

According to Deneault, the WVDOH recently received a determination from the Keeper of the National Register of Historic Places declaring the Coketon Study Area and Blackwater Industrial Complex eligible for the National Register of Historic Places. Therefore, the WVDOH is also studying the potential impacts of the project to the Historic Coketon area.

"This finding could result in additional coordination with cultural resource agencies to determine the effect the project could have on the historic properties close to the project," Deneault said. "We were here tonight to allow for public comment on the new alternatives, endangered species and historic district issues."

For more information log on to the WVDOH's web site dedicated to Corridor H at www.wvcorridorh.com.

-30-

Contact: Joe Deneault
State Highway Engineer
304/558-0191
<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City, State, Zip</th>
<th>Organization (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don Smith</td>
<td>2</td>
<td>E.M.A.</td>
<td>The Inter-Mountain News</td>
</tr>
<tr>
<td>Paula Kerstien</td>
<td>P.O. Box 673, Canaan Valley, W.V.</td>
<td>Davis, W.V. 26260</td>
<td>Canaan Valley Institute</td>
</tr>
<tr>
<td>Gene Griffin</td>
<td>R.T. Box 9A</td>
<td>Kerens, W.V. 26276</td>
<td>herself</td>
</tr>
<tr>
<td>George Savige Co.</td>
<td>P.O. Box 48, Kerens, W.V.</td>
<td>Kerens, W.V. 26276</td>
<td>George Savige Co.</td>
</tr>
<tr>
<td>Warren L. Simpson</td>
<td>P.O. Box 38, Keyser, W.V.</td>
<td>Keyser, W.V. 26726</td>
<td>candidate, W.V.</td>
</tr>
<tr>
<td>Mary Hatfield</td>
<td>P.O. Box 2827, Huntington, W.V.</td>
<td>Huntington, W.V. 25702</td>
<td>TC Planning Commission</td>
</tr>
<tr>
<td>Don Blak</td>
<td>H.C. 40, Box 92, Thomas, W.V. 26702</td>
<td>Thomas, W.V. 26702</td>
<td>PC Planning Commission</td>
</tr>
<tr>
<td>Chuck Kenedy</td>
<td>R.T. Box 98, Kerens, W.V.</td>
<td>Kerens, W.V. 26276</td>
<td>PC Planning Commission</td>
</tr>
<tr>
<td>Robert McClain</td>
<td>R.T. Box 654, Milton, W.V.</td>
<td>Milton, W.V. 26541</td>
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<tr>
<td>Scott Perry</td>
<td>2475 Middle, O.N.A.</td>
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<tr>
<td>Sophia Bryan</td>
<td>31 Nickle St, Brinkley, W.V.</td>
<td>25504</td>
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<tr>
<td>Bill Culley</td>
<td>P.O. Box 317, Thomas, W.V. 26702</td>
<td>Thomas, W.V. 26702</td>
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</tbody>
</table>
DATE: 23 Oct 01

Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Thank you for having this Work Shop. It clarified several issues for me.

DATE: October 23, 2001
SUBJECT: WORKSHOP PUBLIC MEETING
PROJECT: Appalachian Corridor H – Blackwater Avoidance
Parsons to Davis
Tucker County

Please consider the following comments:

- Avoidance of historic battlefields, visual/auditory encroachment on Black River Canyon, wetlands, and NFS habitat is important.
- NFS habitat, dependent as it is on certain stands of fir, could be expanded via protected plantations.
- Since a comprehensive block by block trapping program had not been done, the NFS may be common in this area.
- Preservation of the Coalton area mining artifacts should be placed in a very low priority category.
- Corridor H completion is imperative. It should unlock certain economic development essential to this community’s future.
- A modified southern route which accomplishes the above goals is the most preferred, in my opinion.

(Please print the following information)

NAME: Wayne C Spiggle MD

ADDRESS: Box 97 RT 2
Keiser WV 26726

ORGANIZATION (IF ANY):

Comments are due December 7, 2001
Mr. James E. Sothen, P.E.
Director of Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

DATE: October 23, 2001
SUBJECT: WORKSHOP PUBLIC MEETING
PROJECT: Appalachian Corridor H – Blackwater Avoidance
Parsons to Davis
Tucker County

Please consider the following comments:

Gentlemen,
I am a member of the Corridor H Community Advisory Group and it is my opinion that for reasons too numerous to repeat that the original alignment is by far the best and most logical. I am active in a number of civic originsations such as Tucker County Convention and Visitors Bureau, Tucker County Chamber of Commerce, Tucker County Emergency Ambulance Authority and the Tucker County Rotary Club. And I have found that most of my associates in these organizations agree with the position as stated above.

(Please print the following information)

NAME: Murray G. Dearborn
ADDRESS: P.O. Box 317
Davis, WV 26260

ORGANIZATION (IF ANY): See Above
Comments are due December 7, 2001
Section 106
Coordination & Correspondence
September 4, 1996

Mr. Norman H. Roush  
Division of Highways  
Building 5, Room 109  
Capitol Complex  
Charleston, WV 25305

RE: Corridor H - Management  
Summary - Section 13  
FR: 91-246-MULTI

Dear Mr. Roush,

We have reviewed the following report: "Phase I Archaeological Investigations in the Appalachian Corridor H Project Area - Management Summary - Section 13", submitted by Michael Baker, Jr., Inc. In accordance with Section 106 of the National Historic Preservation Act, we submit our comments on the above referenced project.

According to the report, one archaeological site, the Gnegy Site was identified. It is our understanding that field investigations were interrupted when investigators were barred from conducting further field work. In addition, approximately 3.7 miles or 42% of Section 13 remains unsurveyed because access was denied by property owners.

Therefore, it is our opinion that additional shovel testing be conducted to determine the boundaries of the Gnegy Site. Once this additional work has been conducted, our office will make a determination on whether Phase II investigations are necessary. In addition, the remainder of the project area must be surveyed once access to the property has been acquired.

We appreciate the opportunity to be of service. If you have any questions, please contact Patrick Trader, Senior Archaeologist.

Sincerely,

Susan M. Pierce  
Deputy State Historic Preservation Officer for Resource Protection  

SMP: PDT
March 8, 1999

IN REPLY REFER TO:

Determinations of Eligibility, Sections 12-13
Appalachian Corridor H
Federal Project No. APD-0484 (059)
State Project No. X142-H-38.99
Tucker County, West Virginia

Carol Shull, Keeper
National Register of Historic Places
800 North Capitol St., NE
Suite 400
Washington, DC 20002

Dear Ms. Shull:

Enclosed please find a copy of the final Determination of Eligibility Report for Sections 12-13 of the Appalachian Corridor H highway project in Tucker County, West Virginia, dated March 1999. The report presents our findings regarding National Register eligibility and boundaries for architectural and historical resources in the area of potential effect (APE) for Sections 12-13 of Corridor H, except for resources contained within the Coketon Study Area, which will be addressed in a separate submission. With this letter, we are requesting determinations of eligibility, non-eligibility, and boundaries for the properties discussed in the report, pursuant to 36 C.F.R. § 63.2.

This report evaluates six individual resources in Tucker County and concludes that each of them is ineligible for the National Register. The report also evaluates two potential historic districts, in the Davis and Hambleton areas in Tucker County, and concludes that neither area contains an eligible historic district. Finally, the report evaluates the West Virginia Central & Pittsburgh (WVC&P) Railroad and concludes that it is eligible as a discontinuous historic district, under Criteria A and C, with boundaries drawn to include the historic engineering structures but to exclude the rail-less railroad grade, which no longer has sufficient integrity to contribute to the resource. This finding is consistent with your office's determination of eligibility for the portion of the WVC&P railroad that is located in Sections 14-16 of Corridor H (December 1997).

http://www.fhwa.dot.gov/wvdiv/wv.htm
In a letter dated November 16, 1998, the West Virginia State Historic Preservation Officer (SHPO) concurred in all of the proposed findings of eligibility and non-eligibility in the report. (Please refer to Appendix C for copies of the SHPO’s correspondence.)

In addition to the SHPO’s comments, we also received comment letters from two consulting parties in the Section 106 process, the Monongahela National Forest (MNF), which has jurisdiction over some of the land covered by this report, and Corridor H Alternatives, Inc., a citizens group. (Please refer to Appendix D for copies of this correspondence.) These comment letters questioned the report’s findings regarding the Coketon Study Area. Responses to those comments will be included in a separate submission regarding the Coketon Study Area, which will include archaeological studies of the resources remaining in the area. These archeological studies will examine the ruins of the former mining operations in the Coketon area, and therefore will provide a more complete record for determining the potential for a historic district and/or individually eligible resources in that area.

Thank you for taking the time to examine our findings regarding the National Register eligibility of cultural resources in Sections 12 and 13 of the Appalachian Corridor H highway project. If requested, we would be pleased to accompany you and/or your staff on a field view of any of the resources evaluated in this report. If you have any questions or need further documentation, or if you would like to arrange a field view, please call me or David Leighow at (304) 347-5828. We look forward to receiving your determination within the 45-day review period. Thank you for your attention to this matter.

Sincerely yours,

SGD. DAVID A. LEIGHOW

David A. Leighow
Environment/Civil Rights/Right of Way Team Leader

Enclosure.

cc: File, Reading
DALeighow:o!, 030499
(s:\dal\corrh\_12-13.wpd)
Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

JUN - 9 1999

Mr. Samuel G. Bonasso, P.E.
Secretary, West Virginia Department of Transportation
1900 Kanawha Boulevard
Building Five, Room 110
Charleston, WV 25305-0430

Ref: Appalachian Corridor H
Federal Project APD-0484(059)
West Virginia

Dear Mr. Bonasso:

This letter follows up our earlier response to your concerns regarding the Council's handling of effects determinations. You raised concerns as to whether Council staff adhered to two basic legal principles: the Council's regulations implementing Section 106 of the National Historic Preservation Act and the Administrative Procedures Act.

We have carefully reviewed the position paper you provided which is clearly the product of considerable thought by your department. While we commend your efforts, we are, regrettably, at odds with your analysis and resulting conclusions. The issue of setting can present challenges to those involved in assessing how projects may affect historic properties. Existing guidance and accumulated experience offer some direction; however, all such professional judgements remain somewhat subjective and must be tempered by a healthy dose of common sense.

First the evaluation process: National Register guidance, as quoted in your paper, does state that property boundaries should include the surrounding land that "contributes to the significance of the resource by functioning as its setting." You also cite the National Register Manual for State Historic Preservation Review Boards which directs that boundaries should include "all the aspects or qualities that contribute the [the property's] significance." Underlying this National Register guidance is the fundamental principle that historic properties cannot be understood or appreciated if divorced from the environment in which they exist. The relationship of an historic property to its surroundings, and the historical and visual integrity of that relationship, are important factors in defining the geographic and three dimensional nature of the property as it exists today.
National Register guidance states that the physical features that constitute the setting of a historic property can be either natural or manmade including such elements as: topographic features (a gorge or the crest of a hill); vegetation; simple manmade features (paths or fences) and relationships between buildings and other features or open space. It further states that these features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its surroundings (How to Apply the National Register Criteria for Evaluation, p. 45).

In the context of the Council’s regulations, the environment comprising a property’s setting extends beyond the visual to audible and atmospheric elements. For this reason, these elements are included in the consideration of impacts to setting, and it is within our purview to consider them as part of the environment. It is our view, one informed by the Council’s Criteria of Effect and years of experience working with a wide range of properties, that any discussion of setting must recognize current noise conditions as part of the environment. Your reading that ambient noise levels are somehow separate from the setting is incorrect.

With regard to determining how properties are affected; unfortunately, your reference to the Council’s regulations is repeatedly misquoted throughout your letter which may have led to your confusion about the appropriate application of those regulations. The Criteria of Effect (36 CFR § 800.9(a)) specifically cites location, setting, and use as factors which should be considered in addition to a property’s significant characteristics in determining effect. The Criteria of Adverse Effect (36 CFR § 800.9(b)) states: “An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association....” The Council has consistently determined that introduction of a major modern engineering feature, such as a 150-foot double span overpass or a massive berm in close proximity to an historic structure in a substantially pristine setting, is an adverse effect. This finding is consistent with your paper’s method of considering dominant elements in the viewshed of an historic structure, and it is consistent with professional preservation practice.

The Council’s interpretation of this issue of setting has never been “if you can see it, then it’s an adverse effect” as suggested by your paper. We agree that a highway visible “in the distance” to a person standing on the front step of an historic property might not, in itself, be considered an adverse effect. However, we do not agree that a highway located a mere 100, 200 or even 300 feet from that property is “in the distance,” particularly when that intrusive element is larger in scale than it is distant from the property. Such a structure becomes, according to your methodology, the dominant feature in the viewshed, intrusive and out of character with a relatively intact rural setting.

We also take exception to your allegation that Council staff did not adhere to the Administrative Procedure Act. We refer you to our correspondence dated December 15, 1998 (copy enclosed), which contains a specific discussion of your misinterpretation of the concept of setting and its relationship to historic properties. In the context of that discussion, we believe our notation of
proximity and scale of the proposed construction within these rural surroundings would lead a reasonable observer to conclude that these structures would constitute an intrusion within the setting, changing the character of a historic property's relationship with its surroundings. We maintain that decisions made in this case were consistent with the governing legal standards, as well as with previous decisions made by the Council.

We regret the delay in responding; however, we have recently learned that you chose to widely distribute your letter to others without providing any notice to the Council. Consequently, we would appreciate receiving a list of parties and addresses to which your letter was directed so we might share our response with them. Since responsibility for making the determinations in question lies with the Federal Highway Administration, any further communication regarding the issues you have raised should also include their views.

We welcome any opportunities to discuss these issues further and would certainly be willing to meet with you and your staff for that purpose. We recommend that any further meeting to address these questions includes representatives of the Federal Highway Administration and the National Register. You may contact me at (202) 606-8505 should you wish to set up a mutually agreeable time to meet. We look forward to continuing the good working relationship among our respective staffs.

Sincerely,

John M. Fowler
Executive Director

Enclosure
September 16, 1999

Mr. James Sothen
Division of Highways
Building 5, Room 110
Capitol Complex
Charleston, WV 25305

RE: Appalachian Corridor H, Sections 8,9,10,12, and 13
     State Project X142-H-38.99 02
FR#: 91-246-MULTI-128

Dear Mr. Sothen:

We have reviewed the "Additional Cultural Resources Documentation" report for Sections 8, 9, 10, 12, and 13 of Appalachian Corridor H. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

In June 1996, West Virginia Division of Highways (WVDOH) submitted determinations of National Register eligibility reports for cultural resources in Sections 8, 9, 10, 12, and 13 of the Appalachian Corridor H Project to the West Virginia State Historic Preservation Office (WVSPO) for review. We commented on the report in a December 30, 1998, letter. In this letter, we concurred with WVDOH's evaluations for the cultural resources located within the study sections. Our comments were forwarded to the Keeper of the National Register for her appraisal.

The Keeper made final judgements of National Register eligibility and expressed them in an April 16, 1999, memorandum. She agreed with most of the original determinations, however, the Keeper differed with WVDOH and WVSPO on five resources. These resources are: Folk Victorian House (L1-01), Old Allegheny Church of the Brethren (116-03), Greenland Gap, the Hambleton Study Area (158-22), and the Davis Study Area (012-01). An eligibility recommendation for an additional resource, the Coketon Study Area, was deferred until further archaeological investigation was conducted. The current report addresses the results of this analysis and forwards an eligibility determination for the Coketon Study Area.

Architectural Resources:

Folk Victorian House (L1-01): This resource, determined eligible by the Keeper of the National Register in the April 16, 1999, memorandum, is located outside the Area of Potential Effect (APE) for the Appalachian Corridor H project. As a result, a National Register boundary was not proposed for this property. Unless the Preferred Alignment changes, no further work is necessary for this resource.
Old Allegheny Church of the Brethren (116-03): This resource was determined eligible for the National Register by the Keeper in her April 16, 1999, memorandum. The report prepared by Michael Baker, Jr., Inc. recommends that the current ¼ acre tax parcel serve as the National Register boundary for this resource. This demarcation includes the church and enough surrounding land to convey the property’s historic setting. We concur with this boundary.

Hambleton Study Area (158-22): In her April 1999, memorandum, the Keeper requested additional information regarding the possibility of a National Register historic district in Hambleton. Baker revisited the subject area and again determined that the existing building stock in Hambleton does not retain sufficient integrity to convey the community’s history. We agree and reiterate our determination of ineligibility for the Hambleton Study Area as a historic district that we first expressed in a November 16, 1998, letter. Although Hambleton does not contain a historic district, there are extant individual resources potentially eligible for the Register. Chief among these is the West Virginia Central & Pittsburg (sic) Railroad. Baker identifies the railroad as National Register eligible in their initial report for Sections 12 and 13, and again in the current report (page 147). We expressed our concurrence in the November 16, 1998, correspondence. Please recommend boundaries for the West Virginia Central & Pittsburg Railroad and include it in the upcoming Criteria of Effects report.

Davis Study Area (012-01): In her April 1999, memorandum, the Keeper requested additional information regarding the possibility of a National Register historic district in Davis. Baker revisited the subject area and again determined that the existing building stock in Davis does not retain sufficient integrity to convey the community’s history. We agree and reiterate our determination of ineligibility for the Davis Study Area as a historic district that we first expressed in a November 16, 1998, letter.

Archaeological Resources:

We concur with the consultant’s recommendation that the Coketon Study Area be considered eligible for inclusion in the National Register under Criterion D. The presence of intact subsurface deposits grants this study area the potential to provide significant information concerning the coal industry at the turn of the century. We recommend additional investigation of the “Liquorman’s House” site prior to further development. The current boundary around this site is unclear based upon report maps, and appears to greatly exceed the areas where subsurface testing was conducted. Later discussion of the site indicates that the boundary includes visible surface scatter, yet the ephemeral nature of a surface scatter does not usually lend itself to a determination of eligibility. If the boundary is to remain extensive, we recommend that the surrounding area be shovel tested in order to justify this determination. We also ask that the report be amended to justify the boundaries established for the “Powerhouse” and “Miners Rowhouse” sites. Although charts in table 2-19 explain the boundaries, reasons for their establishment are not clearly stated within the text. As stated in our letter dated November 16, 1998, we concur with the recommendation that the Coketon Study area be considered eligible under Criterion A, but in concert with similar resources in the Douglas and Thomas areas. We are not opposed to the establishment of a “discontiguous” historic archaeological district, but withhold acceptance of the current boundaries until the above mentioned amendments are addressed.
Page 3
September 16, 1999
Mr. James Sothen

Regarding Greenland Gap, we are of the opinion that none of the archaeological resources identified in this area are representative of Civil War-related activities. No further archaeological investigation is necessary.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Marc Holme, Structural Historian, or Joanna Wilson, Senior Archaeologist, at (304) 558-0220.

Sincerely,

[Signature]

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP: mh, jlw
November 19, 1999

Mr. James Sothen  
Division of Highways  
Building 5, Room 110  
Capitol Complex  
Charleston, WV 25305

RE: Corridor H, Sections 11,12 & 13  
   State Project X142-H-38.99 C-2  
FR#: 92-146-MULT-138

Dear Mr. Sothen:

We have reviewed the Phase I investigation report for the above mentioned project. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties", we submit our comments.

The report satisfactorily addresses our concerns regarding the presence of cultural resources within the project area, although we understand that landowner permission was not granted for two portions of the survey area and as such they were not surveyed. Phase I survey of the remainder of the project area located no archaeological materials. We will complete our review of this section upon receipt of survey results from the portion of Section 13 and the access ramp in Parcel T285-22.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Joanna Wilson, Senior Archaeologist, at (304) 558-0220 extension 146.

Sincerely,

Susan M. Pierce  
Deputy State Historic Preservation Officer

SMP:jlw
Ms. Susan Pierce  
State Historic Preservation  
Officer for Resource Protection  
Division of Culture and History  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305

Dear Ms. Pierce:

State Project X142-H-38.99  
Federal Project CHI-484(59)  
FR#: 91-246-MULTI-144  
Appalachian Corridor H, Sections 8, 9, 10, 12, and 13

Your letter, dated January 28, 2000, concerning the cultural resources documentation of Sections 8, 9, 10, 12, and 13 of the subject project, has been received. In the report, the boundary of the West Virginia Central and Pittsburg (sic) Railroad (WVC&P), which merged with the Western Maryland Railroad in 1905, was labeled in the Coketon area but not clearly shown in the Hambleton area. In the Coketon area, the WVC&P is in closer proximity to the preferred alternative and has been previously determined by the Keeper of the National Register of Historic Places to be a potentially contributing resource in the Coketon Study Area. In Hambleton, the WVC&P is located outside of the area of potential effect and is not a contributing resource to a larger study area, as your office has determined that the area is not eligible as a historic district. Nevertheless, the WVC&P is an individual National Register eligible property and has a boundary equal to the boundary shown for the railroad in the Coketon area which encompasses the current railroad right of way. A map showing the boundary for the WVC&P is attached.

The boundaries for the properties known as the Liquorman’s House, Powerhouse, and Miner's Rowhouse are further justified by the addition of Page 132.1, which is attached and will be included in the document. In brief summary, the Powerhouse boundary was delineated by reclamation, the riverbank, historic mapping, and foundation
remnants. The Liqourman’s House boundary was developed to include visible surface artifacts. The Miner’s Rowhouse was delineated by positive test probe locations.

The Division of Highways requests your concurrence with these boundaries. Should you have any questions, please do not hesitate to contact Mr. Mike Wilson of our Environmental Section at 558-2885.

Very truly yours,

[Signature]

James E. Sothen, P.E., Director
Engineering Division

JES:Hs

Attachments

cc: Bill McCartney, Michael Baker, Jr., Inc.
Katry Harris, Michael Baker, Jr., Inc.

bcc: DDE(MW), DD(MF)
February 15, 2000

Mr. James Sothen  
Division of Highways  
Building 5, Room 110  
Capitol Complex  
Charleston, WV 25305

RE: Corridor H, Sections 8, 9, 10  
12 & 13  
FR#: 91-246-MULTI-146

Dear Mr. Sothen:

We have reviewed the additional information submitted for the above mentioned project. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Architectural Resources:
In our January 28, 2000 letter we requested a National Register boundary recommendation for the West Virginia Central and Pittsburg (sic) Railroad located in the Hambleton Study Area. This information was submitted on February 4, 2000 and is the subject of the current correspondence. We concur with the demarcation for the WVC&P Railroad as illustrated in the map that accompanied your aforementioned letter. As described in that letter, the boundary "encompasses the current railroad right of way." This is interpreted as meaning the rails and ties, the grade, and all railroad related hardware such as switches, signals, and trestles.

Archaeological Resources:
The addendum satisfactorily addresses our concerns regarding the boundaries for the Liquorman’s House, Powerhouse and Miner’s Rowhouse sites. We find that the consultant has justified these decisions adequately, and we concur with the boundaries as they stand. We appreciate the attention given to this matter.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Marc Holma, Structural Historian, or Joanna Wilson, Senior Archaeologist, at (304) 558-0220.

Sincerely,

Susan M. Pierce  
Deputy State Historic Preservation Officer

THE CULTURAL CENTER • 1900 KANAWHA BOULEVARD, EAST • CHARLESTON, WEST VIRGINIA 25305-0300  
TELEPHONE 304-558-0220 • FAX 304-558-2779 • TDD 304-558-3562  
EEO/AA EMPLOYER
Mr. James Sothen  
Division of Highways  
Building 5, Room 110  
Capitol Complex  
Charleston, West Virginia 25305  

RE: Parsons to Davis  
State Project X142-H-38.99 C2  
FR#: 91-246-MULTI-175  

Dear Mr. Sothen:  

We have reviewed the Determination of Eligibility report for the above mentioned project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.  

Architectural Resources:  
A windshield survey of the project’s Area of Potential Effect (APE) identified twenty resources fifty years old or older. This number includes seven properties identified in the ASDEIS as requiring further consideration for National Register evaluation, two archaeological sites, and two cemeteries. The current eligibility report addresses all twenty architectural resources within the APE. We will address the two archaeological sites and two cemeteries below. The remaining sixteen architectural resources are not eligible for listing in the National Register of Historic Places. They lack architectural distinction, have been greatly altered, and/or exhibit no evidence of any association with a significant historic event or individual.  

Archaeological Resources:  
In reference to resource number BW-013 (slab foundation), we concur with the consultant’s recommendation that the site lacks integrity, and is unlikely to provide additional significant information. It is not eligible for inclusion in the National Register. The Mt. Calvary Catholic Cemetery (Bw-018) and Rosehill Cemetery (BW-020), though of historic interest, do not meet the Criteria Considerations for eligibility and are not eligible for inclusion in the National Register. Regarding the West Virginia Central and Pittsburg [sic] Railroad, we concur with the determination of eligibility, and support the inclusion of additional components should such be encountered during future archaeological investigation.
We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Marc Holma, Senior Structural Historian for Review and Compliance, or Joanna Wilson, Senior Archaeologist, at (304) 558-0220.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP: mh/jlw
January 17, 2001

Mr. James Sothen
West Virginia Division of Highways
Building 5, Room 110
Capitol Complex
Charleston, WV 25305

RE: Appalachian Corridor H, Section 10 & 11
   State Project X142-H-38.99
FR#: 91-246-MULTI-183

Dear Mr. Sothen:

We have received the Baker memorandum and additional information for the Coketon Study Area. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

We appreciate Ms. Harris' efforts to respond to the Keeper's questions regarding this resource area. We concur with her determination that reclamation activities, while destructive to some aspects of the area, have not negatively affected the resource's potential to provide significant archaeological information. It is our opinion, therefore, that the Coketon Resource Area remains eligible for inclusion in the National Register of Historic Places under Criterion D for its information potential. We also concur with the proposal that both the Coketon Resource Area and the Blackwater Industrial Complex be considered contiguous historic districts due to recent alterations to the landscape.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Marc Holma, Senior Structural Historian for Review and Compliance, or Joanna Wilson, Senior Archaeologist, at (304) 558-0220.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP:jlw

cc: State Historic Preservation Officer Lou Capaldini
    Deputy State Historic Preservation Officer Susan M. Pierce
January 22, 2001

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99
Corridor H - Parsons to Davis
Request for Eligibility Determinations
Tucker County

Randolph T. Epperly, Jr., P.E.
Deputy State Highway Engineer -
Project Development
West Virginia Division of Highways
Charleston, WV 25305

Dear Mr. Epperly:

By letter dated December 6, 2000, the Federal Highway Administration submitted a Determination of Eligibility report to the National Register of Historic Places for the Parsons to Davis section of the Appalachian Corridor H highway project. Enclosed is a copy of their response to the submission.

If you have any questions or comments concerning this information, please contact me at (304) 347-5268 or via e-mail at Henry.Compton@fhwa.dot.gov.

Sincerely yours,

Sgd. Henry E. Compton

Henry E. Compton, P.E.
Right of Way & Environment Specialist

Enclosure

cc: File, Reading, HEC
HEC:012201

http://www.fhwa.dot.gov/wdiv/wv.htm
To: Henry E. Compton  
Right of Way and Environment Specialist  
FHwA  
WV Div  
Geary Plaza, Suite 200  
700 Washington St., E  
Charlestown, WV 25301

The Director of the National Park Service wishes to inform you of our determination pursuant to the National Historic Preservation Act, as amended, and Executive Order 11593 in response to your request for a determination of eligibility for inclusion in the National Register of Historic Places. Our determination appears on the enclosed material.

As you know, your request for our professional judgment constitutes a part of the Federal planning process. We urge that this information be integrated into the National Environmental Policy Act analysis and the analysis required under section 4(f) of the Department of Transportation Act, if this is a transportation project, to bring about the best possible program decisions.

This determination does not serve in any manner as a veto to uses of property, with or without Federal participation or assistance. The responsibility for program planning concerning properties eligible for the National Register lies with the agency or block grant recipient after the Advisory Council on Historic Preservation has had an opportunity to comment.

Attachment
**Determinaton of Eligibility Notification**

National Register of Historic Places  
National Park Service

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**Project Name:** Appalachian Corridor H–Parsons to Davis  
**Location:** Tucker County  
**State:** WV

**Request submitted by:** Henry E. Compton, P.E., Right of Way and Environ. Spec., FHWA

**Date received:** 12/07/00

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### Eligibility

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SEE ATTACHED COMMENTS

(Handwritten note)

Date: 1/17/01  

Keeper of the National Register
Appalachian Corridor H--Parsons to Davis
Tucker County, WEST VIRGINIA

Reviewer's Comments:

West Virginia Central and Pittsburg Railway

We have already determined that the railroad is eligible for listing under Criteria A and C as a discontinuous historic district.

Based on the photographs submitted with this report, this section of the railroad does not appear to be eligible as a contributing linear element within the WVC&P district. In our decision of April 16, 1999, we stated that the portion of the railroad included in the Hambleton to Davis portion of the Corridor H project appeared to be clearly defined and identifiable as a railroad roadbed and that "those portions of the roadbed that retain these character-defining features should be considered contributing to the significance of the district."

The photographs of this portion of the railroad appear to show a roadbed that is not clearly defined and has lost its character as a railroad right-of-way. This portion of the railroad appears to resemble the roadbed in Sections 13, 14, and 15, which we determined to have lost its ability to convey its historic significance.

Based on the information available to us, the only resource which appears to qualify as an individually contributing element in the WVC&P historic district is the stone arched bridge over an unnamed tributary of the North Fork of the Blackwater River near William (shown in photos on page B-43). The other individual components identified on page 30 either lack sufficient information to substantiate their significance or are the partial remains of structures that have lost their integrity.

Marilyn Harper
Historian
National Register of Historic Places
January 17, 2001
February 14, 2001

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99
Corridor H - Coketon Study Area
Supplemental Information
Tucker County

Carol Shull, Keeper
National Register of Historic Places
1849 C Street, NW
Washington, DC 20240

Dear Ms. Shull:

By letter dated February 14, 2000, the Federal Highway Administration (FHWA) submitted a Determination of Eligibility (DOE) report for resources within the former Sections 8, 9, 10, 12 and 13 of the Appalachian Corridor H highway project in Grant and Tucker Counties, West Virginia. By memo dated March 31, 2000 (copy enclosed), your office responded to our request and concurred with five of the six findings presented in the DOE report. For one resource, Coketon Study Area, your office requested additional information to support our contention the Coketon Study Area remains eligible for the National Register of Historic Places. In response to your request, the enclosed report has been developed.

Tab 1 of the report contains a memorandum that has been developed to reply to the specific concerns and/or issues raised in your March 31 memo. Directions for utilizing the overlay of the 1992 base mapping prepared for the Douglas and Albert Highwall projects are located in Tab 2. Tab 3 holds figures 1-5 referred to in the explanatory memo. Tab 4 contains a copy of a previously developed report entitled Coketon: Documentation for the Memorandum of Agreement and a copy of the MOA executed for the Albert and Douglas Highwall reclamation projects. A copy of a letter from the West Virginia State Historic Preservation Officer concurring in the findings presented in this report can be found in Tab 5, along with a copy of your March 31 memo.
With submission of this report, we request your concurrence in our finding that the Coketon Study Area is eligible for the National Register of Historic Places as a discontiguous historic district and as part of the National Register eligible Blackwater Industrial Complex, also as a discontiguous historic district.

If you need additional information or have any questions regarding the enclosed information, please contact me at (304) 347-5268 or via e-mail at Henry.Compton@fhwa.dot.gov. Thank you for your attention to this matter.

Sincerely yours,

Sgd. Henry E. Compton

Henry E. Compton, P.E.
Right of Way & Environment Specialist

Enclosures

cc: File, Reading, HEC, WVDOH
HEC:021401 (s:hec\letters\sections89101213keeper2.wpd)
April 3, 2001

IN REPLY REFER TO:  
Federal Project APD-0484(059)  
State Project X142-H-38.99 C-2  
Corridor H-Coketon Study Area  
Eligibility Determination  
Tucker County

Randolph T. Epperly, Jr., P.E.  
Deputy State Highway Engineer -  
Project Development  
West Virginia Division of Highways  
Charleston, WV 25305

Dear Mr. Epperly:

By letter dated February 14, 2001, the Federal Highway Administration (FHWA) submitted a copy of the revised Determination of Eligibility report to the Keeper of the National Register of Historic Places for concurrence on the eligibility of the Coketon Study Area and concurrence in the proposed boundary of the eligible resource. A copy of the Keeper’s March 16, 2001, Determination of Eligibility Notification been enclosed for your review. The Keeper has again requested additional information regarding the eligibility and boundary of the Coketon Study Area. The FHWA suggests that a field review of the site be conducted among staff of the FHWA, WVDOH, West Virginia State Historic Preservation Officer and the Keeper. To avoid further delay, we suggest the field meeting be held as soon as possible.

If there are any questions concerning this matter, please contact me at (304) 347-5268 or via e-mail at Henry.Compton@fhwa.dot.gov.

Sincerely yours,

[Signature]

Henry E. Compton, P.E.  
Right of Way & Environment Specialist

Enclosure
To: Henry E. Compton  
Right of Way and Environment Specialist  
FHwA  
WV Div  
Geary Plaza, Suite 200  
700 Washington St., E  
Charlestown, WV 25301

The Director of the National Park Service wishes to inform you of our determination pursuant to the National Historic Preservation Act, as amended, and Executive Order 11593 in response to your request for a determination of eligibility for inclusion in the National Register of Historic Places. Our determination appears on the enclosed material.

As you know, your request for our professional judgment constitutes a part of the Federal planning process. We urge that this information be integrated into the National Environmental Policy Act analysis and the analysis required under section 4(f) of the Department of Transportation Act, if this is a transportation project, to bring about the best possible program decisions.

This determination does not serve in any manner as a veto to uses of property, with or without Federal participation or assistance. The responsibility for program planning concerning properties eligible for the National Register lies with the agency or block grant recipient after the Advisory Council on Historic Preservation has had an opportunity to comment.

Attachment
Determination of Eligibility Notification

National Register of Historic Places
National Park Service

Name of Property: Corridor H–Coketon Study Area–Additional Information

Location: Tucker County

State: WEST VIRGINIA

Request submitted by: Henry E. Compton, P.E. Right of Way & Environment Specialist, WV Division, FHwA

Date received: 02/20/01

Additional information received

Opinion of the State Historic Preservation Officer:

_x_ Eligible    _Not Eligible    _No Response    _Need More Information

Comments:

The Secretary of the Interior has determined that this property is:

_x_ Eligible

Applicable criteria:

_Not Eligible

Comments:

_x_ Documentation insufficient

(Please see accompanying sheet explaining additional materials required)

[Signature]

Keeper of the National Register

Date: 3/16/01
Coketon Study Area
Tucker County, WEST VIRGINIA

Reviewers’ Comments:

After carefully reviewing the material you submitted in February 2000 and the supplementary information included with your current request, we agree with the position of the Monongahela National Forest, as stated in their June 30, 1998, letter to Mr. Randolph Epperly. The Coketon Study Area cannot be evaluated in isolation from the larger, eligible Blackwater Industrial Complex.

Please provide us with copies of the 1992 Phase II Evaluation of the Davis Coal and Coke Company and Western Maryland Railroad Industrial Complex at Tucker County, West Virginia, by Jeffery B. Davis, Todd Swann, and Ruth Brinker; the 1997 follow-up report prepared by Davis et al.; and all other available information pertaining to the Blackwater Industrial Complex.

Marilyn Harper
Historian
and
Erika Seibert
Archeologist
National Register of Historic Places
March 16, 2001
Ms. Carol Shull  
Keeper  
National Register of Historic Places  
800 North Capitol Street, NE  
Suite 400  
Washington, D.C. 20002

Dear Ms. Shull,

This letter is a response to a request for information I received today in a telephone conversation with Ms. Erika Seibert of your office. Specifically, I was asked to comment upon the position of the Forest Service regarding the NRHP eligibility of the Coketson Industrial Site and its relationship to the Blackwater Industrial Complex. Also, I am responding to the opinion, expressed by staff of Michael Baker, Inc. during the meeting held at Coketson this Monday, that the Coketson site constitutes a "discontinuous" Historic District.

The Forest Service position set forth in a letter dated June 30, 1998, addressed to the West Virginia Department of Transportation, is still our current position. We hold that the Coketson property is eligible to the NRHP under all four criteria. We also submit that the West Virginia Central and Pittsburgh Railroad grade is a contributing feature of the site, and should be considered alongside the larger site. Further, it is clear that the Coketson site is but a small part of the larger Blackwater Industrial Complex. The Forest's position on the NRHP eligibility of Coketson, associated with the larger Blackwater Industrial Complex, was supported by the WV SHPO in their letter to Norman Roush dated December 17, 1996 and by your office in a review letter dated March 16, 2001.

The notion that Coketson is part of a discontinuous Historic District is, from our point of view, inconsistent with previous opinions expressed by the Forest Service, the WV SHPO and your office. Also, as a point of fact it should be noted that the railroad grade, a landscape feature that retains significant integrity, is a continuous, unifying feature that seamlessly joins all the individual properties in the Blackwater Industrial Complex, including Coketson.

Should you require further documentation, or have any questions or comments, please do not hesitate to contact me at (304) 636-9632 prior to August 10, 2001, and at (304) 636-1800, ext. 245, on or after August 13, 2001.

Caring for the land and serving people
Sincerely,

[Signature]

John A. Calabrese
Forest Archeologist

cc: Dallas Emch, Acting Forest Supervisor
Kimberley Johnson, Asst. Forest Supervisor, Natural Resources
Richard Cook, Asst. Forest Supervisor, Lands
Liz Schuppert, Cheat District Ranger
William Kerr, Program Manager, Recreation, Heritage, and Wilderness
Lynn Hicks, Forest Engineer
United States Department of the Interior
NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20350

DETERMINATION OF ELIGIBILITY NOTIFICATION
National Register of Historic Places
National Park Service

Name of Property: Corridor H—Cokston Study Area—Additional Information

Location: Tucker County
State: WEST VIRGINIA

Request submitted by: Henry E. Compton, P.E., Right of Way & Environment Specialist, WV Division, FHWA

Date received: 07/03/01
Additional information received: 7/24/01

Opinion of the State Historic Preservation Officer:

X Eligible
Not Eligible
No Response
Need More Information

Comments:
The Secretary of the Interior has determined that this property is:

X Eligible
Applicable criteria: A, B, C, D
Not Eligible

Comments:
See attached comments regarding the Cokston study area as it relates to the Blackwater Industrial Complex.

Documentation insufficient
(Please see accompanying sheet explaining additional materials required)

[Signature]
Keeper of the National Register
Date: 8/2/01
DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Coketon Study Area/Blackwater Industrial Complex
Tucker County, West Virginia

We have carefully reviewed the two reports, *A Phase II Evaluation of the Davis Coal and Coke Company and the Western Maryland Industrial Complex* at Tucker County, West Virginia (Davis, Swain and Brinker, 1992) and *What's a Coke Oven?: Archeological Investigations Within the Blackwater Industrial Complex* (Davis, 1997), provided to us at our onsite visit of June 25, 2001, to the project area; a letter of June 28, 2001 (received July 24) from John Calabrese, Montagnolo National Forest Archeologist reiterating the USFS opinion of eligibility (copy attached) and the supplementary mapping submitted by FHWA on July 2. The SHPO has confirmed that the State has no other documentation on record beyond the two aforementioned reports, on which it previously based its determinations of eligibility for the entire Blackwater Industrial Complex.

We have concluded that the Coketon study site retains its significance and integrity as an integral part of the larger Blackwater Industrial Complex, which is eligible for the National Register under criteria A, B, C, and D as a historic and archeological district. Post-mining reclamation of a relatively small area has not significantly disturbed the Coketon resources in a manner that would necessitate Coketon's evaluation as a discontinuous district, nor does it support the evaluation of the Blackwater Industrial Complex as a discontinuous district. As with most historic districts, some areas or resources may be classified as noncontributing. As has been pointed out, the character of the industrial mining landscape had been somewhat diminished already when the Blackwater Industrial Complex was initially determined eligible by the SHPO and FHWA; however, we find that the effects of the Coketon area reclamation project have had a relatively insignificant impact on the resources and the conveyance of their historic and archeological importance. The Blackwater Industrial Complex continues to convey its historic meaning as a significant concentration of continuous, interrelated historic industrial and archeological resources throughout the Blackwater River corridor from Thomas to Hendricks, in Tucker County, West Virginia. The Complex contains a 10-mile stretch of the 1888 West Virginia Central and Pittsburg Railway (WVCRP) grade with associated bridges and culverts, the abandoned community of Limerick along with the historic mining towns of Thomas, Coketon and Douglas, including numerous historic buildings, mine portals, stone foundations of the Coketon power house, several mine buildings and two mine tipple, many other unidentified structure foundations, and the standing remains of approximately 300 (out of the original 1,235) bee hive style coke ovens. The Complex's numerous historic and archeological features located outside of the Coketon area in conjunction with the significant resources within the Coketon...
DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Cokston Study Area/Blackwater Industrial Complex
Tucker County, West Virginia

The study area combine in a geographic concentration from one end of the Blackwater Industrial Complex to the other. Because of this continuity of important resources, the entire Blackwater Industrial Complex is considered one entity and the Cokston study area evaluated within this larger context.

The Cokston study area includes key resources such as the banks of beehive style coke ovens and the WVC&P railroad grade that may or may not be individually eligible, but which, nonetheless, are contributing resources that tie the larger Blackwater Industrial Complex together. Besides being located along the industrial railroad grade between the towns of Thomas and Douglas, the extant resources in Cokston, both above and below ground, represent the material remains of the most significant mining facility of the Davis Coal and Coke Company—the absolute center of the massive former industrial complex of Henry G. Davis, one of West Virginia’s foremost political and industrial leaders. Additionally, the mining operations and railroad fueled the boom town expansion and prosperity of the company towns of Thomas and Douglas included in this area. These towns are also vital components of the larger mining industry landscape, providing the housing, commercial and social environment of the region. Due north of the Cokston area, significant resources such as those of the Thomas Commercial Historic District, extant examples of workers’ housing, the Davis company office building, the former department store building, and the railroad grade, are characteristic examples of the seamless continuity of the Complex’s historic material remains.

Each of the criteria are addressed below.

Criterion A
The Blackwater Industrial Complex, including the Cokston study area, is eligible under Criterion A. The production of coal and coke is clearly significant in the economic and social development of West Virginia and the nation during the late 19th and early 20th centuries. Much of the country’s coal came from West Virginia during this time period. Tucker County, where the Blackwater Industrial Complex is located, produced coke for a period of 49 years starting in 1884, and by 1900 it ranked third in the state in production. The Blackwater Industrial Complex’s most active period, in terms of coal and coke produced, lasted from 1884 to the 1920s. During these productive years the Complex laid claim to the steepest mainline railroad in the East and to being one of the State’s largest coking facilities and one of its highest producing coal facilities. Moreover, during the late 19th and early 20th centuries, the Davis Coal and Coke
DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Coketon Study Area/Blackwater Industrial Complex
Tucker County, West Virginia

Company was one of the largest and most well-known coal and coke companies in the world, exemplifying the property's specific association with these important events in industrial history. At the turn of the 20th century the company was producing more than 10,000 tons of coal daily from its more than 100,000 acres throughout the region, half of which was produced at the Coketon/Thomas location. As an integral component of the Complex, the Coketon area resources include the standing remains of hundreds of beehive style coke ovens, mine portals, foundations of various related buildings, storage tanks, and the railroad grade, which together convey the area's rich industrial past. Despite the reclamation in one relatively small area of Coketon within the overall Complex, extant subsurface and standing features retain adequate integrity to convey the area's historic industrial use.

Criterion B
The Blackwater Industrial Complex, including the Coketon study area, is eligible under Criterion B for its association with Henry G. Davis, a coal baron, entrepreneur, member of the West Virginia legislature and U.S. Senator. Davis and his brothers developed and owned the Davis Coal and Coke Company, a company that directly influenced the social and economic development of the local and regional areas. This influence is reflected in the remaining resources associated with the development of the company and its effects on the local and regional community. The Blackwater Industrial Complex is directly associated with the activities and events for which Davis is well-known, illustrating his importance in local, regional, and state history.

Criterion C
The Blackwater Industrial Complex, including the Coketon study area, is eligible under Criterion C as a significant and distinguishable entity embodying distinctive characteristics of types and methods of construction related to a definable period. The area represents the distinct patterns of social organization and architecture produced through 19th and early 20th-century industrial development. Coal mining and coke production resources, railroad resources, commercial buildings, workers' housing, company-related buildings and structures are of character-defining construction and spatial arrangement. Remains of the coke ovens represent a distinctive, significant property type—the beehive style variety, which were phased out when better-cooking technology was discovered. Stone work throughout the district in the ovens, foundations, bridges (some of which are believed to have been built by immigrant Italian stone masons) and culverts represents examples of excellent period workmanship.
DETERMINATION OF ELIGIBILITY NOTIFICATION

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Coketon Study Area/Blackwater Industrial Complex
Tucker County, West Virginia

Criterion D
The Blackwater Industrial Complex, including the Coketon study area, is eligible under Criterion D. Archeological survey and testing of the subsurface remains has indicated that the area contains significant, intact archeological deposits that have the ability to produce important information about the physical mining of coal and production of coke as well as the experience of workers. Recent excavations of a coke oven have revealed new information about the construction and design of specific ovens in the district. Because of the good integrity of the archeological resources, further archeological investigations of the ovens and other structures associated with the industrial development of the area may be able to produce detailed information about coal and coke production, the development of late 19th and early 20th-century technology, and the influence of railway transportation to this industry. Furthermore, excavation and analysis of workers' housing remains and associated artifacts may shed light on community social structure, ethnic and class divisions, political influences, company policies, cultural styles and trends, and individual wants and needs.

Erika Martin Seibert, Archeologist
Beth L. Savage, Architectural Historian
Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
1900 Kanawha Boulevard, East
Charleston, WV 25305-0300

Dear Ms. Pierce,

As the Corridor H environmental process advances, I would like to take this opportunity to advise your office that the Forest Service remains an interested and affected party in the Section 106 process. The Operating Plan of the ARPA permit issued to the West Virginia Division of Highways for those portions of Corridor H on Forest Service land stipulates that the Forest will review reports as part of the Section 106 process. I have attached a copy of the Operating Plan for your information.

The latest Criteria of Effects report issued by the West Virginia Division of Highways will be sent to my staff by the DOH next week; we will forward to you a copy of our comments on effects to archaeological and historic resources on Forest Service land. I expect that, if we receive the document in a timely manner, you will have our comments no later than the end of next week.

I request that the Forest Archaeologist be sent copies of any correspondence between your office, the FHWA, the WVDOH, and any other interested and affected parties relating to the Section 106 process on Forest Service land in or potentially impacted by Corridor H and its associated mitigation measures.

I and my staff look forward to continue our work with your office on this matter. Should you have any questions, please do not hesitate to contact me or our Forest Archaeologist, Mr. John Calabrese, at (304) 636-1800.

Sincerely,

CLYDE N. THOMPSON
Forest Supervisor

CNT:jac

cc: Norse Angus (WVDOH), Ed Compton (FHWA)
Amendment to the Annual Operating Plan
For
Special Use Permit #CHT-7

WV Department of Transportation
Corridor H Field Surveys

This amendment outlines specific measures to be followed during cultural resource investigations which are necessary to complete the environmental analysis required by the February 24, 2000 settlement agreement, corridor H Alternatives versus Slater, 96-CV-2622, US District Court for the District of Columbia (Battlefield avoidance SEIS and Blackwater avoidance SEIS).

Under the terms and conditions of the Monongahela National Forest Special Use Permit CHT-7, issued to the West Virginia Department of Transportation, Division of Highways, the permit may be modified at the Forest’s discretion. Under the authority of Title 16 USC 470 aa-mm (Archaeological Resources Protection Act), as implemented in 36 CFR 296 (Protection of Archaeological Resources: Uniform Regulations), the following amendments are hereby added to Permit CHT-7 as a mandatory part of the ARPA permit process:

1) West Virginia Department of Transportation, Division of Highways, and its agents are hereby given permission to conduct cultural resources surveys and site evaluations on Monongahela National Forest lands as part of Section 106 of the National Historic Preservation Act compliance for the Corridor H project with the following terms and conditions:

   a) Work shall be confined to the Blackwater Canyon and Battlefield Avoidance areas as defined in the original permit;
   b) Phase Ib archaeological and historic survey work shall conform to a predictive model and methodology mutually agreed to between the WV DOH and the Forest Service, compatible with the Forest’s programmatic agreement with the West Virginia State Historic Preservation Office; that predictive model and survey procedures are included as Attachments A and B;
   c) Phase II site evaluation procedures shall be discussed and agreed upon between the WV DOH and the Forest Archaeologist prior to conducting Phase II work;
   d) All artifacts, samples, collections, copies of records, data, photographs, and other documents resulting from the work conducted under the permit shall be deposited with the Monongahela National Forest, Supervisor’s Office, Elkins, WV, no later than 90 days after submission of a final report;
e) No additional reporting requirements are added; however, copies of any reports resulting from work carried out under this permit shall be submitted to Forest Archaeologist for review as part of the Section 106 process.

It is important to note that initiation of cultural resources survey work, or other activities under the authority of the permit, signifies the permittee’s acceptance of the terms and conditions of the permit, including the above amendments.

Failure to comply with the terms and conditions set forth above may result in a violation of Title 16 USC 470 aa-mm (as implemented in 36 CFR 296.15).

Norse Angus
WV Department of Highways

DON CARROLL
Acting Forest Supervisor
Mr. Ben Hark  
Environmental Section Head  
West Virginia Division of Highways, Engineering Division  
1900 Kanawha Boulevard, East  
Building 5, 4th Floor  
Charleston, WV 25305-0430


Dear Mr. Hark,

Under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800, we are submitting our comments on the aforementioned report.

General Comments

Detailed Design Plans/Area of Potential Effect

While the alignment of Corridor H and the bridge spanning Cokcton are clearly marked, there is no indication of the planned support and construction facilities that will be required to construct a bridge of that size. These areas, in addition to the span and piers, constitute the actual Area of Potential Effect (APE) of the proposed project. We ask that we be provided copies of detailed plans showing the actual APE, including work staging areas, access corridors, cut-and-fill areas, and any and all construction related activities on National Forest land in or in the vicinity of construction activities.

Until such time as this information is made available to us for comment, we are unable to determine if such activities constitute an effect to the National Register eligible site of Cokcton and its many contributing archaeological and historic resources.

Archaeological Survey Coverage

Areas that have been subjected to archaeological survey and testing are not explicitly denoted, nor is there a discussion of the location of potential buried structures, features, and deposits that are currently buried under fill brought in during reclamation activities. According to a November 21, 2000 Memorandum from Katry Harris of Michael J. Baker, Inc. to Ben Hark of the WVDOH, the WVDEP did not prepare the required site maps showing destroyed, extant, and remaining archaeological structures, features and deposits before and after reclamation activities (Harris 2000:3). Therefore, in the absence of archaeological field investigations of the APE, the effects of construction in the APE are unclear.
Historic documentation of the Coketon area, in addition to actual archaeological survey and testing, may be of help in identifying areas of potential deposit. We have attached a copy of an 1896 Fowler print of Coketon, showing the area under question, for your information.

Specific Responses to Sections of the Report

**Physical Impacts: Chapter 4, Page 11, Paragraph 3 and Table 4(A)**
Direct physical impacts to the site, as mentioned above, do not take into consideration the full APE. In order to assess the effects of the project, the APE must be clearly defined. If it is determined that the proposed project will alter or detract from the information potential of resources that have the potential to contributing to the National Register District-eligible site of Coketon through the destruction of features, sites, or other deposit, the project would have an adverse effect on the Coketon district. Such an effect would include undermining the research potential of potentially contributing resources and commensurately detracting from the continuing eligibility of the affected resources under Criterion D.

**Visual Impacts: Chapter 4, Page 11, Paragraphs 4 through 6 and Table 4(B)**
The visual effects analysis states on Page 11, Paragraph 4, that the bridge will be visible from only 8% of the entire nearly 10-mile long Blackwater Industrial Complex. However, as stated on Page 11, Paragraph 6: “Viewsheds from those numerous contributing resources that lie outside of the Coketon area and within the Blackwater Industrial Complex Archaeological and Historic District would not include the proposed project.” It is unclear from the language employed if the bridge would not be visible from the rest of the Blackwater Complex outside of Coketon.
Clarification of this point is necessary.

Also we take exception to the statement (Table 4[B]) that the placement of the bridge on the landscape will not affect the ability of the site to “convey its historic meaning as a significant concentration of contiguous, interrelated historic industrial and archaeological resources,” owing to alterations from the previously mentioned reclamation project. This statement contradicts the Keeper’s (August 2001) finding that “we find that the effects of the Coketon area reclamation have had a relatively insignificant impact on the resources and their conveyance of their historic and archaeological importance.” Also, whatever the final design of the piers and span, a bridge of the proportions necessary for this project cannot fail to have an adverse effect on the integrity of setting, feeling and, possibly, association of the site. The definitions of each of these three terms are found in the National Register Bulletin Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts (1993:19-20) and are as follows:

**Integrity of Setting** includes elements such as topographic features, open space, views, landscapes, vegetation, man-made features..., and relationships between buildings and other features.

**Integrity of Feeling** is conveyed if “its features in combination with its setting convey an historic sense of the property during its period of significance. Integrity of feeling enhances a property’s ability to convey its significance under all of the criteria.”
Integrity of Association is retained on a property "if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer."

The placement of the bridge will: 1) alter the views and landscapes of Coketon, thereby impacting its integrity of setting; by altering its setting as in 1) the placement of the bridge will adversely affect the integrity of feeling of Coketon and, quite possibly, affect its integrity of association.

Maintaining the integrity of setting, feeling, and association of a site or district is directly related to its continuing eligibility under Criterion D. Therefore, since the integrity of setting, feeling, and, possibly, association of the Coketon site will be adversely affected by the placement of the bridge, the eligibility of the site to the Register under Criterion D will potentially be undermined commensurately. This finding is consistent with the guidelines for assessing adverse effects found in 36 CFR 800.5

Auditory Impacts: Chapter 4, Pages 12 through 13; Table 4(B).

This section of the report (Page 12, paragraph 6) states that "...the Coketon area of the Blackwater Industrial Complex Archaeological and Historic District would experience a noise impact ranging from moderate to substantial from the project."

Despite the fact that it is recognized that there will be audible impacts from the bridge, the finding is one of "no effect." We question the consistency of these two statements.

However, it is recognized that the site was formerly a very loud and noisy industrial site. The impacts accruing from the added noise therefore will not have an effect to the historic integrity of the Coketon area. Such auditory impacts may affect the enjoyment of visitors to the area, but that is an issue entirely separate from Section 106 concerns.

Secondary and cumulative Impact Assessment: Chapter 4, Page 13

This section of the report states that since the bridge only spans the site and does not provide direct access to the site, that there are no secondary effects accruing from the bridge. Also, the effects of the planned bicycle path on the former West Virginia Central and Pittsburgh Railroad grade are not considered as effects because "Any access or development would be controlled by those plans and policies controlled by the Monongahela National Forest." There is no mention made in the report that the terms of the February 7, 2000 settlement agreement entered into between Corridor H Alternatives and the USDOT state, indirectly through reference to the 1996 ROD for Appalachian Corridor H, Elkins to I-81, which in turn references the Final Environmental Impact Statement for the same section, dating to June 1995, that the mitigation measures for Corridor H include a bicycle path through the Coketon area. The bicycle path itself is a mitigation measure for Corridor H and its effects therefore should be considered as secondary effects to the overall project considered here.

Thus, the increased traffic flow and access to the site, by both pedestrian and cycling users of the trail, have the potential to increase vandalism and have other unforeseeable cumulative effects to the integrity of the Coketon area.
Conclusions and Recommendations

Owing to the fact that the project may have direct physical impacts to potentially present resources within the APE whose contributing or non-contributing status to the district is not known, we cannot recommend that the finding of "no effect" be maintained for these impacts. Until such time as the presence and integrity of the subsurface archaeological deposit in the APE has been ascertained through fieldwork, we will continue to hold this position in relation to the direct physical impacts of the project.

Also, the visual impacts of the project will, in our estimation, adversely affect the integrity of setting, feeling and, possibly, association of the Coketon area and thereby undermine its eligibility to the NRHP under Criterion D.

Therefore, we recommend that: 1) the actual area of potential effect be determined and that area be archaeologically surveyed and evaluated for effects under Section 106; 2) in order to mitigate the adverse effects to the integrity of setting of the site caused by placement of the bridge and the associated cumulative effects of the bicycle path, that the WVDOT undertake the development of a program of interpretive signage stretching from Thomas to the Hendricks gate. Such a program should focus on the industrial, social, and economic contributions of the Blackwater Industrial Complex and Coketon to the history of West Virginia and the nation. In addition, owing to Forest Service regulations and our internal agency responsibilities, the Forest Service should have design and production responsibilities for signage, while the WVDOT and the FHWA should bear all financial responsibility for signage.

We hope that our comments have been of use to you and look forward to continuing our review responsibilities under Section 106 of the National Historic Preservation Act.

Sincerely,

CLYDE N. THOMPSON
Forest Supervisor
CNT: jac
Enclosures
cc: Sandra Forney (FS Region 9), Ed Compton (FHWA), Susan Pierce (WVSHPo)
Mr. James Sothen  
Director, Engineering Division  
West Virginia Division of Highways  
1900 Kanawha Boulevard, East  
Building 5, Room 110  
Charleston, WV 25305-0430


Dear Mr. Sothen,

Pursuant to the terms of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties, and pursuant to the terms of the Archaeological Resources Protection Act of 1979 (ARPA) permit issued to the WVDOH for its Corridor H work on National Forest lands, as amended to WVDOH Special Use Permit CHT-01, we are submitting revised comments for the above-referenced report. These revised comments take into consideration the outcome of a meeting held between members of our respective staffs and the Federal Highway Administration on October 8, 2002 in Elkins.

It was decided at the October 8, 2002 meeting to implement a program to mitigate the potential effects of the construction of Corridor H to historic properties on Monongahela National Forest land. Such properties include portions of the National Register eligible Blackwater Industrial Complex.

In a previous letter, dated July 26, 2002, we indicated that the proposed construction of a flying bridge over the Blackwater Industrial Complex would constitute an adverse visual effect that would impact the site’s integrity of setting, feeling and, potentially, its integrity of association. Such effects would undermine the continuing eligibility of the site under Criterion D. At that time we indicated that an appropriate and effective means of mitigating this effect would be to undertake a program of interpretive signage along the former West Virginia Central and Pittsburgh Railroad grade. We suggested at that time that this program of signage be funded by the WVDOH and implemented by the Forest Service.

This mitigation effort was tentatively agreed to at the October 8th meeting in Elkins, and confirmed in a further communication with a representative of the Federal Highway Administration, Mr. Henry E. Compton, on October 17, 2002. Given the implementation of this agreement, to be formalized in a Memorandum of Understanding in the very near future, we can now find that the proposed construction of the flying bridge as described in the above-mentioned report will not constitute an adverse effect to the integrity of setting, feeling, or association of the Blackwater Industrial Complex.
Also, in the July 26th letter we expressed some concerns about construction activities in areas of the site where they may potentially impact intact archaeological deposit. Further consultation with your staff, discussion with individuals involved in the initial reclamation efforts, and in consideration of the larger mitigation measures agreed to, have led us to conclude that the construction of the proposed flying bridge will not constitute an adverse effect to buried archaeological or historic resources. During project implementation we recommend that construction activities avoid areas that were not in the reclamation area, but which are shown on historic maps and documents as the location of structures and features associated with the Blackwater Industrial Complex.

We appreciate the opportunity to comment on this matter. Should you require further information, please contact our Forest Archaeologist, Mr. John Calabrese, at (304) 66-1800, ext. 245.

Sincerely,

[Signature]

CLYDE N. THOMPSON
Forest Supervisor

CNT: jac

Cc: Henry E. Compton, Federal Highway Administration
    Susan Pierce, WV State Historic Preservation Office
    Sandra Forney, USDA, Forest Service, Eastern Region
October 30, 2002

Mr. James E. Sothen
Building 5, Room 450
Capitol Complex
Charleston, West Virginia 25305

RE: Corridor H - Blackwater Industrial Complex
    Archaeological and Historic District
FR#: 91-246-MULTI-229

Dear Mr. Sothen:

We have reviewed the draft Criteria of Effect Report for the above mentioned project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: “Protection of Historic Properties,” we submit our comments.

Although the Blackwater Industrial Complex has been affected by previous reclamation activity it retains its historic significance and much of its archaeological integrity. The Report states on page 14 that there will be no effect to the historic resource as defined by the Keeper of the National Register of Historic Places. We don’t agree with this assessment. Although it is stated that the pier placement will avoid all identified archaeological sites; there will be piers within the designated historic areas. As stated, any direct impact to the contributing features of the historic district will be avoided. We ask continued consultation with our office as final design and planning for the bridge crossing occur. Planning and construction documents must clearly delineate the location of the archaeological resources and industrial ruins within the historic district. Monitoring during construction is also important to insure avoidance. We request that the “Powerhouse Site” (46Tu299) be surrounded by snow fencing or other highly visible material to assist in its avoidance, and that no heavy machinery or equipment be allowed within or near the site. We also request that all staging areas, equipment storage, etc. be located in portions of the project area previously surveyed and found to contain no cultural materials.
Page 2
James E. Sothen
October 30, 2002

The report also evaluates the potential visual and auditory changes to the historic district. We do not agree with the method used in the report to determine the percentage of the historic district impacted by the change. Although areas at a greater distance from the bridge crossing will suffer a lesser impact, the actual area of crossing will experience visual and auditory change. Creating a mathematical percentage of impacted area does not eliminate the immediate impact to the district at the bridge crossing. What must be considered is the relative change to a district that is composed of buried and exposed industrial fragments of a major coke producing facility. The existing landscape has changed through abandonment and reclamation. Although it will be an alteration to the landscape, the bridge will not inhibit one’s understanding of the historic resource. The significance of the physical remnants is best served through interpretation on-site. The addition of a bridge will not inhibit understanding. (The modern New River Gorge Bridge which serves U.S. Route 19 illustrates this point. Although obtrusive to the landscape, this bridge does not adversely effect one’s ability to appreciate early modes of transportation in the Gorge historically. Fayette Station Bridge exemplifies the cultural theme of transportation.) We believe that there will be an effect, but the change to the landscape will not adversely effect the historic characteristics of the eligible resource. Direct impacts will not occur as stated by the report and indirect effects will not inhibit future understanding of the Blackwater Industrial Complex and the Coketon Study Area.

Finally, please know that we have thoughtfully considered the recent comments provided by the Monongahela National Forest (MNF). Since the issuance of their letter dated July 26, 2002, the recent letter dated October 22, 2002 and the October 8, 2002 meeting, we understand that the DOH and the MNF have resolved the concerns raised by the Forest Service’s staff.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call me or Joanna Wilson, Senior Archaeologist, at (304) 558-0220.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP: jlw

cc: Clyde Thompson, USDA, Monongahela National Forest
November 11, 2002

Kate Goodrich, Public Affairs Specialist
Monongahela National Forest
200 Sycamore Street
Elkins, WV 26241

RE: Freedom of Information Act Request

Dear Ms. Goodrich:

Please consider this letter as a formal request for information pursuant to the Federal Freedom of Information Act, 5 USC § 552.

We are interested in obtaining information concerning your agency's consultations on the environmental impact statements for the Appalachian Corridor II project, specifically regarding cultural resources.

Consider this request to include but not be limited to all reports, letters, memos, records of meetings, telephone conversations, electronic mail and/or data on disks, involving considerations of, and recommendations regarding, cultural resources and cultural resource management arrangements with any other state and federal agencies.

Please provide us with all related correspondence and records of meetings, including memos, notes of contact and records of phone conversations between your office and the WV State Historic Preservation Office, WV Department of Transportation, Federal Highway Administration and Advisory Council on Historic Preservation.

Corridor II Alternatives, a nonprofit, tax-exempt organization, hereby requests a waiver of any fees connected with this request because this request is made in the public interest and furnishing this information can be considered as primarily benefiting the general public. If for any reason the documents requested cannot be sent free of charge, we request immediate notification of the reasons for the denial and the costs involved prior to any copying. Corridor II Alternatives does not waive its rights to appeal any denial of this request.

Under the Programmatic Agreement with the Advisory Council for Historic Preservation, Corridor II Alternatives is a consulting party, and we should be informed of any and all meetings, communications and actions taken regarding the cultural resources affected by the Corridor II project.
I look forward to receiving your response within ten days.

Please call me at 636-2662 or email me if you have any questions about our request. Thank you for your attention to this matter.

Sincerely,

Hugh Rogers, President
Corridor II Alternatives

Cc: Andrea Furster, Esq.
Elizabeth Merritt, National Trust for Historic Preservation
Don Klina, Advisory Council on Historic Preservation
Susan Pierce, WV State Historic Preservation Office
Randolph Upperly, WV Department of Transportation
Thomas Smith, Federal Highway Administration Division Office
Brett Gainer, Federal Highway Administration Regional Office

Kate -
As far as I know, this should not be too burdensome.

We are particularly interested in Cokeson having heard this in fourth hand about meeting with WV DOT and their consultant.

Thanks,
Hugh
Corridor H Alternatives (CHA), a consulting party to the Section 106 process for the above-referenced project, hereby provides its comments on the Draft Criteria of Effects Report prepared by Michael Baker Jr., for the Blackwater Industrial Complex Archaeological and Historic District, which was circulated to the consulting parties on August 30, 2002, pursuant to Section X.A of the Programmatic Agreement for Appalachian Corridor H. For the following reasons, CHA disagrees with the Draft Report’s proposed determination that the construction of the Original Preferred Alignment for the Parsons to Davis segment of Appalachian Corridor H will have “no effect” on historic resources. Instead, the information provided in the Draft Criteria of Effect Report, as well as subsequent correspondence from consulting parties, plainly indicates that this alignment will have an adverse effect on the Blackwater Industrial Complex Archaeological and Historic District.

As the Draft Criteria of Effects report concedes, the proposed project will cross above the Blackwater Industrial Complex on a dual structure, 950-foot bridge in the vicinity of Coketon. The bridge will be approximately 180 feet above the historic district, and the piers and foundations for the bridge will be placed within the National Register boundaries of the historic district. In addition, the Draft Report concedes that the bridge structure will be plainly visible from numerous vantage points within the historic district. In fact, as the simulated photographs in the Draft Report graphically illustrate, the bridge will appear as a substantial intrusion that significantly diminishes the integrity of the landscape and setting for this historic district. The project will also increase noise levels within the historic district in some locations by more than 22 decibels, an increase that the Draft Report concedes will constitute a substantial noise impact under the West Virginia noise standards, and will exceed the FHWA’s noise abatement criteria applicable to even non-sensitive resources, 23 CFR Part 772, Table 1.
Mr. Tom Smith  
December 12, 2003  
Page 2

The proposed finding of “no effect” in the Draft Criteria of Effects Report appears to stem from a misapprehension that the FHWA is only required to consider effects to features or structures that have specifically been identified as contributing features to the historic district, such as the WVC & P Railroad grade or the coke ovens, and that open space, natural, and topographical features are non-contributing aspects of the Historic District. This plainly erroneous evaluation standard may have been based on the initial view of the West Virginia State Historic Preservation Officer (“SHPO”), when the agencies were in the process of assessing the historic significance of the Blackwater Industrial Complex, that the Blackwater Industrial Complex should be considered a discontinuous historic district due to reclamation activities that have altered portions of the area. However, the Keeper of the National Register expressly rejected this narrow view of the significance of the Blackwater Industrial Complex, and instead determined that the boundaries of the historic district should include the entire 1,693-acre complex. The bridge will be visible from, and indeed located within, substantial portions of the Blackwater Industrial Complex Archaeological and Historic District other than the reclamation area.

There is no support for the view that the unaltered landscape of the Blackwater Industrial Complex, including its open space and nature features, are not contributing resources to this historic district. Rather, this unaltered landscape plainly contributes to the setting of the specifically identified features, and the overall significance, of the Blackwater Industrial Complex Archaeological and Historic District. As the National Park Service guidance recognizes, the setting for archaeological districts “includes elements such as topographic features, open space, views, landscapes, vegetation, man-made features . . . and relationships between buildings and other features.” National Park Service Bulletin No.36, “Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts” (2000). As one court held, the FHWA “must consider more than individual buildings and structures in an historic district when analyzing the impact of a project,” but must also include elements as “[t]opographical features such as a gorge or the crest of a hill”, “[v]egetation”, and “[r]elationships between buildings and other features or open space.” Concerned Citizens Alliance, Inc. v. Slater, 176 F.3d 686, 697 (3d Cir. 1999) (citing National Park Service National Register Bulletin No. 15).

As the Advisory Council on Historic Preservation previously explained in the context of this project, “we do not agree that a highway located a mere 100, 200 or even 300 from that property is “in the distance,” particularly when that intrusive element is large in scale than it is distant from the property. Such a structure becomes . . . the dominate feature in the viewshed, intrusive and out of character with a relative intact rural setting.” Letter to Mr. Samuel G. Bonasso, PE. Secretary WVDOT, from John M. Fowler, Executive Director, ACHP (June 9, 1999) (copy attached). Indeed, as the U.S. Forest Service (“USFS”) stated in its comments on the Draft Criteria of Effects Report, “a bridge of the proportions necessary for this project cannot fail to have an adverse effect on the integrity of setting, feeling and, possibly, association” of the Blackwater Industrial Complex. See Letter from Clyde N. Thompson, Monongahela National
Mr. Tom Smith  
December 12, 2003  
Page 3  

Forest Supervisor, USFS, to Ben Hark, West Virginia Department of Transportation ("WVDOT"), dated July 29, 2002. Although the USFS subsequently changed its determination of adverse effect based on WVDOT’s willingness to providing funding to the USFS for a “program of signage,” better signage will not in any way avoid, minimize, or mitigate the adverse effects so eloquently described in the USFS’s original letter. The USFS’s change of position merely reflects a political compromise struck by the agency as a condition of obtaining funds from WVDOT rather than a consensus that signage will in any way alleviate the project’s adverse effects.

Finally, Corridor H Alternatives, Inc. disagrees with the conclusion in the Draft Criteria of Effects Report that the auditory impacts of the project will not result in an adverse effect on the Blackwater Industrial Complex Archaeological and Historic District because the noise-impacted area only represents approximately 8% of the total area occupied by the Historic District. Draft Criteria of Effects Report, at 12-14. As the courts have recognized, the determination of the impact on protected properties “requires a far more subtle calculation than merely totaling the number of acres to be asphaltered.” D.C. Federation of Civic Association v. Volpe, 459 F.2d 1231 (D.C. Cir. 1971), supp. op., 459 F.2d 1263, cert. denied, 405 U.S. 1030 (1972). Rather, the agency’s conclusions “must bear some relevance to the value, significance, and enjoyment of the lands at issue.” Allison v. Department of Transportation, 908 F.2d 1024, 1029 (D.C. Cir. 1990). The period of significance of the Blackwater Industrial Complex Archaeological and Historic District pre-dates the modern automobile, and the area’s setting is predominantly rural. The significant noise generated by highway traffic will be out-of-character with the Historic District and diminish its integrity, and therefore contributes to the adverse effect of the undertaking.

Please don’t hesitate to contact me at (202) 974-5142 if you have any questions or need any additional information.

Very truly yours,

Andrea C. Ferster

Enc.

cc: Mr. Don Klima, Advisory Council on Historic Preservation  
Ms. Susan Pierce, WV State Historic Preservation Office  
Mr. James Sothen, West Virginia Department of Transportation  
Mr. Clyde Thompson, Supervisor, Monongahela National Forest
Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

JUN - 9 1999

Mr. Samuel G. Bonasso, P.E.
Secretary, West Virginia Department of Transportation
1900 Kanawha Boulevard
Building Five, Room 110
Charleston, WV 25305-0430

Ref: Appalachian Corridor H
Federal Project APD-0484(059)
West Virginia

Dear Mr. Bonasso:

This letter follows up our earlier response to your concerns regarding the Council's handling of effects determinations. You raised concerns as to whether Council staff adhered to two basic legal principles: the Council's regulations implementing Section 106 of the National Historic Preservation Act and the Administrative Procedures Act.

We have carefully reviewed the position paper you provided which is clearly the product of considerable thought by your department. While we commend your efforts, we are, regrettably, at odds with your analysis and resulting conclusions. The issue of setting can present challenges to those involved in assessing how projects may affect historic properties. Existing guidance and accumulated experience offer some direction; however, all such professional judgements remain somewhat subjective and must be tempered by a healthy dose of common sense.

First the evaluation process: National Register guidance, as quoted in your paper, does state that property boundaries should include the surrounding land that "contributes to the significance of the resource by functioning as its setting." You also cite the National Register Manual for State Historic Preservation Review Boards which directs that boundaries should include "all the aspects or qualities that contribute the [the property's] significance." Underlying this National Register guidance is the fundamental principle that historic properties cannot be understood or appreciated if divorced from the environment in which they exist. The relationship of an historic property to its surroundings, and the historical and visual integrity of that relationship, are important factors in defining the geographic and three dimensional nature of the property as it exists today.
National Register guidance states that the physical features that constitute the setting of a historic property can be either natural or manmade including such elements as: topographic features (a gorge or the crest of a hill); vegetation; simple manmade features (paths or fences) and relationships between buildings and other features or open space. It further states that these features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its surroundings (How to Apply the National Register Criteria for Evaluation, p. 45).

In the context of the Council’s regulations, the environment comprising a property's setting extends beyond the visual to audible and atmospheric elements. For this reason, these elements are included in the consideration of impacts to setting, and it is within our purview to consider them as part of the environment. It is our view, however, that the Council's Criteria of Effect and years of experience working with a wide range of properties, that any discussion of setting must recognize current noise conditions as part of the environment. Your reading that ambient noise levels are somehow separate from the setting is incorrect.

With regard to determining how properties are affected; unfortunately, your reference to the Council’s regulations is repeatedly misquoted throughout your letter which may have led to your confusion about the appropriate application of those regulations. The Criteria of Effect (36 CFR § 800.9(a)) specifically cites location, setting, and use as factors which should be considered in addition to a property’s significant characteristics in determining effect. The Criteria of Adverse Effect (36 CFR § 800.9(b)) states: “An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property’s location, design, setting, materials, craftsmanship, feeling, or association...” The Council has consistently determined that introduction of a major modern engineering feature, such as a 150-foot double span overpass or a massive berm in close proximity to an historic structure in a substantially pristine setting, is an adverse effect. This finding is consistent with your paper’s method of considering dominant elements in the viewshed of an historic structure, and it is consistent with professional preservation practice.

The Council’s interpretation of this issue of setting has never been “if you can see it, then it's an adverse effect” as suggested by your paper. We agree that a highway visible “in the distance” to a person standing on the front step of an historic property might not, in itself, be considered an adverse effect. However, we do not agree that a highway located a mere 100, 200 or even 300 feet from that property is “in the distance,” particularly when that intrusive element is larger in scale than it is distant from the property. Such a structure becomes, according to your methodology, the dominant feature in the viewshed, intrusive and out of character with a relatively intact rural setting.

We also take exception to your allegation that Council staff did not adhere to the Administrative Procedure Act. We refer you to our correspondence dated December 15, 1998 (copy enclosed), which contains a specific discussion of your misinterpretation of the concept of setting and its relationship to historic properties. In the context of that discussion, we believe our notation of
proximity and scale of the proposed construction within these rural surroundings would lead a reasonable observer to conclude that these structures would constitute an intrusion within the setting, changing the character of a historic property’s relationship with its surroundings. We maintain that decisions made in this case were consistent with the governing legal standards, as well as with previous decisions made by the Council.

We regret the delay in responding; however, we have recently learned that you chose to widely distribute your letter to others without providing any notice to the Council. Consequently, we would appreciate receiving a list of parties and addresses to which your letter was directed so we might share our response with them. Since responsibility for making the determinations in question lies with the Federal Highway Administration, any further communication regarding the issues you have raised should also include their views.

We welcome any opportunities to discuss these issues further and would certainly be willing to meet with you and your staff for that purpose. We recommend that any further meeting to address these questions includes representatives of the Federal Highway Administration and the National Register. You may contact me at (202) 606-8505 should you wish to set up a mutually agreeable time to meet. We look forward to continuing the good working relationship among our respective staffs.

Sincerely,

John M. Fowler
Executive Director

Enclosure
James E. Sothen, P.E.
Director, Engineering Division
West Virginia Department of Transportation,
Division of Highways
1900 Kanawha Boulevard, East
Building 5, Room 110
Charleston, WV 25305-0430

Re: Appalachian Corridor H, Blackwater Industrial Complex, Archaeological and Historic District Criteria of Effects (COE) Report

Dear Mr. Sothen,

Pursuant to the terms of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties, and pursuant to the terms of the Archaeological Resources Protection Act (ARPA) of 1979 permit issued to the WVDOH for its Corridor H work on National Forest lands, as amended to WVDOH Special Use Permit CHT-01, we are responding to your request for concurrence with the findings presented in the above-referenced report.

Based upon the documentation provided in the report, and the design plans that avoid effects to archaeological and historic resources that contribute to the Blackwater Industrial Complex District, considered alongside the continued implementation and execution of the June 9, 2003 MOU between the USDAFS, the WVDOH, and the Federal Highway Administration, and in light of the expected continued implementation and execution of the August 11, 2003 Agreement entered into between the USDAFS and the WVDOH, we concur with the findings of the above-referenced report. Specifically, we find that the proposed project will have no effect to contributing elements of the District, and recommend that project activities proceed as planned.
We look forward to continuing our review responsibilities for this project. In particular, we look forward to reviewing detailed design plans as they become available. Should you have any questions about this response, or require further information, please do not hesitate to contact our Forest Archaeologist, Mr. John Calabrese, at (304) 636-1800, ext. 245.

Sincerely,

[Signature]

CLYDE N. THOMPSON  
Forest Supervisor

CNT: jac

cc: Henry E. Compton, Federal Highway Administration
June 23, 2004

Mr. James E. Sothen  
WV Division of Highways  
Building Five, Room 110  
Capitol Complex  
1900 Kanawha Boulevard East  
Charleston, WV 25305

RF: Blackwater Industrial Complex- Archaeological and Historic District  
Criteria of Effects Report, Appalachian Corridor II  
FR# 91-246-MULTI

Dear Mr. Sothen,

We have received the Criteria of Effects Report for the Blackwater Industrial Complex- Archaeological and Historic District. We provide our comments as required by Section 106 of the National Historic Preservation Act of 1966, as amended and its regulations, 36 CFR 800, “The Protection of Historic Properties.”

In our letter dated October 30, 2002 we provided comments regarding the potential effects to the Blackwater Industrial Complex. After review of the March 2004 report, we maintain that opinion. The bridge crossing will effect the district, but the district is composed of primarily historic archaeological features. There will be auditory and visual changes to the area, but the historic nature of the site will not adversely change. The significance of the physical remnants can be interpreted; the bridge will not adversely effect that understanding. Please know that we have thoughtfully considered the opinions of the public as evidenced in the appendices. However, the area has been extensively reclaimed; these changes should be considered as well when evaluating the impact of the proposed bridge to the existing elements of the historic district.

Thank you for the opportunity to comment. If you have any questions, please contact our office.

Sincerely,

Susan M. Pierce  
Deputy State Historic Preservation Officer
February 17, 2005

Mr. James Sothen
WV Division of Highways
Building 5, Room 110
Charleston, WV 25305

RE: Appalachian Corridor H, Parsons to Davis
and Associated Truck Route
State Project X142-H-38.99
Federal Project CHI-484(59)
FR# 91-246-MULTI-300

Dear Mr. Sothen,

We have received and reviewed Management Summary, Phase I Archaeological Investigations of Previously Unsurveyed Portions of the Revised Original Preferred Alternative in the Parsons-to-Davis Project, As Well As as Associated Truck Route, Appalachian Corridor H, Tucker County, West Virginia. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

The management summary satisfactorily addresses our concerns regarding the presence of archaeological resources within the above mentioned project area. Systematic pedestrian and subsurface investigations of the preferred alternative resulted in the recovery of an isolated artifact from USA #1 Test Area and in the discovery of modern debris in Pocahontas #5 Test Area. For your records, the isolated find has been assigned site number 46Tu326. Further subsurface investigation around the positive test pit failed to find additional artifacts. It is our opinion that this isolated find is not eligible for inclusion in the National Register of Historic Places. No further work is recommended for USA #1 Test Area. We concur with that recommendation.

It is our understanding that modern debris in Pocahontas #5 Test Area was observed scattered across the ground surface and in the soils of one shovel test pit. These items are considered to be part of a modern dump and not an archaeological site. We concur with that determination. A ground depression and concrete foundation were observed outside and to the east of the proposed truck route corridor. It is thought they may be associated with a building that appears on a 1921 USGS Topographic map of the area. This building is no longer extant and is thought to fall outside of the proposed corridor. No evidence of this building or other historic remains were found within the proposed right-of-way. No further work is recommended for this test area. We concur with that recommendation. However, if the right-of-way alignment shifts so that the foundation and depression fall within it, we request that additional subsurface investigation be undertaken to determine the nature of these resources. It is our opinion that this project will have no effect to any known archaeological site that is eligible for or included in the National Register of Historic Places.

We appreciate the opportunity to be of service. If you have any questions regarding our comments or the Section 106 process, please contact me at (304)558-0240.

Sincerely,

Lora A. Lamarre
Senior Archaeologist
Informal

Section 7 Consultation
Mr. David E. Bender  
Division Administrator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301

Dear Mr. Bender:

The U.S. Fish and Wildlife Service has reviewed your Biological Assessment (BA) which was prepared to evaluate the effects of the construction of Sections 3-15 of Appalachian Corridor H in Randolph, Tucker, Grant and Hardy Counties, West Virginia on the endangered Indiana bat, *Myotis sodalis*. Sections 3-15, constitute the remaining sections of Corridor H to be constructed. The highway extends approximately 92.0 miles between Kerns in Randolph County and the Virginia line east of Wardensville in Hardy County.

The Service previously reviewed the BA prepared for Section 16 in regard to the Indiana bat. Section 16 extends approximately 9.0 miles from Aggregates north to Kerns in Randolph County. The Service concurred with the BA that construction of Section 16 was not likely to adversely affect the Indiana bat. This was based primarily on the mitigation measure that the clearing of potential roost trees (PRTs) would only take place during the hibernation period, November 15 thru March 31.

There are approximately 30 known Indiana bat hibernacula spread across the limestone regions of eastern West Virginia in Preston, Tucker, Randolph, Pendleton, Pocahontas, Greenbrier, Monroe, and Mercer Counties. The population of these hibernacula in West Virginia range in size from one to 9,000 Indiana bats. Recent data indicate that the area within an approximate 5.0-mile radius of a hibernaculum is important foraging and roosting habitat for the Indiana bat in the fall swarming period, August 15 through November 15. In addition, male Indiana bats are known to occur during the summer in close proximity to their hibernaculum. Big Springs Cave, located in the Fernow Experimental Forest, is an Indiana bat hibernaculum within a 5-mile radius of portions or all of Sections 13, 14 and 15 in Tucker County. Males have been recorded by the West Virginia Division of Natural Resources (WVDNR) as remaining in the vicinity of Big Springs Cave during the summer months and both sexes are known to occur during the fall
swarming period. In January, 1999, the WVDNR observed 210 Indiana bats hibernating in Big Springs Cave.

Despite a concerted effort, especially over the last two seasons, there is no historic or recent evidence that female Indiana bats utilize any portion of West Virginia for summer maternity range. Therefore, West Virginia has been designated by the Service as a non-core area for the bat. Based on the presence of hibernacula nearby and the presence of potential summer habitat in the study area, utilization of the area by Indiana bats for summer range is possible. Summer habitat, used for foraging and roosting, is defined as riparian, bottomland or upland forest and old fields and pastures with scattered trees. Roost habitat primarily consists of exfoliating bark with space for bats to roost between the bark and the bole of the tree, such as would be found on dead trees of many species or live species such as shagbark hickory. Tree cavities, crevices, splits, or hollow portions of tree boles and limbs also provide roost sites.

Because of the abundance of potential summer/maternity habitat for the Indiana bat in the vicinity of Corridor H, the Service recommended that mist net surveys be conducted on the remaining sections of the proposed highway, except for portions or all of Sections 13, 14 and 15, which are within the 5-mile radius of Big Spring Cave. Since Indiana bats must be assumed to occupy summer and fall habitat in portions or all of this area, mist netting is unnecessary. Specific survey protocol, as established and approved by the Service and the WVDNR, are accepted by the Service as a reasonable effort to establish presence or absence of the species.

Mist net surveys were conducted between May 15 and August 15, 1998, in the portion of Section 15, outside of the 5-mile radius of Big Springs Cave, and Section 4 in Hardy County. Section 4 begins near Baker and extends approximately 6.0 miles to near County Road 23/12. A total of 10 bats representing three species were captured in the surveys. In addition to the mist net surveys conducted in Sections 15 and 4, 17 (seventeen) locations throughout the Monongahela National Forest were surveyed by the U.S. Forest Service (USFS) during July and August, 1997 and May and August, 1998. These surveys netted 1,088 bats representing nine species. In addition, the WVDNR conducted two additional mist net surveys in prime locations for forest bats in West Virginia. One site was located on the Monongahela National Forest on North Fork Mountain in Pendleton County and the other was located in the eastern panhandle in the Sleepy Creek Wildlife Management Area in Berkeley County. A total of 284 bats were collected representing seven species. In addition to the above mentioned mist net surveys conducted by the USFS and WVDNR, other mist net surveys were conducted in West Virginia associated with the proposed Elkins Bypass, the Westvaco Experimental Forest, and various other bat studies associated with abandoned mine portals, the Ohio River Islands National Wildlife Refuge, and academia. A total of 1,568 bats have been collected in West Virginia during the summers of 1996, 1997 and 1998 by numerous investigators and no Indiana bats were collected in any of these surveys. The only summer records, May 15 through August 15, for this species are males captured in close proximity to Big Springs Cave in the Fernow Experimental Forest.

In addition to mist net surveys, the BA evaluated and compared the amount of remaining habitat after construction of Corridor H. The habitat is expressed by the number of PRTs. PRTs are
defined as trees >6 inches diameter at breast height with loose or exfoliated bark or cavities. It was determined that only approximately 0.02% of the available habitat within the relevant watersheds would be affected by the construction of Corridor H. Only approximately 0.01% would be affected in the 5-mile radius of Big Springs Cave. The BA stated that the remaining habitat would be sufficient to support a population of Indiana bats far greater than presently occurs in West Virginia.

Indiana bat surveys, using the most currently accepted sampling protocol, which may include a combination of mist netting, anabat technology, or radio telemetry, will continue to be conducted between May 15 and August 15 on all Sections of Corridor H as they are prioritized in the pre-construction phases. This is acceptable to the Service because it would be physically impossible to collect all survey data simultaneously along the entire length of the corridor. Construction plan delays would inevitably make some, if not most, of the survey data old and obsolete and therefore, require additional surveys. Sections 5, 6, and a portion of Section 7 in the Moorefield area of Hardy County will be mist netted this summer. Reports will be submitted to the Service upon the completion of each of the mist netting efforts. If a lactating female were to be captured, further, more detailed surveys, must be implemented to determine location and size of the maternity colony. An array of mitigation measures may be implemented to avoid adverse impacts to the species if they are found to be present in the proposed construction alignment. These may include; minor alignment shifts, seasonal construction activity restrictions, and/or creation of potential roosting habitat in the adjacent land.

To avoid take of the Indiana bat in portions of Sections 13 and 15 and all of Section 14, all within a 5-mile radius of Big Springs Cave, removal of PRTs during the hibernation period, November 15 through March 31, and/or inspecting individual PRTs for the presence of bats before removal will occur. In addition, although not intended to lessen the impact specifically to the Indiana bat, approximately 11.0 miles of Corridor H will be elevated on structure, resulting in less permanent habitat disturbance.

Based on the great amount of surrounding available potential habitat remaining when compared to the project areas, and considering your plans to remove all PRTs in the project area between November 15 and April 1 or individually investigating a few PRTs which were not seasonally removed, the Service believes that the construction of Section 4, a portion of Sections 13 and Sections 14 and 15 are not likely to adversely affect the Indiana bat. Therefore, no further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. [531 et seq.) is required with the Service on these Sections. The Service will review the bat survey reports and respond accordingly in our continued Section 7 consultation process on the remainder of the Corridor. Should project plans change, or if additional information on listed and proposed species or species of concern becomes available, this determination may be reconsidered.

Although no Indiana bats are anticipated to be adversely affected by the construction of Section 4 and Sections 13, 14, and 15 within five miles of Big Springs, other forest bats and their habitat will be impacted by these projects. Measures to mitigate the impacts of Corridor H to terrestrial resources were addressed in the Corridor H, Final Environmental Impact Statement Vol. III.
Mitigation Document, pages 25 and 26. Mitigation funds have been set aside to purchase unique habitat in the vicinity of Corridor H. Hellhole Cave, located in the Germany Valley in Tucker County, harbors one of the most important, if not the most important and largest hibernating assemblage of bats in the eastern United States, including approximately 40% of the eastern population of the Indiana bat (8,548, 1999) and approximately 40% of the entire known population of the endangered Virginia big-eared bat, *Corynorhinus townsendii virginianus* (9,597, 1999). The Service has officially designated Hellhole Cave as “Critical Habitat” for the Virginia big-eared bat and the Indiana bat. Critical habitat is defined as habitat which is essential for the recovery of the species. In addition to federally listed species, approximately 100,000 Little brown bats, *Myotis lucifugus* are known to hibernate in the cave. To control human disturbance to the hibernating bat population, Hellhole Cave has been protected since the early 1980’s by a fence and a landowner agreement. The Service believes that Hellhole Cave is one of the most important and certainly unique bat caves in the Eastern United States. The future of Hellhole Cave has become less certain due to the planned expansion of limestone quarrying in the Germany Valley. Insuring Hellhole Cave’s future protection would help offset permanent habitat change as a result of Corridor H and would be a significant pro-active measure to maintain bat populations in West Virginia, including the Indiana bat and the Virginia big-eared bat. We recently met with members of your staff and other interested parties to discuss this possible option. The Service encourages the West Virginia Division of Highways to assist the Service and the WVDNR to work with the local landowner to secure permanent protection for this globally significant cave. The Service would certainly encourage your agency to pursue the possibility of contributing funds to the purchase of Hellhole Cave.

If you have any questions regarding these comments please have your staff contact William A. Tolin of my staff, or call me directly, at 304-636-6586.

Sincerely,

Jeffrey K. Towner
Field Supervisor
Mr. James E. Sothen  
West Virginia Department of Transportation  
Division of Highways  
1900 Kanawha Boulevard East  
Building 5, Room 110  
Charleston, West Virginia 25305-0430

Dear Mr. Sothen:

The U.S. Fish and Wildlife Service (Service) has reviewed your Biological Evaluation (BE) regarding the effects of Appalachian Corridor H on the endangered Virginia big-eared bat, *Corynorhinus townsendii virginianus*. Appalachian Corridor H extends approximately 100.0 miles between Elkins in Randolph County, West Virginia to the Virginia line near Wardensville in Hardy County, West Virginia. The BE addresses the potential impacts of the completion of Corridor H on the Virginia big-eared bat and includes a summary of past informal consultation regarding the effects of Corridor H on the Virginia big-eared bat. Additionally, the Service has reviewed your March 13, 2001, letter regarding new information on Dyers and Baker Caves as it relates to their importance as supporting winter or summer colonies of Virginia big-eared bats in the vicinity of the Baker to Wardensville section of Corridor H. The possibility of these caves providing habitat for the Virginia big-eared bat was brought to the attention of the West Virginia Division of Highways by the Stewards of the Potomac Highlands. Prior to this latest need for data gathering in regard to bat surveys of Dyers and Baker Caves, the Service had concluded that the construction of Corridor H would not adversely affect the Virginia big-eared bat because they were not known to exist in or near the selected corridor.

Baker Cave is located approximately 0.2 mile from the proposed corridor near Baker, Hardy County. A winter bat survey was conducted in Baker Cave on March 2, 2001. A total of 32 bats representing three species was observed hibernating in the cave. In addition, on June 23 and 24, 1999, mist nets were erected to completely enclose the entrance to Baker Cave in an effort to determine if the Virginia big-eared bat utilizes the cave as a maternity colony. No Virginia big-eared bats were observed during the winter hibernation survey and the summer mist net survey.
Dyers Cave is located approximately 1.5 miles from the proposed corridor in Hardy County. A winter bat survey was conducted in Dyers Cave on February 25, 2001. A total of 442 bats representing four species was observed hibernating in the cave. In addition, there were no signs of maternity use by Virginia big-eared bats in the cave.

Based on the results of the hibernacula and mist net surveys conducted in Baker Cave and Dyers Cave, the Service believes that these caves are do not constitute significant winter and summer colonies of the Virginia big-eared bat. In addition, no caves which support significant winter and summer colonies of the Virginia big-eared bat are located with 7.0 miles of the proposed corridor. The Service believes that the completion of Appalachian Corridor H, including the Baker to Wardensville section, is not likely to adversely affect the Virginia big-eared bat. Therefore, no further Section 7 consultation under the Endangered Species Act is required with the Service. Should project plans change, or if additional information on listed and proposed species or species of concern becomes available, this determination may be reconsidered.

If you have any questions regarding these comments, please have your staff contact our Endangered Species Specialist, Mr. William A. Tolin, or contact me directly, at (304)-636-6586 or at the letterhead address.

Sincerely,

[Signature]

Jeffrey K. Towne
Field Supervisor
Mr. James E. Sothen  
West Virginia Department of Transportation  
Division of Highways  
1900 Kanawha Boulevard East  
Building 5, Room 110  
Charleston, West Virginia 25305-0430

Dear Mr. Sothen:

This responds to your letter dated August 20, 2001, regarding the occurrence of the endangered West Virginia northern flying squirrel, *Glaucomys sabrinus fuscus* (WVNFS) within the Blackwater Avoidance Area (BAA) in the Thomas to Davis section of the Parsons to Davis Project of Appalachian Corridor H, Tucker County, West Virginia. The BAA was mandated in accordance with the Corridor H Settlement Agreement (February 2000), as an area north of the original preferred alternative to study new alignments for the highway. A Supplemental Environmental Impact Statement is currently being prepared to study the impacts of the alignment shifts.

The endangered species information was submitted in response to the U.S. Fish and Wildlife Service's (Service) letter dated July 14, 2000, pursuant to Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA). The Service's letter contained, in part, information and recommendations regarding federally listed species which could occur in the new study alignments. These species included: the endangered Indiana bat, *Myotis sodalis*; the endangered Virginia big-eared bat, *Corynorhinus townsendii virginianus*; the endangered WVNFS; the threatened Cheat Mountain salamander, *Plethodon nettingi*; and the endangered running buffalo clover, *Trifolium stoloniferum*. The Service recommended that an analysis of the habitat be conducted in any new alignments to determine the likelihood of these species occurring, and if suitable habitat did exist, that appropriate surveys to determine their presence should be conducted.

Dr. Edwin D. Michael conducted a habitat suitability inventory in the BAA. The preferred habitat of the squirrel consists of mixed northern hardwoods with a conifer component of red spruce or hemlock. Several suitable habitat areas were selected and live trapped. Survey results revealed that at least two population centers of the WVNFS occur in the BAA, one in the Right
Fork of the Big Run watershed and the other in the Middle Run watershed. The larger population, represented by 29 captures of the WVNFS, is located on the Right Fork of Big Run at the western edge of the BAA. The location of this population precludes the opportunity of selecting an alternative in this western portion of the BAA which would not traverse this occupied habitat and not potentially result in incidental take. Therefore, the Service encourages the West Virginia Division of Highways (WVDOT) to investigate an alternative that will not result in incidental take of the WVNFS. If a feasible alternative exists which does not adversely affect the WVNFS, the WVDOT should give it strong consideration.

If you have any questions regarding these comments, please have your staff contact our Endangered Species Specialist, Mr. William A. Tolin, or contact me directly, at (304)-636-6586 or at the letterhead address.

Sincerely,

William A. Tolin
Jeffrey K. Towner
Field Supervisor
Mr. James E. Sothen
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305-0430

Dear Mr. Sothen:

The U.S. Fish and Wildlife Service (Service) has reviewed the mist net survey report dated
October 2001, prepared to determine the possible presence of the Indiana bat, Myotis sodalis in
the vicinity of the proposed Appalachian Corridor H, Parsons to Davis Project in Tucker County,
West Virginia. The report was prepared pursuant to Section 7 of the Endangered Species Act, as
amended (16 U.S.C. 1531 et seq.); and in accordance with your programmatic Biological
Assessment (BA) dated March 3, 1999, for the remaining, unfinished Sections 3-15 of Corridor H.
In our letter dated June 21, 1999, commenting on the BA, the Service agreed that Indiana bat
mist net surveys could be conducted on segments of the corridor as they were prioritized in the
construction schedule. This was acceptable to the Service because it would be physically
impossible to collect all survey data simultaneously along the entire length of the approximately
100.0 mile corridor, and because construction plan delays could make some survey data old and
obsolete. The Parsons to Davis Project begins on the western edge of Backbone Mountain near
U.S. Route 219 and proceeds approximately 9.0 miles in a northeast direction to just north of
Davis along Route 93 in Tucker County.

Twenty three (23) survey sites were selected in flight corridors either over streams or through
natural open corridors in potential foraging and roosting habitat of the Indiana bat in the vicinity
of the proposed highway. Survey methodology closely followed the standard protocol described
in the Draft Indiana Bat Recovery Plan for mist netting Indiana bats. Fifty one (51) bats
representing six (6) species were collected in the mist net survey conducted between July 9 and
August 3, 2001. No Indiana bats were collected in the survey, suggesting they occurred in very
low numbers or were absent.

Based on these survey results, the Service believes that construction of the Parsons to Davis
Project of Appalachian Corridor H is unlikely to adversely affect the endangered Indiana bat.
Therefore, no further Section 7 consultation under the Endangered Species Act is required with the Service for this project. Should project plans change, or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

If you have any questions regarding these comments, please have your staff contact our Endangered Species Specialist, Mr. William A. Tolin, or contact me directly, at (304)-636-6586 or at the letterhead address.

Sincerely,

Jeffrey K. Towner
Field Supervisor
March 12, 2002

Mr. Ed Compton, P.E.
Environmental Specialist
Federal Highway Administration
Geary Plaza, Suite 200
700 Washington St., E.
Charleston, WV 25301

Dear Mr. Compton:

The West Virginia Division of Natural Resources, Wildlife Resources Section (WRS) and the U.S. Fish and Wildlife Service (Service) have reached consensus on handling of habitat units for Corridor H. We propose that habitat units be valued in the following manner.

Habitat Suitability Indices (HSIs) were developed by the Service to quantify a parcel’s ability to support a wildlife species. It identifies strengths and weaknesses of the tract by ranking various aspects of the habitat along a continuum from 0.0 (unsuitable habitat) to 1.0 (highly suitable habitat). Habitat Units (HUs) are generated by multiplying these indices by the acreage. HUs can be used as common currency to assess habitat losses and measure mitigative measures taken. Within this framework, a dollar value is never assigned to a HU, because the cost is unknown until the management treatment is implemented. Any such value is highly specific and applicable only to the site.

HSIs were determined for a number of wildlife guilds residing within the right-of-way of Corridor H. A total of 6,145 HUs were identified for this project. Concurrently, negotiations were underway to identify a financial settlement amount for terrestrial impacts. It is the desire of both agencies to apply the HUs to purchase and protect unique habitat. In 1995, when the terrestrial project impacts were being tallied, it was necessary for a dollar figure to be calculated for project funding. A figure of $1.8 million was calculated based on averaged property values of lands suggested for possible purchase and preservation at that time. The negotiated amount ($1.8 million) has become permanently attached to the 6,145 HU’s, giving each HU a value of approximately $293.

It is not our intent to defend using the HSI for establishing a dollar value on habitat in the long term. The HSI, however, places impacted habitat and habitat created or otherwise provided as
mitigation on an equal footing while allowing evaluation and mitigation of that habitat with numerical consistency.

Linking habitat values, as measured by HSIs, with dollar values is, in general, an inappropriate exercise never intended by model developers. However, having agreed to a total dollar amount, linking HUs to dollars in this unique case will allow purchase of the terrestrial mitigation which all parties agree is the most beneficial result for the wildlife resources involved.

This amount is specific to this project and should not be construed as representing the actual HU value on this or any other project, nor is it to be construed as establishing a precedent. Having issued this disclaimer, we suggest that the WV Division of Highways receive one HU for every $293 dollars spent. A zero balance will be realized when all $1.8 million is spent.

We hope this proposal meets with your approval and precipitates the release and expenditure of these mitigation dollars. If you have any questions regarding this proposal, please do not hesitate to contact Keith Krantz (WRS) or John Schmidt/Bill Tolin (Service) of our respective staffs at your earliest convenience.

Sincerely,

Curtis I. Taylor
Chief, Wildlife Resources Section

Jeffrey K. Towner
Field Supervisor,
West Virginia Field Office
U.S. Fish & Wildlife Service

CIT/JKT/kkj
United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241
AUG 1 2 2002

James E. Sothen
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East
Building 5, Room 110
Charleston, West Virginia 25305-0430

Dear Mr. Sothen:

The U.S. Fish and Wildlife Service (Service) has reviewed your letter dated July 29, 2002, which summarizes the results of the Cheat Mountain salamander, *Plethodon nettingi*, surveys on the proposed alternative alignments of the Parsons-to-Davis Project of the Appalachian Corridor H highway. In a letter dated July 14, 2000, the Service indicated that the federally threatened Cheat Mountain salamander could occur in the study area and requested that surveys for the Cheat Mountain salamander be conducted if suitable habitat existed. The suitable habitat and salamander inventories were conducted by Dr. Thomas K. Pauley and Dr. Mark B. Watson in the study area in 2000, 2001, and 2002, during suitable climatic conditions.

Although suitable habitat for the Cheat Mountain salamander did occur in the study area, no Cheat Mountain salamanders were collected in the surveys. Based on these results, the Service believes that the construction of the Parsons-to-Davis Project is not likely to adversely affect the Cheat Mountain salamander. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the Service in regard to the Cheat Mountain salamander on the Parsons-to-Davis Project. Should project plans change, or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

If you have any questions regarding these comments, please have your staff contact our Endangered Species Specialist, Mr. William A. Tolin, or contact me directly, at (304)-636-6586 or at the letterhead address.

Sincerely,

Jeffrey K. Towner
Field Supervisor
Dear Mr. Sothen:

Pursuant to your request, dated August 21, 2002, the U.S. Fish and Wildlife Service (Service) has reviewed the Biological Assessment for the West Virginia Northern Flying Squirrel (BA). The BA was prepared to evaluate the impact of alternative alignments being considered in the Appalachian Corridor H, Parsons to Davis Project on the endangered West Virginia northern flying squirrel, *Glaucomys sabrinus fuscus* (WVNFS). These comments and recommendations are submitted in accordance with Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA).

By letter, dated July 14, 2000, the Service provided a list of federally listed species, including the WVNFS, that could occur within a new study area outside of the Blackwater Canyon Avoidance Area. Live-trapping surveys were conducted in the study area along the avoidance alternatives and shifts to the original preferred alternative. The WVNFS was discovered in two locations: along Big Run of the Blackwater River, and Middle Run of the North Fork of the Blackwater River. In a letter dated August 24, 2001, the Service recommended that the West Virginia Division of Highways consider alternative alignments that would minimize or avoid impacts to these newly discovered populations. The subject BA responds to our August 24, 2001 recommendation by presenting two basic alternative alignments (SAA1 and SAA2) believed to avoid impacts to the WVNFS.

On September 6, 2001, the Service amended Appendix A, Guidelines for habitat Identification and Management for *Glaucomys sabrinus fuscus* of the Appalachian Northern Flying Squirrels Recovery Plan (1990) (enclosed). Prior to the amendment, the presence of the WVNFS in a project area was determined by either placing and monitoring nest boxes or live trapping. The Service, the West Virginia Division of Natural Resources, the Monongahela National Forest and
the Recovery Team agreed, based on the data gathering over the past 10 years, that this approach may not have protected WVNFS habitat to the fullest extent possible. The Service and others believe that the WVNFS is less likely to use nest boxes or enter traps in good quality habitat due to the natural presences of numerous den sites and an abundance of preferred foods. Therefore, if an area exhibits suitable habitat, it is assumed to be potentially occupied.

The BA clearly shows that none of the alternatives or combinations thereof, can avoid suitable habitat. In addition, William A. Tolin, Endangered Species Specialist of the Service’s West Virginia Field Office, met on-site with Ms. Mindy Ramsey and Ms. Martha Dobynes of Michael Baker, Jr. to review the mapping of the potential habitat. The Service believes far more suitable habitat exists along all the study alignments than is depicted in the BA. This determination is primarily based on the fact that suitable habitat should also include buffers of approximately 150 feet and corridors necessary to provide linkages between suitable habitat. In addition suitable habitat can be represented by very little conifer in the understory which is probably not all picked up by the satellite imagery used in the BA.

The Service believes that based on the presence of suitable habitat in sections of all alternative alignments, it is impossible to avoid incidental take of the WVNFS. However, the Service recommends that a more thorough evaluation of the presence of suitable habitat along the alignments be accomplished to compare the degree of direct and indirect disturbance between alternatives and to aid in the selection of the least damaging alternative as it relates to the WVNFS.

After the National Environmental Policy Act review has been completed, the Service recommends that the evaluation of selected alternative’s impacts to the WVNFS be incorporated into an additional, separate Biological Assessment pursuant to Section 7 of the ESA. Biological Assessments are designed to assist federal agencies in determining if formal consultation is required. If it is determined that the proposed action “may affect” a federally listed species the federal agency must request, in writing, formal consultation with this office, pursuant to Section 7(a) of the ESA.

If you have any questions regarding these comments, please have your staff contact our Endangered Species Specialist, Mr. William A. Tolin, or contact me directly, at (304)-636-6586 or at the letterhead address.

Sincerely,

[Signature]

Jeffrey K. Towner
Field Supervisor

Enclosure
United States Department of the Interior
FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

October 14, 2004

Mr. James E. Sothen
WV Dept. of Transportation
Division of Highways
1900 Kanawha Boulevard, East
Building FIVc, Room 110
Charleston West Virginia 25305-0430

Re: Appalachian Corridor H, Parsons to Davis, West Virginia

Dear Mr. Sothen:

The U.S. Fish and Wildlife Service (Service) has reviewed the Appalachian Corridor H Parsons to Davis Project, Biological Assessment for the West Virginia Northern Flying Squirrel (BA) and provides the following comments. The West Virginia Division of Highways (WVDOH) in conjunction with the Federal Highway Administration (FHA) proposes to construct an approximately 9-mile section of the proposed Corridor H highway between Parsons and Davis, Tucker County, West Virginia. These comments are submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

On August 9, 2004 the Service received a draft copy BA for the West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus) (WVNFS). On August 23, 2004 the Service met with members of your staff, your project consultants, and the FHA to discuss the conclusions and content of the BA as well as future actions on this project. On September 8, 2004 the Service received a revised version of the BA that incorporated changes recommended at our previous meeting.

The BA evaluates four alternatives including the no build alternative, two “squirrel avoidance alternatives” (with sub-alternatives), and the Revised Original Preferred Alternative (ROPA). Based on mapping of WVNFS habitat within the action area, all of the build alternatives would directly impact “highly suitable” and “suitable” WVNFS habitat. Additional direct and indirect effects including fragmentation, barriers to travel corridors, and disposal of fill material are anticipated for all build alternatives. The BA therefore concludes that all of the alternatives evaluated, except the no build alternative, would be likely to adversely affect the WVNFS. The
ROP A is the shortest route and would involve the least amount of cut and fill. As a result, the BA further concludes that the ROP A would impact the least amount of "highly suitable" and "suitable" WVNFS habitat.

The Service concurs that all build alternatives are "likely to adversely affect" the WVNFS. Therefore, formal consultation will be required if the WVDOH wishes to proceed with construction of the proposed project as described in any of the alternatives evaluated.

The Service has not received a request to initiate formal consultation from the WVDOH. As consistent with National Environmental Policy Act procedures and agreements made during project meetings, the WVDOH will use the information developed in this BA to aid in selecting a preferred project alternative. The selected alternative will then be presented in a Revised Preferred Alternative Report. Once the preferred alternative is selected, the WVDOH will work with the Service and other resource trustees to develop appropriate conservation and minimization measures that will be incorporated into the selected alternative. These measures should benefit and enhance WVNFS conservation efforts consistent with section 7(a) of the ESA, and minimize project impacts to the WVNFS to the extent practicable. Formal consultation will not be initiated until these steps are completed and the Service receives a completed initiation package that fully describes the proposed project.

Additionally, for your future information, please note that recent captures near Otter Creek cabin have documented WNNFS at elevations as low as 2300 ft above sea level. We appreciate your commitment to working with the Service to address endangered species issues, and we look forward to continuing our cooperative efforts on this project. If you have further questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

Thomas R. Chapman
Field Supervisor

RECEIVED
OCT 20 2004
ENGINEERING DIVISION
WV DOH
August 23, 2005

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99 C-2
Appalachian Corridor H
Tucker County
Formal Consultation Initiation

Mr. Thomas R. Chapman
Field Supervisor
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

Dear Mr. Chapman:

With this letter, the Federal Highway Administration (FHWA) is requesting the initiation of formal consultation with the U.S. Fish and Wildlife Service regarding the potential effects of the Parsons-to-Davis section of Appalachian Corridor H project on the West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus).

We have enclosed the information required to initiate formal consultation under the Service’s regulations (50 CFR 402.14(c)). The enclosed materials include:

- WV Northern Flying Squirrel Formal Consultation Initiation Package – August 2005
- WV Northern Flying Squirrel Biological Assessment – August 2004
- WV Northern Flying Squirrel Biological Assessment – August 2002
- Amended Preferred Alternative Report – November 2004
- Supplemental Draft Environmental Impact Statement – December 2002
- Final Environmental Impact Statement – April 1996
The initiation package provides a detail description of the action being considered, a description of the specific area that may be affected by the action, a description of the listed species and/or critical habitat and an analysis of potential cumulative effects. As noted above, all relevant reports and studies have been included for your use and information.

In accordance with U.S. Fish and Wildlife Service guidance, the FHWA is also requesting an acknowledgement letter and/or e-mail within 30 working days of receipt of the initiation package to indicate the actual initiation date for formal consultation. If you have any questions concerning this matter, please contact me at (304) 347-5268 or via e-mail at henry.compton@fhwa.dot.gov.

Sincerely yours,

Henry E. Compton, P.E.
Planning & Environment Team Leader

Enclosures

cc: File, Reading, HEC, WVDOH(Hark)
HEC:hec 08/17/05

http://www.fhwa.dot.gov/wdiv/wv.htm
Formal
Section 7 Consultation
Mr. Henry E. Compton  
Division Environmental Coordinator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301  

Re: Appalachian Corridor H, Parsons to Davis: Formal Consultation Initiation  

Dear Mr. Compton:

This letter acknowledges the U.S. Fish and Wildlife Service’s August 22, 2005 receipt of your August 19, 2005 letter requesting initiation of formal section 7 consultation under the Endangered Species Act. The consultation concerns the possible effects of the proposed construction of Appalachian Corridor H, Parsons to Davis on the West Virginia northern flying squirrel (Glaucomys sabrinus fuscus).

The Service has reviewed the information provided in your initiation package. While the package appears to be substantially complete, we have determined that we have not yet received all the information necessary to initiate formal consultation on this project. The additional information required is listed below:

- Your initiation package includes two different versions of Appendix B (Conservation Measures). Please clarify which version is the appropriate one for us to use in the formal consultation process.

- Both versions of Appendix B refer to Exhibit 4, which is supposed to detail plans to bifurcate a portion of the highway. However, we were not able to locate an Exhibit 4 in the initiation package. Please provide a copy of this document.

- Section 4.4 Indirect Effects – Habitat Remnants states that you identified the areas that would be isolated by the highway and would be considered too small to support a viable population. The Service requires more information on what procedures were used to make this determination, including what threshold value was used to determine whether the interdicted areas are "too small," and the supporting data that was used to make this
determination. In addition, Table 3 quantifies the acreage that would be affected in this manner. However, no map is provided that allows us to determine where these affected areas are located. We recommend highlighting the identified areas on a map similar to the ones provided as Exhibit 1.

The formal consultation process for this project will not begin until we receive all of the information listed above. We will notify you when we receive this additional information. Our notification letter will also outline the dates within which formal consultation should be complete and the biological opinion delivered on the proposed action.

The Service recognizes and appreciates the amount of early coordination that occurred prior to submittal of this package. We appreciate your commitment to working with the Service to address endangered species issues, and we look forward to continuing our cooperative efforts on this project. If you have further questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

[Signature]

Thomas R. Chapman
Field Supervisor
October 25, 2005

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99 C-2
Appalachian Corridor H
Tucker County
Formal Consultation Initiation

Mr. Thomas R. Chapman
Field Supervisor
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

Dear Mr. Chapman:

By letter dated August 19, 2005, the Federal Highway Administration (FHWA) requested the initiation of formal consultation with the U.S. Fish and Wildlife Service (FWS) regarding the potential effects of the Parsons-to-Davis section of Appalachian Corridor H project on the West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus). By letter dated September 19, 2005, the FWS provided comments to the FHWA requesting that modifications be made to the submitted documentation prior to initiation of formal consultation. The requested modifications have been made. Please find enclosed a copy of the revised documentation, along with an errata sheet, outlining how each of the FWS comments were addressed. Your timely acknowledgment and commencement of formal consultation would be greatly appreciated. If you have any questions concerning this matter, please contact me at (304) 347-5268 or via e-mail at henry.compton@fhwa.dot.gov.

Sincerely yours,

Henry E. Compton, P.E.
Planning & Environment Team Leader

Enclosure
United States Department of the Interior
FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241
November 18, 2005

Mr. Henry E. Compton
Division Environmental Coordinator
Federal Highway Administration
Geary Plaza, Suite 260
700 Washington Street, East
Charleston, West Virginia 25301

Re: Formal Consultation Initiation - Appalachian Corridor H, Parsons to Davis Section

Dear Mr. Compton:

This letter acknowledges the U.S. Fish and Wildlife Service’s October 26, 2005 receipt of your October 25, 2005 letter requesting initiation of formal section 7 consultation under the Endangered Species Act. The consultation concerns the possible effects of the proposed construction of Appalachian Corridor H, Parsons to Davis Section on the West Virginia northern flying squirrel (Glaucousmys sabrinus fuscus).

The Service has reviewed the information provided in your revised initiation package and determined that it contains all the information necessary to initiate formal consultation on this project. Formal consultation is initiated on the date that the Service receives a federal agency's initiation request, provided all relevant data are provided to the action agency pursuant to section 7 of the ESA. Section 7 allows the Service up to 90 days to conclude formal consultation with your agency, and an additional 45 days to prepare our Biological Opinion (BO) (unless we mutually agree to an extension). While additional coordination may be required to address specific project details, the Service has received all the information required to initiate consultation. Therefore, based on an initiation date of October 26, 2005, we expect to provide you with our biological opinion on or before March 10, 2006.

The Service will continue to coordinate with your office throughout the formal consultation process, and appreciates the cooperative efforts that have been expended to address these issues. If you have further questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

[Signature]

Thomas R. Chapman
Field Supervisor
Mr. Henry E. Compton  
Division Environmental Coordinator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia  25301

Re: Appalachian Corridor H (Parsons to Davis) Formal Consultation Extension Request

Dear Mr. Compton:

As you know, the U.S. Fish and Wildlife Service (Service) and the Federal Highway Administration have been consulting under Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. § 1536) on the proposed Parsons to Davis segment of the Appalachian Corridor H highway project in Tucker County, West Virginia.

By correspondence dated October 25, 2006, the Federal Highway Administration determined that this segment of the project is likely to adversely affect the federally endangered West Virginia northern flying squirrel (Glaucomys sabrinus fuscus), and therefore initiated formal consultation pursuant to the Service’s regulations (50 C.F.R. Part 402). Based on our evaluation of the final biological assessment for the project, and our independent examination of the effects of the proposed action, the Service concurred with this evaluation. Formal consultation was initiated on October 26, 2005.

However, we regret that due to an overwhelming workload we are unable to complete this consultation by the specified time proposed in our November 18, 2005 correspondence. As I recently discussed with you, we are respectfully requesting an extension to complete this consultation.

We will continue to work with you to address any remaining issues and incorporate this information into the draft biological opinion and provide the draft to you for review. We anticipate providing you with a draft biological opinion by April 28, 2006. The final biological opinion will be issued after the Service has responded to your comments and incorporated any appropriate changes.
Mr. Henry E. Compton  
March 22, 2006

Thank you for your patience. If you have any questions regarding this letter, please contact me at (304) 636-6586, or at the letterhead address. Your written response to this request for a time extension would be appreciated.

Sincerely,

[Signature]

Thomas R. Chapman  
Field Supervisor
Mr. Henry E. Compton  
March 22, 2006

cc:  
WVDNR – Stihler  
WVDOH - Angus  
Project File  
Reader File  
Filename: U:\Finalized Correspondence\WVDOH\Corridor H Project\2006\Corridor H Parson to Davis BO Extension.doc
NRCS Coordination
January 22, 2001

Mary Keith Floyd
Michael Baker Jr., Inc.
Hillcrest Building, Suite 101
1801 Bayberry Court
Richmond, Virginia 23226

Fax: (304) 538-7676

Re:  AD – 1006
Blackwater Avoidance – Corridor H

Dear Ms. Floyd:

Enclosed are the completed AD-1006 forms for the latest potential alignments of Corridor H through Tucker and Randolph Counties, WV. I am indicating on the forms that the alternatives contain no prime, unique, statewide, or locally important farmland (by definition in the 1995 FPPA final rule), and the Farmland Protection Policy Act does not apply.

This negative determination is very consistent with past evaluations of most corridor-type projects in West Virginia. In our State, the relatively few acres of important farmland soils along a corridor are typically far exceeded by many acres of steep and stony soils. Therefore, our overall ratings for corridor projects are typically low.

As you know, a small acreage of important farmland actually does exist along the alternative corridors. I am sure that individual farmers consider these acreages to be very important. However, when the sum of the land evaluation plus the site assessment of a corridor equals less than 160 points, the FPPA is considered not to apply. Since all the calculated site assessments which you provided are already rather low, and since the maximum land evaluation can be only 100 points, the sums cannot exceed the 160 point threshold for any of the alternative corridors. Previous ratings for similar Corridor H alternative routes showed values at far less than 160, and typically less than 50.

If you have questions about this report, I can be contacted at the above address or by phone at 304-538-7583.

Sincerely,

Ron Estepp,
Soil Scientist
# FARMLAND CONVERSION IMPACT RATING

**PART I (To be completed by Federal Agency)**

- **Name Of Project**: Blackwater Avoidance - Corridor I
- **Proposed Land Use**: highway
- **Federal Agency Involved**: TUCKER, WV
- **County And State**: Tucker, WV
- **Date Of Land Evaluation Request**: 1/14/01

**PART II (To be completed by SCS)**

- **Date Request Received By SCS**: 1/18/01
- **Does the site contain prime, unique, statewide or local important farmland?**
  - [ ] Yes
  - [x] No
- **Acres Irrigated**: 0
- **Average Farm Size**: 0
- **Major Crop(s)**
- **Farmable Land In Govt. Jurisdiction**:
  - Acres:
  - %
- **Amount Of Farmland As Defined in FPPA**:
  - Acres:
  - %
- **Name Of Land Evaluation System Used**:
- **Name Of Local Site Assessment System**:
- **Date Land Evaluation Returned By SCS**: 1/23/01

**PART III (To be completed by Federal Agency)**

A. **Total Acres To Be Converted Directly**
   - [ ] 193
   - [ ] 205
   - [ ] 222

B. **Total Acres To Be Converted Indirectly**
   - [ ]
   - [ ]
   - [ ]

C. **Total Acres In Site**
   - [ ] 193
   - [ ] 205
   - [ ] 222

**PART IV (To be completed by SCS) Land Evaluation Information**

A. **Total Acres Prime And Unique Farmland**
   - [ ] 0
   - [ ] 0
   - [ ] 0

B. **Total Acres Statewide And Local Important Farmland**
   - [ ] 7.8
   - [ ] 10.5
   - [ ] 15.5

C. **Percentage Of Farmland In County Or Local Govt. Unit To Be Converted**
   - [ ]
   - [ ]
   - [ ]

D. **Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value**
   - [ ]
   - [ ]
   - [ ]

**PART V (To be completed by SCS) Land Evaluation Criterion**

**Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)**

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<thead>
<tr>
<th>Site Assessment Criteria</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Area In Nonurban Use</td>
<td>15 14 13 12</td>
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<tr>
<td>2. Perimeter In Nonurban Use</td>
<td>10 10 10 10</td>
</tr>
<tr>
<td>3. Percent Of Site Being Farmed</td>
<td>20 2 1 1</td>
</tr>
<tr>
<td>4. Protection Provided By State And Local Government</td>
<td>20 0 0 0</td>
</tr>
<tr>
<td>5. Distance From Urban Builtup Area</td>
<td>NA - - -</td>
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<tr>
<td>6. Distance To Urban Support Services</td>
<td>NA - - -</td>
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<td>7. Size Of Present Farm Unit Compared To Average</td>
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<td>8. Creation Of Nonfarmable Farmland</td>
<td>25 1 1 1</td>
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<tr>
<td>9. Availability Of Farm Support Services</td>
<td>5 0 0 0</td>
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<tr>
<td>10. On-Farm Investments</td>
<td>20 3 3 3</td>
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<tr>
<td>11. Effects Of Conversion On Farm Support Services</td>
<td>25 0 0 0</td>
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<tr>
<td>12. Compatibility With Existing Agricultural Use</td>
<td>10 1 1 1</td>
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**TOTAL SITE ASSESSMENT POINTS**: 160 360 34 34

**PART VII (To be completed by Federal Agency)**

**Relative Value Of Farmland (From Part V)**

<table>
<thead>
<tr>
<th></th>
<th>Maximum Points</th>
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<tbody>
<tr>
<td>1</td>
<td>100</td>
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**Total Site Assessment (From Part VI above or a local site assessment)**

<p>| | | | |</p>
<table>
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<tr>
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<tr>
<td>160</td>
<td>360</td>
<td>34</td>
<td>34</td>
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**TOTAL POINTS (Total of above 2 lines)**

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<tbody>
<tr>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Site Selected**: | Date Of Selection: | Was A Local Site Assessment Used? | [ ] Yes [ ] No
**Reason For Selection**: | | | |

*(See Instructions on reverse side)*
FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)

Name Of Project: Blackwater Avoidance - Corridor H
Proposed Land Use: Highway

PART II (To be completed by SCS)

Date Request Received By SCS: 1/13/81

Does the site contain prime, unique, statewide or local important farmland?

<table>
<thead>
<tr>
<th>Major Crop(s)</th>
<th>Farmable Land In Gov't Jurisdiction</th>
<th>Acres</th>
<th>%</th>
<th>Amount Of Farmland As Defined In FPPA</th>
<th>Acres</th>
<th>%</th>
</tr>
</thead>
</table>

Date Land Evaluation Returned By SCS: 2/3/81

PART III (To be completed by Federal Agency)

<table>
<thead>
<tr>
<th>Alternative Site Rating</th>
<th>Area Blue</th>
<th>Red</th>
<th>Very Orange</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total Acres To Be Converted Directly</td>
<td>240</td>
<td>284</td>
<td>282</td>
</tr>
<tr>
<td>B. Total Acres To Be Converted Indirectly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total Acres In Site</td>
<td>240</td>
<td>284</td>
<td>282</td>
</tr>
</tbody>
</table>

PART IV (To be completed by SCS) Land Evaluation Information

| A. Total Acres Prime And Unique Farmland | 0 | 0 | 0 |
| B. Total Acres Statewide And Local Important Farmland | 18.5 | 18.3 | 16.4 |
| C. Percentage Of Farmland In County Or Local Gov't Unit To Be Converted | | | |
| D. Percentage Of Farmland In Gov't. Jurisdiction With Same Or Higher Relative Value | | | |

PART V (To be completed by SCS) Land Evaluation Criterion

Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)

<table>
<thead>
<tr>
<th>Site Assessment Criteria (These criteria are explained in 7 CFR 656.51b)</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Area In Nonurban Use</td>
<td>15</td>
</tr>
<tr>
<td>2. Perimeter In Nonurban Use</td>
<td>10</td>
</tr>
<tr>
<td>3. Percent Of Site Being Farmed</td>
<td>20</td>
</tr>
<tr>
<td>4. Protection Provided By State And Local Government</td>
<td>30</td>
</tr>
<tr>
<td>5. Distance From Urban Builtup Area</td>
<td>NA</td>
</tr>
<tr>
<td>6. Distance To Urban Support Services</td>
<td>NA</td>
</tr>
<tr>
<td>7. Size Of Present Farm Unit Compared To Average</td>
<td>10</td>
</tr>
<tr>
<td>8. Creation Of Nonfarmable Farmland</td>
<td>25</td>
</tr>
<tr>
<td>9. Availability Of Farm Support Services</td>
<td>5</td>
</tr>
<tr>
<td>10. On-Farm Investments</td>
<td>20</td>
</tr>
<tr>
<td>11. Effects Of Conversion On Farm Support Services</td>
<td>25</td>
</tr>
<tr>
<td>12. Compatibility With Existing Agricultural Use</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL SITE ASSESSMENT POINTS</td>
<td>160</td>
</tr>
</tbody>
</table>

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V) | 100 |
Total Site Assessment (From Part VI above or a local site assessment) | 160 |
TOTAL POINTS (Total of above 2 lines) | 260 |

Site Selected: | Date Of Selection |

Purpose For Selection: | Yes | No |

(See Instructions on reverse side)
U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)

<table>
<thead>
<tr>
<th>Name Of Project</th>
<th>Federal Agency Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backwater Avoidance - Corridor H</td>
<td>Tucker, WV</td>
</tr>
</tbody>
</table>

Proposed Land Use

| Highway |

Date Of Land Evaluation Request

| 11/10/01 |

PART II (To be completed by SCS)

| Date Request Received By SCS |
| 1/13/01 |

Does the site contain prime, unique, statewide or local important farmland?

| Yes | No |

(If no, the FPPA does not apply — do not complete additional parts of this form.)

| Acres Irrigated | Average Farm Size |

Major Crop(s)

| Formable Land In Govt. Jurisdiction | Acres: |
| % | Amount Of Farmland As Defined In FPPA |
| % | Acres: |

Name Of Land Evaluation System Used

| Name Of Local Site Assessment System |

Date Land Evaluation Returned By SCS

| 1/23/01 |

PART III (To be completed by Federal Agency)

<table>
<thead>
<tr>
<th>Green</th>
<th>Alternative Site Rating</th>
</tr>
</thead>
</table>

A. Total Acres To Be Converted Directly

| 241 | 73 |

B. Total Acres To Be Converted Indirectly

| - | - |

C. Total Acres In Site

| 241 | 73 |

PART IV (To be completed by SCS) Land Evaluation Information

| A. Total Acres Prime And Unique Farmland |
| 0 |

| B. Total Acres Statewide And Local Important Farmland |

| 162 | 5 |

| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted |
| 14.7 |

| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value |

PART V (To be completed by SCS) Land Evaluation Criteria (Scale of 0 to 100 Points)

| Relative Value Of Farmland To Be Converted |
| 160 |

PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 559.5(b))

<table>
<thead>
<tr>
<th>Site Assessment Criteria</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Area In Nonurban Use</td>
<td>15</td>
</tr>
<tr>
<td>2. Perimeter In Nonurban Use</td>
<td>10</td>
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<td>3. Percent Of Site Being Farmed</td>
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</tr>
<tr>
<td>12. Compatibility With Existing Agricultural Use</td>
<td>10</td>
</tr>
</tbody>
</table>

TOTAL SITE ASSESSMENT POINTS

| 160 |

PART VII (To be completed by Federal Agency) Relative Value Of Farmland (From Part V)

| 100 |

Total Site Assessment (From Part VI above or a local site assessment)

| 160 |

TOTAL POINTS (Total of above 2 lines)

| 260 |

Site Selected:

| Date Of Selection | Was A Local Site Assessment Used? |

Reason For Selection:

(See Instructions on reverse side)
Cities of
Thomas, West Virginia
and
Davis, West Virginia
Coordination
CITY OF THOMAS
P.O. BOX 248
THOMAS, WV 26292

RESOLUTION

March 13, 2001

The City of Thomas passed a resolution stating that we would like to develop the property as a park but we would like to do it jointly with the West Virginia Division of Highways and the Federal Highway Administration such that Corridor H may be located within property boundaries.

Debbie Snyder
Mayor
July 28, 2003

The Honorable Joe Drenning
Mayor, City of Davis
Post Office Box 207
Davis, West Virginia 26260

Dear Mayor Drenning:

State Project X142-H-38.99 C-2
Federal Project APD-484(59)
Appalachian Corridor H, Parsons to Davis
Tucker County

As you know, the Blackwater Supplemental DEIS (SDEIS) for the Parsons to Davis portion of Corridor H has been circulated, and the public comment period on that SDEIS has been completed. In accordance with the Corridor H Settlement Agreement, Section III(c)(2)(b), this letter

- initiates the additional 60-day period within which each City Council is asked to consider the alternatives that were examined in the SDEIS and to express its views on one or more of the alternatives examined;
- identifies West Virginia Department of Transportation's (WVDOT's) Preferred Alternative and explains the reasons for selecting that alternative (see details below);
- offers to each City Council an opportunity to have a presentation given by the WVDOT to the City Council outlining the reasons for the WVDOT Preferred Alternative identification; and
- requests that if the City Council requests the presentation as discussed above, that the City Council provide Corridor H Alternatives an
opportunity to express its views on the Preferred Alternative at the presentation given by the WVDOT to the City Council.

Preferred Alternative Identification and Rationale

After consideration of engineering and environmental constraints and public and agency comments, the Revised Original Preferred Alternative (OPA) with the Truck Route (TR) option has been identified as the Preferred Alternative for the Parsons to Davis project at this stage of the process based on the following summarized information:

- This alternative, by including a TR, will greatly reduce heavy truck traffic through downtown Thomas, thus increasing its attractiveness for economic development, particularly tourism related retail activities.

- This alternative is the only alternative that can feasibly provide a connection to Tucker County High School from Corridor H, an important safety issue raised during the public involvement process by the Citizens Advisory Group, individual citizens at public meetings, and Tucker County officials.

- This alternative reduces travel and emergency response times more than any of the other alternatives under consideration.

- This alternative will not impact the Tucker County Landfill facilities or the landfill's ability to expand for future growth. Alternatives that run east of the Tucker County Landfill (1D East, 1E, and 1G East) would impact the landfill’s ability to expand. The landfill currently services 10 counties in West Virginia.

- This alternative is similar to the other alternatives in terms of its overall environmental impacts; in the areas where its impacts are greater (e.g., wetlands), the impacts have already been fully permitted and mitigated.

- This alternative will have no adverse effect on any historic properties. The West Virginia State Historic Preservation Office (SHPO) and the Monongahela National Forest have concurred in this finding.

- This alternative is $16 million to $70 million less expensive than any other alternative.

While the Revised OPA with the Truck Route has been identified at this stage of the Blackwater SEIS process as the Preferred Alternative, its
identification does not preclude the WVDOT from changing the Preferred Alternative's identification at a later stage based on the City Councils' or resource agencies' comments or other new information or changed circumstances [Settlement Agreement, Section III(C)(b)(2)].

Next Steps

Under the Corridor H Settlement Agreement, the transmittal of this letter initiates a 60-day period within which the City Councils of Thomas and Davis may express their views on the selection of the Preferred Alternative for the Parsons to Davis project. During this period, if requested, the WVDOT will give a presentation to each City Council outlining our reasons for selecting the Preferred Alternative. If we are asked to give such a presentation, we also will ask that you allow an opportunity at that presentation for Corridor H Alternatives to present its views on the Preferred Alternative.

Under the Settlement Agreement, the City Councils are under no obligation to take any action. In particular, you are not required to provide an opportunity for a presentation, nor are you required to adopt a resolution. However, if you intend to submit comments, we request that they be submitted in the form of a resolution adopted by the Councils during the 60-day comment period, which ends on September 30, 2003. If a resolution is not adopted within this time period, the views of the City Councils would not be given any weight under the Settlement Agreement.

Thank you for your attention to this matter. Should you require additional information, please call me at (304)558-6266.

Very truly yours,

ORIGINAL SIGNED BY

RANDOLPH T. EPPERLY, JR.

Randolph T. Epperly, Jr., P.E.,
Deputy State Highway Engineer -
Development

RTE:Ss

cc: Corridor H Alternatives
bcc: AC, DDE(NA), DDR, DD(MF, LA), HD
RESOLUTION TO SUPPORT THE REVISED ORIGINAL PREFERRED
ALTERNATIVE (OPA) WITH TRUCK ROUTE (TR) OPTION OF CORRIDOR H
FROM PARSONS TO DAVIS

WHEREAS, IT HAS BEEN DETERMINED BY THE MAYOR AND COUNCIL OF THE
TOWN OF DAVIS, TUCKER COUNTY, WEST VIRGINIA, THAT IN AN EFFORT TO
GET THE CORRIDOR H FROM PARSONS TO DAVIS COMPLETED IN AN EXPEDIENT
FASHION IN HOPES THAT THE SURROUNDING COMMUNITIES CAN THEN WORK
TOGETHER AND DRAW SOME MORE JOBS INTO OUR AREA

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE TOWN
OF DAVIS, TUCKER COUNTY, WEST VIRGINIA, THAT THE REVISED ORIGINAL
PREFERRED ALTERNATIVE (OPA) WITH THE TRUCK ROUTE (TR) OPTION IS THE
MOST COST EFFICIENT AND FEASIBLE ROUTE AND THEREFORE IS THE ROUTE
WE HEREBY SUPPORT WHOLE HEARTEDLY.

THIS RESOLUTION SHALL BE IN EFFECT FROM THE DATE OF ITS ADOPTION.

ADOPTED: September 10, 2003

[Signatures]

RECORDER

MAYOR

THE UNDERSIGNED RECORDER OF THE TOWN OF DAVIS, TUCKER COUNTY,
WEST VIRGINIA, HEREBY CERTIFIES THAT THE FOREGOING IS A TRUE, CORRECT
AND COMPLETE COPY OF A RESOLUTION ADOPTED BY THE GOVERNING BODY
OF THE TOWN OF DAVIS AT A REGULAR MEETING HELD ON THE 10TH DAY OF
SEPTEMBER, 2003 IN ACCORDANCE WITH LAW, AND SUCH RESOLUTION HAS NOT
BEEN REPEALED, REVOKED, RESCINDED, OR AMENDED BUT IS IN FULL FORCE
AND EFFECT ON THE DATE HEREOF.

WITNESS MY HAND AND THE SEAL OF THE TOWN OF DAVIS, TUCKER
COUNTY, WEST VIRGINIA ON THIS THE 10TH DAY OF SEPTEMBER 2003.

[Signature]
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • 304/558-3505
Fred VanKirk, P.E.
Secretary/Commissioner
Jerry Bird
Assistant Commissioner

July 28, 2003

The Honorable Debbie Snyder
Mayor, City of Thomas
Post Office Box 248
Thomas, West Virginia 26292

Dear Mayor Snyder:

State Project X142-H-38.99 C-2
Federal Project APD-484(59)
Appalachian Corridor H, Parsons to Davis
Tucker County

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The Honorable Debbie Snyder
July 28, 2003
Page 3

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Next Steps

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Thank you for your attention to this matter. Should you require additional information, please call me at (304)558-6266.

Very truly yours,

ORIGINAL SIGNED BY
RANDOLPH T. EPPERLY, JR.
Randolph T. Epperly, Jr., P.E.,
Deputy State Highway Engineer -
Development

RTE:Ss

cc: Corridor H Alternatives
bcc: AC, DDE(NA), DDR, DD(MF, LA), HD
WHEREAS, The Thomas and Davis City Councils have until September 30, 2003, to review the preferred alternative recommendation,

WHEREAS, the City of Thomas, Tucker County, West Virginia, will be significantly impacted by the location of Corridor H construction.

WHEREAS, the Mayor and Council of the City of Thomas favors the northern route for the following reasons:

- To enhance economic and community development for the City of Thomas.
- Provide better access to Tucker County High School and Cordland Acres.
- Provide more efficient Emergency Services for Thomas, Davis and Canaan Valley.
- To provide direct access to Route 219, both north and south.
- To provide a more scenic route.

WHEREAS, the Mayor and Council of the City of Thomas find the following problems with the preferred route:

- The proposed truck route will cause hazardous road conditions.
- There is no documentation that the preferred route, with a truck route, is more cost effective.
- The preferred route will isolate the City of Thomas from the economic development benefits associated with a new four-lane highway.
- The preferred route does not maximize public access to hospitals.

NOW, THEREFORE BE IT RESOLVED THAT: the Mayor and Council of the City of Thomas, Tucker County, West Virginia endorses the Northern Route of the Parsons to Davis segment of Corridor H and firmly oppose the preferred route as proposed.


ATTEST:

________________________
MAYOR

________________________
CLERK / WITNESS

9/23/03
DATE

9/23/03
DATE
Community Advisory Group
Coordination
CORRIDOR H
COMMUNITY ADVISORY GROUP

July 13, 2000

WV DOT Division of Highways
1900 Kanawha Blvd, East
Building 5 – Room A 317
Charleston, WV 25305-0430

Attention: James E. Sothen, PE
Director, Engineering Division

re: Corridor H Scoping Meeting
June 14, 2000

The Community Advisory Group has met on several occasions and attended the Scoping Session on June 14, 2000 at Canaan Valley Resort. The following comments and recommendations are a result of these meetings.

Corridor H will enhance Economic Development in the Davis/Thomas area. In studying alternative routes to the north of Thomas it is desirable to maximize the potential for development and to control how development occurs.

A. The Committee suggests that three interchanges be established as follows:

1. At WV Route 93 near the intersection of WV Route 32 with efficient access to the Industrial Park and Route 32 and other potential areas of development. The obvious advantages of this location are the site of the Tucker County Industrial Park, the Eastern Gateway to the Canaan Valley and Blackwater Falls State Parks and access to the Town of Davis.

2. At US Route 219, North of Thomas (Between Thomas and William). The advantage of this location is to direct commercial traffic onto Corridor H—South or North without going through the downtown shopping, historic, recreational and residential areas of Thomas. This will open up the area north of Thomas for needed residential development and provide access to the Thomas Education Center, Cotril’s Opera House, The historic B&L Building, Mountain-Made and the Thomas business district.

The ultimate advantage is the eventual intersection of Corridor H and Continental 1 (Route 219) in the near future.

3. At Route 219, South of Thomas (in the Benbush area). The advantage of this location is the future development of the old airport area for both industrial and residential development. This location also will provide access to the planned recreational development on the South side of the City of Thomas, the Thomas City Park and Cortland Acres Nursing Home and Retirement Village. The Ambulance Authority would also have quick access to the corridor at this location.

B. The Committee suggests that the Study Area be expanded to the south (possibly as far as the Tucker County High School) to provide the opportunity to follow the topography more closely for the northern route and to provide better alternatives for the interchange south of Thomas at US Route 219.
C. Interchanges are preferred to at-grade crossings at the intersections of Corridor H and Route 219 and Routes 219 and 93 for the following reasons:

1. Safety – These areas can be areas of fog, as well as, ice and snow. Grade crossings create areas for high occurrences of accidents

2. Control development – Interchanges will deter strip-mall type development along the highway which will enhance the downtown business areas which are historic, as well as, commercial

3. The proposed Rails-to-Trails corridors can be developed to safely traverse these intersections if interchanges are constructed.

D. The Committee suggests that a Visitors Center/Rest Area, be constructed in the area of study. This would assist in the promotion of the area and provide travelers a place to acquire information on the State Parks, Wildlife areas, recreational opportunities, historic sites, cultural activities, economic benefits, residential and educational information. The possibility of locating the Tucker County Convention and Visitors Bureau in this facility should also be investigated.

E. Because of the delay in construction of Corridor H due to this realignment study, the impact of this delay on the local economy and to support future traffic patterns and economic development, the Committee requests special funding for enhancement and mitigation projects. The funding for Tucker County communities should be similar to the amounts awarded to other communities in the settlement.

In addition, preference should be given from other funding sources, Federal and State, for projects being developed and in future development in the County.

The Committee was asked to identify areas of awareness. They are as follows:

1. The Tire Disposal area just off RT 219 South in the Benbush area
2. Cortland Acres Nursing Home
3. Tucker County Landfill
4. Thomas City Reservoir
5. Thomas City Park

Overall, the Committee feels that a properly designed route within the area of study can be achieved and can be beneficial to the communities of Davis and Thomas.

The Committee submits these comments and suggestions in the spirit of cooperation and hope that serious consideration will be given to them.

Delegated to sign on behalf of the Committee

M Quattro
August 30, 2000

WV DOT Division of Highways
1900 Kanawha Blvd East
Building 5 - Room A 317
Charleston, WV 25305-0430

Attention: James E Southern, PE
Director, Engineering Division

re: Corridor H
Community Advisory Group

The Community Advisory Group met on August 29, 2000 and the consensus was that we have met the objectives of the group and no further input was necessary until the alternate design route actually was chosen. We again request that the suggestions and recommendations that were submitted in our letter of July 13, 2000, be given serious consideration in the chosen design.

The Committee did feel that two recommendations originally submitted need to be expanded on:

The first is the consideration of construction of a Visitors Center/Rest Area in the Thomas/Davis area. Currently there is no plan to construct any facility along the entire length of the Corridor. Since the Thomas/Davis area is approximately half way between I-79 and I-81, it is a logical place to have a tourist facility. The proximity of the State Parks, Canaan Valley, Wildlife Refuge, etc., also make it an obvious choice an obvious choice. The request to consider such a facility is again being made and cooperation with the Tucker County Convention and Visitors Bureau in the construction and operation of the facility is suggested.

Secondly, the request for dedicated funds for enhancement projects was discussed at great length. The communities of Thomas and Davis and the Tucker County Planning Commission have already prepared strategic plans for their respective areas. The next logical step is to develop detailed comprehensive community development plans that specifically address the problems and opportunities of the effect of Corridor H on the infrastructure, economic development, land use and landscaping of the communities. Since part of the Corridor funds are dedicated to enhancement projects, such a plan would insuire the proper and efficient use of future enhancement requests. The Committee, again, requests that special consideration be given for these enhancement projects.

The Committee thanks the WVDOT for the opportunity to participate in this planning process and hope that consideration will be given to our recommendations.

Delegated to sign on behalf of the Committee,

A M Quattro
February 12, 2001

WV DOT Division of Highways
1900 Kanawha Blvd East
Building 5 – Room A 317
Charleston, WV 25305-0430

Attention: James E. Southern, PE
Director, Engineering Division

re: Corridor H
Community Advisory Group

The Community Advisory Group met on January 25, 2001 to review the Blackwater Avoidance Alternatives prepared by Michael Baker & Associates for the WVDOT.

The CAG was given the task of reviewing the proposed alternatives, identifying areas of concern and forwarding recommendations to the WVDOT for consideration.

Although eight alternative routes were studied - four of them were rejected for various reasons by Baker and the CAG had no problem with this decision. None of the remaining alternatives stood out as being more desirable than the others, as each route has advantages and disadvantages. The committee suggests that further study be done using the desirable and eliminating the undesirable features of each route.

The following should be given maximum consideration:

- No traffic should enter or exit Corridor H by crossing in front of oncoming traffic. This is primarily for safety reasons. The weather conditions, especially fog, dictate that this be given maximum consideration.

- Minimize the impact of the corridor on the landfill and of the landfill on the corridor.
  -the landfill is important to the economy of Tucker County and impact on it must be minimized. It was suggested that the WVDOT and the consultants meet with the County Commissioners and the Tucker County Solid Waste Authority to address any potential landfill problems and development plans.
  -the view of the landfill from the corridor must also be addressed to minimize the effect on the tourist business.

- The intersection of Corridor H at Route 93 & Route 32 in the Davis Area needs to be as safe and accessible as possible. The original diamond-shaped intersection is preferred to the “connector” type of intersections being utilized in most of the alternative designs. An interchange with different grade crossing would be preferable.

- Connector roads need to be kept to a minimum in length and obvious as connections to the corridor.

- The Residential areas in and near the Benbush area should be avoided.

- The intersection of Route 219 north of Thomas should be as far north as possible to minimize the impact on the City of Thomas and for future land development.
The Committee did not have any objection to the original preferred route being considered as one of the preferred alternate routes.

The advantages of the original route are:
- It is the most direct route;
- The bridge over the North Fork of the Blackwater would be an asset;
- The intersection at Davis (Route 93 & Route 32) is safer and better designed than the alternatives;
- It is the lease costly of all the routes.

The disadvantages of the original route are:
- It goes through the avoidance area;
- There is only one access to the corridor.

It was suggested that if further consideration is given to the original preferred route that a connector to Route 219 north of Thomas be constructed to eliminate the traffic that will have to go through the City of Thomas.

The Committee did feel that two recommendations originally submitted have not been addressed:
- The first is the consideration of construction of a Visitors Center/Rest Area in the Thomas/Davis area. Currently there is no plan to construct any facility along the entire length of the Corridor. Since the Thomas/Davis area is approximately half way between I-79 and I-81, it is a logical place to have a tourist facility. The proximity of the State Parks, Canaan Valley, Wildlife Refuge, etc., also make the choice an obvious one. The request to consider such a facility is again being made and cooperation with the Tucker County Convention and Visitors Bureau in the construction and operation of the facility is suggested.
- Secondly, the request for dedicated funds for enhancement projects was discussed at great length. The communities of Thomas and Davis and the Tucker County Planning Commission have already prepared strategic plans for their respective areas. The next logical step is to develop detailed comprehensive community development plans that specifically address the problems and opportunities of the effect of Corridor H on the infrastructure, economic development, land use and landscaping of the communities. Since part of the Corridor funds are dedicated to enhancement projects, such a plan would insure the proper and efficient use of future enhancement requests. The Committee, again, requests that special consideration be given for these enhancement projects.

The Committee thanks the WVDOT for the opportunity to participate in this planning process and the consideration that will be given to our recommendations.

Delegated to sign on behalf of the Committee,

A M Quattro
SDEIS
December 2002
Preferred Alternative Report
December 2003
and
Amended Preferred Alternative Report -
November 2004

Agency Comments and Responses
United States Dep
FISH AND W

Date: January 27, 2003

From: William Tolin, Acting Field Supervisor, West Virginia Field Office, Elkins, WV

To: Cynthia Wilkerson, Philadelphia Support Office, National Park Service, Mid-Atlantic Region, Philadelphia, PA

Subject: Review of Supplemental Draft Environmental Impact Statement (SDEIS) for Appalachian Corridor H. Parsons to Davis, Tucker County, WV (ER 02/1139)

The West Virginia Department of Transportation (WVDOT) in conjunction with the Federal Highways Administration (FHWA) is proposing to construct an approximately 10-mile long, four-lane divided highway between Parsons and Davis in Tucker County, West Virginia. The project is a component of the Appalachian Corridor H project which is a proposed 100-mile highway between Elkins, West Virginia and the West Virginia/Virginia state line east of Wardensville, West Virginia. The project will traverse Randolph, Tucker, Grant, and Hardy Counties, West Virginia.

The U.S. Fish and Wildlife Service (Service) has reviewed the SDEIS and provides the following comments concerning impacts to fish and wildlife resources as per the National Environmental Policy Act (40 CFR 1501.6) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA).

General Comments on Project Options

The Service has been involved with this project since planning resumed in 1990 and is very familiar with the terrestrial and aquatic resources of the project area. The alternatives carried forward provide a diversity of options for the Department to avoid high quality fish and wildlife habitat. Of these alternatives, Alternative 1G (East and West) and Alternative 1D (East and West) would result in the least amount of adverse impacts to wetlands. Alternative 1G (East) and Alternative 1D (East) are considered to have the least amount of adverse impact to surface water resources.

Endangered Species Comments

The document contains accurate information regarding the four federally listed species (Indiana bat, Myotis sodalis; Virginia big-eared bat, Corynorhinus townsendii virginianus; West Virginia northern flying squirrel, Glaucomys sabrinus fuscus (WVNFS), and the Cheat Mountain salamander, Plethodon nettingi). The document states that further consultation with the Service will be required under Section 7 of the ESA for the Preferred Alternative as all alternatives will adversely affect potentially occupied WVNFS habitat. Since all alternatives will affect potentially occupied habitat, formal consultation will ultimately be necessary. The WVDOT, however, has the opportunity in the Preferred Alternative phase of this project to select an alternative that adversely affects the least amount of potentially occupied WVNFS habitat. The Service strongly encourages the WVDOT to select the least damaging alternative to suitable WVNFS habitat.

If you have any questions regarding this letter, please have your staff contact John E. Schmidt at Ext. 16 of my staff, or contact me directly, at (304) 636-6586, or at 694 Beverly Pike, Elkins, WV 26241.
cc:
Reader File
Project File
ES: WVPO:JSchmidt:skd:1/27/03
File Name: H:\nepa\02-03\CorrH-SDEIS Parsons Davis, CommentstoNPS.103.wpd
James E. Sothen, P.E., Director
Engineering Division
1900 Kanawha Boulevard East
Building Five, Room 110
Charleston, WV 25305-0430

Re: Appalachian Corridor H, Parsons-to-Davis
Supplemental Draft Environmental Impact Statement; CEQ Number 020510

Dear Mr. Sothen:

In accordance with the National Environmental Policy Act and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the Supplemental Draft Environmental Impact Statement (SDEIS) for the above referenced project. No preferred alternative was identified in the SDEIS, so based on our review, we have assigned the entire document a rating of EC-I, indicating that there are environmental concerns and that EPA believes the draft adequately sets forth the environmental impacts of the proposed project. Enclosed for your reference is a copy of EPA's rating system. The basis for this rating is expressed in the comments that follow.

The project development process for Corridor H has been long, complicated, and complex. As a result of the lawsuit challenging the 1996 Corridor H ROD, a settlement agreement was recently reached in which West Virginia Division of Highways and the Federal Highway Administration agreed to divide the Corridor into nine separate segments, each with its own environmental documentation. This SDEIS studies the segment located between Parsons and Davis, Tucker County, West Virginia. The purpose of this SDEIS was to evaluate a reasonable range of new alternatives to the original preferred alternative that are prudent and feasible and that would successfully avoid the Blackwater Area.

The Settlement Agreement required that the original preferred alternative (OPA) be retained for detailed study. All of the additional alternatives retained for detailed study in the SDEIS avoid the Blackwater Valley and surrounding area and they also appear to further reduce impacts to important natural resources based on the information provided in the document. A two level screening process was developed to narrow down the most reasonable alternatives to
carry forward. EPA believes this is a reasonable and acceptable process and that all the appropriate alternatives were carried forward for detailed study.

EPA is concerned with the potential impacts of the proposed project to the endangered West Virginia Northern Flying Squirrel. Potential habitat exists within the entire study area. We encourage the continued coordination already underway with the U.S. Fish and Wildlife Service to identify the most appropriate alternative to limit the impact to such an important species as well as valued resources in the area.

Borrow and waste fill was used as a screening criteria in the alternative reduction analysis. Disposal of excess waste or the borrowing of fill for the earthmoving activities of highway construction can lead to potential secondary impacts. Clearly, efforts have been made to avoid and minimize the impacts of the highway on ecologically sensitive areas. It is important that borrow and waste methods not impact those same resources. Obviously no specific designs have been developed for this project; however, to the extent possible, potential staging areas should be identified and their impacts assessed and evaluated.

As with any highway development project, environmental impacts will occur. Terrestrial habitat will be bisected and some will be lost, streams will be impacted by crossings and relocations, wetlands will be filled and cumulative impacts from the road construction and induced development will happen. However, through the Settlement Agreement process undertaken, and the development of a range of new alignment alternatives, such environmental impacts have been reduced.

Finally we believe that the OPA and alternative 2 have too many significant impacts to the natural resources of the area, especially when compared to the avoidance alternatives. Thank you for providing EPA the opportunity to comment on this project. If you have any questions regarding our comments, please contact Jessica Greenwood at 215-814-5144.

Sincerely,

William Arguto
NEPA Team Leader
Office of Environmental Programs
Mr. James E. Sothen, P.E., Director
Engineering Division
WVDOT - Division of Highways
1900 Kanawha Boulevard East
Bldg. Five, Room 110
Charleston, WV 25305-0430

Re: Appalachian Corridor H, Parsons to Davis SDEIS,

Dear Mr. Sothen:

The West Virginia Division of Natural Resources, Wildlife Resources Section (WRS) has completed its review of the referenced project Supplemental Draft Environmental Impact Statement (SDEIS), December 2002. Comments are submitted pursuant to the authorities of the Fish and Wildlife Coordination Act (as amended), the Federal Water Pollution Control Act/Clean Water Act (as amended), the Endangered Species Act of 1973 (as amended), and corresponding responsibilities described in The Laws of West Virginia (WV Code, Chapter 20).

A Summary Matrix is provided to identify and quantify anticipated project impacts. Reviewers depend on the accuracy of this matrix to evaluate these impacts. Recently, we received a letter from the West Virginia Highlands Conservancy expressing their concerns relative to apparent underestimated earthwork balances from the Elkins to Kerens segment. Since our environmental evaluations and understanding of project impacts are based on the figures within the SDEIS, the tremendous increase of waste volumes (2.7 million cubic meters original estimate to 9.4 million cubic meters actual amount) was disturbing. Discrepancies of this magnitude make evaluating potential impacts difficult. Unlike the Elkins to Kerens section, the Parsons to Davis segment is surrounded by occupied endangered species habitat, making wasting areas extremely difficult to establish. Given the sensitivity of this area, we request that the Division of Highways, in coordination with the WRS and U.S. Fish and Wildlife Service (Service), identify approved wasting areas or areas where wasting is prohibited/permitted prior to final design.
Within the alternative analysis, eight alignments have been carried forward for evaluation. While the original preferred alignment costs considerably less than the other alternatives, it is also the most environmentally impacting. Assuming that the earthwork balances, miles of stream crossings, length of relocations, acres of wetlands and habitat unit (HU) figures will not exceed those in the document, alternatives 1D east and west and 1G east and west have attempted to reduce project impacts. While the G-series has fewer impacted HUs, its southern alignment (similar to alternative 2) creates greater forest fragmentation because it is further away from the existing SR 219 corridor.

The portion of Backbone Mountain that the proposed road traverses has been identified by the Service as occupied West Virginia Northern Flying Squirrel habitat. Minimizing the road footprint and its attendant cut/fill slopes and wasting areas will be critical to minimizing the impact on these endangered squirrels. Recognizing that development may occur along the route, increasing the distance from the existing SR 219 increases the likelihood that development will occur within this interstitial space, thus compounding the secondary impacts from the road. An alignment that closely follows SR 219 will minimize this terrestrial impact.

If the alternatives were ranked according to surface water impacts, 1G east impacts the least, followed by 1D east. The main difference between the two is: 1G east utilizes 4,208 feet of culvert and 1D east utilizes 5,415. The vast majority of these culverts are installed on un-named tributaries to high quality streams. Both alternatives impact the same amount of named, perennial, high quality stream. The 1G series also impacts slightly less wetland acreage than the 1D series. Despite the aquatic benefits of 1G to 1D, we prefer the 1D series based on the small earthwork balance and decrease in forest fragmentation. Within this series, 1D east is our preferred alternative because it is less impacting than 1D west.

WRS concurs with the SDEIS with the inclusion of our comments and encourages the DOH to select the least environmentally impacting alternative (1D east). We appreciate the opportunity to comment on this document. If you have any questions concerning our comments, please contact Mr. Keith Krantz of my staff at (304) 637-0245, kkkrantz@dnr.state.wv.us.

Sincerely,

Curtis I. Taylor, Chief
Wildlife Resources Section

CIT/akj
James E. Sothen, P.E., Director
Engineering Division
West Virginia Division of Highways
1900 Kanawha Boulevard East
Building Five, Room 110
Charleston, WV 25305-0430

Re: Appalachian Corridor H, Parsons-to-Davis
Supplemental Draft Environmental Impact Statement; Preferred Alternative Report

Dear Mr. Sothen:

The Environmental Protection Agency (EPA) has reviewed the Preferred Alternative Report for the Supplemental Draft Environmental Impact Statement (SDEIS) in accordance with the July 1992 Consensus on Integrating NEPA/Section 404 Process for Transportation Projects. Based on this review, EPA concurs that the environmental impacts have been adequately disclosed in the SDEIS and that the West Virginia Division of Highways (WVDOH) has subsequently identified a Preferred Alternative to be carried forward in the Final SEIS. However, EPA believes that the Revised Original Preferred Alternative (ROPA), when compared to the other feasible alternatives examined in the SDEIS, has considerably more environmental impacts and suggests that WVDOH reconsider identifying the ROPA as the Preferred Alternative.

The ROPA differs from the Original Proposed Alternative (OPA) in three manners: the Truck Route (TR) is incorporated, there is a shift at Middle Run to reduce wetland impacts, and there is a direct connection to US 219. Even with these slight differences, EPA believes the ROPA to be the most environmentally impacting alternative, when compared to the other alternatives examined in the SDEIS. In the Settlement Agreement, the WVDOH was directed to examine at least one alternative to avoid the Blackwater Area, which has been done. However, the Preferred Alternative identified does not avoid this area, and, in comparison to those avoidance alternatives, the ROPA has higher wetland and stream impacts. In addition, the Preferred Alternative Report also lacks any comparisons addressing how and to what degree the West Virginia Northern Flying Squirrel habitat is impacted by the various alternatives.

We understand that the wetland impacts for the OPA have already been permitted and mitigated for, and that the WVDOH is not required to select for implementation the alternative identified in the EIS as being "environmentally preferable". However, the environmentally preferred alternative does need to be identified in both the Final SEIS and the Record of Decision, whether or not that is the alternative which DOH actually chooses to pursue.
Thank you for providing us the opportunity to provide comments on this project. If you have any questions regarding our comments, please contact Jessica Martinsen at 215-814-5144.

Sincerely,

[Signature]

William Arguto
NEPA Team Leader
Office of Environmental Programs
James E. Sothen, Director
Engineering Division
West Virginia Department of Transportation, Division
of Highways
1900 Kanawha Boulevard, Building Five
Charleston, WV 25305-0430

Dear Mr. Sothen:

Additional comments have been provided by various specialty areas from within the Monongahela NF regarding Appalachian Corridor H, Parsons to Davis, Preferred Alternative CONCURRENCE, State Project X142-H-38.99, Federal Project APD-484(59). We trust these comments will strengthen the project.

Ecology

1. The document displays the likely acres of National Forest Land impacted by the road construction (pp. 22-23). It appears that the footprint of the road may impact a few acres of two areas with our Management Prescription 8.0. Our Forest plan directs us to manage 8.0 areas with a view towards “the preservation of unique ecosystems or areas for scientific or recreational purposes.” One such area is the Big Run Bog Natural Natural Landmark and Botanical Area, and while the action will not occur within the watershed of the bog, it appears that some of the MP8.0 area the Forest has identified around the bog may be impacted. An older map for the area shows the boundary to be just to the pipeline, and not the road (FR 717) as shown in Figure 1. The other area is the Olsen Tower Deferred Rotation Study Area, used by the Fernow Experiment Forest. A closer review of any electronic maps available from the WVDOT is warranted.

2. The Forest has a concern for the likely spread and introduction of non-native invasive species because of the road construction. The document reviewed did not include mitigation measures. The Forest is interested in the seed mixtures to be used on the highway and associated disturbed areas, and recommends that aggressive non-native invasive species not be used unless absolutely necessary to control erosion. As borrow and waste areas are created during construction, an assessment of non-native invasive species and the likelihood of their transport should be made and such impacts mitigated as possible. Knowing that roads serve as corridors for non-native invasive species, the Forest is interested in long-term treatment of species such as purple loosestrife should this species become established on the new road, possibly threatening the Big Run Bog.
**Hydrology**

1. The ROPA alignment traverses National Forest lands in the headwaters of Mill Run and Slip Hill Mill Run, then turns east and leaves National Forest ownership until it crosses the NF lands along the railroad grade adjacent to the North Fork Blackwater River. It also cuts through the headwaters of a fork of Big Run but on private land, upstream from National Forest lands, and this fork of Big Run does not flow through the National Natural Landmark Big Run Bog.

2. Corridor H construction can be expected to have very substantial sediment effects on streams, including those mentioned above, regardless of mitigation. Mitigation will reduce effects, but may not make them insignificant. For example, portions of Corridor H near Elkins have been in place for some years and exhibit substantial erosion of the cut slopes above the highway, and likely very substantial sediment delivery to the receiving streams (Tygart Valley River and Leading Creek).

3. Mill Run and Slip Hill Mill Run are native brook trout streams. National Forest sediment monitoring during the 1990s documented portions of these streams that have higher than desired levels of fine sediment in potential spawning habitat locations. Fine sediment monitoring over the period of years from 1994 to 1998 found that portions of those streams had spawning gravel fine sediment levels that exceeded the point at which substantial impairment of trout reproduction begins to occur. That "threshold" level of impairment is generally considered to be about 20 percent fine sediment. The Mill Run/Slip Hill Mill Run channels had fine sediment levels in spawning gravel sites approaching or exceeding the "threshold" level in four out of five years of monitoring. In the most recent year of monitoring (1998) fine sediment levels were the highest of the five years of monitoring, at 28 and 27 percent respectively. This is well above the theoretical level at which impaired trout reproduction begins to occur. There are a number of sediment source areas in the headwaters of these streams that contribute sediment to these channels, such as the existing Highway 219, and other sources.

4. The preferred alternative report (page 22) indicates that "soils on this side of Backbone Mountain are highly erodible. Construction in this area could lead to additional sediment loads in Slip Hill Mill Run,..." The Forest Soil Scientist's review and comments on this document indicated the highly erosive nature of the soils on the mountain slopes through which the ROPA highway location will pass. Those soils originate from the Mauch Chunk surficial geology within that area, although other soils through which the ROPA location would pass are also highly erodible. This portion of the highway traverses steep slopes and sensitive soils, and will likely have extensive areas of soil disturbance. Considerable modification of surface flow patterns is to be expected. It appears likely that an additional sediment burden will be placed on these streams (Mill Run and Slip Hill Mill Run) resulting from highway construction, despite mitigation efforts. That additional sediment burden is likely to have effects on trout reproductive success, and possibly for the longer-term condition.

5. Mitigation measures planned for the highway need to be closely reviewed, and input made to that plan. Comments made by the WVDNR concerning "wasting areas" also need to be closely reviewed. Where are the wasting areas planned for within the Mill Run/Slip Hill Mill Run
watershed? Are there opportunities for relocation to better sites that may pose a reduced risk of sedimentation in these streams?

6. Monitoring of the effects of the new highway in Mill Run and its tributaries should be considered. This is a valuable native trout stream, despite its apparent impaired condition with regard to sediment. Sediment monitoring should be conducted to document the pre- and post-highway construction effects, and the long-term effects as well. Does the WVDOT have a process for carrying out or funding that long-term monitoring?

Soils

1. (Page 22 of 33): Reference to the sensitivity of the soils on Backbone Mountain in the Monongahela National Forest (MNF) is made on this page. These soils are referred to as highly erodible. "To construct the highway along Backbone Mountain will require large cuts." The document makes note of the presence of sensitive soil types along this section of Backbone Mountain. The specific soil types present are the Catache and Shouns soil series. The underlying geology is the Mauch Chunk Formation. This formation is the cause of many mass wasting and slippage concerns across the Forest and on other sections of Corridor H. This is evident from the problems already observed along Corridor H where Mauch Chunk geology is present (e.g., the Crystal Springs intersection near Elkins). Areas underlain by Mauch Chunk geology should be considered for special mitigation in order to address the highly weatherable bedrock and instability of the bedrock once exposed to water and air. No mitigation measures were mentioned in the document. Also, as referred to in previous meetings with the FHWA, appropriate mitigation, in our estimation, consists not of choosing revegetation options that accounts for the potential stabilization of cut banks (especially large cut banks); rather, appropriate mitigation consists of the design of the cut and fill slopes that will account for instability, erosion, and water drainage off these cuts and fills. We would like to see this concern specifically addressed when crossing the Mauch Chunk geologic formation. We would also like the opportunity to review and comment on sedimentation designs and plans to account for additional sediment generated off of these large cuts.

2. The Forest Service has particular concern of surface mine refuse piles and sedimentation ponds on federal lands through which Corridor H would traverse. The Forest Service recommends that the WVDOT and FHWA to follow the same guidelines as they are in other areas of the project when dealing with these special areas. These guidelines include all of the recommendations made by West Virginia University, Dr. John Sencindiver and Dr. Jeff Skousen, in a 2003 report. Guideline examples include examining the content of spoil piles and ponds from the perspective of acidity production, heavy metal content and potential environmental effects both on-site and off-site to water bodies.

3. It would be beneficial to have a meeting on the above mentioned concerns about the Mauch Chunk geology and associated sediment and about the presence of strip mines, refuse piles, and sedimentation ponds with planners and engineers in charge of the project.
4. Also, the Forest would like to reiterate our willingness and expectation that we participate in a joint field trip or trips with FHWA and Forest Service to examine mitigation measures for sediment and soil erosion concerns on other portions of Corridor H or similar projects.

**Wildlife**

The US Fish and Wildlife Service is involved in discussions with the FHWA and the WVDOH regarding potential effects to wildlife, specifically threatened and endangered species and compliance with the Endangered Species Act.

**Cultural Resources**

Major areas of concern regarding cultural resources and Section 106 concerns have already been addressed with the Forest Service. We concur that the proposed preferred alternative will have no effect to cultural resources, consistent with our letters of July 26th and October 24th, 2002. The implementation of a program of interpretive signage, recommended by us in our July 26, 2002 letter, and also recommended by the WV SHPO in an October 30th, 2002 letter. The funding for this program of interpretation has been supplied by the FHWA and the WVDOH through our June 6th, 2003 MOU.

As the project develops and more specific design plans are developed, Forest Heritage staff will continue to comment and consult with the WVDOH, FHWA, and the WV SHPO in order to continue minimizing and mitigating potential impacts of Corridor H to cultural resources.

Thank you for the opportunity to provide comments as this project moves through its various development phases.

*Sincerely,*

\[Signature\]

CLYDE N. THOMPSON
Forest Supervisor

cc: John A Calabrese, Randall G Biller
United States Department of the Interior
FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

February 4, 2004

Mr. James E. Sothen
WV Dept. of Transportation, DOH
1900 Kanawha Boulevard East,
Building Five, Room 110
Charleston West Virginia 25305-0430

Re: Appalachian Corridor H, Preferred Alternative Concurrence, Parsons to Davis, West Virginia

Dear Mr. Sothen:

On January 7, 2004, U.S. Fish and Wildlife Service (Service) received the Appalachian Corridor H, Parsons to Davis Project; Preferred Alternative Report dated December 2003. The West Virginia Division of Highways (WVDOH) requests that the Service concur with selection of the preferred alternative as identified in that report. The following comments concerning impacts to fish and wildlife resources are provided as per the National Environmental Policy Act (40 CFR 1501.6) (NEPA) and the Endangered Species Act (87 Stat. 884, as amended:16 U.S.C. 1531 et seq.) (ESA).

The federally endangered West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus) (WVNFS) is known to occur in the vicinity of the proposed project. The Preferred Alternative Report states that all the project alternatives have the potential to adversely impact the WVNFS, and would require formal consultation under the ESA to address these impacts. However, the report does not provide any information that will allow for a comparison of the alternatives in regard to those impacts. It should be noted that even though all the alternatives will require formal consultation, the alternatives may vary in the level and significance of their impacts to WVNFS. These impacts should be accurately compared and evaluated so that they can be fully considered in the NEPA evaluation/Alternative Selection process.

The Service provided comments on the WVNFS Biological Assessment (BA) for this project in a letter dated October 11, 2002. In that letter, we recommended that the BA be revised and "a more thorough evaluation of the presence of suitable habitat along the alignments be..."
accomplished to compare the degree of direct and indirect disturbance between alternatives and to aid in the selection of the least damaging alternative as it relates to the WVNFS." The Service met with members of your staff, and the Federal Highway Administration on January 15, 2004 to discuss this project. During that meeting we outlined a process to address ESA and WVNFS issues, and recommended that a preferred alternative not be selected until after the Division of Highways conducts an accurate evaluation of the alternative's impacts on WVNFS, and incorporates that information into the NEPA evaluation/Preferred Alternative Report. The Service can not concur with your selection of a preferred alternative until that information has been provided.

We appreciate your willingness to meet and discuss this issue and look forward to continuing a positive cooperative relationship to ensure all applicable environmental regulations are fulfilled. Should you have further questions regarding this matter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

[Signature]

Thomas R. Chapman  
Field Supervisor
Mr. James E. Sothen, P.E., Director
Engineering Division
WV Division of Highways
1900 Kanawha Blvd. E., Bldg. 5, Room 10
Charleston, WV 25305-0430


Dear Mr. Sothen:

Because the Division of Highways (DOH) failed to provide the Wildlife Resources Section, Coordination Unit the December 2003 Preferred Alternative Report until recently, we were unable to provide comments in the appropriate timeframe. That report, which continued the NEPA review process, laid the foundation for the currently referenced document.

In the ROPA document we note that the DOH rejected our original alignment comments made in the SDEIS. While the ROPA is the least expensive alignment, it is the most environmentally impacting. Some impacts (i.e., wetlands) have already been mitigated with constructed wetlands.

Our concern with this ROPA alignment is twofold. First, in our comments on the SDEIS, we pointed out the problems we had with estimated earthwork volumes as they related to actual amounts. In the Elkins to Kerens segment of Corridor H, the estimate was 2.7 million cubic meters and the actual amount was almost 3.5 times greater. The magnitude of cuts and fills is supposedly less under the selected alignment. We trust this estimate is more accurate than the Elkins to Kerens segment. The ROPA purports to reduce the impact to suitable and highly suitable Northern Flying Squirrel habitat, but we are concerned that this may not be an accurate assessment without identifying all wasting and borrowing areas as previously discussed. The ROPA document does not identify areas suitable for waste/borrow operations or areas to avoid.
Secondly, we are concerned with how DOH proposes to handle road crossings of perennial streams. DOH should be well aware of our concerns relative to culverts and their impacts to wildlife. We strongly encourage DOH to utilize oversized and embedded culverts whenever such installation is feasible and appropriate.

In conclusion, we do not oppose, but cannot agree with the selection of the ROPA alternative. It is the most environmentally impacting. We do understand and appreciate the fiscal responsibilities and alignment difficulties represented in this alignment selection and look forward to continued project coordination.

Sincerely,

Curtis I. Taylor, Chief
Wildlife Resources Section

CIT/akj
James E. Sothen, P.E., Director
Engineering Division
Division of Highways
West Virginia Department of Transportation
1900 Kanawha Boulevard East
Building Five, Room 110
Charleston, West Virginia 25330-0430

Re: Corridor H Parsons to Davis Project Amended Preferred Alternative Concurrence

Dear Mr. Sothen;

The Environmental Protection Agency (EPA) has completed its review of the submitted Amended Preferred Alternative Report for the Parsons to Davis Section of the Appalachian Corridor H project. In January 2004 the West Virginia Division of Highways submitted a report to the agencies identifying their preferred alternative for the Parsons to Davis Section. That report had identified the Revised Original Preferred Alternative (ROPA) as the preferred alternative. At that time, EPA did not concur with the selection of the ROPA as the Preferred Alternative and provided comment to the Division of Highways expressing our concerns.

Based on the information submitted in the Amended Preferred Alternative Report, EPA can concur with the selection of the ROPA as the Preferred Alternative. We recognize that compensatory wetland mitigation has already been completed for the proposed impacts, however we suggest that you continue to avoid, and minimize impacts during the preparation of the Final Environmental Impact Statement through to the completion of final design.

Thank you for providing EPA with the opportunity to provide comments. Should you have any questions or concerns please contact Jessica Martinsen at 215-81405144, or by email at martinsen.jessica@epa.gov.

Sincerely,

[Signature]

William Arguto,
NEPA Team Leader
Environmental Programs Branch
United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

March 18, 2005

Mr. James E. Sothen
WV Dept. of Transportation
Division of Highways
1900 Kanawha Boulevard, East
Building Five, Room 110
Charleston, West Virginia 25305-0430

Re: Amended Preferred Alternative Report; Appalachian Corridor H, Parsons to Davis, WV

Dear Mr. Sothen:

The U.S. Fish and Wildlife Service (Service) has reviewed the Amended Preferred Alternative Report (Amended PAR) for the Appalachian Corridor H Parsons to Davis Project dated November 12, 2004. The West Virginia Division of Highways (WVDOH) in conjunction with the Federal Highway Administration (FHA) proposes to construct an approximately 9-mile section of the proposed Corridor H highway between Parsons and Davis, Tucker County, West Virginia. These comments are submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 et seq.).

The Service provided comments on a previous version of the PAR by letter dated February 4, 2004. At that time, the Service could not concur with selection of a preferred alternative until a comparison was made between the impacts of the alternatives on the federally endangered West Virginia Northern Flying Squirrel (Glaucomys sabrinus fuscus) (WVNFS). The WVDOH provided an analysis of impacts to the WVNFS in a Biological Assessment (BA) dated August 2004. In August 2001, the WVNFS Recovery Plan was amended to indicate that irregardless of positive or negative capture data, all habitat displaying characteristics required by the WVNFS ("suitable habitat") would be assumed to be potentially occupied by WVNFS. For this reason, the BA quantified direct impacts to WVNFS in terms of acres of suitable habitat impacted. The Service provided comments on the BA by letter dated October 14, 2004. In that letter, the Service concluded that all build alternatives would likely adversely affect the WVNFS, and that the Revised Original Preferred Alternative (ROPA) would impact the least amount of "highly suitable" and "suitable" WVNFS habitat.

The Service has reviewed the Amended PAR and provides the following comments.

[Further comments regarding the Amended PAR and the impacts on the WVNFS]

Sincerely,

[Signature]

[Name]
[Title]

Deputy State Hwy. Eng.
Development
Mr. James E. Sothen  
March 18, 2005

The Amended PAR incorporates the Service’s previous comments on this project, and recommends that the ROPA be selected as the WVDOH’s preferred alternative. The Service has reviewed the information provided in the PAR and Amended PAR, and has considered the relative impacts of the alternatives evaluated to all fish and wildlife resources. While the ROPA has increased impacts to wetlands and other Waters of the United States when compared to the other alternatives, selection of this alternative would minimize impacts to WVNFS habitat. Therefore, of the currently evaluated alternatives, the Service does not object to the selection of the ROPA as the preferred alternative.

Formal consultation under section 7 of the ESA will be required if the WVDOH wishes to proceed with construction of the preferred alternative as described. The opportunity for successful completion of formal consultation will be greatly enhanced by mutual development of project-specific minimization and conservation measures for the WVNFS. The WVDOH and FHA have agreed to work with the Service and other resource trustees to develop appropriate conservation and minimization measures that will be incorporated into the selected alternative. We recommend, a meeting be held, prior to initiation of formal consultation, between the WVDOH, the FHA, the Service, and other appropriate resource trustees, to discuss development of these measures. The Service is available to assist in scheduling or coordinating this meeting, as appropriate.

We appreciate your commitment to working with the Service to address endangered species issues, and look forward to continuing our cooperative efforts with your staff on this project. If you have further questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

[Signature]

Thomas R. Chapman  
Field Supervisor
INFORMATION STATEMENT FOR THE RECORD

APPALACHIAN CORRIDOR II

PARSONS TO DAVIS

WORKSHOP PUBLIC HEARING

February 6, 2003 4 to 7 p.m.

BLACKWATER LODGE - DAVIS

The purpose of this hearing is to provide you with an opportunity to participate with the West Virginia Division of Highways in the development of this project. It is your opportunity to have a voice in the decisions that are being made concerning the Supplemental Draft Environmental Impact Statement and the alternatives presented for the project.

This workshop is being held in compliance with the West Virginia Department of Transportation, Division of Highways public involvement process. The Division of Highways procedures for public meetings and hearings have been established to maximize citizen input in location and design of proposed projects while complying with environmental requirements.

These environmental requirements include the National Environmental Policy Act, Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act, and Executive Orders 11988 and 11990 (floodplain and wetlands) and various other state and federal regulations. Handouts provided and documents available for review at the workshop include: Meeting Brochures; Draft Environmental Impact Statements; Project Plans; Right of Way Brochures and Comment Sheets.

This hearing is being held in a workshop format. Information and assistance is being provided by qualified representatives located at various stations who will be available to discuss the alternatives studied, as well as representatives who will explain the environmental issues including, natural, historic, social and economic impacts which may result from the project. Representatives at this workshop include qualified staff from: the West Virginia Division of Highways Engineering Division and Environmental Section; West Virginia Division of Highways Right of Way Representatives; Environmental and Engineering consulting firm, Michael Baker.

This is a workshop public hearing. We request that you review available materials
and address any questions you may have concerning the project to our representatives at
the various stations. This will assist you in better preparing your oral or written comments
concerning this project.

If you would like to make an oral statement, you will need to visit court reporter. Please
provide your name, your address, and organization if any. The Court Reporter needs this
information for the record.

A transcript of statements made will be prepared for the project and made part of the
official record. This transcript will be provided to the FHWA for their review. We are also
accepting written comments, which will become part of the project record. Written comments are
due April 22, 2003.

The Division of Highways has and will continue to coordinate the development of the
project with various agencies, both state and federal, and organizations that might have concerns
or interests. This includes the county, local communities, the Department of Natural Resources,
Division of Environmental Protection, the US Fish and Wildlife Service, the Environmental
Protection Agency, state and federal historic agencies, and many other organizations. These
organizations and agencies have been provided a copy of the necessary environmental documents
for their review. Their comments will also be considered in the selection of an alternative and for
future development of the project.

We are coordinating this project with the Federal Highway Administration since it is
expected that they will be assisting in the funding of the project. Funding will be 80% federal
and 20% state-matching.

A very important aspect of coordination, of course, is the community itself, and that is
why we are here tonight. The West Virginia Division of Highways thanks you for your
participation in our public involvement process.
CONDENSED TRANSCRIPT

WEST VIRGINIA DEPARTMENT
OF TRANSPORTATION

APPALACHIAN CORRIDOR H
PARSONS TO DAVIS
WORKSHOP PUBLIC HEARING

February 6, 2003
4:00-7:00 p.m.

Blackwater Lodge
Davis, West Virginia
<table>
<thead>
<tr>
<th>Page 1</th>
<th>Page 3</th>
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<tr>
<td>1 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION</td>
<td>1 alternatives presented for the project.</td>
</tr>
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<td>2 APPALACHIAN CORRIDOR H PARSONS TO DAVIS WORKSHOP PUBLIC HEARING</td>
<td>2 This workshop is being held in compliance with the West Virginia Department of Transportation, Division of Highways public involvement process.</td>
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<tr>
<td>4</td>
<td>4 The Division of Highways procedures for public meetings and hearings have been established to maximize citizen input in location and the design of proposed projects, while complying with environmental requirements.</td>
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<tr>
<td>5</td>
<td>6 These environmental requirements include the National Environmental Policy Act, Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act, and Executive Orders 11988 and 11990 for flood plains and wetlands and various other state and federal regulations.</td>
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<td>6</td>
<td>7 Handouts provided and documents available for review at the workshop include: Meeting Brochure Draft, Environmental Impact Statements, Project Plans, Right-of-Way Brochures, and Comment Sheets.</td>
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<td><strong>February 6, 2003</strong></td>
<td><strong>Page 4</strong></td>
</tr>
<tr>
<td><strong>4:00-7:00 p.m.</strong></td>
<td>This hearing is being held in a workshop format. Information and assistance is being provided by qualified representatives located at various stations who will be available to discuss the alternatives studied, as well as representatives who will explain the environmental issues including, natural, historic, social and economic impacts, which may result from the project. Representatives at this workshop include qualified staff from the: West Virginia Division of Highways Engineering Division and Environmental Section; West Virginia Division of Highways Right of Way Representatives; Environmental and Engineering consulting firm, Michael Baker and Charles Ryan &amp; Associates. This is a workshop public hearing. We request that you review available materials and address any questions you may have concerning the project to our representatives at the various stations. This will assist</td>
</tr>
<tr>
<td><strong>Blackwater Lodge</strong></td>
<td><strong>Page 2</strong></td>
</tr>
<tr>
<td><strong>Davis, West Virginia</strong></td>
<td></td>
</tr>
</tbody>
</table>
you in better preparing your oral or
written comments concerning this
project.
4. If you would like to make an
oral statement, you will need to visit
the Court Reporter. Please provide
your name, your address, and
organization if any. The Court
Reporter needs this information for
the record.
11. A transcript of statements made
will be prepared for the project and
made part of the official record.
12. This transcript will be provided to
the Federal Highway Administration for
their review. We are also accepting
written comments, which will become
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comments are due April 22, 2003.
19. The Division of Highways has
and will continue to coordinate the
development of the project with
various agencies, both state and
federal, and organizations that may
have concerns or interests. This
includes the county, local communities,
the Department of Natural Resources,
the Division of Environmental
Protection, the U.S. Fish and Wildlife
Service, the Environmental Protection
Agency, state and federal historic
agencies, and other affected
organizations. These organizations and
agencies have been provided a copy of
the necessary environmental documents
for their review. Their comments will
also be considered in the selection of
an alternative and for future
development of the project.
15. We are coordinating this
project with the Federal Highway
Administration, since it is expected
that they will be assisting in the
funding of the project. Funding will
be 80 percent federal and 20 percent
state-matching.
22. A very important aspect of
coordination, of course, is the
community itself, and that is why we
are here tonight. The West Virginia
Division of Highways thanks you for
your participation in our public
involvement process.
4. Officials in attendance tonight
from the West Virginia Division of
Highways include, Mike Wilson, Norse
Angus, Ben Hark, Jim Colby, Chuck
Bartley, David Clevenger, Randy
Epperley, Chandra Inglis. From the
Federal Highway Administration, Ed
Compton. From the consulting firm
Baker, Martha Dobyns, Jonathan Danz,
Bill McCartney, Jennifer Riddle, Andy
From the consulting firm Charles Ryan
& Associates, Amy Dobkin and Jennifer
Vieweg. From the West Virginia
Department of Culture & History, Susan
Pierce and Joanna Wilson.
20. MR. DEARBORN: I'd like
21 to be recorded in favor of the
22 preferred original. It seems it's not
23 only, well, for one thing it's more
economical, more direct and for those
24 two reasons alone, well, plus the fact
that the, the alternatives appear to
be as much as 90 million dollars more,
which doesn't make a lot of sense to
me.
5. COURT REPORTER: Please
6 state your name and address.
7. MR. DEARBORN: Oh, my
8 name is Murray Dearborn, Post Office
9 Box, I live in the Canaan Valley, Post
10 Office Box 37, Davis 26260, okay.
11. COURT REPORTER: Thank
12 you.
13. MR. BRIGHT: John
14 Bright. Should I mention who I'm
15 with? I'm with the Purple Fiddle,
16 which is a, a business based, most
17 businesses are based on tourism in
18 Thomas. We support any of the, mostly
19 any of the northern routes, the routes
20 that cut north of Thomas, mainly so
21 that there is an exit for Thomas,
22 specifically 1G with the multiple
23 exits for Thomas. We believe, we're,
24 we're, we know that Thomas is going to
25 be a great tourist attraction, very
### Page 9
1. historic town that is slowly
2. developing into a little touristy area
3. with shops and restaurants and it
4. would benefit the entire State to have
5. an exit near such a historic town and
6. also the northern route, yeah, diverts
7. traffic around Thomas.
8. Oh, yeah, we would like to see
9. if there's any way of getting funds
10. from Corridor H to develop the park in
11. Thomas because the northern routes
12. will cut right through the middle of
13. the park, and we think that
14. esthetically that the park should
15. benefit somehow and, and receive some
16. money because otherwise the park may
17. not be developed for decades.
18. MR. ANGUS: Written
19. comments are due April 22nd but all
20. this has to be, you know, put into
21. the record, summarized and we're,
22. let's see today's what, 7th, 6th, 6th,
23. it'd be nice to have it within a
24. month at least.
25. COURT REPORTER: Okay.

### Page 10
1. Well, we have a normal time, which is
2. 7 to 10 days.
3. MR. ANGUS: Okay.
4. COURT REPORTER: Okay.
5. I'll put you down for that.
6. MR. ANGUS: Okay.
7. That's fine.
8. COURT REPORTER: And you
9. just want a regular transcript, right?
10. Do you want anything specific on it,
11. like any special...
12. MR. ANGUS: Just make
13. sure, that the title of the meeting
14. and all that's on there...
15. COURT REPORTER: All
16. this stuff, the names.
17. MR. ANGUS: Yeah, and
18. that the names are on there and other
19. Court Reporters have like attached a
20. copy of this or they've actually, you
21. know, taken it verbatim from my
22. statement and then, but now one thing
23. I didn't, in my statement put these
24. two people in there but I want, you
25. know, to add those on...

### Page 11
1. COURT REPORTER: I'll
2. make sure I put that down that these
3. names...
4. MR. ANGUS: Yeah, I
5. wanted to give you that because, you
6. know, that, the spelling I'm sure is
7. tough on names.
8. COURT REPORTER: Yes,
9. yes, some of them are, okay. Thank
10. you.
11. NORSE ANGUS: All right,
12. thank you.
13. (WHEREUPON, the Workshop was concluded
14. at 7:06 p.m.)

### Page 12
1. The Workshop Public Hearing in the
2. matter, on the date, and at the time
3. and place set out on the title page
4. hereof.
5. It was requested that the Workshop
6. Public Hearing be taken by the
7. reporter and that the same be reduced
8. to typewritten form.
CERTIFICATE OF REPORTER

STATE OF VIRGINIA AT LARGE:

I, CONNIE LYNN MORRIS, Notary Public for the State of Virginia at Large, do hereby certify that the foregoing constitutes a true and accurate transcript to the best of my ability.

I further certify that I am not an employee of nor related to any of the parties, and I have no financial interest in the outcome of this matter.

My Commission Expires: September 30, 2006

Notary Public
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<td>37 8:10</td>
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WORKSHOP PUBLIC HEARING
Appalachian Corridor H
Parsons-to-Davis
Tucker County

February 6, 2003
Convention Room, Blackwater Lodge
Davis, WV
INFORMATIONAL SUMMARY

In accordance with FHWA guidance, the Supplemental Draft Environmental Impact Statement (SDEIS) incorporates by reference the FEIS and the subsequent ROD for the Appalachian Corridor H Project, both issued in 1996. The SDEIS reader should refer to the 1996 Corridor H FEIS and 1996 ROD for information regarding the Project that is unchanged, still valid, and therefore, not presented in the text of the SDEIS.

BRIEF PROJECT DESCRIPTION

The West Virginia Department of Transportation (WVDOT), Division of Highways (WVDOH), in conjunction with the Federal Highway Administration (FHWA), is proposing to construct an approximately 10-mile long highway between Parsons and Davis in Tucker County, West Virginia. This Parsons-to-Davis Project is a component of the Appalachian Corridor H Project which is a proposed 100-mile highway between Elkins and the West Virginia-Virginia state line, spanning Randolph, Tucker, Grant, and Hardy counties in West Virginia.

As a result of legal challenges, a Settlement Agreement required the WVDOH and FHWA to prepare a Supplemental Environmental Impact Statement (SEIS) to evaluate one or more alignment shifts for the Thomas-Davis section of the Parsons-to-Davis Project to determine if avoidance of the Blackwater Area, also defined in the Settlement Agreement, was prudent and feasible. The Supplemental Draft Environmental Impact Statement (SDEIS) is the first part of the required SEIS. Additionally, discovery of an endangered species within the limits of the Original Preferred Alternative (OPA) between Parsons and Davis has necessitated that the SEIS address the entire length of the Parsons-to-Davis Project.
As a part of the Corridor H project, the Parsons-to-Davis project is expected to contribute to addressing the needs identified in the Corridor H Final Environmental Impact Statement (FEIS) of 1996 (WVDOH, 1996). Additionally, the Parsons-to-Davis project will address specific local needs. Overall, the purpose of the Parsons-to-Davis project is to:

- Provide a safe, high-speed, high capacity, four-lane connection between the project termini;
- Promote economic development in the Study Area;
- Reduce truck traffic on existing routes; and,
- Improve emergency response times and access to emergency facilities.

The purpose and need for the project are detailed in Section 1 (Project Background and Need) of the SDEIS.

THE STUDY AREA

The project termini are located in Parsons, WV in the west and Davis, WV in the east. In Parsons, the Study Area begins at County Route (CR) 219/4, 0.2 mile south of US 219. In Davis, the eastern boundary of the Study Area is located on WV 93 near the proposed Tucker County Industrial Park. The eastern terminus was defined in the 2000 Settlement Agreement as 0.7 mile east of US 32 along US 93; however, this limit was extended approximately a half-mile to the east along US 93 in order to accommodate study of alignment options around the Tucker County Landfill.

The southern boundary of the Study Area corresponds roughly to the southern cut/fill limits of the OPA, with the exceptions of the Blackwater Area boundary and a southern dip by Middle Run. This dip in the Study Area was created to assess options for avoiding an area known to be occupied by the WVNFS. The Blackwater Area, as defined in the Settlement Agreement, extends into the Study Area from the south; it includes the Blackwater River valley from Thomas to Hendricks and the City of Thomas itself.

The northern boundary of the Study Area was selected based on several factors. These factors included the topography of Backbone Mountain; avoidance of the Big Run Bog watershed (Big Run Bog is a Monongahela National Forest Research Natural Area); avoidance of known occupied habitat of the endangered WVNFS; and avoidance of the Blackwater Area. In the northeast, the Study Area boundary extends to US 219 in the vicinity of the community of William. The boundary does not extend north of William because economic development objectives of the project will not be fulfilled if the project is far removed from the existing populated and developed areas of Thomas, Davis, and Canaan Valley.
**ALTERNATIVES CONSIDERED**

The SDEIS presents the alternatives considered and identifies those alternatives retained for detailed environmental analysis. The SDEIS does not identify a Preferred Alternative; however, a Preferred Alternative will be identified in a Preferred Alternative Report. After circulation of the SDEIS and after the City Councils of Thomas and Davis have had a 60-day opportunity to comment on the Preferred Alternative Report, the Supplemental Final Environmental Impact Statement (SFEIS) will be issued.

In order to develop prudent and feasible alternatives, a project Study Area was defined. Environmental and engineering constraints were identified from secondary sources. Alternatives were then developed within the Study Area so as to minimize impacts to environmental constraints and maximize adherence to engineering constraints.

The alternatives developed and considered in this document included the No-Build Alternative, the Improved Roadway Alternative (IRA), the OPA, and twelve (12) avoidance alignments. A Truck Route option was also considered as an addition to the OPA and one of the avoidance alignments.
THIS PAGE INTENTIONALLY LEFT BLANK.
THIS PAGE INTENTIONALLY LEFT BLANK.
Preliminary consideration screening indicates that the IRA and six of the avoidance alignments should be eliminated from detailed study. The remaining six avoidance alignments, the OPA, the No-Build, and the Truck Route were retained for detailed environmental study and analysis. The alternatives and their considerations are detailed in Section 2 (Alternatives Considered) of the SDEIS.
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### Summary of Potential Impacts on the Existing Environment

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<th>Issue or Resource</th>
<th>No Build</th>
<th>1D West</th>
<th>1D East</th>
<th>1E</th>
<th>1G West</th>
<th>1G East</th>
<th>2</th>
<th>OPA</th>
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<td>10.9</td>
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<td>188.6</td>
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<td>-80%</td>
<td>-80%</td>
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<td>-80%</td>
<td>-45%</td>
<td>-45%</td>
<td>Up to 39%</td>
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<td>18</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>9</td>
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N/A = Not Applicable; MCY = Million Cubic Yards; N/C = Not Calculated
1OFA = Original Preferred Alternative of Route H passing through the Pawumo-Toonais Project Study Area.
2The Truck Route is an option area that would be associated with only the OPA or Alternative 2. It would divert up to an additional 35% of truck traffic.
3Based on current average construction costs, including such variables as earthwork, drainage, pavement and bridging. Does not include cost of ROW or utility relocations.
4Positive numbers represent waste (i.e. excess cut) and negative numbers represent borrow (i.e. deficit of material). Quantities include access roads.
5The facilities include the scales and scale house of the Tucker County Landfill. The facilities would need to be moved due to construction of these alternatives.
6WWNFs = West Virginia northern flyway segments (Glaucomys sabrinus fasciatus).
7MPA = Management Prescription Area.
MAJOR UNRESOLVED ISSUES

Section 4(f) Analysis
At this time, evaluation results indicate that none of the alternatives retained for detailed study would require “use” of Section 4(f) land. A draft Section 4(f) Analysis is included with the SDEIS (Section 4), and a final Section 4(f) Analysis will be included with the SFEIS.

Section 7 Consultation
Throughout the development of the environmental documentation for Corridor H, WVDOH and FHWA consulted with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act (ESA). The documentation was considered sufficient by the USFWS to address effects on threatened and endangered species at the time the ROD was signed (August 1996). However, in June 2000, WVDOH and FHWA re-initiated informal consultation with the USFWS during agency coordination for the preparation of the SDEIS. Consultation is still ongoing with regard to one endangered species, the West Virginia northern flying squirrel (WVNFS), found within the Study Area boundary.

A Biological Assessment (BA) for the WVNFS was prepared and submitted to USFWS (August 2002). The BA found that the OPA would likely result in an adverse effect to the species and that the avoidance alignments would not likely adversely affect the WVNFS. USFWS did not concur with this conclusion and stated that any of the alternatives presented in the BA (which are the same alternatives presented in the SDEIS) would not avoid suitable habitat for the species (letter dated October 11, 2002, Section 7: Comments and Coordination). According to the most recent Recovery Plan for the species (USFWS, 2001), suitable habitat for the WVNFS is assumed to be potentially occupied by the species; therefore, any of the alternatives would impact potentially occupied WVNFS habitat. Further consultation with the USFWS will be required for the Preferred Alternative.

OTHER FEDERAL ACTIONS REQUIRED
After the selection of the Preferred Alternative and before project construction, one federal permit, two state permits, and one state certification are required:

- Section 404 Clean Water Act Permit (Pittsburgh District COE);
- West Virginia NPDES Permit (WVDEP);
- West Virginia Stream Activity Permit (WV Public Land Corporation); and,
- West Virginia Section 401 Water Quality Certification (WVDEP).

These permits and certifications were issued for the OPA in 1996. If an alternative other than the OPA is selected as the Preferred Alternative for this project, amended permits and certifications will be pursued.

SCOPING, AGENCY COORDINATION AND PUBLIC INVOLVEMENT
The Settlement Agreement specified that, in addition to the public involvement efforts required by law, WVDOH also will undertake efforts to enhance opportunities for the affected communities to participate in conducting the study and in selecting the Preferred Alternative for the avoidance of the Blackwater Area.

In accordance with the Settlement Agreement, WVDOH has established and consulted with a Community Advisory Group (CAG) composed of 12 members representing a cross-section of the interests potentially affected by the location of Corridor H in the Thomas and Davis areas. The CAG has held 11 meetings, attended by WVDOH staff and moderated by a professional facilitator. The CAG has prepared two comment letters that are considered part of the public comment record (Section 7: Comments and Coordination of the SDEIS) for the project.

The Settlement Agreement also requires that after completion of the standard public comment period on the SDEIS, WVDOH must transmit a letter to each of the City Councils of Thomas and Davis identifying its Preferred Alternative for the project and its reasons for selecting that alternative. (WVDOH will provide this information in the form of a “Preferred Alternative Report.”) WVDOH will request that the City Councils provide an opportunity for the WVDOH to present its findings and for the CAG to express its views on those recommendations. It will also request that the Councils express their views on the location and design of the Preferred Alternative within 60 days.

If, during that 60-day period, a City Council adopts a resolution either opposing all of the new alternatives considered or supporting the OPA, FHWA and WVDOH will have the right, but not the obligation, under the agreement to discontinue the Blackwater Avoidance Study.
(see Appendix A for Settlement Agreement, p. 31). However, this agreement will not have an effect on the need for study necessary to investigate avoidance of the WVNFS.

All comments received from the agency scoping meeting and public information workshops were reviewed and considered. As a result of those comments, additional alternatives were developed for consideration in the SDEIS. In addition to the formal opportunities for agency coordination and public involvement, comments have been accepted throughout the SDEIS process on the project website, www.wvcorridorh.com. Section 7: Comments and Coordination of the SDEIS provides more detailed information on the scoping, agency coordination, and public involvement process for this SDEIS.
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<tr>
<td>F. Joe Drenning</td>
<td>Box 545</td>
<td>Davis, W.Va. 26260</td>
<td>Mayor</td>
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<tr>
<td>David Lester</td>
<td>PO Box 778</td>
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<td>E. Reid Gilbert</td>
<td>P.O. Box 20</td>
<td>Red Creek</td>
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<td>Gary Tomasek</td>
<td>Diner &amp; K/W Dive</td>
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<td>Don Crossett</td>
<td></td>
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<tr>
<td>Jack McGuigan</td>
<td>134 Pennsylvania Ave</td>
<td>Parsons 26207</td>
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<td>Murren Dabbs</td>
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<td>Jenny Newland</td>
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<td>Thomas 26200</td>
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<td>Paul Warden</td>
<td>PO Box 633</td>
<td>Davis 26200</td>
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<tr>
<td>Susan Pierce</td>
<td>1900 Kanawha Blvd</td>
<td>Charleston 25305</td>
<td>WV Div. of Culture</td>
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<tr>
<td>Joanna Wilson</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Roy Schimidt</td>
<td>PO Box 42</td>
<td>Davis, WV</td>
<td></td>
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<tr>
<td>Ted Layner</td>
<td>8057 Kennedys Springs Lane Vienna VA</td>
<td></td>
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<tr>
<td>Roger L. Ily</td>
<td>PO Box 1000</td>
<td>MH Station 26239</td>
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<tr>
<td>Susan Moore</td>
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<td>Gary Wentworth</td>
<td>HCO 70 Box 558</td>
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<td>Planning Commission</td>
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<td>Doug Soeller</td>
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<td>Huntington WV 25701</td>
<td>WPPLP</td>
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<td>HT-44 Box 92</td>
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<td>HT-70 Box 504</td>
<td>Davis WV 26260</td>
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<td>Kate &amp; John Bright &amp; Silas</td>
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<tr>
<td>Adam Moomaw</td>
<td>P.O. Box 215, Oakland, MD</td>
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<td>Primus Engineering &amp; Consulting</td>
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Appalachian Corridor H
Parsons-to-Davis SFEIS

Appendix B
Settlement Agreement
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

CORRIDOR H ALTERNATIVES, INC., et al.,

Plaintiffs,

v.

RODNEY SLATER, Secretary,
U.S. Department of Transportation, et al.,

Defendants.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Case No. 1:96-CV-2622 (TFH)

SETTLEMENT AGREEMENT

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SIGNATURE PAGES:

Corridor H Alternatives, Inc.
West Virginia Highlands Conservancy
West Virginia Citizen Action Group
West Virginia Environmental Council
Concerned Citizens Coalition
Harrison County Environmental Citizens Organization
Ohio Valley Environmental Coalition
Downstream Alliance
Northern Shenandoah Valley Audubon Society
Student Environmental Network
Heartwood
Resource Alliance
Reynolds Estates Landowners
Cedar Creek Battlefield Foundation
Sierra Club
West Virginia Department of Transportation
Federal Highway Administration
U.S. Department of Justice
SETTLEMENT AGREEMENT

This Agreement is entered into this 7th date of February, 2000 by and between Corridor H Alternatives, Inc. (“CHA”), West Virginia Highlands Conservancy, West Virginia Citizen Action Group, West Virginia Environmental Council, Concerned Citizens Coalition, Harrison County Environmental Citizens Organization, Ohio Valley Environmental Coalition, Downstream Alliance, Northern Shenandoah Valley Audubon Society, Student Environmental Network, Heartwood, Resource Alliance, Reynolds Estates Landowners, Cedar Creek Battlefield Foundation, and Sierra Club (collectively, “Plaintiffs”); the West Virginia Department of Transportation (“WVDOT”); and the United States of America, acting by and through the Federal Highway Administration (“FHWA”), an agency within the United States Department of Transportation.

RECITALS

WHEREAS, on August 2, 1996, the FHWA issued a Record of Decision (“August 1996 ROD”) approving the general location and design for the Appalachian Corridor H highway (“Corridor H”) between Elkins, West Virginia, and the West Virginia/Virginia state line;

WHEREAS, on November 19, 1996, Plaintiffs filed an action in the United States District Court for the District of Columbia (“District Court”) alleging that FHWA had issued the August 1996 ROD in violation of the National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. (“NEPA”), and Section 4(f) of the Department of Transportation Act, 49 U.S.C. § 303
(“Section 4(f)”), which action was docketed as Corridor H Alternatives v. Slater, Case No. 96-CV-2622 (TFH) (“Lawsuit # 1”);

WHEREAS, on October 8, 1997, the District Court issued an opinion in Lawsuit # 1 holding that FHWA had complied with NEPA and Section 4(f) in issuing the August 1996 ROD;

WHEREAS, on October 23, 1997, Plaintiffs appealed the District Court’s decision in Lawsuit # 1 to the U.S. Court of Appeals for the District of Columbia Circuit (“Court of Appeals”);

WHEREAS, on September 24, 1998, CHA filed a new action in the District Court challenging “findings of no constructive use” made by FHWA, pursuant to Section 4(f), for two specific properties, Corricks Ford Battlefield and the Kerns House, which action was docketed as Corridor H Alternatives v. Slater, Case No. 98-CV-2256 (“Lawsuit # 2”);

WHEREAS, on November 5, 1998, Plaintiffs requested that the District Court issue an injunction pending appeal in Lawsuit # 1 to prevent WVDOT from proceeding with any further construction of Corridor H outside an approximately 3.5-mile section near Elkins;

WHEREAS, on November 23, 1998, the Court of Appeals granted the injunction pending appeal in Lawsuit # 1, prohibiting WVDOT from proceeding with any construction of Corridor H other than construction of the approximately 3.5-mile section that Plaintiffs stated they did not oppose;

WHEREAS, on February 9, 1999, the Court of Appeals issued an opinion and judgment affirming the District Court decision upholding FHWA’s compliance with NEPA, but reversing the District Court’s decision with respect to Section 4(f), and instructing the District
WHEREAS, on March 30, 1999, pursuant to an agreement among the parties, the
District Court dismissed Lawsuit # 2 without prejudice to CHA’s right to challenge any future
findings of no constructive use that might be made by FHWA with respect to Corricks Ford
Battlefield and the Kerns House;

WHEREAS, on April 20, 1999, the Court of Appeals issued an order providing, inter
alia, that FHWA and WVDOT may proceed with construction of that portion of Corridor H
known as the Northern Elkins Bypass, and that the District Court has discretion to preside
over settlement negotiations and to approve any settlement that may be reached by the
parties, provided that such settlement is not inconsistent with the Court of Appeals’ February
9, 1999 opinion in Lawsuit # 1;

WHEREAS, on April 26, 1999, FHWA issued an Amended ROD authorizing
construction of the Northern Elkins Bypass to proceed;

WHEREAS, on May 5, 1999, the District Court issued an order referring the case to
the court’s mediation program and further providing, inter alia, that “if the case settles in whole
or in part, counsel shall advise the Court of the settlement by filing a stipulation”;

WHEREAS, on May 5, 1999, the District Court issued an order that, inter alia, enjoined
any further construction, design, or right-of-way acquisition on Corridor H pending completion
of the remaining studies of historic properties for the project and issuance of an Amended
ROD for Corridor H, and also provided that the Court would “retain jurisdiction of this case,
including the authority to modify this order as appropriate, pending the outcome of ongoing settlement negotiations among the parties”;

WHEREAS, the parties desire to eliminate, to the maximum extent possible, the potential for future litigation;

WHEREAS, the parties recognize that any settlement involving potential alignment shifts for Corridor H must take into account the interests and concerns of those potentially affected by such alignment shifts, and must not pre-determine or prejudice the outcome of any future studies regarding such alignment shifts;

WHEREAS, WVDOT is committed to the completion of Corridor H as a continuous four-lane highway, and FHWA supports WVDOT’s efforts to achieve that objective provided that such efforts are carried out in compliance with all applicable laws;

WHEREAS, CHA has a continuing interest in, and different priorities for, transportation improvements in West Virginia and the Appalachian region, which do not include the completion of Corridor H as a continuous four-lane highway, and that CHA intends to continue advocating those priorities;

WHEREAS, WVDOT intends to sequence the construction of Corridor H in a manner that allows for the completion of useable sections to the greatest extent practicable within each construction season, or over a series of consecutive construction seasons where necessary due to funding, weather, engineering, environmental, or other factors;

NOW, Therefore, the parties agree as follows:
I. DEFINITIONS

Whenever the terms listed below are used in this Agreement, the following definitions shall apply:

1. “Advance Notice Statute” means any federal or state statutory provision under which Plaintiffs would be required to provide notice to a federal or state agency before filing a lawsuit challenging a decision by that agency.

2. “Advisory Council” means the Advisory Council on Historic Preservation and any successor departments, agencies, or instrumentalities of the United States.

3. “Agreement” means this Agreement.

4. “Amended ROD” means any ROD issued by FHWA for any Project under this Agreement.


6. “Baker-to-Wardensville Project” means the portion of Corridor H from Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55) to Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259).

7. “Battlefield Alignment” means the alignment for the Kerens-to-Parsons Project that FHWA approved in the August 1996 Corridor H ROD, or any other alignment for the Kerens-to-Parsons Project that is located at least partly within the Battlefield Area.
8. “Battlefield Area” means the area within and around the Corricks Ford Battlefield, as depicted on Exhibit 3.

9. “Battlefield Avoidance Alignment” means any alignment for Corridor H that is located entirely outside the Battlefield Area.


11. “Bismarck-to-Forman Project” means the portion of Corridor H from Bismarck (at WV Route 42, 0.4 miles south of the intersection with WV Route 42/93) to Forman (at County Route 5, near Thorn Run).

12. “Blackwater Alignment” means the alignment for the Thomas-Davis Section that FHWA approved in the August 1996 Corridor H ROD, or any other alignment for the Thomas-Davis Section that is located at least partly within the Blackwater Area.

13. “Blackwater Area” means the area within and around the Blackwater Valley, south of Thomas, as depicted on Exhibit 4.

14. “Blackwater Avoidance Alignment” means any alignment for Corridor H that is located entirely outside the Blackwater Area.

15. “CHA” means Corridor H Alternatives, Inc., any corporations that are subsidiaries of CHA or are otherwise legally affiliated with CHA, any successors-in-interest to CHA, and any existing or future entities, associations, or groups formed by or with the direct involvement of any persons who, as of the Effective Date, are directors or officers of
CHA partly or entirely for the purpose of opposing Corridor H or any Project or for the purpose of promoting alternatives to Corridor H or any Project.

16. “Corridor H” means all or a portion of the Appalachian Corridor H highway, between Aggregates, West Virginia, and the West Virginia/Virginia State Line.

17. “Court of Appeals” means the United States Court of Appeals for the District of Columbia Circuit.

18. “Davis” means the town of Davis, West Virginia.

19. “Davis-to-Bismarck Project” means the portion of Corridor H from Davis (at WV Route 93, 0.7 miles east of WV Route 32) to Bismarck (at WV Route 42, 0.4 miles south of the intersection with WV Route 42/93).

20. “Delivery Date” when used in reference to the delivery of document to any Party under this Agreement is the date on which the delivery of that document to that Party is completed in accordance with the procedures established in Section II, Part E of the Agreement, except as otherwise specifically provided in this Agreement.


22. “Effective Date” means the date on which the District Court enters an order in Lawsuit # 1 approving the Agreement.
23. "Elkins-to-Kerens Project" means the portion of Corridor H from Elkins (at the terminus of the Northern Elkins Bypass, 0.55 miles east of County Route 11) to Kerens (0.2 miles north of County Route 7).

24. "Exhibit" means an exhibit attached to the Agreement.

25. "Facsimile Delivery Procedure" is the delivery procedure specified in Section II, Part E, Paragraph 2 of this Agreement.

26. "Feasible" and "Feasibility" when used in quotation marks have the same meaning as those terms are given in Section 4(f), as interpreted through governing case law, regulations, guidance, and policy statements.

27. "FHWA" means the Federal Highway Administration and any successor departments, agencies, or instrumentalities of the United States.


29. "Forman-to-Moorefield Project" means the portion of Corridor H from Forman (at County Route 5, near Thorn Run) to Moorefield (at County Route 15, 0.5 miles west of WV Route 55).

30. "Greenland Gap" means the valley between Scherr and Greenland, West Virginia, from a point just west of the intersection of County Route 1 and WV Route 93 to the intersection of County Route 1 and County Route 3/3.
31. “Hardship Acquisition” has the same meaning as that term is given in 23 C.F.R. § 771.117(d)(12), footnote 3.

32. “Improved Roadway Alternative” means any alternative that calls for the improvement of an existing two-lane or three-lane roadway, or the construction of a new two-lane or three-lane roadway, in lieu of the completion of all or a portion of Corridor H as a four-lane, divided highway.

33. “Keeper” means the Keeper of the National Register, or any other official within the United States Department of the Interior vested with authority to determine the eligibility of historic properties for listing in the National Register, pursuant to 16 U.S.C. § 470a.

34. “Kerens-to-Parsons Project” means the portion of Corridor H from Kerens (0.2 miles north of County Route 7) to Parsons (County Route 219/4, 0.2 miles south of the northernmost point at which County Route 219/4 intersects with US Route 219).

35. “Lawsuit # 1” means all stages of the lawsuit that was originally docketed as Corridor H Alternatives, et al. v. Pena et al., Case No. 96-CV-2622 (TFH), in the District Court and was docketed as Corridor H Alternatives et al. v. Slater, Case No. 97-5301, in the Court of Appeals.

36. “Lawsuit # 2” means the lawsuit docketed as Corridor H Alternatives v. Slater et al., Case No. 98-CV-2256 (TFH) in the District Court.

37. “Moorefield” means the Town of Moorefield, West Virginia.
38. “Moorefield-to-Baker Project” means the portion of Corridor H from Moorefield (at County Route 15, 0.5 miles west of WV Route 55) to Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55).

39. “MSBV EA” means the August 1999 Environmental Assessment for the Middle South Branch Valley Alternatives for Corridor H.

40. “National Register” means the National Register of Historic Places, as maintained by the United States Department of the Interior, pursuant to 16 U.S.C. § 470a.


42. “NEPA Document” means any document or report prepared by or on behalf of FHWA or WVDOT pursuant to NEPA for a Project, including but not necessarily limited to any Environmental Assessment, Finding of No Significant Impact, Draft SEIS, Final SEIS, or Amended ROD, but not including any pre-decisional, deliberative, or privileged materials.

43. “NPS” means the National Park Service and any successor departments, agencies, or instrumentalities of the United States.

44. “Paragraph” (when used in reference to a portion of the Agreement) means a portion of the Agreement contained under a heading that begins with an arabic numeral (1,2,3, etc.)
45. “Parsons-to-Davis Project” means the portion of Corridor H from Parsons (at County Route 219/4, 0.2 miles south of US Route 219) to Davis (at WV Route 93, 0.7 miles east of WV Route 32).

46. “Part” when used in reference to a portion of the Agreement means a portion of the Agreement contained under a heading that begins with an upper-case letter (A,B,C, etc.)

47. “Parties” means the United States, acting by and through FHWA; WVDOT; and the Plaintiffs.

48. “Plaintiffs” means all named Plaintiffs in Lawsuit # 1, including CHA, the West Virginia Highlands Conservancy, the West Virginia Citizen Action Group, the West Virginia Environmental Council, the Concerned Citizens Coalition, the Harrison County Environmental Citizens Organization, the Ohio Valley Environmental Coalition, the Downstream Alliance, the Northern Shenandoah Valley Audubon Society, the Student Environmental Network, Heartwood, the Resource Alliance, the Reynolds Estates Landowners, the Cedar Creek Battlefield Foundation, and the Sierra Club, any corporations that are subsidiaries of a Plaintiff or are otherwise legally affiliated with a Plaintiff, as well as any successors-in-interest to any such organization, and (except in the case of the Sierra Club) any existing or future entities, associations, or groups formed by or with the direct involvement of any persons who, as of the Effective Date, are directors or officers of any Plaintiff partly or entirely for the purpose of opposing Corridor H or any Project or for the purpose of promoting alternatives to Corridor H or any Project.
49. “Programmatic Agreement” means the Programmatic Agreement entered into by FHWA, the Advisory Council, and the SHPO with respect to Corridor H on November 8, 1995.

50. “Project” means a section of Corridor H for which an Amended ROD may be issued pursuant to this Agreement.

51. “Project Status Report” means any document required to be prepared by WVDOT pursuant to Section IV, Part B, Paragraph 6 of this Agreement.

52. “Protective Acquisition” has the same meaning as that term is given in 23 C.F.R. § 771.117(d)(12), footnote 3.

53. “Prudent” and “Prudence” when used in quotation marks have the same meaning as those terms are given in Section 4(f), as interpreted through governing case law, regulations, guidance, and policy statements.

54. “Return Receipt Delivery Procedure” is the delivery procedure specified in Section II, Part E, Paragraph 1 of this Agreement.

55. “ROD” means a Record of Decision issued pursuant to NEPA.

56. “Section” when used in reference to a portion of the Agreement means a portion of the Agreement contained under a heading that begins with an upper-case roman numeral (I, II, III, etc.)

58. “Section 106 Activities” means any activities required to be undertaken for a Project pursuant to Section 106, including but not necessarily limited to activities required to be undertaken pursuant to the Programmatic Agreement.


60. “Section 4(f) Activities” means any activities required to be undertaken for a Project pursuant to Section 4(f).

61. “Section 4(f) Document” means any finding, evaluation, report, or other document prepared by or on behalf of FHWA or WVDOT pursuant to Section 4(f) with respect to a Project, including but not necessarily limited to any finding of no constructive use and any approval of the use of a Section 4(f) Resource, but not including any pre-decisional, deliberative, or privileged materials.

62. “Section 4(f) Resource” means any park, recreation area, wildlife or waterfowl refuge or historic site that is protected under Section 4(f).

63. “SEIS” means a Supplemental Environmental Impact Statement, prepared by FHWA and WVDOT in accordance with NEPA and other applicable laws and regulations.
64. “SHPO” means the West Virginia State Historic Preservation Officer, or an official authorized to act on his or her behalf for purposes of Section 106.

65. “Stand-Down Period” when used in reference to any Amended ROD is a period of 15 calendar days following the date on which Plaintiffs receive a copy of that Amended ROD from WVDOT pursuant to this Agreement.


67. “Thomas-Davis Section” means the portion of the Parsons-to-Davis Project from a point west of Thomas (approximately 0.9 miles east of the intersection of US Route 219 and Forest Road 18, near Big Run) to a point east of Davis (at WV Route 93, 0.7 miles east of WV Route 32).

68. “United States” means the United States of America, including its departments, agencies, and instrumentalities.

69. “Use” when used in quotation marks in this Agreement has the same meaning as that term is given in Section 4(f), as interpreted through governing case law, regulations, guidance, and policy statements.

70. “USFS” means the United States Forest Service and any successor departments, agencies, or instrumentalities of the United States.

71. “Wardensville” means the Town of Wardensville, West Virginia.
72. “Wardensville-to-Virginia Project” means the portion of Corridor H from Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259) to a point on WV Route 55 approximately 100 feet west of the West Virginia/Virginia state line.

73. “WVDOT” means the West Virginia Department of Transportation, including the West Virginia Division of Highways, and any successor departments, agencies, or instrumentalities of the State of West Virginia.

74. “WVDOT-Owned Right-of-Way” means all property owned by WVDOT as right-of-way for any highway, other roadway, or recreational trail.

II. GENERAL PROVISIONS

A. Parties Bound
This Agreement is binding upon the United States, including FHWA; the State of West Virginia, including WVDOT; and the Plaintiffs.

B. Amendments
This Agreement may be amended by mutual written consent of all Parties. Any amendments to this Agreement will become effective upon approval by the District Court.

C. Integration
The Agreement (including the Exhibits) constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Agreement. The Parties acknowledge that there are no representations, agreements, or
understandings relating to the settlement other than those expressly contained in the Agreement. The following Exhibits are attached to and incorporated into the Agreement:

1. Exhibit 1: List of “Projects”
2. Exhibit 2: Illustration of “Projects”
3. Exhibit 3: Map of “Battlefield Area”
4. Exhibit 4: Map of “Blackwater Area”
5. Exhibit 5: List of Plaintiff Contacts

D. Federal Authority
This Agreement shall not be construed to (1) deprive any official of the United States of authority to revise, amend, or promulgate regulations, (2) commit any official of the United States to expend funds not appropriated by Congress or to seek appropriations from Congress, or (3) limit the ability of Congress to amend the laws of the United States.

E. Delivery of Documents
Documents required to be delivered to any Party under this Agreement shall be delivered to that Party in accordance with the Return-Receipt Delivery Procedure or the Facsimile Delivery Procedure, as specified in the applicable provision of the Agreement, or via any other procedure that is specifically authorized in this Agreement or that may subsequently be agreed-upon by the Parties in writing. Compliance with such procedures shall completely satisfy a Party’s obligation to deliver any document to another Party pursuant to this Agreement.

1. Return-Receipt Delivery Procedure
Any Party may transmit a document to another Party pursuant to the “Return Receipt Delivery Procedure” by transmitting that document to the other Party at each of the addresses specified in this Paragraph via either of the following methods: (1) U.S. Postal Service, certified mail, return receipt requested, or (2) any commercial delivery service that provides a written return receipt bearing the signature of the recipient.

a. **Return-Receipt Delivery to Plaintiffs**

Documents delivered to the Plaintiffs pursuant to the Return-Receipt Delivery Procedure shall be delivered to each of the individuals specified in Exhibit 5 at the addresses specified therein, unless those individuals or their successors give notice of a change to the other Parties in writing. Notwithstanding any other provision of this Agreement, the Delivery Date for any document delivered to the Plaintiffs pursuant to the Return-Receipt Delivery Procedure shall be the date on which a return receipt for that document is signed by the President of Corridor H Alternatives, Inc.

b. **Return-Receipt Delivery to WVDOT**

Documents delivered to WVDOT pursuant to the Return-Receipt Delivery Procedure shall be delivered to each of the following individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing:

Sheila D. Jones, Esq.
William G. Malley, Esq.
Cutler & Stanfield, L.L.P.
700 14th St. NW
Tenth Floor
Washington, DC 20005
c. Return-Receipt Delivery to FHWA

Documents delivered to FHWA pursuant to the Return-Receipt Delivery Procedure shall be delivered to each of the following individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing:

Brett Gainer, Esq.
Office of the Chief Counsel
Federal Highway Administration
10 S. Howard St.
Suite 4000
Baltimore, MD 21201
(410) 962-0936

Thomas Smith
Division Administrator
Federal Highway Administration
700 N. Washington St.
Suite 200
Charleston, WV 25301
(304) 347-5928

2. Facsimile Delivery Procedure

Any Party may transmit a document to another Party pursuant to the "Facsimile Delivery Procedure" by transmitting that document to the other Party at the facsimile number and addresses specified in this Paragraph via both of the following methods: (1) facsimile transmission and (2) any commercial overnight delivery service.
a. **Facsimile Delivery to Plaintiffs**

Documents delivered to the Plaintiffs pursuant to the Facsimile Delivery Procedure shall be delivered to the facsimile number and address specified below, unless the Plaintiffs give notice of a change to the other Parties in writing:

Andrea Ferster, Esq.
1100 17th St. NW
Tenth Floor
Washington, DC 20036
(202) 974-5142
(202) 331-9680 (facsimile)

b. **Facsimile Delivery to WVDOT**

Documents delivered to WVDOT pursuant to the Facsimile Delivery Procedure shall be delivered to the facsimile number and address specified below, unless WVDOT gives notice of a change to the other Parties in writing:

Sheila D. Jones, Esq.
William G. Malley, Esq.
Cutler & Stanfield, L.L.P.
700 14th St. NW
Tenth Floor
Washington, DC 20005
(202) 624-8400
(202) 624-8410 (facsimile)

c. **Facsimile Delivery to FHWA**

Documents delivered to FHWA pursuant to the Facsimile Delivery Procedure shall be delivered to the facsimile number and address specified below, unless FHWA gives notice of a change to the other Parties in writing:

Brett Gainer, Esq.
Office of the Chief Counsel
Federal Highway Administration
10 S. Howard St.
III. RESOLUTION OF MAJOR ISSUES IN DISPUTE

A. Elkins to Kerens

1. Issuance of Amended ROD
   FHWA may issue an Amended ROD granting approval for the Elkins-to-Kerens Project without any further study or consultation.

2. Implementation of Amended ROD
   Following the issuance of the Amended ROD for the Elkins-to-Kerens Project, FHWA and WVDOT may proceed immediately, without any Stand-Down Period, with any remaining final design activities, right-of-way acquisition, and construction within the Elkins-to-Kerens Project.

3. Right to Challenge Amended ROD
   Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Elkins-to-Kerens Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation.
B. Kerens to Parsons

1. Alignment Shift Study (SEIS)
   FHWA and WVDOT will prepare a Supplemental Environmental Impact Statement
   (“SEIS”) to examine one or more potential alignment shifts for the Kerens-to-Parsons Project.
   The SEIS will be prepared in accordance with NEPA and all other applicable laws in
   existence at the time the SEIS is prepared and the following provisions:

   a. Range of Alternatives
      The SEIS will evaluate a reasonable range of alternatives for completing the Kerens-to-
      Parsons Project. The range of alternatives will include one or more Battlefield Avoidance
      Alignments and the Battlefield Alignment.

   b. Evaluation of Alternatives
      The SEIS will evaluate the Battlefield Avoidance Alignment(s) to determine whether
      any such alternative (1) is “feasible” and “prudent” and (2) does not “use” any land protected
      by Section 4(f). The evaluation required by this Paragraph will be included in draft form in the
      Draft SEIS and in final form in the Final SEIS.

2. Alignment Selection
   In the Final SEIS, FHWA and WVDOT will select the alignment for the Kerens-to-
   Parsons Project in accordance with the following provisions:
a. **If Any Battlefield Avoidance Alignment is “Prudent” and “Feasible” and Avoids All Section 4(f) Resources:**

   If FHWA determines that there is a Battlefield Avoidance Alignment that is “prudent” and “feasible” and does not “use” any Section 4(f) resources, FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative any Battlefield Avoidance Alignment that is “prudent” and “feasible” and does not “use” any Section 4(f) resources and FHWA may approve the selection of that alternative in an Amended ROD for the Kerens-to-Parsons Project.

b. **If None of the Battlefield Avoidance Alignments Is “Prudent” and “Feasible”:**

   If FHWA determines that no Battlefield Avoidance Alignment is both “prudent” and “feasible,” FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the Battlefield Alignment and FHWA may approve the selection of that alternative in an Amended ROD for the Kerens-to-Parsons Project.

c. **If None of the “Prudent” and “Feasible” Battlefield Avoidance Alignments Avoids the Use of Section 4(f) Resources:**

   If FHWA determines one or more of the Battlefield Avoidance Alignments is “prudent” and “feasible,” but also determines that any such alternative involves the unavoidable “use” of Section 4(f) lands, FHWA and WVDOT will proceed as follows:
(1) **Re-Consider “Prudence” and “Feasibility” of Battlefield Alignment**

FHWA will re-evaluate the “prudence” and “feasibility” of the Battlefield Alignment, by taking into consideration all relevant factors, including but not limited to the cost of mitigation associated with that alignment, and determine whether the Battlefield Alignment is “prudent” and “feasible.”

If FHWA determines that the Battlefield Alignment is not “prudent” and/or is not “feasible,” FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the “prudent” and “feasible” Battlefield Avoidance Alignment that minimizes harm to Section 4(f) resources and FHWA may approve the selection of that alternative in an Amended ROD for the Kerens-to-Parsons Project.

(2) **Re-Consider “Use” of 4(f) Resources by Battlefield Alignment**

If FHWA determines that the Battlefield Alignment is “prudent” and “feasible,” FHWA will re-evaluate its July 16, 1998 finding that the Battlefield Alignment does not “use” any Section 4(f) resources. This re-evaluation will be conducted in light of the administrative record for the previous finding as well as any additional information or changed circumstances that may exist at that time.

If FHWA determines that the Battlefield Alignment “uses” any Section 4(f) resource, FHWA will include this determination together with the supporting rationale in the Final SEIS. FHWA will then weigh the harm to Section 4(f) resources caused by the Battlefield Alignment
against the harm to Section 4(f) resources caused by the “prudent” and “feasible” Battlefield Avoidance Alignments.

If FHWA determines that the Battlefield Alignment causes greater harm to Section 4(f) resources than one or more of the Battlefield Avoidance Alignments, or causes substantially equal harm to Section 4(f) resources when compared to one or more of the Battlefield Avoidance Alignments, FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the “prudent” and “feasible” Battlefield Avoidance Alignment that minimizes harm to Section 4(f) resources and FHWA may approve the selection of that alternative in an Amended ROD for the Kerens-to-Parsons Project.

(3) Select Battlefield Alignment If It Is Prudent and Feasible and Avoids All Section 4(f) Resources

If FHWA determines that the Battlefield Alignment is “prudent” and “feasible,” and further determines that the Battlefield Alignment avoids all Section 4(f) Resources, FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select the Battlefield Alignment as its preferred alternative and FHWA may approve the selection of that alternative in an Amended ROD for the Kerens-to-Parsons Project.

3. Issuance of Amended ROD

FHWA may issue an Amended ROD granting approval for the Kerens-to-Parsons Project after (1) completing the SEIS for the Kerens-to-Parsons Project, (2) completing all Section 106 Activities and Section 4(f) Activities for this Project, and (3) making any findings required by this Agreement.
4. Implementation of Amended ROD

Following the issuance of an Amended ROD for the Kerens-to-Parsons Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Kerens-to-Parsons Project.

5. Right to Challenge Amended ROD

Except as specifically provided in Section IV of this agreement, Plaintiffs retain the right to file an action under the Administrative Procedure Act or other applicable authority challenging an Amended ROD for the Kerens-to-Parsons Project based on alleged non-compliance with any applicable law or with any additional requirements imposed by this Agreement or the Programmatic Agreement.

C. Parsons to Davis

1. Alignment Shift Study (SEIS)

FHWA and WVDOT will prepare an SEIS to evaluate one or more alignment shifts for the Thomas-Davis Section of the Parsons-to-Davis Project. The SEIS will be prepared in accordance with NEPA and all other applicable laws in existence at the time the SEIS is prepared and with the following provisions:

a. Range of Alternatives

The SEIS will evaluate a reasonable range of alternatives for completing the Thomas-Davis Section of the Parsons-to-Davis Project. The range of alternatives will include one or more Blackwater Avoidance Alignments and the Blackwater Alignment.
b. **Evaluation of Alternatives**

The SEIS will evaluate the Blackwater Avoidance Alignment(s) to determine whether there is any such alternative that (1) is “feasible” and “prudent” and (2) does not “use” any land protected by Section 4(f). The evaluation required by this Paragraph will be included in draft form in the Draft SEIS and in final form in the Final SEIS.

2. **Additional Public Involvement Opportunities**

In addition to the public involvement efforts required by law, WVDOT also will undertake the following efforts to enhance opportunities for the affected communities to participate in conducting the study and in selecting the preferred alternative for the Thomas-Davis Section.

a. **Community Advisory Group**

WVDOT will establish and consult with a Community Advisory Group (“CAG”) of not more than twelve (12) members representing a cross-section of the interests potentially affected by the location of Corridor H in the Davis and Thomas areas.

(1) **Role**

The role of the CAG will be to broaden the opportunities for public involvement in all phases of the SEIS for the Thomas-Davis Section, from the initial scoping stage through the final selection of a preferred alternative. This role will include three major elements: (1) identifying the range of interests potentially affected by the location and design of the Thomas-Davis Section, including economic development, transportation, environmental, and historic preservation interests (i.e., stakeholders); (2) evaluating a range of approaches to resolving
any actual or potential conflicts among those interests; and (3) if possible, identifying a particular alternative that is acceptable to all stakeholders.

(2) **Membership**

WVDOT will establish a 60-day period during which members of the CAG may be appointed. The right to appoint members will be allocated as follows:

1. The City Council of the City of Thomas (appoints two members)
2. The City Council of the Town of Davis (appoints two members)
3. Tucker County Planning Commission (appoints one member)
4. Tucker County Convention & Visitors Bureau (appoints one member)
5. Tucker County Development Authority (appoints one member)
6. Region VII Planning and Development Council (appoints one member)
7. Alpine Heritage Preservation, Inc. (appoints one member)
8. Tucker County Gateway Project (appoints one member)
9. Highlands Trail Foundation (appoints one member)
10. Friends of the 500th (appoints one member)

If any entity listed in this Paragraph fails to exercise its right to appoint a member or members of the CAG within the 60-day period specified herein, WVDOT will consult with CHA regarding the selection of the remaining member or members. In consultation with CHA, WVDOT will then: (1) appoint the remaining member or members, (2) invite another entity to appoint the remaining member or members, or (3) extend the period within which the appointing entity may appoint a member or members to the CAG.
The power to appoint a member is plenary: it includes the power to appoint, to remove, and to replace, and the exercise of this power is solely within the discretion of the appointing authority.

(3) **Facilitator**

In consultation with CHA, WVDOT will retain the services of a facilitator, who will be responsible for scheduling and facilitating meetings of the CAG and for serving as a liaison between the CAG and WVDOT. In selecting a facilitator, WVDOT will seek an individual from the Canaan Valley Institute or elsewhere with the following characteristics: (1) experience as a facilitator, (2) familiarity with Davis and Thomas and the surrounding area, (3) familiarity with transportation and environmental issues, (4) independence and objectivity, and (5) ability to devote sufficient time to the project. WVDOT will not select as the facilitator any past or current employee of FHWA, WVDOT, or the consultant preparing the SEIS, nor will WVDOT select any person with a known personal interest in the location of the Thomas-Davis Section. WVDOT may retain the facilitator either directly or as a sub-contractor to the consultant preparing the SEIS.

(4) **Meetings**

The dates, agendas, and formats for meetings of the CAG will be determined by the members of the CAG in conjunction with the facilitator, not by WVDOT. However, WVDOT will take appropriate actions within its authority to ensure that all meetings of the CAG are open to the public; are held at locations convenient to members of the Davis and Thomas communities; and are held on a regular basis throughout the development of the SEIS.
(5) **Access to Project Records**  
WVDOT will provide opportunities for members of the CAG to review technical reports, maps, and other materials during the preparation of the SEIS, to the extent that such materials would otherwise be available to the public at large. All information provided to members of the CAG will be considered a matter of public record and therefore may be distributed without restriction to the public at large.

(6) **Coordination with NEPA Process**  
WVDOT will inform the members of the CAG of upcoming events in the NEPA process so that the members of the CAG will have an opportunity to schedule their meetings accordingly. WVDOT will not be required by this Agreement to postpone any action based on the meeting schedule of the CAG.

(7) **Effect on WVDOT Decisions**  
WVDOT will consider the views expressed by the members of the CAG, whether individually or collectively, in reaching its decisions regarding the scope of the SEIS and the location and design of the Thomas-Davis Section. WVDOT will not be required to adopt recommendations made by members of the CAG, individually or collectively, nor will WVDOT be required to give such recommendations greater weight than recommendations made by any other agency, organization, or individual.
b. **City Councils**

FHWA and WVDOT will provide an opportunity for the city councils of Thomas and Davis to express their views on the alignments under consideration. FHWA and WVDOT will solicit the views of the city councils as follows:

1. **Invitations**

   After completion of the public comment period on the Draft SEIS, WVDOT will transmit a letter to each city council requesting that the council express its views on the location and design of the Thomas-Davis Section. The transmittal of these letters will initiate an additional 60-day period for each city council to consider the alternatives examined in the SEIS and to express its views on one or more of those alternatives.

2. **Identification of Preferred Alternative**

   In its letter to each city council, WVDOT will identify its preferred alternative for the Thomas-Davis Section and will explain its reasons for selecting that alternative. The identification of a preferred alternative by WVDOT at this stage of the process will not preclude WVDOT from changing its preferred alternative at a later stage based on the city councils’ comments or other new information or changed circumstances.

3. **Presentations to City Councils**

   In its letter to each city council, WVDOT will offer to make a presentation to each city council outlining WVDOT’s reasons for selecting its preferred alternative for the Thomas-Davis Section. WVDOT will request that the City Council provide an opportunity for CHA to express its views on the preferred alternative at any such presentation.

4. **Effect of Decision by City Councils**
If, during the 60-day period specified above, either city council adopts a resolution opposing all of the Blackwater Avoidance Alignments or supporting the Blackwater Alignment, FHWA and WVDOT will have the right (but not the obligation) under this Agreement to discontinue consideration of the Blackwater Avoidance Alignments without preparing a Final SEIS for the Thomas-Davis Section. Under those circumstances, FHWA and WVDOT would then be free to proceed with any remaining steps in the approval process for the Blackwater Alignment.

3. Alignment Selection

If the Blackwater Avoidance Alignments have not been eliminated from consideration based on the actions of the city council(s) of Davis and/or Thomas, pursuant to this Agreement, FHWA and WVDOT will proceed with preparation of a Final SEIS for the Thomas-Davis Section. In the Final SEIS, FHWA and WVDOT will select the alignment for the Thomas-Davis Section in accordance with the following provisions:

a. **If Any Blackwater Avoidance Alignment is Prudent and Feasible and Avoids All Section 4(f) Resources:**

If FHWA determines that there is a Blackwater Avoidance Alignment that is “prudent” and “feasible” and does not “use” any Section 4(f) resources, FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative any Blackwater Avoidance Alignment that is “prudent” and “feasible” and does not “use” any Section 4(f) resources and FHWA may approve the selection of that alternative in an Amended ROD for the Parsons-to-Davis Project.
b. **If None of the Blackwater Avoidance Alignments Is Prudent and Feasible:**

If FHWA determines that no Blackwater Avoidance Alignment is both “prudent” and “feasible,” FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the Blackwater Alignment and FHWA may approve the selection of that alternative in an Amended ROD for the Parsons-to-Davis Project.

c. **If None of the Prudent and Feasible Blackwater Avoidance Alignments Avoids the Use of Section 4(f) Resources:**

If FHWA determines one or more of the Blackwater Avoidance Alignments is “prudent” and “feasible,” but also determines that any such alternative involves the unavoidable “use” of Section 4(f) lands, FHWA and WVDOT will proceed as follows:

1. **Determine Whether Blackwater Alignment is “Prudent” and “Feasible”**

FHWA will evaluate the “prudence” and “feasibility” of the Blackwater Alignment, by taking into consideration all relevant factors, including but not limited to the cost of mitigation associated with that alignment, and determine whether the Blackwater Alignment is “prudent” and “feasible.”

If FHWA determines that the Blackwater Alignment is not “prudent” and/or is not “feasible,” FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the “prudent” and “feasible” Blackwater Avoidance Alignment that minimizes harm to Section 4(f) resources and FHWA
may approve the selection of that alternative in an Amended ROD for the Parsons-to-Davis Project.

(2) **Determine Whether Blackwater Alignment “Uses” Any Section 4(f) Resources**

If FHWA determines that the Blackwater Alignment is “prudent” and “feasible,” FHWA will determine whether the Blackwater Alignment “uses” any Section 4(f) resources.

If FHWA determines that the Blackwater Alignment “uses” any Section 4(f) resource, FHWA will include this determination together with the supporting rationale in the Final SEIS. FHWA will then weigh the harm to Section 4(f) resources caused by the Blackwater Alignment against the harm to Section 4(f) resources caused by the “prudent” and “feasible” Blackwater Avoidance Alignments.

If FHWA determines that the Blackwater Alignment causes greater harm to Section 4(f) resources than one or more of the Blackwater Avoidance Alignments, or causes substantially equal harm to Section 4(f) resources when compared to one or more of the Blackwater Avoidance Alignments, FHWA will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select as its preferred alternative the “prudent” and “feasible” Blackwater Avoidance Alignment that minimizes harm to Section 4(f) resources and FHWA may approve the selection of that alternative in an Amended ROD for the Parsons-to-Davis Project.

(3) **Select Blackwater Alignment If It Is Prudent and Feasible and Avoids All Section 4(f) Resources**

If FHWA determines that the Blackwater Alignment is “prudent” and “feasible,” and further determines that the Blackwater Alignment avoids all Section 4(f) Resources, FHWA
will include this determination together with the supporting rationale in the Final SEIS. WVDOT may then select the Blackwater Alignment as its preferred alternative and FHWA may approve the selection of that alternative in an Amended ROD for the Parsons-to-Davis Project.

4. Issuance of Amended ROD
FHWA may issue an Amended ROD granting approval for the Parsons-to-Davis Project after (1) completing an SEIS that evaluates alignment shifts in the Thomas-Davis Section, as specified in this Agreement, (2) completing all Section 106 Activities and Section 4(f) Activities for the Parsons-to-Davis Project, and (3) making any findings required by this Agreement.

5. Implementation of Amended ROD
Following the issuance of an Amended ROD for the Parsons-to-Davis Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Parsons-to-Davis Project.

6. Additional Commitments
FHWA and WVDOT will continue to consult with the NPS and the USFS regarding the potential impacts of the Parsons-to-Davis Project on the Big Run Bog National Natural Landmark and Canyon Rim Road and Canyon Rim Trail. FHWA and WVDOT also will consult with CHA on these issues. Through such consultation, FHWA and WVDOT will ensure that the construction limits for the Parsons-to-Davis Project are located entirely outside the drainage area for Big Run Bog. In addition, FHWA and WVDOT will ensure that the Parsons-
to-Davis Project is consistent with the recommendations of the USFS regarding access from Corridor H onto Canyon Rim Road.

7. Right to Challenge Amended ROD
Except as specifically provided in Section IV of this agreement, Plaintiffs retain the right to file an action under the Administrative Procedure Act or other applicable authority challenging an Amended ROD for the Parsons-to-Davis Project based on alleged non-compliance with any applicable law or with any additional requirements imposed by this Agreement or the Programmatic Agreement.

D. Davis to Bismarck

1. Issuance of Amended ROD
FHWA may issue an Amended ROD granting approval for the Davis-to-Bismarck Project after completing all Section 106 Activities and Section 4(f) Activities for this Project.

2. Implementation of Amended ROD
Following the issuance of an Amended ROD for the Davis-to-Bismarck Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Davis-to-Bismarck Project.

3. Right to Challenge Amended ROD
Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Davis-to-Bismarck Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited to, any claim
that the Davis-to-Bismarck Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

1. Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;

2. Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement; and

3. Except as specifically provided in Section IV, Part D, of this Agreement, the Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD.

E. Bismarck to Forman

1. Issuance of Amended ROD

FHWA may issue an Amended ROD granting approval for the Bismarck-to-Forman Project after completing all Section 106 Activities and Section 4(f) Activities for this Project.

2. Implementation of Amended ROD

Following the issuance of an Amended ROD for the Bismarck-to-Forman Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Bismarck-to-Forman Project.

3. Right to Challenge Amended ROD

Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Bismarck-
to-Forman Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited to, the claim that the Bismarck-to-Forman Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

1. Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;

2. Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement;

3. Except as specifically provided in Section IV, Part D, of this Agreement, the Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD;

4. If the Keeper determines that Greenland Gap is (or is included within) a historic resource eligible for the National Register, and if FHWA then determines that Corridor H will not “use” that historic resource, Plaintiffs do not waive the right to file an action under the Administrative Procedure Act challenging that finding based on alleged non-compliance with Section 4(f); and

5. If the Keeper determines that Greenland Gap is (or is included within) a historic resource eligible for the National Register, and if FHWA issues an Amended ROD approving the “use” of that historic resource, Plaintiffs do not waive the right to file an action under the Administrative Procedure Act challenging that approval based on alleged non-compliance with Section 4(f).
F. Forman to Moorefield

1. Selection of Alternative B.

WVDOT will identify Alternative B, as defined in the MSBV EA, as its preferred alternative for the portion of the Forman-to-Moorefield Project that was evaluated in the MSBV EA. FHWA may approve the preferred alternative identified by WVDOT, provided that such approval is not inconsistent with federal environmental or other laws.

2. Issuance of Amended ROD

FHWA may issue an Amended ROD granting approval for the Forman-to-Moorefield Project after completing all remaining Section 106 Activities and Section 4(f) Activities for this Project, including Section 106 Activities required for Alternative B as defined in the MSBV EA.

3. Implementation of Amended ROD

Following the issuance of an Amended ROD for the Forman-to-Moorefield Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Forman-to-Moorefield Project. WVDOT will sequence the construction of this Project in a manner that results in the completion of the portion of this Project between the Moorefield interchange (including connecting roads to U.S. 220) and County Route 15 as a useable section.

4. Right to Challenge Amended ROD
Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Forman-to-Moorefield Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited to, the claim that the Forman-to-Moorefield Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

1. Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;

2. Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement;

3. Except as specifically provided in Section IV, Part D, of this Agreement, the Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD; and

4. If FHWA issues an Amended ROD that does not approve Alternative B, but instead approves an alignment for Corridor H that directly uses land within the Middle South Branch Valley Historic District, Plaintiffs may file an action under the Administrative Procedure Act challenging that Amended ROD based on alleged non-compliance with Section 4(f).

G. Moorefield to Baker

1. Issuance of Amended ROD
FHWA may issue an Amended ROD granting approval for the Moorefield-to-Baker Project after completing all Section 106 Activities and Section 4(f) Activities for this Project.

2. Implementation of Amended ROD
Following the issuance of an Amended ROD for the Moorefield-to-Baker Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Moorefield-to-Baker Project.

3. Right to Challenge Amended ROD
Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Moorefield-to-Baker Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited to, the claim that the Moorefield-to-Baker Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

(1) Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;

(2) Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement; and

(3) The Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD, except to
the extent that such claims are waived pursuant to Section IV, Part D, Paragraph 4 of this Agreement.

H. Baker to Wardensville
With respect to the Baker-to-Wardensville Project, the Parties agree as follows:

1. Issuance of Amended ROD
FHWA may issue an Amended ROD granting approval for the Baker-to-Wardensville Project, after completing all Section 106 Activities and Section 4(f) Activities for this Project.

2. Implementation of Amended ROD
Following the issuance of an Amended ROD the Baker-to-Wardensville Project, FHWA and WVDOT may proceed with any remaining final design activities, right-of-way acquisition, and construction of the Baker-to-Wardensville Project.

3. Right to Challenge Amended ROD
Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Baker-to-Wardensville Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited to, the claim that the Baker-to-Wardensville Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

(1) Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;
(2) Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement; and

(3) Except as specifically provided in Section IV, Part D, of this Agreement, the Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD.

I. Wardensville to Virginia State Line

1. Issuance of an Amended ROD
FHWA may issue an Amended ROD for the Wardensville-to-Virginia Project after all Section 106 Activities and Section 4(f) Activities for this Project have been completed.

2. Wardensville Improvements
Within five (5) years after issuance of an Amended ROD for the Wardensville-to-Virginia Project, WVDOT will make available a total of $1 million in federal enhancement funds or other funds for streetscape improvements and other permanent capital improvements within Wardensville. Before granting such funds, WVDOT will consult with Wardensville mayor, town recorder, and town council and the public regarding the terms and conditions upon which the grant will be made.

3. Implementation of Amended ROD
Following the issuance of an Amended ROD for the Wardensville-to-Virginia Project, WVDOT may proceed with final design, right-of-way acquisition, and construction of this Project subject to the following restrictions:

   a. Restrictions on Final Design
WVDOT may proceed with final design activities (including surveying work and aerial photography) in the Wardensville-to-Virginia Project only under the following conditions:

(1) Right to Proceed with Final Design Needed for Hardship Acquisition

Following the issuance of an Amended ROD for this Project, WVDOT may proceed with final design for this Project to the extent necessary to carry out Hardship Acquisition for the Project, provided that (1) WVDOT may proceed with such final design work only after receiving a written request for Hardship Acquisition from the affected property owner and after FHWA makes a written determination that the request meets the applicable criteria for Hardship Acquisition; (2) for purposes of such final design, WVDOT will rely on mapping based on aerial photography; and (3) for purposes of such aerial photography, WVDOT will ensure that any visible physical markers used as “control points” are removed within 10 calendar days after the necessary photographs have been taken.

(2) Right to Proceed with Final Design Needed for Protective Acquisition

Following the issuance of an Amended ROD for this Project, WVDOT may proceed with final design for this Project to the extent necessary to carry out Protective Acquisition for the Project, provided that (1) WVDOT may proceed with such final design work only after FHWA makes a written determination that the request meets the applicable criteria for Protective Acquisition; (2) for purposes of such final design, WVDOT will rely on mapping based on aerial photography; and (3) for purposes of such aerial photography, WVDOT will
ensure that any visible physical markers used as "control points" are removed within 10 calendar days after the necessary photographs have been taken.

(3) **Right to Proceed with All Final Design**
When the conditions for construction of this Project have been met, pursuant to sub-paragraph (c) of this Paragraph, WVDOT may proceed with all final design for this Project without any restriction.

**b. Restrictions on Right-of-Way Acquisition**
WVDOT may proceed with right-of-way acquisition in the Wardensville-to-Virginia Project only under the following conditions:

(1) **Right to Proceed with Hardship and Protective Acquisition**
Following issuance of the Amended ROD, WVDOT may proceed with Hardship Acquisition or Protective Acquisition for this Project. WVDOT will not solicit any requests for Hardship Acquisition.

(2) **Right to Proceed with All Right-of-Way Acquisition**
When the conditions for construction of this Project have been met, pursuant to sub-paragraph (c) of this Paragraph, WVDOT may proceed with all right-of-way acquisition for this Project without any restriction.

**c. Restrictions on Construction**
WVDOT may proceed with construction of the Wardensville-to-Virginia Project when one of the following conditions occurs:
(1) **Four-Lane in Virginia**

The Virginia Department of Transportation obtains FHWA approval, in the form of a ROD for completion of Corridor H in Virginia as a four-lane highway connecting the Virginia state line to Interstate 81; or

(2) **Unacceptable Level of Service in West Virginia**

WVDOT determines that operating conditions on WV Route 55 between Route 259 North (near Wardensville) and the Virginia state line have reached Level of Service “E” as defined by the Highway Capacity Manual at least two hours per day (not necessarily two consecutive hours), and WVDOT’s determination is confirmed by an independent expert jointly selected by WVDOT, FHWA, and CHA from the faculty of the Civil Engineering Department of West Virginia University or other comparable academic institution; or

(3) **Potential Loss of Federal Funding**

Federal legislation requires that the Appalachian Development Highway System be completed by a date certain in order to avoid the rescission of previously authorized and appropriated federal-aid highway funding for that System; or

(4) **Passage of Time**

Twenty years has elapsed from the Effective Date.

4. **Right to Challenge Amended ROD**

Plaintiffs hereby waive the right to bring an action under the Administrative Procedure Act or any other law alleging that FHWA’s issuance of the Amended ROD for the Wardensville-to-Virginia Project was not granted in accordance with NEPA, Section 4(f), Section 106, or any other applicable law or regulation. This waiver includes, but is not limited
to, the claim that the Wardensville-to-Virginia Project “constructively uses” any Section 4(f) resource. This waiver is subject to the following exceptions:

1. Plaintiffs do not waive the right to file an action alleging that the Amended ROD for this Project was issued prior to completion of the Section 106 Activities and/or Section 4(f) Activities for this Project;

2. Plaintiffs do not waive the right to file an action alleging that FHWA has not complied with its obligations under the Programmatic Agreement and

3. Except as specifically provided in Section IV, Part D, of this Agreement, the Plaintiffs do not waive the right to file an action challenging any findings made pursuant to the Endangered Species Act in the Amended ROD.

IV. IMPLEMENTATION OF SETTLEMENT AGREEMENT

A. Initial Announcement and Implementation Steps

1. Announcement
The Parties will announce the Agreement in a joint press release, which will be accompanied by a jointly prepared summary of the Agreement. The Parties will publicly distribute the joint press release and the accompanying summary of the Agreement to the media and the public on the date that the Agreement is filed with the District Court or on such other date as may be agreed-upon by the parties through their respective counsel. The Parties will refrain from making any public comments regarding the terms of the Agreement prior to the date on which the joint press release is publicly distributed.

2. Efforts to Build Public Support
WVDOT and the Plaintiffs will make a good-faith effort to build public support for the Agreement.

B. Completion of NEPA, Section 106, and Other Studies

1. Alignment Shift Studies
   FHWA and WVDOT will initiate the alignment shift studies mandated by Sections II-B and II-C of this Agreement as soon as practicable after the Effective Date.

2. Compliance with Programmatic Agreement
   FHWA and WVDOT will continue to comply with the existing Programmatic Agreement for all Projects, including Projects where alignment shifts are being studied, except as follows:
   FHWA will request that the Advisory Council allow the section designations in the Programmatic Agreement to be modified to conform to the Project designations in this Agreement. FHWA and WVDOT will oppose any amendment of the Programmatic Agreement that would reduce or eliminate CHA’s right to review and comment on Section 106 reports, unless CHA does not oppose the amendment.

3. Improved Roadway Alternative
   With respect to all remaining NEPA, Section 106, and other studies involving Corridor H, regardless of whether those studies are specifically described in this Agreement, Plaintiffs waive their right to submit comments in any form requesting the consideration or approval of an Improved Roadway Alternative or contending that such an alternative is required to be
considered or approved under any law, regulation, or policy. Plaintiffs do not otherwise waive any right to advocate for an Improved Roadway Alternative.

4. Project Termini
With respect to all remaining NEPA, Section 106, and other studies involving Corridor H, regardless of whether those studies are specifically described in this Agreement, Plaintiffs waive their right to submit comments in any form that are based in any way on the argument that the Projects lack independent utility or logical termini or limit the consideration of alternatives for other Projects.

5. Completion of Ongoing Section 106 Activities
Nothing in this Agreement will be interpreted to preclude FHWA and WVDOT from proceeding with the ongoing Section 106 Activities for the Corridor H alignment that was approved in the August 1996 ROD.

6. Project Status Reports
Within 30 days after the Effective Date, and at least once every six months thereafter until construction of each Project is completed, WVDOT will transmit to the Plaintiffs a Project Status Report for the next 12-month period in accordance with the Return-Receipt Delivery Procedure. The Project Status Report will contain the following information, to the best of WVDOT's knowledge based on existing information, with respect to each Project for which construction has not yet been completed:

(1) Estimated schedule for the remaining Section 106 Activities and Section 4(f) Activities for the Project (if any).
(2) Estimated schedule for alignment shift studies for the Project (if any).
(3) Estimated date for issuance of Amended ROD for the Project.
(4) Estimated date for commencement of final design and right-of-way acquisition for the Project.
(5) Estimated date for advertising and letting construction contracts for the Project.
(6) Estimated date for commencement of construction of the Project.
(7) Estimated date for completion of construction of the Project.
(8) Approximate termini for construction sections, if construction of the Project will take place over more than one construction season.
(9) Status of U.S. Route 50 study, which is to be performed pursuant to Section V, Paragraph 2 of this Agreement.
(10) Status of efforts to enforce weight limits on U.S. Route 219, between Elkins and Thomas, pursuant to Section V, Paragraph 7, of this Agreement.

7. NEPA Documents
   WVDOT will transmit copies of all NEPA Documents to the Plaintiffs, within ten (10) working days after those documents receive final agency approval, via the Return-Receipt Delivery Procedure.

8. Section 4(f) Documents
   FHWA will transmit copies of all Section 4(f) Documents to the Plaintiffs, within ten (10) working days after those documents receive final agency approval, via the Return-Receipt Delivery Procedure.
9. Other Documents
WVDOT will transmit copies of the following documents to the Plaintiffs, within the time frames specified below, via the Return-Receipt Delivery Procedure:

(1) Any written request for Hardship Acquisition of right-of-way for the Wardensville-to-Virginia Project (to be transmitted to the Plaintiffs within 10 days after receipt of the request by WVDOT);

(2) Any written determination by FHWA or WVDOT that Hardship or Protective Acquisition is appropriate for a particular parcel of land for the Wardensville-to-Virginia Project, together with the documentation relied upon in making that determination (to be transmitted to the Plaintiffs within 10 days after final approval of the determination by FHWA or WVDOT, as the case may be);

(3) Any written request or proposal from the Advisory Council or the SHPO for an amendment of the Programmatic Agreement (to be transmitted to the Plaintiffs within 10 days after receipt of the request or proposal by WVDOT), and

(4) Any advertisement for bids for construction contracts for any portion of any Project (to be transmitted to the Plaintiffs within 10 days after the initial publication of the advertisement),

C. Dispute Resolution

1. ADR Obligations
If any dispute arises regarding any Party’s compliance with the terms of this Agreement, and such dispute has not yet become the subject of litigation, all Parties will
attempt to resolve such dispute in good faith through the alternative dispute resolution ("ADR") procedures established in this Agreement.

2. ADR Procedures

Any Party may initiate ADR proceedings under this Agreement by transmitting a written request for ADR via the Facsimile Delivery Procedure. When ADR proceedings are initiated in this manner, the Parties shall proceed as follows:

a. **Step 1: Direct Negotiation**

Within ten (10) calendar days after the initiation of ADR proceedings under this Agreement, the Parties shall confer (in person or by telephone) regarding the issues in dispute and shall seek in good faith to resolve the dispute without the involvement of a third-party mediator.

b. **Step 2: Mediation**

The Parties may agree at any time to select a private third-party mediator to assist in the resolution of the issues in dispute. Moreover, any Party may unilaterally propose the appointment of a private third-party mediator if the issues in dispute are not fully resolved within ten (10) calendar days after the initial conference among counsel in Step 1. Any such proposal shall be made in writing and shall be transmitted via the Facsimile Delivery Procedure. If such a proposal is made, the Parties shall confer (in person or by telephone) within five (5) days after the date of that proposal regarding the selection of the mediator.
Counsel for the Parties shall seek in good-faith to agree upon a mediator and to resolve the remaining issues in dispute as expeditiously as possible.

c. **Written Agreement**

If an agreement is reached on any issues in dispute, whether at Step 1 or Step 2, the Parties will state the agreement in writing, and the agreement will be signed by each Party that participated in the ADR process (or by their counsel), thus concluding the ADR process with respect to those issues.

d. **FHWA and WVDOT’s Right to Terminate**

FHWA and WVDOT will each have the right to terminate an ongoing ADR process if (1) 60 calendar days have elapsed since the initiation of ADR proceedings or (2) any Plaintiff commences litigation regarding any aspect of the Amended ROD that is the subject of the ADR process. The FHWA and WVDOT may exercise this right, individually or jointly, only by providing written notice to CHA via the Facsimile Delivery Procedure. The termination becomes effective on the Delivery Date for the termination notice.

e. **Plaintiffs’ Right to Terminate**

The Plaintiffs have the right to terminate an ongoing ADR process at any time. The Plaintiffs may exercise this right, individually or jointly, only by providing written notice to FHWA and WVDOT via the Facsimile Delivery Procedure. The termination becomes effective on the Delivery Date for the termination notice.
f. **Automatic Termination**
   The ADR process will be terminated automatically, by operation of this Agreement, on the date any Plaintiff commences litigation regarding any matter specifically at issue in the ADR process.

g. **Expenses**
   Each Party will be responsible for any expenses (including attorneys’ fees) that it incurs while participating in ADR procedures pursuant to this Agreement. FHWA and WVDOT will be responsible for paying for the services of the mediator, if a mediator is retained pursuant to the ADR procedures in this Agreement.

3. **Effect of ADR on Ongoing and Planned Activities**
   The initiation of ADR proceedings with respect to any Project shall affect activities in that Project as follows:

   a. **ADR Initiated Before Amended ROD is Issued**
      If ADR proceedings are initiated with respect to a Project before the Amended ROD is issued for that Project, FHWA and WVDOT will be allowed to proceed during the ADR process with any and all ongoing or planned activities in that Project.

   b. **ADR Initiated During Stand-Down Period**
      During the Stand-Down Period, FHWA and WVDOT will not let any final design contracts, conduct any right-of-way acquisition, or let any construction contracts for the Project covered by that Amended ROD. If ADR proceedings are initiated with respect to an Amended ROD during the Stand-Down Period for that Amended ROD, FHWA and WVDOT
will not let any final design contracts, conduct any right-of-way acquisition, or let any construction contracts for the Project covered by that Amended ROD until ADR efforts regarding that Amended ROD have been concluded in accordance with this Agreement.

c. **ADR Initiated After the Stand-Down Period**
   If ADR proceedings are initiated with respect to an Amended ROD after the end of the Stand-Down Period for that Amended ROD, FHWA and WVDOT will be allowed to proceed during the ADR process with any and all ongoing or planned activities in that Project.

4. **Litigation**
   The filing of a request for ADR following the issuance of an Amended ROD is not a prerequisite for seeking judicial relief with respect to any aspect of that Amended ROD.

D. **Future Litigation**

1. **Improved Roadway Alternative**
   Plaintiffs waive all existing and future legal claims or requests for relief that are based in any way on the argument that FHWA and/or WVDOT failed to give sufficient consideration to, or improperly failed to select, an Improved Roadway Alternative.

2. **Project Termini**
   Plaintiffs waive all existing and future legal claims or requests for relief that are based in any way on the argument that the Projects lack independent utility or logical termini or limit the consideration of alternatives for other Projects.

3. **Injunctive Relief**
Plaintiffs waive the right, in any action relating to a particular Project or Projects, to seek injunctive relief relating to any Project other than the Project or Projects at issue in that action. In particular, but without limiting the foregoing, Plaintiffs waive the right, in any action challenging an Amended ROD, to seek injunctive relief with respect to any Project other than the Project or Projects approved in that Amended ROD.

4. Waiver of Pre-Existing Claims
Plaintiffs waive the right to file any action, with respect to any Project, that is based on a final agency action taken, or finding made, prior to the Effective Date.

5. Litigation Initiated by Others
With respect to any claims that the Plaintiffs themselves have waived under this Agreement, the Plaintiffs agree that (1) they will not invite or solicit others to bring such claims, or invite or solicit others to lend financial assistance for the purpose of assisting others in bringing such claims, through the use of (a) newspaper, radio, or television advertisements taken out in the name of the Plaintiff, (b) newsletters, correspondence or other documents bearing the Plaintiff’s official letterhead or logo, or (c) materials electronically posted on the Plaintiff’s official Internet site; (2) they will not lend financial assistance to others for the purpose of assisting them in filing such claims, and (3) they will not seek to appear as amici curiae, individually or collectively, in the litigation of such claims; provided, however, that the Sierra Club is not bound by clauses (1) and (2) of this Paragraph but is bound by clause (3), which prohibits the Plaintiffs from appearing as amici curiae in the litigation of claims that the Plaintiffs have waived under this Agreement.
6. **Deadlines for Challenging Amended ROD**

Plaintiffs hereby waive the right to file any action challenging an Amended ROD that does not comply with the deadlines set forth in this Paragraph.

a. **General Rule.**

Except as provided in sub-paragraph (b) of this Paragraph, the deadline for any Plaintiff to file an action challenging an Amended ROD is the later of the following dates: (1) the 30th calendar day after the Delivery Date for that Amended ROD or (2) if ADR proceedings have been initiated with respect to the Amended ROD during the Stand-Down Period, the 30th calendar day after the termination of those ADR proceedings.

b. **Special Requirements for Advance-Notice Statutes**

The following deadlines apply to any action filed by any Plaintiff challenging an Amended ROD under an Advance Notice Statute:

1. The Plaintiff must provide the required notice of intention to sue, in accordance with the Advance Notice Statute, by the later of the following dates: (1) the 30th calendar day after the Delivery Date for the Amended ROD or (2) if ADR proceedings have been initiated with respect to the Amended ROD during the Stand-Down Period, the 30th calendar day after the termination of those ADR proceedings.

2. The Plaintiff must file the claim challenging the Amended ROD under the Advance Notice Statute no later than 30 calendar days after the expiration of the notice period required by the Advance Notice Statute. FHWA and WVDOT will not object to the filing of such a claim in the form of an amendment to a complaint previously filed by the same Plaintiff challenging the same Amended ROD.
c. **Effect on FHWA and WVDOT Activities**

The deadlines established in this Agreement are not intended to limit in any way the ability of FHWA and WVDOT to proceed with final design, right-of-way, and/or construction activities following the issuance of an Amended ROD. The only restrictions imposed on such activities by this Agreement are the restrictions imposed in Section III, Part I, Paragraph 3, and Section IV, Part C, Paragraph 3 of this Agreement.

7. **Challenges to Post-Amended-ROD Decisions**

Except to the extent provided in Section IV, Part D, Paragraphs 1-5, the Plaintiffs do not waive the right to file an action, with respect to any Project, based on claims that arise after the issuance of the initial Amended ROD for that Project. For purposes of this Paragraph, a claim “arises after” the issuance of an Amended ROD only if that claim (1) is based on a final agency action that occurs after the issuance of the Amended ROD and (2) could not have been filed in an action challenging the Amended ROD itself.

8. **Corridor H in Virginia**

Plaintiffs do not waive any existing or future claims with respect to any aspect of Corridor H between the West Virginia/Virginia state line and Interstate 81 in Virginia.

9. **Enforcement of Order Approving Settlement Agreement**

Notwithstanding any other provision of this Agreement, the Plaintiffs do not waive the right to enforce any provision of this Agreement or the order of the District Court approving this Agreement or the right to seek appropriate injunctive relief on an interim or permanent basis consistent with the terms of this Agreement.

10. **Reservation of Rights by FHWA and WVDOT**
FHWA and WVDOT reserve any and all defenses that may be raised in any future actions that may be filed by any Plaintiff with respect to any aspect of Corridor H, including but not limited to defenses based on theories of standing, mootness, laches, waiver, estoppel, and res judicata.

11. No Admission of Right to Sue
References in this Agreement to the “right” of the Plaintiffs to bring certain causes of action should not be construed as an admission FHWA or WVDOT that such a right actually exists under applicable laws. Such references are included in this Agreement solely for the purpose of limiting the scope of the Plaintiffs’ waiver of rights; they are not intended to confer rights on the Plaintiffs that would not otherwise exist.

V. ADDITIONAL ISSUES

1. Removal of Signs in Right-of-Way
WVDOT will ensure that all unauthorized signs relating to Corridor H that have been erected within WVDOT-Owned Right-of-Way are removed within thirty (30) calendar days after the Effective Date. WVDOT also will ensure that, if any new unauthorized signs relating to Corridor H are erected within WVDOT-owned Right-of-Way after the Effective Date, such signs are removed within ten (10) calendar days after WVDOT receives written notice of their existence and location. Notwithstanding any other provision in this Paragraph, WVDOT will not be required by this agreement to remove any sign within a specific time period if such removal would be inconsistent with WVDOT’s obligations under applicable statutes and regulations, including those governing the removal of obstructions from highway rights-of-way.
2. **Study of U.S. 50 Improvements**
   Commencing in the year 2000, WVDOT will undertake a study of improvements to U.S. Route 50 from WV Route 972, near Keyser, to the Virginia state line. Upon completion, WVDOT will transmit one copy of the study to Plaintiffs at the following address:

   - Lee Wakefield
   - Corridor H Alternatives
   - P.O. Box 463
   - Wardensville, WV 26851
   - (304) 874-3188

3. **Re-Design of Connection to U.S. 219 at Kerens**
   WVDOT will evaluate the connection between Corridor H and U.S. Route 219 at Kerens to determine whether the current design complies with applicable design standards. If any design deficiencies are identified, WVDOT will make a good-faith effort to eliminate such deficiencies. Before making any final decision regarding the connection between Corridor H and U.S. Route 219 at Kerens, WVDOT will transmit engineering drawings depicting the alternative designs that it is considering to the Plaintiffs at the following address, in person or via any commercial overnight delivery service, and will provide the Plaintiffs with five (5) calendar days to comment on those design plans via telephone or in writing:

   - Ruth Blackwell Rogers
   - Moon Run
   - Kerens, WV 26276
   - (304) 636-2662

4. **Release of Traffic and Safety Data**
   WVDOT will publicly release the following information that was provided to the Plaintiffs during the mediation process: (1) information concerning traffic volumes and level of
services, and (2) information concerning the total number of accidents and the accident rates on specific roadway sections.

5. Funds for Recreational Trails
The Parties will jointly seek judicial approval of an order authorizing the immediate release of federal-aid highway funds for all recreational trail projects approved in the August 1996 Corridor H ROD in Grant, Tucker, and Randolph Counties.

6. Attorneys Fees
Pursuant to the Order approving this Agreement, WVDOT shall pay the Plaintiffs at the Equal Access to Justice Act rate for the attorneys’ fees incurred by the Plaintiffs in connection with the mediation process that resulted in this Agreement within 90 days after the Effective Date. The amount to be paid to the Plaintiffs for attorneys fees’ pursuant to this Paragraph is $24,529. If WVDOT does not pay the Plaintiffs’ attorneys’ fees within 90 days after the Effective Date, and the Plaintiffs then bring an action to compel compliance with the order requiring payment of such fees, WVDOT shall pay the Plaintiffs at the Equal Access to Justice Act rate for the attorneys’ fees incurred by the Plaintiffs in connection such action. The United States, including FHWA, will not be responsible for paying any portion of the attorneys’ fees awarded to CHA pursuant to this Paragraph.

7. Truck Traffic on Route 219
WVDOT agrees to make reasonable efforts to enforce weight limits on truck traffic on U.S. Route 219 between Elkins and Thomas and to provide status reports on such efforts pursuant to Section IV, Part B, Paragraph 6.
# # #

THIS IS THE END OF THE TEXT OF THE SETTLEMENT AGREEMENT.
EXHIBITS 1-5 IMMEDIATELY FOLLOW THIS PAGE.
THE EXHIBITS ARE IMMEDIATELY FOLLOWED BY THE SIGNATURE PAGES.
## Exhibit 1: List of “Projects”

<table>
<thead>
<tr>
<th>Project</th>
<th>Western Terminus</th>
<th>Eastern Terminus</th>
<th>Length (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elkins to Kerens</td>
<td>Elkins (at the terminus of the Northern Elkins Bypass, 0.55 miles east of County Route 11)</td>
<td>Kerens (0.2 miles north of County Route 7)</td>
<td>5.5 miles</td>
</tr>
<tr>
<td>Kerens to Parsons</td>
<td>Kerens (0.2 miles north of County Route 7)</td>
<td>Parsons (at County Route 219/4, 0.2 miles south of the northernmost point at which County Route 219/4 intersects with US Route 219)</td>
<td>13.5 miles</td>
</tr>
<tr>
<td>Parsons to Davis</td>
<td>Parsons (at County Route 219/4, 0.2 miles south of the northernmost point at which County Route 219/4 intersects with US Route 219)</td>
<td>Davis (at WV Route 93, 0.7 miles east of WV Route 32)</td>
<td>9 miles</td>
</tr>
<tr>
<td>Davis to Bismarck</td>
<td>Davis (at WV Route 93, 0.7 miles east of WV Route 32)</td>
<td>Bismarck (at WV Route 42, 0.4 miles south of the intersection with WV Route 42/93)</td>
<td>16.5 miles</td>
</tr>
<tr>
<td>Bismarck to Forman</td>
<td>Bismarck (at WV Route 42, 0.4 miles south of the intersection with WV Route 42/93)</td>
<td>Forman (at County Route 5, near Thorn Run)</td>
<td>9.5 miles</td>
</tr>
<tr>
<td>Forman to Moorefield</td>
<td>Forman (at County Route 5, near Thorn Run)</td>
<td>Moorefield (at County Route 15, 0.5 miles west of WV Route 55)</td>
<td>16 miles</td>
</tr>
<tr>
<td>Moorefield to Baker</td>
<td>Moorefield (at County Route 15, 0.5 miles west of WV Route 55)</td>
<td>Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55)</td>
<td>14 miles</td>
</tr>
<tr>
<td>Baker to Wardensville</td>
<td>Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55)</td>
<td>Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259)</td>
<td>7 miles</td>
</tr>
<tr>
<td>Wardensville to Virginia</td>
<td>Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259)</td>
<td>Virginia Line (a point on WV Route 55 approximately 100 feet west of the West Virginia/Virginia state line)</td>
<td>5.5 miles</td>
</tr>
</tbody>
</table>

Settlement Agreement – Filed February 7, 2000
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
Exhibit 2: Illustration of "Projects"
Exhibit 3: Map of "Battlefield Area"
Exhibit 5: List of Plaintiff Contacts

Andrea Ferster, Esq.
1100 17th St. NW
Tenth Floor
Washington, DC 20036
(202) 974-5142

Lee Wakefield
Corridor H Alternatives
HC 68 Box 78 A
Wardensville, WV 26851
(304) 874-3188

Pamela Moe-Merritt
Corridor H Alternatives, Inc.
801 N. Randolph Ave.
Elkins, WV 26251
(304) 637-4082

Hugh Rogers
West Virginia Highlands Conservancy
Moon Run
Kerens, WV 26276
(304) 638-2662

Norm Steenstra
West Virginia Citizen Action Group
1324 Virginia Street East
Charleston, WV 25301
(304) 346-5891

Donald S. Garvin, Jr., President
West Virginia Environmental Council
Rt. 6, Box 627
Buckhannon, WV 26201
(304) 472-8716

Vivian Stockman
Concerned Citizens Coalition
249 Millstone Run
Spencer, WV 25276
(304) 655-7486

Settlement Agreement – Filed February 7, 2000
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
Matt Evans  
**Harrison County Environmental Citizens Organization**  
Rt. 4, Box 1154  
Salem, WV 26426  
(304) 783-5307  

Dianne Bady, Executive Director  
**Ohio Valley Environmental Coalition**  
725 1/2 Fourteenth Street NW  
Huntington, WV 25704  
(304) 522-0246  

Dave Houser, President  
**Downstream Alliance**  
Rt. 1, Box 103  
Moatsville, WV 26405  
(304) 892-4372  

Alison Cochran, Executive Director  
**Heartwood**  
116 1/2 S. College  
Bloomington, IN 47403  
(812) 337-8898  

Margaret Janes  
**Potomac Headwaters Resource Alliance**  
HC 67, Box 27 AA  
Mathias, WV 26812  
(304) 897-6048  

Laura Spadaro, Chapter Chair  
**West Virginia Sierra Club**  
76 Fifteenth Street  
Wheeling, WV 26003  
(304) 232-0191 or 232-4188  

Leah Divine  
**Student Environmental Network**  
Rt.1, Box 209-5  
Kings Run Road  
Elkins, WV 26241  
(304) 635-6765
Fran Endicott
Northern Shenandoah Valley Audubon Society
3355 Calmes Neck Lane
Boyce, VA 22720
(540) 837-1471

Michael Slimak
Reynolds'Estates Landowners
9207 Shotgun Court
Springfield, VA 22153
(703) 644-0891

Suzanne Lewis
Cedar Creek Battlefield Foundation:
8437 Valley Pike
Middletown, VA 22645
(540) 869-2064
On behalf of the United States Department of Justice:

Aimee Bevan
Trial Attorney
General Litigation Section
Environment and Natural Resources Division

Dated: 12-2-99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Corridor H Alternatives, Inc.

Hugh Rogers, President

Dated: Dec 1, 1999

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)

U.S. District Court for the District of Columbia
On behalf of Plaintiff West Virginia Citizen Action Group:

Norm Steenstra, Executive Director

Dated: 11/30/99

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of West Virginia Highlands Conservancy:

Frank Young, President

Dated: 12-9-99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff West Virginia Environmental Council:

Donald S. Garvin, Jr., President

Dated: November 30, 1999

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Concerned Citizens Coalition:

Vivian Stockman, President

Dated: 12/7/99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Harrison County Environmental Citizens Organization:

Matt Evans

Dated: November 30, 1999

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Ohio Valley Environmental Coalition:

Dianne Bady, Executive Director

Dated: 11/30/99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Downstream Alliance:

Dave Houser, President

Dated: 12-1-99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Northern Shenandoah Valley Audubon Society:

Fran Endicott

Dated: Dec. 1, 1999

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Student Environmental Network:

Leah Divine  
Dated: 12/01/99

Settlement Agreement  
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)  
U.S. District Court for the District of Columbia
On behalf of Plaintiff Heartwood:

Alison Cochran, Executive Director  Dated: November 29, 1999
Alison Cochran, Executive Director

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Resource Alliance:

Margaret Janes, President

Dated: 11/30/99

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Reynolds Estates Landowners:

Michael Slimak, President

Dated: Dec 3, 1999

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)

U.S. District Court for the District of Columbia
On behalf of Plaintiff Cedar Creek Battlefield Foundation:

Suzanne Lewis, Executive Director

Dated: December 2, 1999

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of Plaintiff Sierra Club:

[Signature]

Executive Director

Title

Dated: 2/1/2000

Settlement Agreement

Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)

U.S. District Court for the District of Columbia
On behalf of Defendant West Virginia Department of Transportation:

Samuel G. Bonasso

Dated: December 1, 1999

Settlement Agreement
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)
U.S. District Court for the District of Columbia
On behalf of the Federal Highway Administration:

Thomas Smith  
Division Administrator, West Virginia

Dated: December 1, 1999

Settlement Agreement  
Corridor H Alternatives v. Slater, 96-CV-2622 (TFH)  
U.S. District Court for the District of Columbia
Appalachian Corridor H
Parsons-to-Davis SFEIS

Appendix C

Formal Section 7 Consultation
WVNFS USFWS
Biological Opinion
United States Department of the Interior
FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

November 6, 2006

Mr. Henry E. Compton
Division Environmental Coordinator
Federal Highway Administration
Geary Plaza, Suite 200
700 Washington Street, East
Charleston, West Virginia 25301

Re: Appalachian Corridor H, Davis to Bismark; Formal Consultation Initiation

Dear Mr. Compton:

On October 25, 2006, the U.S. Fish and Wildlife Service (Service) received your letter requesting that we confirm the May 5, 2006 draft Biological Opinion (BO) on the Appalachian Corridor H, Parsons to Davis project as the final BO. This letter serves to confirm that request. As a result, no further Endangered Species Act (ESA) Section 7 consultation on that project is required unless the reinitiation criteria are met, project plans change, or if additional information on listed and proposed species becomes available. The Service will continue to work with you to implement the terms and conditions of the BO as agreed to.

This letter also acknowledges the Service’s October 6, 2006 receipt of your October 2, 2006 letter requesting initiation of formal section 7 consultation under the ESA on construction of Appalachian Corridor H, Davis to Bismark section. The consultation concerns the possible effects of the proposed project on the West Virginia northern flying squirrel (Glaucomys sabrinus fuscus). As discussed with you by phone on October 25, 2006, due to our currently heavy workload and staffing shortages, the Service has not yet fully reviewed the information provided in your revised initiation package to determine whether it contains all the information necessary to initiate formal consultation on this project. In addition, because of the strong similarities between the two project sections, and the associated formal consultations, the Service also wished to resolve any outstanding issues on the previous Parsons to Davis consultation prior to proceeding with an additional consultation. We anticipate that we will have completed a review of your Davis to Bismark initiation package by November 30, 2006. Should it be determined that additional information is required, we will notify you at that time.
Mr. Henry E. Compton
November 6, 2006

The Service will continue to coordinate with your office throughout the formal consultation process, and appreciates the cooperative efforts that have been expended to address these issues. If you have further questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, or at the letterhead address.

Sincerely,

Laura Hill
For Thomas R. Chapman
Field Supervisor
Mr. Henry E. Compton  
Division Environmental Coordinator  
Federal Highway Administration  
Geary Plaza, Suite 200  
700 Washington Street, East  
Charleston, West Virginia 25301  

Re: Appalachian Corridor H, Parsons to Davis; Formal Consultation Initiation  

Dear Mr. Compton:  

This document transmits the U.S. Fish and Wildlife Service's (Service's) draft biological opinion (BO) on the proposed construction of Appalachian Corridor H, Parsons to Davis in Tucker County, West Virginia, and its effects on the federally endangered West Virginia northern flying squirrel, Glaucomys sabrinus fuscus. This BO has been developed in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 et seq.). Information provided in the September 2004 Biological Assessment; the October 2005 initiation package; and discussions between the Service, the Federal Highway Administration (FHWA) and the West Virginia Division of Highways (WVDOH) have been used in the preparation of this document.

CONSULTATION HISTORY

Table 1: Summary of Section 7 Consultation History for the Proposed Action.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/14/2000</td>
<td>Service letter to WVDOH providing a list of federally listed species that could occur within the study area</td>
</tr>
<tr>
<td>7/17/2001</td>
<td>WVDOH letter to the Service requesting attendance at meeting to discuss modifying alternatives to avoid impacts to G. s. fuscus</td>
</tr>
<tr>
<td>8/9/2001</td>
<td>Meeting with West Virginia Division of Natural Resources (WVDNR), Service, U.S. Forest Service (USFS), U.S. Environmental Protection Agency, FHWA, WVDOH, and Baker Engineering to discuss modifying alternatives to avoid impacts to G. s. fuscus</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8/20/2001</td>
<td>WVDOH letter to the Service regarding the results of studies that document the occurrence of <em>G. s. fuscus</em> within the study area</td>
</tr>
<tr>
<td>8/24/2001</td>
<td>Service letter to the WVDOH stating that alternatives within the Blackwater Avoidance Area would impact <em>G. s. fuscus</em> and recommending that the WVDOH should look for alternatives that would avoid or minimize impacts to <em>G. s. fuscus</em> habitat.</td>
</tr>
<tr>
<td>9/6/2001</td>
<td>Service amends Appendix A (Guidelines for habitat identification and management) of the <em>G. s. fuscus</em> Recovery Plan</td>
</tr>
<tr>
<td>10/9/2001</td>
<td>FHWA publishes a Federal Register Notice of Intent to prepare a Supplemental Draft Environmental Impact Statement (EIS) and expand the study area.</td>
</tr>
<tr>
<td>10/22/2001</td>
<td>WVDOH submits Indiana bat mist net survey report to the Service</td>
</tr>
<tr>
<td>11/9/2001</td>
<td>Service letter to the WVDOH confirming that the proposed project is not likely to adversely affect the Indiana bat</td>
</tr>
<tr>
<td>12/6/2001</td>
<td>Service letter to FHWA responding to Notice of Intent to prepare a Supplemental Draft EIS and concurring with the proposal to expand the study area.</td>
</tr>
<tr>
<td>7/29/2002</td>
<td>WVDOH letter to the Service providing results of Cheat Mountain salamander surveys conducted within the study area</td>
</tr>
<tr>
<td>8/12/2002</td>
<td>Service letter to the WVDOH confirming that the proposed project is not likely to adversely affect the Cheat Mountain salamander</td>
</tr>
<tr>
<td>8/21/2002</td>
<td>WVDOH letter to the Service submitting a Biological Assessment (BA) that evaluates impacts of alternatives and concludes the some alternatives are not likely to adversely affect <em>G. s. fuscus</em></td>
</tr>
<tr>
<td>10/2/2002</td>
<td>Service biologist Tolin meets with Baker Engineering to conduct field review of habitat within study area and determines that suitable habitat is present within the area of the “avoidance” alternatives.</td>
</tr>
<tr>
<td>10/11/2002</td>
<td>Service letter to the WVDOH reviewing 8/2002 Biological Assessment and recommending that all alternatives are likely to adversely affect <em>G. s. fuscus</em> and that a more thorough evaluation of suitable habitat should be conducted</td>
</tr>
<tr>
<td>12/11/2002</td>
<td>WVDOH submits Supplemental Draft EIS</td>
</tr>
<tr>
<td>1/27/2003</td>
<td>Service’s West Virginia Field Office memo to Department of the Interior providing comments on Supplemental Draft EIS and recommending that the WVDOH select the least damaging alternative</td>
</tr>
<tr>
<td>11/20/2003</td>
<td>Meeting with WVDNR, WVDOH, FHWA, Dr. Michael, and Baker Engineering to discuss current information on <em>G. s. fuscus</em> in regard to the proposed project</td>
</tr>
<tr>
<td>1/5/2004</td>
<td>WVDOH submits original Preferred Alternative Report to the Service</td>
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<td>Date</td>
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<tr>
<td>1/15/2004</td>
<td>Meeting with Service, WVDOH, and FHWA to discuss formal consultation procedures and review next steps</td>
</tr>
<tr>
<td>2/4/2004</td>
<td>Service letter to the WVDOH commenting on Preferred Alternative Report and recommending that a revised BA be completed before selecting a preferred alternative</td>
</tr>
<tr>
<td>2/25/2004</td>
<td>Baker Engineering submits <em>G. s. fuscus</em> maps to the Service</td>
</tr>
<tr>
<td>4/29/2004</td>
<td>Meeting with Service, WVDOH, FHWA, Dr. Michael, and Baker Engineering to discuss results of the habitat mapping effort</td>
</tr>
<tr>
<td>5/5/2004</td>
<td>Baker Engineering submits revised <em>G. s. fuscus</em> maps to Service</td>
</tr>
<tr>
<td>5/5/2004</td>
<td>Field review with Service biologist Ceperly, WVDOH, Dr. Michael, and Baker Engineering to evaluate <em>G. s. fuscus</em> habitat mapping</td>
</tr>
<tr>
<td>7/15/2004</td>
<td>Meeting with Service, WVDOH, FHWA, and Baker Engineering to discuss information to be included in the revised Biological Assessment</td>
</tr>
<tr>
<td>8/6/2004</td>
<td>WVDOH submits revised Biological Assessment to the Service</td>
</tr>
<tr>
<td>8/23/2004</td>
<td>Meeting with Service, WVDOH, FHWA, and Baker Engineering to discuss contents of revised Biological Assessment and next steps</td>
</tr>
<tr>
<td>9/8/2004</td>
<td>WVDOH submits revised Biological Assessment, including changes discussed at the 8/23/2004 meeting</td>
</tr>
<tr>
<td>10/14/2004</td>
<td>Service letter to the WVDOH concurring with revised Biological Assessment and concluding that all alternatives would adversely impact <em>G. s. fuscus</em></td>
</tr>
<tr>
<td>11/12/2004</td>
<td>WVDOH sends Amended Preferred Alternative Report to the Service</td>
</tr>
<tr>
<td>3/18/2005</td>
<td>Service letter to the WVDOH commenting on Amended Preferred Alternative Report and not objecting to selected alternative</td>
</tr>
<tr>
<td>7/15/2005</td>
<td>Meeting with Service, WVDOH, FHWA, and Baker Engineering to discuss required contents of initiation package and proposed conservation measures</td>
</tr>
<tr>
<td>8/19/2005</td>
<td>WVDOH submits initiation package and request to initiate formal consultation to the Service</td>
</tr>
<tr>
<td>9/19/2005</td>
<td>Service letter to FHWA acknowledging receipt of initiation package and requesting additional information</td>
</tr>
<tr>
<td>10/25/2005</td>
<td>WVDOH submits revised initiation package and request to initiate formal consultation</td>
</tr>
<tr>
<td>11/18/2005</td>
<td>Letter from Service to FHWA confirming the initiation of formal consultation</td>
</tr>
</tbody>
</table>
Mr. Henry E. Compton  
May 3, 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>3/22/2006</td>
<td>Letter from Service to FHWA requesting an extension for completion formal consultation.</td>
</tr>
<tr>
<td>3/30/2006</td>
<td>Letter from FHWA to the Service concurring with requested extension</td>
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</tbody>
</table>

**BIOLOGICAL OPINION**

**DESCRIPTION OF THE PROPOSED ACTION**
The FHWA, in conjunction with the WVDOH, is proposing to construct an approximately 9-mile long highway between Parsons and Davis in Tucker County, West Virginia. The general location of the proposed project is shown in Figure 1. The project begins east of Parsons, 0.2 miles south of the northernmost point at which Tucker County 219/4 intersects U.S. Route 219, and 3 miles north of the U.S. Route 219/WV Route 72 intersection. The project ends north of Davis, at WV Route 93, 1.1 miles east of WV Route 32. The proposed facility would be a four-lane divided highway, with partial control of access, built on a new location. This project represents one section of a proposed 100-mile long highway known as Appalachian Corridor H.

The proposed highway would have two 12-foot lanes in each direction. These sets of lanes would generally be separated by a maximum 48-foot wide graded median. Paved shoulders, 10-feet wide, would be constructed on the outside travel lanes, and 4-foot wide paved shoulders would be constructed adjacent to the median. Additional cut and fill areas in most cases would extend 25 feet on each side of the road; however in some cases these disturbed areas would extend an additional 100 to 125 feet. Average width of the entire disturbed area of the roadway is approximately 140 feet. The mainline of the project would incorporate truck climbing lanes near Backbone Mountain, as well as brake check and escape ramp areas. The project would also include: (1) an approximately 1.8-mile long, two-lane by-pass for trucks connecting with U.S. Route 219, north of the Town of Thomas; (2) a two-lane connecting roadway from the mainline to U.S. Route 219 to facilitate access to the Tucker County High School; and (3) an interchange at the eastern end of the project to connect the mainline of Corridor H with U.S. Route 32 in the vicinity of the Town of Davis.

**Conservation Measures**
The FHWA and the WVDOH have incorporated the following endangered species protection and conservation measures into their project:

- WVDOH produced a map of *G. s. fuscus* suitable and highly suitable habitat within the action area.
- WVDOH redesigned the highway in the vicinity of Middle Run to avoid a population of *G. s. fuscus* identified during trapping surveys.
- WVDOH bifurcated an approximately 2,000-foot long section of the project in the vicinity of Middle Run to minimize potential impact of the project on *G. s. fuscus* dispersal corridors.
Mr. Henry E. Compton  
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- WVDOH refined the project design to minimize impacts to *G. s. fuscus* suitable and highly suitable habitat. This redesign reduced impacts to highly suitable habitat by 42%. This measure also minimized impacts to Slip Hill Mill Run and its watershed.

- WVDOH agreed to provide a minimum of $728,000 to establish a Habitat Mitigation Fund. Monies from this fund will only be used to implement beneficial measures that will contribute to the management and recovery of the *G. s. fuscus* such as purchasing habitat, conducting spruce restoration efforts, or supporting scientific research necessary to support *G. s. fuscus* management. Projects supported by the fund would be selected by a group of resource managers under conditions to be established in an agreement between the agencies.

In addition to the conservation measures listed above that were developed specifically to address *G. s. fuscus* within the Parsons-to-Davis project area, the following conservation measures were developed as part of the 1996 Final EIS for the full length of the Corridor H project, and will be incorporated into the Parsons-to-Davis section. These measures help ensure that the project will be designed to minimize environmental impacts, including those to threatened and endangered species.

- WVDOH will limit clearing and grubbing activities to an area extending no more that 10 feet beyond project construction limits.

- WVDOH will purchase and preserve uneconomical land remnants and unique habitat to mitigate for upland habitat loss. (Note: These lands may not necessarily provide *G. s. fuscus* habitat.)

- Where practicable, WVDOH will design and construct bridge length and abutment placement to provide for riparian buffer strips along stream banks to facilitate wildlife movement.

- WVDOH will provide resource agencies the opportunity to review and comment during all design engineering phases, including field and office reviews, through and including final design.

These proposed conservation measures are discussed in more detail in Appendix B of the October 2005 Initiation Package.

**Action Area**

The action area is defined as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. For the purposes of this BO, the action area includes the area within a 0.5-mile radius around the construction boundaries of the proposed project. This distance encompasses the majority of documented travel distances for *G. s. fuscus*. It should therefore be sufficient to include impacts to any squirrels whose home ranges
will be affected by the project, and any *G. s. fuscus* with adjacent home ranges that could potentially be affected by displaced *G. s. fuscus* moving into their already established home ranges.

This buffer distance is also consistent with distance established in the 1990 recovery plan. The action area (Fig. 1), is located entirely within Tucker County, West Virginia and contains a total of 6916 acres. Please note that the extent of the action area is based exclusively on potential impacts to federally listed species, and is therefore different than the “Blackwater Study Area” that was used to evaluate alternatives under the National Environmental Policy Act and previously submitted BAs.

**STATUS OF THE SPECIES**

**Listing History**
In 1985, both subspecies of northern flying squirrel, *Glaucomys sabrinus* found in the Appalachian Mountains; Carolina northern flying squirrel, *Glaucomys sabrinus coloratus*, and *G. s. fuscus* were listed as endangered (50 Federal Register 27002 [1985]). No critical habitat has been designated for *G. s. fuscus* within its range. The Service is currently conducting a 5-year status review for *G. s. fuscus* to determine if it should remain listed as an endangered species; be downlisted to a threatened species; or delisted (70 Federal Register 128 [2005]).

**Recovery Plan**
The Service issued the Appalachian Northern Flying Squirrels (*G. s. fuscus* and *G. s. coloratus*) Recovery Plan in September 1990. An update was issued in September 2001, which amended the Guidelines for Habitat Identification and Management (Appendix A) for *G. s. fuscus*. The amendment determined that for projects subject to ESA section 7 consultations, all areas which resemble known occupied habitat should be considered suitable habitat and potentially occupied.

**Threats**
Recent data collected and analyzed during the 5-year status review appear to suggest that *G. s. fuscus* is no longer subject to significant rangewide threats and may be close to recovery. Originally *G. s. fuscus* was listed primarily due to range restriction caused by widespread habitat loss and fragmentation during the railroad logging era of high-elevation spruce forests and subsequent wide-spread fires at the turn of the 20th century. New information suggests that the species is persisting widely throughout its historic range, habitat loss is localized, and a substantial amount of habitat is now secure and improving in quality.

The current known range of *G. s. fuscus* approximates the extent of the historic range. Compared to four isolated capture locations in 1985, the subspecies now is known widely from over 1100 captures at 107 dispersed sites (see later sections in this BO on Population Distribution and Trends). In the 20+ years since listing, threats to habitat have primarily been localized, on the periphery of the subspecies’ range, and are not expected to pose a substantive threat in the future. Largely due to their mobile nature and plasticity in tree selection, *G. s. fuscus* continues to survive and persist even after the devastation of the historic old growth
spruce forests. Studies have confirmed the ability of *G. s. fuscus* to adjust its activity patterns and use of space to persist in a forest matrix of relict spruce stands interspersed with northern hardwood forests.

The final rule listing the species suggested that vast stretches of unsuitable habitat separated the four known population centers in 1985. We now recognize that there is more connectivity within and between the current seven known population centers, supported by large acreages of optimal and likely habitat. Increasing connectivity is expected to continue as the current spruce forest and spruce/hardwood forests continue to mature or are actively managed and restored.

Numerous conservation actions in the recovery plan have been implemented since the time of listing. Of particular importance, the Monongahela National Forest (MNF) has taken a proactive approach to avoid adverse impacts to *G. s. fuscus* habitat, alleviating the threat of logging within a large portion of the range of the species. Currently, about 60% of the squirrel’s existing habitat (and 85% of the best habitat) is protected and managed on the MNF. In addition the MNF has initiated an active spruce research and restoration program, and other land managers have shown growing interest in spruce restoration. As habitat availability increases into the foreseeable future, the carrying capacity of secured and protected habitat should allow for persistence of viable populations of *G. s. fuscus*.

The final rule suggested that use of *G. s. fuscus* in the pet trade was a threat, as well as predation by pets and competition with the southern flying squirrel, *G. volans*. However, in the 21 years since the subspecies was listed, the Service has not received any evidence of overuse of *G. s. fuscus* for commercial (pet trade), recreational, scientific, or educational purposes. Human encroachment resulting in predation also has not been documented since listing and is not thought to be a substantial threat in the future. The final rule concluded that *G. s. fuscus* was threatened by competition with the *G. volans* for habitat and by spread of a parasite from the *G. volans* to *G. s. fuscus*. However, where *G. s. fuscus* and *G. volans* overlap, *G. s. fuscus* has persisted for multiple generations and has not shown signs of sickness, debilitation or death of individuals from parasite infestations in the over 1100 squirrels captured in the last 21 years.

Prior to listing, there were no known existing regulations to protect *G. s. fuscus*. Today, the majority of their range is protected by land use designations and regulatory commitments in forest plans, which would likely remain in place irrespective of the listing status of *G. s. fuscus*.

Since the time of listing, several new forest pests have been recognized (Balsam woolly adelgid, hemlock woolly adelgid, and beech bark disease). Active monitoring/control programs are in place for such pests and the preliminary analysis in the 5-year review suggests that, overall, these factors pose a low to moderate degree of risk to a relatively small portion of the habitat of *G. s. fuscus*.

Since the time of listing, detrimental effects of acid rain and climate change also have been detected in spruce-fir forests to the north and south of the range of *G. s. fuscus*. However, detrimental effects have not been detected within the range of *G. s. fuscus* and are difficult to
predict. Land managers are monitoring these potential threats to the spruce ecosystem and have indicated intent to respond by adaptive management, if necessary.

**Life History**

Several authors have noted the acrobatic nature of flying squirrels in flight, with long glides including banking and turning to avoid objects in the flight path (Dolan and Carter 1977, Nowak 1999 in Vernes 2001). In a study by Vernes (2001), the horizontal glide distance of *G. sabrinus* varied between 10 and 148 feet, with the majority of the glides ranging from 16 to 82 feet. In this study, the most common landing tree was red spruce, although hardwood species were more readily available. Despite their dominance in the stand, nonconiferous trees were used infrequently as landing points, probably because flying squirrels have difficulty maintaining traction on the smooth, flaky bark of hardwoods such as yellow birch. For longer glides, gliding mammals usually select vertical tree trunks (Caple et al. 1983 in Vernes 2001). In Tucker County, West Virginia, *G. s. fuscus* was captured on one side of a cleared, vegetated power line right-of-way approximately 142 feet wide and recaptured on the other side a couple of weeks later (Michael 2002). Mature red spruce trees were present along both edges of the forest adjacent to this cleared power right-of-way.

Data is limited to accurately predict the reproductive biology of *G. s. fuscus*, primarily because most capture records are by virtue of nest box monitoring which has occurred primarily in the spring (April-May) and fall (October-November). Despite these limitations, capture data (WV DNR unpublished, 1990-2005) suggests that the majority of breeding activity occurs in the late spring and early summer and only a single litter per year is reared (Service 1990). Therefore, the most likely time of year for reproductive activity, and the presence of immobile young, appears to be April – June.
Population Distribution and Trends
When listed, *G. s. fuscus* was known from four geographic areas: Laurel Fork (Highland, Co, VA); Cranberry Glades (Pocahontas Co, WV); Cheat Bridge/Cheat Mountain (Randolph Co, WV); and Stuart Knob (Randolph Co, WV). Additional surveys led to the designation of five geographic recovery areas (GRAs) in the Recovery Plan (1990). These areas were Stuart Knob, Cheat Bridge, Cranberry, Blackwater Falls, and Spruce Knob/Laural Fork. Unlike Recovery Units, no formal or regulatory distinction is imparted to these areas. By 1997, as distribution became better understood, Stihler et al. (1995) recognized Dolly Sods Recreation Area as a new GRA. Squirrels were also recorded from Rich Mountain in western Randolph County (WVDNRa, see above) in 1997. These records added other geographic locations for known squirrel populations.

The current known range encompasses a seven county area across two states and follows the spine of the high Allegheny Plateau in a southwest to northeast alignment in an area known as the Allegheny Highlands. Helmick Run (Grant Co, WV) marks the northeast edge and Briery Knob (Greenbrier Co, WV), the southwest boundary. The concept of “Geographic Recovery Areas” no longer sufficiently describes the population distribution across the landscape. As new locations for *G. s. fuscus* have been identified, the extent of the recovery areas has expanded and new ones have been added. The possibility of movement between some of these areas suggests that the areas are not as temporally or spatially isolated as initially believed. Instead, the known population appears concentrated in six population centers of relict habitat which have the potential to merge and overlap with time and habitat restoration efforts. These six centers are:
- Cranberry Glades/Upper Williams
- Gauley Mountain
- Kumbrabow/MWERF
- Cheat Mountain/Spruce Knob/Laural Fork
- Stuart Knob
- Blackwater Canyon/Dolly Sods

These population areas were likely panmictic in the early Holocene and became more isolated with Pleistocene warming and post-settlement logging. Habitat modeling and historical forest-type maps suggest that prior to settlement and logging pressures, the Cranberry and Gauley Mountain areas formed a contiguous complex, and the Cheat Mountain, Stuart Knob, and Blackwater Canyon areas formed another. Although we have no evidence to suggest that landscape features prevented dispersal of flying squirrels between these complexes, the interspersed low elevations might have limited dispersal.

Presence/absence surveys for this thinly dispersed subspecies are problematic for determining population trends, status, and occupied habitat. Although biologists occasionally use live-trapping, nest box monitoring has been the primary tool for surveys. Biologists place transects of nest boxes in the survey area and check the boxes periodically for occupancy. Foraging at night, *G. s. fuscus* return to their nests before daylight, which facilitates nest box monitoring during daytime. Nest boxes are typically checked twice each year, during fall and spring. The small sample size of twice-yearly surveys, combined with the unlikely chance of a squirrel occupying a box on the day of the survey, provide scant data on the overall squirrel population.
The success of nest box monitoring relies on the squirrels occupying the boxes during the day of the survey. Menzel (2003) found that *G. s. fuscus*, in her radio telemetry study, did not make use of nest boxes as dens. All nests were either cavities or drey nests. She also noted that *G. s. fuscus* used multiple den sites, switching nests on average every three days in summer. The WVDNR’s nest box monitoring program had a 2% average success rate of squirrel occupancy per box checked. These data confirm the difficulty of capturing squirrels with nest boxes and the error in relying on nest box data for determining occupied habitat. A captured individual affirms the presence of squirrels at a site. An empty box, however, does not signify absence or unoccupied habitat.

Conclusions on the status of the population drawn from these data are tentative at best. Because of the low number of squirrels captured at a site and the infrequency of recapture events, population trends are not known and a viability analysis unfeasible. Density indices based on catch-per-unit effort are likewise inaccurate because of the unsystematic survey protocol.

After 18 years of biannual surveys, we can report that the number of *G. s. fuscus* recorded in the Allegheny Highlands has increased. Prior to listing, 10 known captures of this subspecies were recorded in West Virginia and one in Virginia. Eleven years of monitoring in Virginia (1985-1996) and 18 years of monitoring in West Virginia (1985-2003) recorded over 1100 individuals (mean 56/yr, range 19-107; WVDNRa).

Monitoring and surveys have increased our knowledge of the extent of *G. s. fuscus*’s range in the Allegheny Highlands. Compared to 1985 when four capture sites were known, 107 sites were known in 2006. WVDNR defines a “site” as a capture location that is greater than 0.5 mile from another capture location. This definition was based on homerange estimates available when the surveys began (e.g. Urban 1988). During 1985-2002, squirrels were captured, on average, at 18 sites per year (range 6-30). The number of sites monitored each year varied between 16 and 53 (avg 34; WVDNRa).

Despite limitations in nest box monitoring, long-term data collected from over 30 sites is the best indication of continued presence of *G. s. fuscus* at all long-term nest box monitoring sites. One or multiple years may pass between squirrel captures, yet squirrels continue to be found at each of these long-term monitoring sites. All sites had at least one year without captures followed by a year with squirrel captures. Juveniles have been captured at approximately 65% of these sites suggesting recruitment. Because *G. s. fuscus* has a relatively short life span, averaging approximately 4 years, persistence at a single nest box site over 5 years indicates successful reproduction across multiple generations.

**Habitat Availability and Home range**
Odom and others (2001) derived a model from topographic conditions and proximity to conifer cover which reiterated the importance of spruce for squirrel habitat. A more recent model delineates areas of the Allegheny Highlands in which squirrels are likely to occur based on more specific habitat characteristics and preferences (Menzel 2003, Menzel et al. 2006). The habitat
model allows us to estimate the amount of high quality habitat in the Allegheny Highlands, prioritize areas for restoration and recovery, assess anthropogenic and geologic fragmentation of the spruce forest, and analyze stewardship of the suitable habitat.

Derived from habitat use and availability studies in West Virginia, modeling efforts reflect the habitat preferences of the squirrel. Menzel's model (2003) incorporated high resolution aerial photography for vegetation characteristics. Areas with greater than 50% likelihood of use by squirrels are classified as "likely" habitat; areas with a greater than 75% likelihood of use by squirrels are classified as "optimal" habitat. This model was applied only to USGS 7.5 min quads within the Monongahela and George Washington/Jefferson National Forests from which squirrels had been recorded. A second model was created to approximate likely and optimal habitat on topographic quadrangles without captures, particularly areas outside the proclamation boundary for the Monongahela National Forest (MNF) (WVFO files, Menzel et al. 2006). According to the combined models, there are 47,000 acres of optimal habitat currently available to the northern flying squirrel in West Virginia and Virginia, and 626,000 acres of likely habitat.

Many of the areas modeled as likely habitat are not currently suitable G. s. fuscescens habitat. Likely areas are forest patches that may not be suitable at the present time, are typically lower in elevation, less mesic, or have little or no conifer component. If forested, they may be pure northern hardwood stands, or through forestry practices and other past anthropogenic events (fires) have been converted to stands containing oak or other mast producing species less favorable to G. sabrinus. Regeneration of suitable squirrel habitat in the degraded, former spruce forests is most likely to occur through strategic forest management in areas that are currently forested and near areas of optimal habitat.

Telemetry studies in the southern Appalachians have provided some data on G. s. fuscescens and G. s. colaratus; activities and spatial use of habitat. Animals radio tracked during the summer have a marked biphasic activity pattern with peaks between sundown and midnight and 1-3 hours before sunrise (Service 1990, Menzel, 2000). During these times squirrels are extremely active in trees and on the ground and a number of different nests or refuges (Ferron, 1981, Weigl et al. 1999, Menzel 2000). The long periods of time spent on the ground is thought to be associated with foraging on hypogeous fungi.

Using radio-telemetry and GIS analyses, Menzel et al. (2006) examined homerange size and habitat use on the Monongahela National Forest, Kumbrabow State Forest and the Meadow Westvaco Experimental Research Forest in West Virginia during summers of 2000-2003. Male squirrels had a mean homerange size of 134 acres and females had a mean homerange size of 38 acres based on the adaptive kernal method. Homeranges of G. s. fuscescens observed were somewhat larger than many of those previously reported for any subspecies of G. sabrinus. Within the central and southern Appalachians, Weigl and others (2002) found mean homerange of the Carolina northern flying squirrel to be 18.5 acres in the Unicoi Mountains of North Carolina and Tennessee whereas the three G. s. fuscescens tracked by Urban (1988) had a mean homerange 12.8 acres during the summer and fall months near the Stuart Knob, West Virginia study area on the Monongahela National Forest. The deviation between the homeranges reported by Menzel et al. (2006) and that of others might be attributed in part to the use of the minimum
convex polygon estimator that is dependent on number of sampling locations and bearings collected. Study duration also may have influenced the homerange size reported, as individuals were tracked over an average of 12 weeks each, somewhat longer than in other studies (Urban, 1988, Weigl et al. 1999). Lastly, Menzel et al. (2006) used simultaneous triangulation to determine location, rather than physically following squirrels and inducing behavioral reactions that bias movements. Simultaneous triangulation also prevents any temporal lag between bearings collected by observers.

The large homeranges of *G. s. fuscus* observed in the Menzel et al. (2006) study may be a result of the patchy distribution and degraded condition of suitable forest habitat in the region. Due to both natural processes and past logging and burning, most high elevation spruce and mixed spruce-northern hardwood stands in the region are highly disjunct. Since many of the extant spruce and mixed spruce-northern hardwood patches are generally insufficient in size or quality to sustain a population of *G. s. fuscus*, individuals may utilize several patches or stands to meet their ecological requirements for food and den resources. Additionally, the legacy of timber harvest and fires in the red spruce forests in the central Appalachians destroyed much of the humus layer (Clarkson 1993) and undoubtedly much of the coarse woody debris associated with the original old-growth forest, leaving a degraded forest floor condition in second-growth forests. As a result of the loss of ecological function of these red spruce forests, current conditions are still lacking compared to mature, old-growth type forests. It is therefore hypothesized that homeranges observed by Menzel and others may have been inflated for these reasons.

Euclidean distance analysis indicated the squirrels used spruce, and mix spruce-northern hardwood forests habitats more than what was available across the landscape and were not deterred by open areas (Menzel et al. 2006). In summary, the presence of red spruce is thought to be extremely important to the presence of *G. s. fuscus* (Urban 1988, Payne et al. 1989, Weigl et al. 1999, Hackett and Pagels 2003). The findings of Menzel and others indicate that *G. s. fuscus* in West Virginia primarily use spruce, mixed spruce-northern hardwood, while passing freely through limited areas of open habitats surrounded by forest. This generalist approach to habitat selection has made it possible for *G. s. fuscus* to persist in and around relict spruce and mixed spruce-northern hardwood patches despite the past natural habitat changes and the more catastrophic anthropogenic forest disturbances in the last century.

**Conservation Needs of the West Virginia Northern Flying Squirrel**

For projects that will adversely affect *G. s. fuscus* through the removal of suitable habitat, timber clearing should be designed to occur at a time of year when it is least likely for immobile young to be present, to avoid direct take.

The protection, restoration, or enhancement of the native red spruce ecosystem and the promotion of older forest structural attributes in current spruce and mixed spruce-northern hardwood forests should be the primary objective for managing *G. s. fuscus* (Menzel et al. 2005). A forest management strategy in northern hardwood stands that combines retention of large overstory tree species valued as dens, with selective thinning to release suppressed spruce in the understory, could result in conditions more favorable for *G. s. fuscus* (Carey 2001, Schuler et al. 2002).
Active management is a valuable tool for restoring the red spruce forests and recovering *G. s. fuscus*, particularly because recent and ongoing studies have identified viable spruce restoration techniques for the central Appalachians (Schuler et al. 2002, Menzel 2003, Ford et al. 2004). Efforts to expand the coverage of red spruce forest and accelerate the time until a red spruce forest displays mature to old-growth structure in West Virginia, as suggested by Schuler et al. (2002) is prudent. Furthermore, there are forestry management techniques which have been used elsewhere to facilitate the structural development of flying squirrel habitat (Carey et al. 1999) that could be used to increase the red spruce component for *G. s. fuscus*. These types of improvements would increase the carrying capacity of habitat.

**ENVIRONMENTAL BASELINE**

**General Description of the Action Area**
The 6916-acre action area exists within the mountainous habitat of Tucker County, West Virginia. It is also located within the Black Fork/Cheat River watersheds and encompasses portions of the North Fork Blackwater River, as well as numerous smaller tributaries such as Slip Hill, Mill Run, Big Run, Tub Run, Long Run, Middle Run, and Snyder Run. Elevations range from approximately 2700 to 3600 feet above mean sea level. Forested habitats are a mix of mature hardwoods and spruce/conifer stands. Spruce/conifer areas are dominated by red spruce (*Picea rubens*), with eastern hemlock (*Tsuga canadensis*) and occasional red pine (*Pinus resinosa*). Typical hardwood overstory species include American beech (*Fagus grandifolia*), black cherry (*Prunus serotina*), yellow birch (*Betula alleghaniensis*), and maples (*Acer spp*). In both habitat types, rhododendron (*Rhododendron maximum*) and saplings of the overstory trees typically dominate the understory. Most of the forested areas have been logged two to three times in the past 100 years. Some scattered areas have been logged within the past 10 years.

**Survey Efforts**
As summarized in Table 2, Dr. Edwin Michael of West Virginia University has conducted a number of surveys to document the potential presence of *G. s. fuscus* within the action area. Figure 2 shows the location of those *G. s. fuscus* survey sites.

<p>| Table 2. Summary of Site-Specific Surveys Conducted near the Project Area |
|---|---|---|---|---|---|
| Date | Area | Location | Dominant Veg. | Trap Nts. | <em>G. s. fuscus</em> | <em>G. volans</em> |
| Aug-Sept 2000 | 1 | East bank of Long Run | Hardwood w/ hemlock &amp; pine | 100 | |
| Aug-Sept 2000 | 2 | Knob to the west of Long Run elev. 3340 MSL | beech/maple | 150 | 8 |
| Aug-Sept 2000 | 3 | Knob north of Middle Run elev. 3297 MSL | hemlock w/ spruce &amp; yellow birch | 250 | |
| Aug-Sept 2000 | 4 | Knob SE of Benbush, W of Snyder Run elev. 3226 MSL | beech/maple | 150 | 3 |
| Aug-Sept 2000 | 5 | Near Rose Hill cemetery | red pine | 100 | |
| Apr/May 2001 | 6 | W/SW of Middle Run – recently logged | hemlock w/ northern hardwoods | 200 | 2 | 2 |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Number</th>
<th>Location</th>
<th>Habitat Description</th>
<th>Size 1</th>
<th>Size 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr/May 2001</td>
<td>7</td>
<td>West of the Right Fork of Big Run - recently logged</td>
<td>hemlock w/ northern hardwoods</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Apr/May 2001</td>
<td>8</td>
<td>E/SE of Coketon</td>
<td>red pine plantation</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Apr/May 2001</td>
<td>9</td>
<td>Between Davis and Thomas</td>
<td>mixed conifer plantation</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Apr/May 2001</td>
<td>10</td>
<td>Along the Right Fork of Big Run</td>
<td>mature hemlock/red spruce</td>
<td>250</td>
<td>21</td>
</tr>
<tr>
<td>June/July 2001</td>
<td>10A</td>
<td>Big Run - north of US Route 219</td>
<td>mature hemlock/red spruce</td>
<td>138</td>
<td>0</td>
</tr>
<tr>
<td>June/July 2001</td>
<td>10B</td>
<td>Big Run - south of US Route 219</td>
<td>hemlock w/ northern hardwoods</td>
<td>438</td>
<td>13*</td>
</tr>
<tr>
<td>August 2001</td>
<td>10C</td>
<td>Big Run – east/west transects</td>
<td>mature hemlock/red spruce</td>
<td>716</td>
<td>53**</td>
</tr>
<tr>
<td>Sept 1999-May 2001</td>
<td>11</td>
<td>North Fork Blackwater River RR grade</td>
<td>hemlock/birch</td>
<td>N/A</td>
<td>4</td>
</tr>
</tbody>
</table>

* includes 5 recaptures
** includes 29 recaptures

Between August and September 2000, a survey effort was conducted at five locations of potential habitat within the "Blackwater Avoidance Area". This area was being studied to evaluate the effects of alternative routes for the proposed project. A total of 75 traps were set, resulting in the capture of no *G. s. fuscus*, 11 *G. volans*, and various other non-target species. Of the areas surveyed, the highest quality habitat was located on a knob north of Middle Run with a north-facing aspect and elevations between 3,250 and 3,300 feet. This area consisted of a large hemlock stand. Recent logging had occurred in hardwood stands surrounding this stand but not in the hemlock stand itself. Some trees within the area were estimated to be between 100-150 years old, and had diameter-at-breast heights of greater than 30 inches (Michael, 2000).

Five additional areas of potential habitat were surveyed between April and May 2001. A total of 77 live traps were set, resulting in the capture of 23 *G. sabrinus*, 2 *G. volans*, and other non-target species. Twenty-one *G. s. fuscus* were captured at the Right Fork of Big Run and 2 were captured at Middle Run. At Big Run, all *G. s. fuscus* captured were adults, with 3 males and 18 females. Two of the captured females were lactating, indicating reproduction was occurring within that area. At Middle Run, one male and one female were captured. The Big Run capture site had a southeast facing aspect and was at elevations of 3370 - 3380 feet. Although logging had not occurred within the hemlock stand itself, logging had occurred in the surrounding hardwoods. The hemlock stand contained a few red spruce trees with a diameter-at-breast height of greater than 30 inches and an estimated age of greater than 100 years old. This area had the highest quality habitat of the areas surveyed during this effort (Michael, 2001a).

Between June and July 2001 a survey effort was conducted near the previously delineated Big Run capture site in an attempt to determine the geographic boundaries of the population. Forty-four traps were set along transects to the south of U.S. Route 219, and 14 traps were set along transects to the north of U.S. Route 219. South of U.S. Route 219, the habitat was dominated by eastern hemlock with a 5-10% component of red spruce. No logging had been conducted in this
area within the last 50 years. Trapping in this area resulted in 13 captures of G. s. fuscus, 31 captures of G. volans, and other non-target species. Of the 13 captures of G. s. fuscus, there were 4 males, 4 females, and 5 recaptures. All captured G. s. fuscus were non-reproductively active adults, and were all captured in the 16 traps located farthest from U.S. Route 219. The 31 captures of G. volans were all in the 18 traps closest to U.S. Route 219. No G. s. fuscus were captured in the traps located to the north of U.S. Route 219; however 27 captures of southern flying squirrels were in this area. This area was dominated by hemlock with 30-60% northern hardwoods in the canopy. Within the last 10 years, some areas of the Big Run watershed had been selectively logged for cherry and other hardwood species, and other areas had been clearcut; however, all G. s. fuscus were captured in areas where no recent logging had occurred (Michael, 2001b).

Additional surveys along Big Run/Right Fork of Big Run were conducted in August 2001 to delineate the eastern and western limits of the population. Seventy-two (72) traps were placed along eight transects established perpendicular to the Right Fork of Big Run. An additional 4 transects, each with 13 traps, were established east of Big Run. The efforts along the Right Fork of Big Run resulted in the capture of 53 G. s. fuscus including 24 individual adults (10 males and 14 females). Six individuals were captured on both sides of the Right Fork of Big Run, indicating that the squirrels commonly moved across the stream (Michael, 2001c).

Some additional surveys that were not related to the proposed project have been conducted in the Blackwater Canyon area. Surveys conducted in September 1999 and May 2001 resulted in the capture of four G. s. fuscus, including three males (two juvenile) and one adult female, at a site approximately 1.5 miles north of Blackwater Falls State Park along the old railroad grade following the North Fork Blackwater River. The overstory habitat consisted of 80% hemlock and 20% birch, with rhododendron dominating the understory. Elevations ranged from 2,750 and 3,180 feet (WVDNR, 2005).

**Habitat Mapping**
Maps of suitable squirrel habitat within the project area were developed in accordance with the 2001 West Virginia Northern Flying Squirrel Recovery Plan Amendment. Initial maps were developed based on field reviews by Dr. Michael and were refined using aerial photography. Additional mapping was developed based on the Menzel (2003) habitat model, maps and field data developed by the U.S. Forest Service, additional analysis of digital ortho quadrangles, and other available data. The maps were ground-truthed in selected locations and refined based on a multi-agency field review in May 2004. Additional information on the process used to develop the habitat maps can be found in the August 2004 BA, and is incorporated here by reference. The resulting maps delineated areas of “highly suitable” and “suitable” G. s. fuscus habitat. In accordance with the Recovery Plan Amendment, all areas delineated within these two categories are considered potentially occupied by G. s. fuscus. Highly suitable habitat generally includes areas that contain all required characteristics known to support G. s. fuscus including high elevations (greater than 3400 feet) and high percentages of conifers in the overstory. This designation coincides with Menzel’s “optimal” category. Suitable habitat still provides the conditions necessary to support G. s. fuscus populations and may include areas that have high percentages of conifers in the overstory but occur at lower elevations, or high elevation areas that have greater percentages of mixed hardwoods and occur in close proximity to highly suitable
habitats. As discussed in the "Life History – Suitable Habitat" section, many areas identified as likely G. s. fuscus habitat by Menzel's model, may not currently provide the conditions necessary to support the squirrel. Because it was not possible to conduct field reviews at every location affected by this project, areas that were mapped as "likely" habitat were considered suitable unless field reviews or other data were available to show otherwise. As a result, it is likely that the map will over-estimate actual project impacts to G. s. fuscus.

Of the 6916 acres in the action area, there are 715 acres identified as highly suitable (10%) and 3513 acres identified as suitable habitat (51%). The highly suitable habitat occurs towards the western edge of the action area and runs southwest to northeast along the ridge of Backbone Mountain. Suitable habitat occurs throughout the project area, but becomes patchier towards the eastern end of the project (Figure 2). Suitable habitat generally does not occur near the towns of Thomas and Davis, or in the previously mined areas between the two towns.

**Land Ownership**

Most of the action area consists of privately owned timber lands with Western Pocohantas Land Corporation being the primary land holder. A small portion of the action area is within boundaries of the Monongahela National Forest.

**Conservation Needs of West Virginia Northern Flying Squirrel in the Action Area**

Conservation needs of G. s. fuscus within the action area are similar to conservation needs of G. s. fuscus range-wide. Specifically, designing timber removal activities so as to avoid encounters with adult females and their immobile young would decrease negative impacts by allowing adult female G. s. fuscus to successfully rear immobile young. Strategic project design to minimize forest clearing and establishment of conservation areas to protect, restore, or enhance the native red spruce ecosystem through the promotion of older forest structural attributes (e.g. downed woody debris, abundant tree cavities, etc.) should be included in conservation planning for the project.

**EFFECTS OF THE ACTION**

Construction of Corridor H, Parsons to Davis as proposed will result in the clearing of habitat for the G. s. fuscus. Clearing and removal of this habitat and the eventual operation of the project could adversely affect the squirrel by causing direct mortality, or through the direct and indirect effects of harm through habitat loss. Noise and other disturbances associated with construction and operation of the project also have the potential to adversely affect G. s. fuscus. The scope and potential effects of each factor is discussed in detail below.

**Loss of Habitat**

**Direct Removal**

Construction of the project will result in the direct removal of 25 acres of highly suitable habitat and 232 acres of suitable habitat. These areas will likely be cleared of all vegetation, will be paved, filled or excavated and represent a permanent loss of G. s. fuscus habitat within the action area. These impacts will affect 3.5% (25/715 acres) of the highly suitable habitat and 6.7% (232/3513 acres) of the suitable habitat within the action area.
Fragmentation of remaining habitat

In addition to habitat loss associated with tree clearing within the project footprint, construction of the project may also serve to fragment remaining parcels of suitable habitat. The remaining *G. s. fuscus* habitat may be so small and isolated from other patches of suitable/highly suitable habitat that they no longer provide the habitat characteristics necessary to support *G. s. fuscus*. The size of documented homeranges for *G. s. fuscus* varies greatly and ranges from 12 to 165 acres (Urban 1988; Menzel 2003). The size of an individual's homerange is dependant on the quality of the available habitat within the area and the sex of the individual. Females apparently have a smaller homerange than males. This difference may be explained by the males tendency to cover large distances in a short amount of time, particularly during breeding season. Another difference between males and females, especially those with young, is that a female exhibits den fidelity, rearing her young in a natal den instead of using multiple den trees.

The FHWA conducted an evaluation of the effects of habitat fragmentation by using the results of the habitat mapping effort to identify areas of suitable or highly suitable habitat that would remain after project construction, but would be smaller than minimum established homerange sizes (as listed above) or were isolated from other areas of suitable or highly suitable habitat. The detailed results of the habitat fragmentation analysis are presented in Section 4.4 and Exhibit 1 of the Formal Consultation Initiation Package for this project and are incorporated here by reference. That analysis determined that project construction would create nine habitat fragment areas, totaling 107 acres that would be no longer suitable to support *G. s. fuscus*. Currently, all of these areas are connected to larger blocks of contiguous suitable *G. s. fuscus* habitat.

The Effects of Loss of Habitat

The primary impact to *G. s. fuscus*, as a result of the proposed activities, is the loss of potentially occupied suitable and highly suitable forested habitat through the direct removal of 257 acres, and the fragmentation of an additional 107 acres, which will be rendered unsuitable. Consequently, *G. s. fuscus* that have homeranges within these affected areas will be displaced and forced to migrate, shift, or enlarge their homeranges to other available habitat in search of available food and shelter. Permanent displacement from affected areas may result in an increased level of competition for breeding, feeding, and sheltering resources in forests adjacent to the project footprint. These impacts may affect breeding, feeding, or sheltering success in the short term, and therefore survival of individual *G. s. fuscus*. Because the surrounding suitable and highly suitable habitat is likely to be occupied by other *G. s. fuscus* or *G. volans*, interspecific and intra-specific competition for food and nest sites will increase. While radio telemetry studies indicate the homeranges of *G. s. fuscus* overlap in many instances (Michael 2000, Weigl et al. 1999, Urban 1988), and *G. s. fuscus* frequently share nests (Weigl et al. 1999), one of the critical limiting factors to recovery of *G. s. fuscus* populations is limited availability of secure nesting sites. Actions which would reduce the number of available secure nesting sites, would in turn adversely affect breeding behavior. Future breeding success will be reduced as a result of increased competition for secure nest sites. In addition, *G. s. fuscus* will be subject to increased energy expenditures from the loss of foraging habitat and increased competition for food. Malnutrition or starvation, particularly of breeding females and young *G. s. fuscus* may result. This loss may adversely affect future breeding success. Clearing of habitat associated with the construction and continued operation of this project would also reduce the amount of
cover and make the remaining habitat unsuitable. If affected *G. s. fuscus* cannot find adequate cover, predation could increase, particularly along the highway right-of-ways, which are known to attract raptors and some other predators. Weather-related mortality may also result if *G. s. fuscus* cannot find secure nest sites. The cumulative result of these adverse affects is anticipated to negatively affect the population of *G. s. fuscus* in and around the proposed project area. These impacts could potentially be reduced if, prior to timber removal, artificial den sites (*G. s. fuscus* nest boxes) were placed in the surrounding forest to enhance the availability of den sites in adjacent habitat. Impacts to foraging efficiency could be ameliorated by enhancing the quality of the adjacent habitat through measures such as placing downed trees and woody debris generated during project clearing in the remaining adjacent habitat.

Habitat loss resulting from construction of the project may also impede the ability of *G. s. fuscus* to move between the remaining patches of habitat in the action area. The *G. s. fuscus* recovery plan lists the limited and discontinuous nature of the remaining habitat as a threat to the species. Small, relict populations may suffer disproportionately from genetic constraints (e.g. increased homozygosity) as a result of decreased ability to disperse and mate with other individuals within the larger population (Service 1990). As noted in the "Life History – Population Trends" section, while some limited analysis of genetic samples has been conducted to compare results between different subspecies of *G. sabrinus* (Arbogast et al 2005; Sparks 2005), these studies did not evaluate a large enough quantity of samples from throughout the range of the subspecies to provide an analysis of baseline conditions relevant to the proposed project. It should be noted however, that suitable *G. s. fuscus* habitat, particularly within the northern portion of the subspecies' range (i.e. Grant and Tucker Counties) is more fragmented and discontinuous when compared to available habitat within the southern portion of the subspecies’ range. Therefore, this potential effect to the population, if it exists, could be a more important consideration in the northern portion of the range where the action area occurs.

Range-wide habitat modeling has estimated that approximately 621,000 acres of potentially suitable *G. s. fuscus* habitat exists south of the proposed Corridor H alignment, whereas only 4400 acres of potentially suitable *G. s. fuscus* habitat exists to the north of the alignment (Service unpublished). Construction of the proposed project could decrease habitat connectivity within the northern habitats, as well as create a permanent barrier to dispersal of *G. s. fuscus* between northern and southern areas. Based on the absence of existing genetic data, it is not possible to quantify or evaluate the significance of this potential effect. As noted previously, some studies have found that other larger highways present "absolute barriers" to the movement of *G. sabrinus* (Weigl et. al. 2004). However, other studies have shown that *G. s. fuscus* are capable of moving across paved roads and other similar openings. Measures could be implemented that would minimize the potential impacts of the proposed project in this regard. Segments of the proposed project that have the widest right-of-way and associated cut and fill widths will present the most significant barrier to dispersal. For example, as described in the Initiation Package, the FHWA and the WVDOH evaluated design alternatives, such as constructing a bridge, that would minimize impacts to the Big Run area (largest documented population of *G. s. fuscus* in the action area). These alternatives were deemed to be infeasible based on excessive construction cost and increased ancillary impacts (e.g. increased excavation requirements). As a result, the proposed project will bifurcate the area known to support this large population of *G. s. fuscus*. The design of the project at this location currently consists of placing fill in the valley and
culverting Big Run, and most likely will totally impede the ability of *G. s. fuscus* to migrate to and from the remaining sections of these habitats.

Narrower segments of the road that are bordered by suitable habitat on each side provide the greatest opportunity to provide potential dispersal corridors. Therefore, restricting road widths to the minimum necessary, retaining forested habitat along highway right-of-ways, minimizing the amount of habitat disturbed, and revegetating disturbed areas within the right-of-way with native species so that they return to suitable *G. s. fuscus* habitat, would increase the potential that resident *G. s. fuscus* could successfully disperse to surrounding areas. In addition, shifting the road alignment to minimize the amount of suitable *G. s. fuscus* habitat that is bisected would help ensure that existing travel corridors are maintained to the extent possible. Many of these measures have been incorporated into the proposed project, as described in the Effects of the Conservation Measures section below. The remaining unavoidable impacts will affect a small portion of the overall range of *G. s. fuscus*.

**Direct Mortality – Tree Clearing**

Direct mortality to *G. s. fuscus* could occur as a result of the proposed project when cavity trees containing squirrel nests are felled to begin construction. There is limited data regarding how *G. s. fuscus* would respond if an occupied den tree was disturbed. However, it is assumed that an adult, mobile *G. s. fuscus* would flee so as to avoid lethal take if a den tree was disturbed. This assumption is supported by Dr. Andrew Carey, a research biologist for the northern flying squirrel in the Western United States. According to his experiences (Carey pers. comm., 2002), adult flying squirrels generally flee at any disturbance of an occupied den tree. Disturbances would include pounding an occupied tree with a stick, or cutting it with a chainsaw. Northern flying squirrels are even known to flee as a result of someone trying to quietly climb the tree. Methods of data collection for *G. s. fuscus* are live trapping and nest box monitoring. Both survey methods involve the release of captured individuals during the day. The normal behavior observed during these releases is for *G. s. fuscus* to flee without harm, normally climbing up a nearby tree, gliding to another tree and eventually traveling out of sight. The assumption that adults would be able to flee is further supported by the behavior of *G. s. fuscus* in that mobile adults are aware of and able to utilize several den trees. For example, Menzel and others (2004) found that 13 *G. s. fuscus* used 59 different nest trees. These squirrels used an average of 3.6 nest trees/month, switching trees frequently. During 2001, a *G. s. fuscus* was captured at the proposed location of a fire station at Snowshoe Resort. Tree clearing operations for the fire station occurred during the non-breeding season for *G. s. fuscus* (late September). The same individual was recaptured in 2002 in remaining adjacent habitat after the clearing had occurred for the proposed fire station. Therefore, if an occupied den tree were disturbed, it is assumed that a mobile adult *G. s. fuscus* would successfully flee from a tree before incurring serious injury or death.

However, northern flying squirrel litters have been recovered from falling trees which suggests that very young squirrels may not flee (Carey, pers. comm., 2002). Therefore, any immobile young present may be killed. Generally northern flying squirrels produce one litter per year and mate in late March through May, with young usually born in late May through June (Wells-Gosling and Heaney, 1984). Northern flying squirrel young may begin to leave the nest at about 35 days of age, but are not weaned until between 55 and 60 days old (Hamilton and Whitaker,
The majority of young *G. s. fuscus* and/or pregnant or lactating females encountered during nest box monitoring and/or live trapping support the notion that breeding occurs in the spring and early summer (WVDNR, unpublished). Recent monitoring has documented immobile young as late as the end of July. While it is not known what the criteria for determining young were in the early monitoring of this sub-species, older data from the WVDNR show the presence of young later in the year. Trees greater than 6 inch d.b.h. and trees less than 6 inch d.b.h. with a cavity could serve as potential nest sites. Therefore, tree clearing that is conducted between April 2nd and September 14th could result in direct take of young. However any tree clearing conducted between September 15th and April 1st would coincide with the time of year that that young of the year would be mobile and be able to flee the trees. Restricting tree clearing in suitable and highly suitable habitat to this time of year would minimize the potential for direct take of immobile young.

**Direct Mortality – Vehicular Strikes**

Once the highway is completed and in use, there is a potential that *G. s. fuscus* could be taken through roadway mortality. There are limited data available to predict the probability of this type of take, or quantify the potential effects. While *G. s. fuscus* is known to occur adjacent to many paved roads, there are no documented occurrences of vehicular strikes of this sub-species, or other *G. sabrinus*. One study on the effects of highways on wildlife identified two *G. sabrinus* carcasses along four-lane highways in Illinois (Adams and Geis, 1981). However, Illinois is outside the documented range of *G. sabrinus*, and it is therefore likely that these specimens were actually *G. voalans*, which were misidentified. Available data on *G. s. fuscus* movement patterns provides that best available information to evaluate the potential for roadway mortality.

Although *G. s. fuscus* may spend a significant amount of time on the ground foraging, the primary mode of travel is by gliding or moving through the branches of trees, they are capable of gliding up to to 148 feet, with the majority of the glides ranging from 16 to 82 feet (Vernes 2001). In Tucker County, West Virginia, a *G. s. fuscus* was captured on one side of a cleared, vegetated power line right-of-way approximately 142 feet wide and recaptured on the other side a couple of weeks later (Michael 2002). Mature red spruce trees were present along both edges of the forest adjacent to this cleared power right-of-way. Squirrels tracked in North Carolina frequently crossed barriers and habitat boundaries, with documentation of a male crossing a paved road during five separate tracking sessions (Weigl et. al., 1999). In West Virginia, *G. s. fuscus* are also known to have crossed railroad right-of-way (C. Stihler, WVDNR, pers. comm.), logging roads, and gravel roads (M. Ford, USFS, pers. comm. 2005). Weigl et al. (1999) found that *G. s. coloratus* frequently crossed patches of non-forested habitat, and one crossed a paved road several times. This indicates that conceptually, *G. s. fuscus* might attempt to cross Corridor H.

However, telemetry studies conducted on *G. s. coloratus* near the Cherohala Skyway in North Carolina failed to document any evidence of squirrels attempting to cross this highway, even though in many cases the homoranges of the tracked squirrels were located in close proximity to the highway right-of-way. In some cases the home range boundaries were delineated by the highway right-of-way indicating the “significant effect” the highway had on movement patterns.
The study concluded that the road presented an "absolute barrier" to squirrel movement. The Cherohala Skyway is a two-lane paved road through mountainous region of North Carolina. Mean distances between forest edges across both sides of the right-of-way for that study ranged from 125 to 175 feet. For the Parsons to Davis project, a four-lane paved highway, typical width of the constructed roadway would be about 140 feet. Additional cut and fill areas in most cases would extend 25 feet on each side of the road; however in some cases these disturbed areas would extend an additional 100 to 125 feet. This indicates that for most locations along the proposed project, the constructed roadway would serve as a significant barrier to *G. s. fuscus* movement, thus reducing the chance that squirrels would attempt to cross the road and limiting their susceptibility to road mortality. However, *G. s. fuscus* are known to traverse distances greater than the width of the proposed project. Road crossing attempts are more likely in areas with narrow cut and fill boundaries and that have suitable habitat on both sides of the road. Squirrels are most likely to attempt to glide across the road rather than cross at ground level, thus reducing their susceptibility to vehicular mortality. We conclude that over the life of the project that there is a limited chance that some unquantifiable number of *G. s. fuscus* could be taken through direct roadway mortality, but that the overall this impact to the local population will be minor.

**Effects of Noise and Associated Disturbances**

Squirrels could be adversely affected through noise and other disturbances associated with construction activities, and by disturbances associated with the continued operation and use of the road. Construction activities would include tree clearing, grubbing, demolition and removal of existing structures, blasting, excavation, filling, grading, paving, and general operation of machinery and heavy equipment. While no studies have specifically evaluated *G. s. fuscus*’s response to noise, anecdotal evidence suggests that squirrels may be tolerant of noise and construction activity. In 2002, a male *G. s. fuscus* was captured at Snowshoe resort within 240 to 350 feet of locations where snowmaking machines had been operating for the three nights prior to the capture. Additionally, a lactating female *G. s. fuscus* was captured approximately 1.5 miles south of Snowshoe's Camp Wilderness in a small forested area that was surrounded by areas cleared of vegetation, active construction sites, condominiums, and roads heavily used by construction machinery and other vehicles, (Michael, 2002). In 2001, a pregnant female was captured and then recaptured during the same survey at Snowshoe Mountain near a heavily used and active ski lift (Michael 2001). These captures, in addition to the March captures of three scrotal male *G. s. fuscus* in the same area, suggest that breeding activity can occur in disturbed areas. These data also appear to indicate that while *G. s. fuscus* may be displaced from areas of direct construction they would still attempt use areas adjacent to construction activities. The extent that *G. s. fuscus* would continue to use these habitats and the degree that their behavior was disrupted would likely be correlated to the severity and extent of noise and disturbance occurring in the surrounding areas.

For Corridor H, the most potentially disruptive effects are associated with initial construction (major excavation, etc) and would be temporary. Construction of this entire segment of Corridor H is anticipated to last approximately 3-5 years. Activity in any specific area of the project will not occur for this entire duration, but may be intermittent. After that time, disturbances would be limited to continued maintenance such as mowing the right-of-way, occasional road repairs
and repaving, and the long-term and continuous use of the road (truck and car traffic, snow plowing, etc.) These types of disturbances would be much less intense than those experienced during construction, and it is likely that squirrels would adapt to these continued activities. Nest box monitoring has demonstrated that *G. s. fuscus* utilize nest boxes adjacent to major roads with truck traffic and also along railroads. In addition, telemetry studies along the Cherohala Skyway frequently documented *G. s. colratus* utilizing areas along the forest edge adjacent to the highway right-of-way, as well as foraging in large piles of timber at the forest/right of way junction which were pushed to the side during right of way clearing operations (Weigl et. al. 1999). In summary, it appears that any adverse effects to *G. s. fuscus* as a result of noise and other disturbances associated with the construction and continued operation of the highway will be limited in nature, with the most severe effects being associated with temporary behavioral alterations as a result of initial construction. Based on this analysis, while adverse effects may occur as a result of noise and associated disturbances, these effects will not “significantly impair essential behavioral patterns, including breeding, feeding, or sheltering”, and therefore do not rise to the level of take as defined by the ESA.

**Implementation of Conservation Measures**
The FHWA and the WVDOH have incorporated numerous conservation measures into the design of the proposed project. A summary of those measures is provided in the “Description of the Proposed Action – Conservation Measures” section of this document. Additional detail is provided in the August 2004 BA and the Initiation Package and is incorporated here by reference.

Most significantly, the FHWA and the WVDOH have selected the least damaging practicable project construction alternative in regards to direct removal of *G. s. fuscus* habitat. They then refined the selected alternative to further reduce those direct impacts as shown in Table 3 below.

**Table 3. Impacts to Acreage of *G. s. fuscus* Habitat as a Result of Project Modifications**

<table>
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<td>257</td>
</tr>
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<td>-18</td>
<td>6</td>
<td>-12</td>
</tr>
</tbody>
</table>

Further modifications to the proposed design and alignment were made to reduce fragmentation of remaining *G. s. fuscus* habitat (e.g. near Middle Run) and increase the potential that squirrels may be able to migrate across selected sections of the roadway. Additional compensatory measures, in the form of monies to be used to fund conservation actions for the benefit of *G. s. fuscus*, have been provided to partially offset unavoidable habitat loss. As a result of these measures, anticipated adverse effects of the project as a result of direct and indirect loss of habitat have been substantially avoided and minimized.

**CUMULATIVE EFFECTS**
Cumulative effects include the combined effects of any future state, local, or private actions that are reasonably certain to occur within the action area covered in this BO. Future federal actions
that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA.

As noted in the Baseline section, lands within the action area consist of a mixture of publicly owned National Forest Lands, and privately owned lands. Because all activities that occur within the National Forest are subject to consultation under section 7 of the ESA, no cumulative impacts within suitable *G. s. fuscus* habitats on public lands are expected. The majority of suitable *G. s. fuscus* habitat on privately owned lands is currently used as timber land. These private lands could be subject to future cumulative impacts. Private land holders could initiate timber harvesting activities at some time in the future that would adversely affect *G. s. fuscus* populations in the action area. In addition, construction of the proposed road is expected to increase accessibility to surrounding lands and could spur increased development in the lands adjacent to the project. Private development activities could include mineral mining, accelerated logging, or development of commercial, residential or recreational facilities. A cumulative effects assessment was conducted by the FHWA in section 5.4.2 of the BA, and is incorporated here by reference. That analysis suggests that there is an adequate amount of non-environmentally sensitive, low elevation, land (e.g. unsuitable *G. s. fuscus* habitat) within a 30 minute drive distance of the proposed highway, to support all development reasonably expected to occur as a result of the highway construction. This includes areas both within and outside the action area.

Unless a project is underway or a particular project proponent comes forth, it is not possible to determine the number of acres that may be cleared, or the precise locations where clearing may take place. At this time, the Service is not aware of any planned activities of this nature within the action area, nor do we have any specific information on activities that are “reasonably certain to occur.” Therefore, cumulative effects, as defined in the ESA, are not reasonably certain to occur within the action area and will not be addressed further in this BO.

**CONCLUSION**
Take in the form of direct mortality and harm through habitat loss is reasonably expected to occur as a result of this project, resulting in a decrease in reproduction and numbers of *G. s. fuscus* within the action area. However, the project has been designed to avoid and minimize these adverse impacts to *G. s. fuscus*, and the action area should be able to sustain reproducing populations of *G. s. fuscus* after project construction. Project impacts will result in the loss of 364 acres of habitat for the *G. s. fuscus* and will be restricted to a localized portion of the species range. It is estimated that there are 47,000 acres of highly suitable habitat currently available to *G. s. fuscus* in West Virginia and Virginia, and roughly 626,000 acres of suitable habitat. The project will impact 0.05% of the available highly suitable and suitable habitat for the species. Therefore, the rangewide distribution of this sub-species will not be reduced.

After reviewing the current status of *G. s. fuscus*, the environmental baseline, the effects of the proposed action and the cumulative effects, it is the Service's biological opinion that constructing Corridor H, Parsons to Davis, as proposed, is not likely to jeopardize the continued existence of the *G. s. fuscus*. Jeopardize the continued existence means to engage in an action that would be expected directly or indirectly, to reduce appreciably the likelihood of both survival and recovery
of *G. s. fuscus* by reducing the reproduction, numbers, or distribution of that sub-species. No critical habitat has been designated for this sub-species; therefore, none will be affected.

**INCIDENTAL TAKE STATEMENT**

Section 9 of the ESA and federal regulation pursuant to section 4(d) of the ESA, prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the FHWA and any applicant, agent, or contractor as appropriate, for the exemption of section 7(o)(2) to apply. The FHWA has a continuing duty to regulate the activity covered by this Incidental Take Statement. If the FHWA should (1) fail to assume and implement the terms and conditions, or (2) fail to require an applicant, agent or contractor to adhere to the terms and conditions of the Incidental Take Statement through enforceable terms that are added to any permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the FHWA must report the progress of the action and its impact on the species to the Service as specified in the Incidental Take Statement [50 CFR § 402.14(i)(3)].

**Level of Take**

As noted in the Baseline section, surveys conducted in and around the action area between August 2000 and July 2001 documented the presence of at least 41 individual *G. s. fuscus* in the area. However, the results of these surveys should not be used to quantify the number of *G. s. fuscus* that may be affected by the proposed project. These surveys were conducted a number of years ago, and the proposed project may not be constructed for a number of additional years. As a result, the survey data are not likely to be reflective of populations within the action area at the time that the impacts will occur. In addition, as noted in the Life History section, presence/absence surveys for this thinly dispersed subspecies are problematic for determining population levels. Rather these results serve to confirm that suitable habitat within the action area is indeed occupied by populations of the *G. s. fuscus*. There is no practical means to directly measure the number of individual *G. s. fuscus* affected by the alteration of suitable habitat associated with the proposed action, and the Service anticipates incidental take of the *G. s. fuscus* will be difficult to detect because of the secretive nature of the sub-species. Therefore, for most forms of take, the anticipated level of take is expressed most accurately in terms of acres of habitat affected.
The Service anticipates that the proposed project could cause incidental take of *G. s. fuscus* either as a result of harm through loss of habitat, or direct mortality.

**Loss of Habitat:** A total of 364 acres of highly suitable/suitable *G. s. fuscus* habitat will be lost either directly or indirectly as a result of the proposed project. Direct clearing of habitat for project construction will remove 257 acres, while fragmentation of remaining habitat will make an additional 107 acres unsuitable. Consequently, *G. s. fuscus* present within these affected habitats will suffer harm as a result of a decreased ability to feed, breed, and obtain shelter. These effects may cause increased mortality of squirrels within the affected areas. In addition, squirrel populations present along the nine miles of highway may suffer from decreased ability to disperse between areas of suitable habitat, potentially resulting in decreased genetic health of populations.

**Direct Mortality:** Direct mortality of *G. s. fuscus* could occur through loss of immobile young or vehicular strikes.

- **Loss of Immobile Young:** All immobile young that are present within the 257 acres of *G. s. fuscus* habitat to be cleared could be killed if trees are cut between April 2 and September 14.
- **Vehicular Strikes:** After the project is in operation, an unquantifiable, but likely low number, of *G. s. fuscus* may be killed as a result of collisions with vehicles using this nine mile stretch of highway.

However, implementation of the terms and conditions associated with the reasonable and prudent measures will reduce the potential for incidental take. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The FHWA must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

**REASONABLE AND PRUDENT MEASURES**
The Service believes the following reasonable and prudent measures (RPMs) are necessary and appropriate to minimize incidental take of *G. s. fuscus*. In order to be exempt from the prohibitions of section 9 of the ESA, the FHWA must comply with the following terms and conditions which implement the RPMs and outline reporting/monitoring requirements. These terms and conditions are non-discretionary. Each RPM is listed in italics, followed by numbered terms and conditions that implement each RPM.

**RPM 1: Avoid Direct Take of Immobile Young**
Restricting tree clearing activities within suitable and highly suitable habitat so that they only occur when no immobile young are present would avoid direct take of young that are unable to flee from trees being cleared.

1.1 All trees within suitable or highly suitable habitat that provide potential nest sites (i.e., all trees greater than 6 inch d.b.h., and trees less than 6 inch d.b.h. with a cavity) will be
removed only between September 15 and April 1, when both adult and young *G. s. fuscus* are expected to be capable of avoiding construction activities. Trees without cavities and with a d.b.h. less than 6 inches (non-nesting trees) may be cleared during the period from April 2 to September 14, as needed for project construction.

*RPM 2: Reduce impacts of habitat loss by enhancing nesting and foraging habitat in remaining habitat.*

As discussed in the "Effects of Loss of Habitat" section, the availability of nest sites may limit *G. s. fuscus* distribution and population size. Potential nest sites will likely be removed during clearing associated with the project construction. Impacts associated with loss of nesting habitat could potentially be reduced if, prior to timber removal, artificial den sites (nest boxes) were placed in the surrounding forest to enhance the availability of den sites in adjacent habitat. Impacts to foraging efficiency could be ameliorated by enhancing the quality of the adjacent habitat through measures such as placing downed trees and woody debris generated during project clearing in the remaining adjacent habitat.

2.1 Nest boxes must be installed in forest adjacent to construction areas to enhance nest site availability for *G. s. fuscus* that will be displaced during construction. Current USFWS guidelines require 15 boxes to be installed for the first 50 acres impacted, and 1 nest box for each additional 5 acres (Service 1990). Thus, for the 257 acres proposed to be cleared, a total of 57 nest boxes would be required. All nest boxes will be installed in forest adjacent to areas to be cleared at least six months prior to the start of tree clearing. Nest boxes will be constructed according to designs specified by the Service or the WVNDR. The location of all nest boxes will be documented using GPS or other similar technology, and will be coordinated with the Service prior to placement. Characteristics of the forest within 100 feet of each nest box will also be recorded, using forms provided by the Service.

2.2 Trees and woody debris generated during clearing of highly suitable and suitable habitat shall be gathered and placed in piles within or adjacent to remaining highly suitable and suitable habitat. Because *G. s. fuscus* may be expected to travel an average of 1500 linear feet from the center of their homerange (M. Ford, Pers. Comm. Year), one pile on each side of the highway should be placed for every 1500 feet of road frontage adjacent to suitable or highly suitable *G. s. fuscus* habitat. Pile design and placement shall be coordinated with the Service prior to clearing.

*RPM 3: Reduce barriers to dispersal by retaining and restoring adjacent habitat.*

As discussed in the "Effects of Loss of Habitat" section, construction of the proposed project may create barriers to *G. s. fuscus* dispersal. Narrower segments of the road that are bordered by suitable habitat on each side provide the greatest opportunity to provide potential dispersal corridors. Therefore, restricting road widths to the minimum necessary, retaining forested habitat along highway right-of-ways, minimizing the amount of habitat disturbed, and revegetating disturbed areas with native species so that they return to suitable *G. s. fuscus* habitat, would increase the potential that resident *G. s. fuscus* could successfully disperse to surrounding areas.
3.1 The FHWA and the WVDOH shall limit clearing within the project right-of-way to the minimal size needed to construct the project. Where possible, spruce trees and forested habitats should be retained as close as possible to the highway.

3.2 Prior to initiating any construction activities, the FHWA and the WVDOH shall develop a reclamation plan so that to the extent possible after project construction, disturbed areas will be revegetated with native, non-invasive species consistent with those found in *G. s. fuscus* habitat. The plan shall be submitted to the Service for review and concurrence.

3.3 The FHWA and the WVDOH shall develop a right-of-way maintenance plan that restricts activities in areas of *G. s. fuscus* habitat so that existing habitats will be maintained and reclamation plans will not be impeded. The plan shall be submitted to the Service for review and concurrence.

**RPM 4: Implement all Proposed Conservation Measures.**
In order to avoid and minimize adverse effects to *G. s. fuscus* as a result of the proposed project, the FHWA and the WVDOH have coordinated with the Service to develop and implement project specific conservation measures. The resulting beneficial effects are described in the “Implementation of Conservation Measures” section of this BO.

4.1 All conservation measures proposed in Appendix B of the October 2005 “Appalachian Corridor H Parsons-to-Davis Project; West Virginia Northern Flying Squirrel Formal Consultation Initiation Package” shall be incorporated as an integral part of the project and implemented as proposed.

4.2 Within 30 days of signing a Record of Decision for the project, the FHWA and the WVDOH shall have: 1) completed an agreement with the Service, and other resource trustees, as appropriate, outlining the management and use of monies associated with the Habitat Mitigation Fund (as described in Appendix B of the Initiation Package); and 2) placed the funds in a dedicated account set up to support only the designated uses. Under this agreement, the Service shall have the ability to direct use of funds for designated uses by other parties to the agreement.

**RPM 5: Develop and Implement a Monitoring Program to Track Incidental Take Associated with the Project.**
It is anticipated that some of the nesting and foraging habitat for *G. s. fuscus* will be removed and fragmented. Those *G. s. fuscus* displaced from these areas will be subject to reduced survival as a result of decreased ability to feed, reproduce, and obtain shelter. Monitoring studies have the potential to identify these effects. A plan for surveying, monitoring, and reporting incidental take of *G. s. fuscus* within the action area shall be developed and conducted in consultation with the Service. The purpose of the monitoring plan is to: 1) determine whether the actual level of take occurring is in compliance with the established level of incidental take; 2) assess the effectiveness of RPMs and conservation measures over time; and 3) evaluate the response of *G. s. fuscus* to the disturbance that will occur in the action area.
5.1 Direct loss of habitat: The incidental take statement authorizes direct clearing of 257 acres of *G. s. fuscus* habitat. In order to ensure that this level is not exceeded, the FHWA shall monitor the amount of clearing conducted during construction of the project. The FHWA shall use the already developed *G. s. fuscus* habitat map and aerial photography of the project area that is no more than one year old at the initiation of construction to establish a baseline habitat conditions map. All areas cleared for the project shall be delineated on the habitat map. Acreages of highly suitable and suitable habitat cleared shall be calculated annually. Results including acreage figures, a corresponding map of the current habitat status, and whether seasonal clearing restrictions (as described in RPM 1.1 above) were used for each cleared area, shall be reported to the Service annually as described in 5.3 below.

5.2 Tracking of squirrels: The FHWA and the WVDOH, under consultation with the Service, will develop a program to monitor the response of *G. s. fuscus* to construction and operation of the proposed project.

- This tracking program shall include annual monitoring of nest boxes, trapping, and radio telemetry of *G. s. fuscus* within the action area. Telemetry efforts shall target tracking of three *G. s. fuscus* annually.

- Baseline conditions shall be established by conducting monitoring within the year prior to initiation of construction. Monitoring shall be continued annually for the duration of construction, and two years post-construction.

- All *G. s. fuscus* monitoring efforts shall be conducted by a qualified surveyor with experience identifying and working with *G. s. fuscus*. At the time work is conducted, surveyors must hold any permits required by the Service and have a valid collecting permit from the WVDNR.

- The FHWA and the WVDOH shall coordinate all surveys with the Service prior to conducting the work. Proposed survey locations, frequency, level of effort, and methods for each field season shall be submitted to the Service for review and concurrence at least 45 days prior to the beginning of each monitoring season.

- The applicant shall notify the Service and the WVDNR within 5 working days of the capture of each *G. s. fuscus*. Field data relative to captures and observations of *G. s. fuscus* shall be reported regularly to the Service in an informal manner as notable events occur. An annual report of all findings regarding *G. s. fuscus*, including raw data, shall be furnished to the Service and the WVDNR annually as described in 5.3 below.

5.3 Reporting: An annual report of project related efforts in regard to the *G. s. fuscus* shall be furnished to the Service and the WVDNR no later than January 15 following each monitoring year. This report shall include: 1) a description of all activities implemented in accordance with the RPMs during the previous year (e.g. number and location of nest
boxes installed or debris piles created); and 2) a description of the methods, results, and associated data analysis of all monitoring as described in 5.1 and 5.2 above.

RPM 6: Implementation of these minimization measures shall be ensured by appropriately informing all project personnel and contractors.

The FHWA and the WVDOH have the responsibility to ensure that all RPMs and their associated terms and conditions are fully implemented over the life of the project, and that the permitted level of take is not exceeded. Unless workers on-site are familiar with the contents of the Biological Opinion and the presence of *G. s. fuscus*, they may inadvertently engage in actions that would adversely impact listed species in violation of the terms and conditions of the Biological Opinion.

6.1 In order to ensure compliance with these terms and conditions, the FHWA and the WVDOH shall instruct all personnel and contractors potentially operating within the action area and their supervisors, as appropriate, about the requirements and restrictions identified within, or developed as required by the terms and conditions of this Biological Opinion. The requirements and restrictions of the RPMs and associated terms and conditions shall be placed as special provisions in contract specifications and described in any work manuals as appropriate.

CONSERVATION RECOMMENDATIONS

Section 7(a) (1) of the ESA directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service is not providing any conservation recommendations at this time.

REINITIATION NOTICE

This concludes formal consultation for the Corridor H, Parsons to Davis. You may ask the Service to confirm this draft biological opinion as a final biological opinion on the prospective action. The request must be in writing. If the Service confirms this as the final biological opinion on the project, no further section 7 consultation will be necessary except if any reinitiation criteria are met. As required by 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat is designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such a take must cease, pending reinitiation.
The Service appreciates the opportunity to work with the FHWA and the WVDOH in fulfilling our mutual responsibilities under the Endangered Species Act. If you have any questions regarding this letter, please contact Ms. Barbara Douglas of my staff at (304) 636-6586 ext. 19, or at the letterhead address.

Sincerely,

[Signature]

Thomas R. Chapman
Field Supervisor
LITERATURE CITED


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This Section 106 Programmatic Agreement was approved in 1995 and serves as the overall "guide" to completion of cultural resources investigations for the Corridor H project including this SFEIS. It was amended as part of the Settlement Agreement of February 7, 2000 (See Appendix B of this SFEIS).
August 7, 2000

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99
Appalachian Corridor H
Programmatic Agreement - Amendment

Randolph T. Epperly, Jr., P.E.
Deputy State Highway Engineer-
Project Development
West Virginia Division of Highways
Charleston, West Virginia 25305

Dear Mr. Epperly:

As required by the Corridor H Settlement Agreement, by letter dated May 1, 2000, the Federal Highway Administration (FHWA) submitted to the Advisory Council on Historic Preservation (ACHP) a proposed Amendment to the existing Corridor H Programmatic Agreement. The purpose of the Amendment was to revise the project designations in Appendix A of the agreement. By e-mail dated July 28, 2000, the ACHP concurred in the proposed revision. By letter dated August 7, 2000, the FHWA forwarded a copy of the revised Appendix to the ACHP to confirm our agreement. In addition, a copy of the revised Appendix has been provided to the Forest Supervisors of the Monongahela National Forest and the George Washington National Forest (signaturees to the Programmatic Agreement). The FHWA also forwarded copies of the revised Appendix, and all other pertinent correspondence between the FHWA and ACHP regarding the proposed amendment, to all seventeen (17) parties identified in Exhibit 5 (List of Plaintiff Contacts) of the Corridor H Settlement Agreement via the Return-Receipt Delivery to Plaintiffs procedure. As described in our May 1 letter to the ACHP, all future submissions of either Criteria of Effects (COE) reports or Mitigation Plans should be developed in accordance with the revised project designations (with exception to the Lahman House and Hott House). If needed, the COE report for the Lahman House (formerly in Section 7) will be submitted to the ACHP as an independent submission. The Mitigation Plan for the Hott House will be submitted to the ACHP at the same time other resources within former Section 3 are submitted; however, FHWA will request that the Hott House be reviewed independently of the other resources.

Enclosed for your information is a copy of the letter sent to each of the twenty (20) parties contacted by the FHWA. In order to complete the amendment process, the FHWA is requesting the West Virginia Division of Highways forward to the West Virginia State Historic Preservation Officer a copy of our
August 7 letter transmitting the revised Appendix to the ACHP. If you have any questions or comments concerning this information, please contact me at (304) 347-5268 or via e-mail at Henry.Compton@fhwa.dot.gov.

Sincerely yours,

[Signature]

Henry E. Compton, P.E.
Right of Way & Environment Specialist

Enclosures
## APPENDIX A: PROJECT SECTION DESCRIPTIONS

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>WESTERN TERMINUS</th>
<th>EASTERN TERMINUS</th>
<th>LENGTH (Approx)</th>
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<td>Elkins (at the terminus of the Northern Elkins Bypass, 0.55 miles east of County 11)</td>
<td>Kerens (0.2 miles north of County Route 7)</td>
<td>5.5 miles</td>
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<td>Kerens to Parsons</td>
<td>Kerens (0.2 miles north of County Route 7)</td>
<td>Parsons (at County Route 219/4, 0.2 miles south of the northernmost point at which County Route 219/4 intersects with US Route 219)</td>
<td>13.5 miles</td>
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<tr>
<td>Parsons to Davis</td>
<td>Parsons (at County Route 219/4, 0.2 miles south of the northernmost point at which County Route 219/4 intersects with US Route 219)</td>
<td>Davis (at WV Route 93, 0.7 miles east of WV Route 32)</td>
<td>9.0 miles</td>
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<td>Davis to Bismarck</td>
<td>Davis (at WV Route 93, 0.7 miles east of WV Route 32)</td>
<td>Bismarck (at WV Route 42, 0.4 miles south of the intersection with Route 42/93)</td>
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<td>Bismarck to Forman</td>
<td>Bismarck (at WV Route 42, 0.4 miles south of the intersection with Route 42/93)</td>
<td>Forman (at County Route 5, near Thorn Run)</td>
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<td>Forman to Moorefield</td>
<td>Forman (at County Route 5, near Thorn Run)</td>
<td>Moorefield (at County Route 15, 0.5 miles west of WV Route 55)</td>
<td>16.0 miles</td>
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<td>Moorefield to Baker</td>
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<td>Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55)</td>
<td>14.0 miles</td>
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<td>Baker to Wardensville</td>
<td>Baker (at WV Route 259, 0.6 miles east of the intersection with WV Route 259/55)</td>
<td>Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259)</td>
<td>7.0 miles</td>
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<td>Wardensville to Virginia State Line</td>
<td>Wardensville (at County Route 23/12, 0.2 miles south of WV Route 259)</td>
<td>Virginia Line (a point on WV Route 55 approximately 100 feet west of the West Virginia/Virginia state line)</td>
<td>5.5 miles</td>
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Appendix E

USFS MNF Memorandum Of Understanding
June 9, 2003

IN REPLY REFER TO:
Federal Project APD-0484(059)
State Project X142-H-38.99 C-2
Appalachian Corridor H
Various Counties
Memorandum of Understanding

Randolph T. Epperly, Jr., P.E.
Deputy State Highway Engineer -
Project Development
West Virginia Division of Highways
Charleston, WV 25305

Dear Mr. Epperly:

Enclosed please find a copy of the fully executed Memorandum of Understanding among the Federal Highway Administration, Monongahela National Forest and West Virginia Department of Transportation. If there are any questions concerning this matter, please contact me at (304) 347-5268 or via e-mail at Henry.Compton@fhwa.dot.gov.

Sincerely yours,

[Signature]

Henry E. Compton, P.E.
Right of Way & Environment Specialist

Enclosure
MEMORANDUM OF UNDERSTANDING

Between

the Federal Highway Administration,

the West Virginia Department of Transportation,
Division of Highways,

and

the United States Department of Agriculture, Forest Service,
Monongahela National Forest

The MEMORANDUM OF UNDERSTANDING (MOU) is hereby entered into by and between the Federal Highway Administration, hereinafter referred to as the FHWA; the West Virginia Department of Transportation, Division of Highways, hereinafter referred to as the WVDOH; and the United States Department of Agriculture, Forest Service, Eastern Region, Monongahela National Forest, hereinafter referred to as the MNF.

A. PURPOSE:

The purpose of this MOU is to document measures that have been or will be employed to facilitate continued coordination among the WVDOH, FHWA and the MNF during the development and implementation of the Appalachian Corridor H highway project. This MOU will outline project specific measures to minimize and mitigate the effects of Appalachian Corridor H to the MNF and to outline review processes for activities that cannot be defined until final design activities have been undertaken (e.g., excess excavation sites, trail relocations, trailhead parking areas, etc.). In addition, the MOU will document actions that have been or will be taken by the respective parties for the redevelopment of the existing abandoned railway corridor located within the Blackwater Canyon area into a bicycle/pedestrian path.

B. BACKGROUND:

The WVDOH, FHWA and the MNF have worked cooperatively since the inception of the Appalachian Corridor H highway project to minimize impacts to forest resources. The MNF has been and continues to be a Cooperating Agency in the environmental process and a Consulting Party in application of Section 106 of the National Historic Preservation Act.

In August 1996, FHWA issued a Record of Decision (ROD) approving the alignment for Appalachian Corridor H between Elkins and the West Virginia/Virginia state line. The 1996 Corridor H ROD approved the Preferred Alternative identified in the 1996 Corridor H FEIS. In late 1996, legal challenges to the 1996 Corridor H ROD were presented in U.S. District Court in Washington, D.C. On October 8, 1997, the U.S. District Court ruled in favor of the FHWA and WVDOH. The plaintiffs subsequently filed an appeal with the U.S. Court of Appeals. As a result of the findings made during the appellate review, the case was referred to mediation in early 1999. As a result of the mediation, a Settlement
Agreement (February 2000) was reached among the parties. The Settlement Agreement divided the 100-mile long Corridor H corridor into nine separate projects. The Settlement Agreement required that the two projects affecting the Monongahela National Forest (Kerens to Parsons and Parsons to Davis) have Supplemental Environmental Impact Statements prepared. The SEIS's for each of these sections are currently under development with anticipated completion in calendar year 2003. The MNF has been and continues to participate in the review of all aspects of the environmental development process.

The West Virginia State Historic Preservation Officer (SHPO) has concurred that both the Kerens to Parsons project and the Parsons to Davis project would have “no adverse effect” on historic and archeological resources. This finding concludes the Section 106 consultation process under the Section 106 programmatic agreement for Corridor H. The FHWA and WVDOH have agreed to continue coordinating with the SHPO during final design and construction of these projects.

While Corridor H will not have an adverse effect on historic and archeological resources within the MNF, the highway will increase access to the Forest and has the potential to cause impacts within the Forest, depending on the routes that are selected in the environmental process for the Kerens to Parsons and Parsons to Davis projects. Accordingly, the WVDOH, FHWA and MNF have agreed to enter into this MOU in order to promote the protection and public understanding of the historic and archeological resources located within the MNF, while also establishing procedures to assure that any impacts of construction within the MNF are appropriately addressed.

C. AGREEMENTS

1. Historic and Archeological Resources.

The WVDOH will provide the MNF a total of $1,200,000.00 beginning on July 1, 2003. The funding will be distributed over a five year period as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Funds Distributed</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2003:</td>
<td>30% of the funds distributed</td>
<td>($360,000)</td>
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<tr>
<td>July 2004:</td>
<td>20% of the funds distributed</td>
<td>($240,000)</td>
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<tr>
<td>July 2005:</td>
<td>20% of the funds distributed</td>
<td>($240,000)</td>
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<tr>
<td>July 2006:</td>
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<tr>
<td>July 2007:</td>
<td>10% of the funds distributed</td>
<td>($120,000)</td>
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</table>

The funding is to be used exclusively for personnel and equipment costs to investigate, evaluate, interpret and curate archaeological and historic resources under the stewardship of the MNF, production costs associated with disseminating the results of archaeological and historical fieldwork, and the design, installation, and production of interpretive signing, displays, and other devices for public dissemination. A portion of the interpretive signing/displays is to be placed within the boundaries of the National Register Eligible Blackwater Industrial Complex along the proposed bicycle/pedestrian path. Acknowledgement will be made to the financial contribution of the WVDOH and the FHWA in all public documents and displays.
2. Bicycle/Pedestrian Trail on Railroad Grade in Blackwater Canyon

Upon successful completion of the environmental process for the Parsons to Davis project, the WVDOH will construct a bicycle/pedestrian trail on the existing railroad grade through the Blackwater Canyon area. Trail design will accommodate any outstanding rights and reservations existing along the trail to be determined by the WVDOH. In addition, access to private properties located along the trail will be accommodated in trail design and construction to the extent that MNF lands are required for that access.

After completion of the Blackwater Canyon bicycle/pedestrian path by the WVDOH, the MNF will agree to assume overall maintenance responsibilities for the facility. An agreement to this effect shall be executed between the WVDOH and MNF upon final acceptance of the project.

3. Boundary Survey of Railway Corridor from Parsons to Thomas

In addition to the funding noted in item #1, the WVDOH will provide the MNF a total of $229,000 to conduct, with its contractors, a boundary survey with monumentation of the existing abandoned railway corridor from Parsons to Thomas. The funding will be disbursed upon approval of this MOU.

4. Agreements to Transfer Funds

The WVDOH will prepare two additional implementing agreements to transfer the funds committed in numbered paragraphs 1 and 3 of this MOU. The WVDOH and the MNF shall execute these agreements.

5. Limitations on Use of Funds

The MNF will use the funding providing by the WVDOH for only the activities authorized in this MOU. Funds will be used employing a CWFS (Cooperative Work Forest Service) job code. The 5-year financial plan included as Attachment A to this agreement will be followed as closely as possible.

6. Annual Accounting of Expenditures by MNF

The MNF will provide a detailed accounting of all expenditures at the end of each State of West Virginia Fiscal Year. No additional funds shall be provided until the report has been submitted to the WVDOH for review. The report should also include a summary of the findings made during any archaeological investigations conducted using the provided resources. At the end of year 5, a complete summary report shall be submitted to the WVDOH outlining the utilization of the available funding, a summary of any projects that were completed and an overall report on archaeological findings.

7. Use of Federal Funds

The Federal Highway Administration concurs that federal funds (including Appalachian Development Highway System funds) may be used for all activities defined in this Interagency Agreement.
8. Construction Impacts within MNF

The following terms and conditions shall apply if the environmental process results in the selection of an alternative located within the MNF for any portion of Corridor H:

a. The WVDOH will work with the MNF to establish any excess excavation and/or borrow sites or construction access roads within the Forest to minimize environmental impacts. The WVDOH/MNF will agree during the project development process to areas within the MNF that may be suitable locations for development of these ancillary facilities. The final construction plans will depict these agreed upon areas.

b. In addition to any stipulations outlined in the Letter of Consent (the document that allows access to the MNF for construction of the highway), all preliminary construction plans for projects located within or near the forest boundaries will be submitted to MNF for review. The WVDOH will provide the MNF a minimum of 14-calendar day notice to all field and/or office reviews. The MNF will make every effort to provide representation at the reviews.

c. The WVDOH will work with the MNF to establish appropriate replacement and/or relocation sites for any trails crossed and/or relocated by Corridor H. Additionally, the WVDOH will establish parking areas and trailheads as mutually agreed upon by the MNF.

d. The MNF will provide comments on all plan submissions and related information no later than 30 days from receipt of information.

e. The WVDOH will use natural stream design for all high quality stream relocations within the boundaries of the Forest.

f. The WVDOH will use Best Management Practices for all erosion control within the Forest. The MNF staff will be invited to attend all erosion control reviews, comment on erosion control plans and participate in field views of the construction projects as needed.

9. Effective Date

This MOU will become effective upon signature by all parties and shall remain in effect until terminated by any party.

10. Termination and Amendments

Any signatory may terminate this MOU upon 90 days written notice to the other. Its provisions can be amended or supplemented in writing. Unless terminated, this MOU will remain in full force and effect until completion of the Kerens to Parsons and Parsons to Davis projects.
SIGNED:

Thomas J. Smith, Division Administrator
Federal Highway Administration

4/19/03
Date

Fred VanKirk, Secretary
West Virginia Department of Transportation

4/19/03
Date

Clyde N. Thompson, Forest Supervisor
Monongahela National Forest

3/27/03
Date
## ATTACHMENT A

### Annual Budget

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<th>Year</th>
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