#### ALTERNATIVES

#### **DESCRIPTION OF THE ALTERNATIVES**

There are five alternatives for the Blue Ridge Parkway regional destination visitor center. The alternatives for the project were developed to achieve the following purposes:

Interpretation of natural and cultural resources along the Blue Ridge Parkway via an entertaining, immersive, and interactive format in which the public can participate through the use of state-of-the-art-technology.

An educational forum via a range of programs, workshops, and media that facilitate learning for a broad range of visitors (i.e., area residents, school groups, college students, and the public).

Information and orientation to the Blue Ridge Parkway and link the public to community functions and attractions within the Asheville community and the greater Western North Carolina region.

Alternative A. The no action alternative would continue the present management operation and condition. It does not imply or direct discontinuing the present action or removing existing uses, developments, or facilities. Alternative A (no action) provides a basis for comparing the management direction and environmental consequences of Alternative B (preferred alternative) and the other alternatives. Should Alternative A, no action, be selected, the National Park Service would respond to future needs and conditions associated with the park's objectives without major actions or changes from the present course.

Action Alternatives. This section presents the National Park Service's proposed action and alternatives and defines the rationale for the action in terms of resource protection and management, visitor use and operational use, costs, and other applicable factors. The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to:

Design park facilities to minimize adverse effects on natural and cultural values, reflect their environmental setting, and maintain and encourage biodiversity;

Construct and retrofit facilities using energy-efficient materials and building techniques;

Operate and maintain facilities to promote their sustainability; and

Illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use.

Alternative B (preferred alternative) subscribes to and supports the practice of sustainable planning and design to accomplish the regional destination visitor center. Alternatives C, D, and E provide optional sites for the build alternative. Alternatives B and C are located at Milepost 384 of the parkway to the east of Asheville, North Carolina,

at the Hemphill Knob site, the current location of the Blue Ridge Parkway headquarters. Alternatives D and E are located at Milepost 382 of the parkway at the Folk Art Center.

In an effort to select the best alternative the National Park System uses a selection and ranking process that is based on the relative advantages and costs of each project in accomplishing service-wide goals and objectives. This process is called Choosing by Advantage (National Park Service, 1999). In using the Choosing by Advantage process, the National Park Service asks itself "what and how large are the advantages of each project" proposed for consideration, "how important are the advantages of the projects", and finally "are those advantages worth their associated cost". Projects then compete against each other in the Choosing by Advantage process that evaluates all the projects relative to the following factors, which reflect the National Park Service mission:

Protecting cultural and natural resources,

Provide for visitor enjoyment,

Improve efficiency of park operations, and

Provide cost-effective, environmentally responsible, and otherwise beneficial development for the National Park Service.

The results reflect total benefits of each project toward achieving the National Park Service mission. Cost is then introduced to the priority setting process, establishing an importance to cost ratio. The resulting priorities represent those projects which provide the greatest benefit to the National Park Service for each dollar spent.

The Choosing by Advantage process was conducted at the Blue Ridge Parkway headquarters in Asheville, North Carolina during the week of November 29<sup>th</sup>, 2004. Parsons, the consultant team chosen for this Development Concept Plan / Environmental Analysis, presented preliminary development concept site plans A and B completed for the Hemphill Knob location and C and D completed for the Folk Art Center location. Presentations of conceptual building plans were made by Lord, Aeck, & Sargent, the regional destination visitor center building consultant. The details of the Choosing by Advantage process are described in Appendix B.

Because the facility and interpretive programs remains the same in each of the alternatives, the ongoing operational cost for the regional district visitor center will not vary. Based on discussions with NPS management, staffing is estimated to be 8 full time equivalent employees for each of the alternatives. Annual operation cost for staffing the regional district visitor center would be \$491,500. (based on GSA Grade 9 Step 5 and a 45% burden factor). Under Alternative D, the cumulative staffing requirements for both the regional district visitor center and Folk Art Center may be reduced. However, with the Parkway taking the lead role in the building and the Folk Art Center as tenant, the Parkway staffing would remain at 8 full time equivalents. The specific design of the buildings will investigate alternative energy and maintenance cost savings, but there is no appreciable difference between the alternative sites affecting these. The operational cost will be very comparable for any of the alternative sites.

#### Alternative A: No Action

The no action alternative is the baseline condition against which proposed activities are compared. It is defined as taking no action to change or alter current management. Currently, visitor centers are located at the following twelve locations along the parkway.

Humpback Rocks	Linville Falls
James River	Museum of North Carolina
Peaks of Otter	Minerals
Rocky Knob	Craggy Gardens
Cumberland Knob	Folk Art Center
Moses H. Cone Memorial Park	Waterrock Knob
Linn Cove Viaduct	

Many of these visitor centers are primarily visitor contact stations that supply trail maps, publications, and local area information. Interpretive programs, if available, are generally limited to the local features of that particular attraction. For instance, the interpretive program at the Museum of North Carolina Minerals focuses on mining activities and the program at the Folk Art Center focuses on mountain crafts. Under Alternative A, the current park interpretation and operational programs would continue, and there would be no single location where interpretation of the cultural and historic features of the overall parkway would be presented. Information and orientation to the Blue Ridge Parkway in the Asheville area would be limited to the visitor information that is available at the Folk Art Center. Any links to community functions and attractions within the Asheville community and the greater Western North Carolina region would be provided at sites away from the parkway, such as the Greater Asheville Chamber of Commerce Visitor Center. Should the no action Alternative be selected, the National Park Service would respond to future needs and conditions without major actions or changes in the present course.

The Blue Ridge Parkway's Folk Art Center is operated by Southern Highland Craft Guild, Inc. under the terms and conditions of a cooperative agreement. The agreement provides for the Guild to maintain the building and grounds, but does not require rents or fees. The no action alternative represents the Guild's ongoing routine of continuing maintenance and repairs. The existing Folk Art Center, located at Milepost 382 of the parkway, was completed in 1980 as a public/private partnership between the Southern Highland Craft Guild and the National Park Service. The Folk Art Center consists of a large building, readily visible from Blue Ridge Parkway.

The Guild commissioned a design consultant to complete a master plan for the Folk Art Center facilities. This plan, completed in 1999, proposes renovations to the existing facility and an additional 20,000 square feet of public, educational and marketing space added to the existing 28,327 square foot facility. Substantial net square footage additions to the facility include the following categories:

Public demonstration and information areas Permanent exhibits Library and archival space Sales and artisans workspaces Administrative space

The plan extends the building footprint generally in the northern and western directions on the site. Site improvements in the plan include amphitheater improvements, a picnic knoll, perimeter trails, environmental sculpture and staff parking and loading dock areas. Under the no action alternative, the improvements that are planned for the Folk Art Center would remain in place.

## Alternative B: Hemphill Knob (the preferred alternative)

In 1981, the United States Congress authorized the National Park Service to acquire the Hemphill Knob property for a new headquarters complex. This site was chosen after an extensive search, based primarily on ease of access from the parkway and local area Interstate highways (See Figure 2).

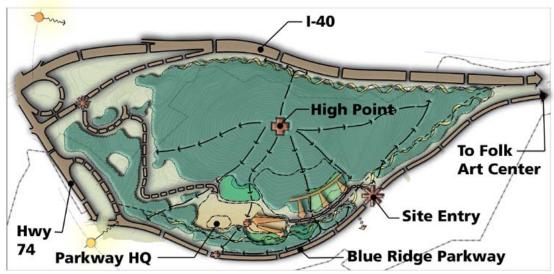


FIGURE 2. HEMPHILL KNOB EXISTING CONDITIONS

The existing headquarters building lies at a relatively level location approximately onefourth to one-third of the way up the slope (knob) that offers generally open views of surrounding mountains, including Mount Pisgah to the west. Mount Pisgah is important because it is the highest elevation of any developed area along the parkway. The headquarters building and associated site was designed with strict adherence to parkway design guidelines including the building architecture, wood guard railing, stone curbing and stone masonry waterways.



FIGURE 3. EXISTING CONDITIONS AT HEMPHILL KNOB SHOWING ENTRANCE ROAD, OFFSITE MOUNTAIN VIEWS AND ALTERNATIVE B LOCATION FROM THE HEADQUARTERS

The entrance road into the Hemphill Knob site takes advantage of changing horizontal and vertical curve elevations for an appealing entrance progression. Parking areas are located on both the northwest and northeast sides of the headquarters building. The visitor parking area located to the northeast of the headquarters building is comprised of 29 parking stalls with a wide lawn median and an adjacent level grade lawn area that together serve as the foreground to the headquarters building. The 63 stalls located to the northwest of the headquarters building serve as employee parking.

As the Hemphill Knob property was purchased with the precedence for a future visitor center, there is adequate room for the visitor center to be located on several different sites. The regional destination visitor center building in Alternative B would be located within a portion of the wooded area directly east of the parking area, removing a portion of an existing pine forest in decline. Whether arriving by a bus or car, visitors would have ample room for maneuverability, as all curved segments of the road and parking area have large turning radii. Bus and recreational vehicle drivers also would have flow through parking stalls for fewer traffic conflicts, as there is no need for drivers to back up. Visitors may drop passengers off at the visitor arrival area that includes an architectural focal point that forms a vista to the site entry road and an interpretive plaza. The plaza allows interpretation of local heritage, history, culture and parkway construction through the use of signage or other exhibits. It would also allow visitors to take advantage of the natural setting and mountain views to the west. This plaza would be tied to the interior uses by a north-south axis and open views through the building. The preferred alternative is shown in Figure 4.



FIGURE 4. PREFERRED ALTERNATIVE B AT HEMPHILL KNOB

The parking area design would include planted medians with curved edges that visually flow directly into the curved building edges. The regional destination visitor center and headquarters would be separate buildings and operations, yet they would have a visual relationship. The planted medians would also reduce impervious pavement and provide an additional means for surface water purification. Much of the proposed parking and associated perimeter road for the regional destination visitor center would be confined within the cleared, relatively flat portion of the site established during the headquarters planning and construction. This would reduce the amount of additional site disturbance and grading. The design team estimated that 237 parking stalls would be required for the Hemphill Knob site (*see Appendix C*). The service drive and loading dock in Alternative B would accommodate semi trucks and would be located on the north side of the building, away from primary visitor view. Other site features proposed in this alternative include outdoor classroom opportunities, an interpretive garden, and trails to both the Mountain to Sea Trail and Hemphill Knob.

The 11,000 square foot regional destination visitor center building includes a 2,360 square foot entrance area comprised of a lobby with exhibits, an information desk, and restrooms on the main floor. A 700 square foot gift shop would be located to the north of the information desk and a 1,235 square foot parkway information center would be located to the east of the gift shop. A 1,100 square foot regional information center would be located to the south of the parkway information center. The 70 seat immersive digital theatre would be located to the north of the parkway information center. Administrative

offices would be located to the north of the gift shop. The 1,150 square foot education center would be located on the lower floor, along with storage and mechanical areas.

Electric, sanitary sewers, telephone, water utility services would be extended from existing headquarters building. Stubs for these services and future capacity were included in the design and construction of the headquarters building, thereby eliminating costly upgrades.

Alternative B would fulfill the three objectives for the regional destination visitor center. First, this alternative offers an interpretation of the Blue Ridge Parkway in an interactive, entertaining format. It contains the immersive digital theatre that will dramatically portray some features associated with the parkway. It also contains an area for parkway information and exhibits regarding the parkway. This would provide information regarding the entire Blue Ridge Parkway, not just the immediate vicinity. Secondly, this facility would accommodate a broad range of visitors. Specifically, the regional destination visitor center would provide a broader and more formal educational forum for school children and college students than is currently available. A dedicated educational center would be provided that would have programs oriented toward students. Third, the regional destination visitor center would provide a specific area to link visitors to Western North Carolina tourism centers and attractions in partnership with the Blue Ridge National Heritage Area.

The environmental effects of Alternative B are summarized in the Summary of Environmental Consequences (*Table 4*) shown at the end of this section. Additional details are provided in the Affected Environment/Environmental Consequences section.

The preferred Alternative B, as described, is estimated to cost approximately \$9.2 million to construct, including contingencies. Some components of the building and site could be developed in phases over an extended period of time. A summary breakdown of the site and building cost is provided in Appendix D.

## Alternative C: Hemphill Knob

Alternative C would also be located at Hemphill Knob. This alternative would share some similarities with Alternative B. Similar to Alternative B, this alternative would include an entrance median on the parkway. Additionally, the majority of the proposed parking and the perimeter road around the parking would be confined within the relatively flat building pad established during the headquarters planning and construction. The parking area design in this alternative would also include planted medians that reduce impervious pavement and enhance surface runoff purification. Unlike Alternative B, these medians would offer less visual relationship between the headquarters and the regional destination visitor center. Instead the median edges would direct visitors to the regional destination visitor center entry focal point. The building in this alternative would be located east of and closely adjacent to the ravine located below the pedestrian bridge leading to the headquarters building. (See Figure 5 for the Alternative C concept plan). Visitors arriving at this site by bus or car may take an immediate left to the circular arrival area. This focal point would include a drop off and interpretive plaza and aligns on axis with the proposed building, parking and pedestrian bridge of the headquarters building. Visitors arriving by car would have ample room for maneuverability in the parking area with large turning radii. Visitors arriving by bus or recreational vehicle would have the same ample turning radii plus flow-through parking stalls for easier maneuverability. This alternative also would call for 237 parking stalls, similar to the number for Alternative B.

In addition to parking and an interpretive plaza, other site program components would include an interpretive theme garden, outdoor classroom opportunities and trails that lead to both the Mountain to Sea Trail and Hemphill Knob. Alternative C would take advantage of westward views to Mount Pisgah from the proposed building and interpretive plaza and a more wooded "tree house" setting.



FIGURE 5. ALTERNATIVE C AT HEMPHILL KNOB

Alternative C would contain the same program elements as the preferred alternative and each program element would have approximately the same square footage as Alternative B. However, the layout could vary from Alternative B, due to the unique topographic characteristics and interior-exterior relationships of each site. Alternative B has a linear building to site relationship, while Alternative C is less linear.

Electric, sanitary sewers, telephone, and water utility services would be extended from existing headquarters building service lines. Stubs for these services and future capacity were included in the design and construction of the headquarters building. Due to the building placement in this alternative, extension of these lines would be at a shorter distance than Alternative B.

Alternative C would fulfill the three objectives for the regional destination visitor center. First, this alternative would offer an interpretation of the Blue Ridge Parkway in an interactive, entertaining format. It would contain the immersive digital theatre that would dramatically portray some feature associated with the parkway. It also would contain an area for parkway information and exhibits regarding the parkway. This would provide information regarding the entire Blue Ridge Parkway, not just the immediate vicinity. Secondly, this facility would accommodate a broad range of visitors. Specifically, the regional destination visitor center would provide a broader and more formal educational forum for school children and college students than is currently available. A dedicated educational center would be provided that would have programs oriented toward students. Third, the regional destination visitor center would provide a specific area to link visitors to Western North Carolina tourism centers and attractions in partnership with the Blue Ridge National Heritage Area.

The environmental effects of Alternative C are summarized in the Summary of Environmental Consequences (*Table 4*) shown at the end of this section. Additional details are provided in the Affected Environment / Environmental Consequences section.

Alternative C, as described, is estimated to cost approximately \$9.4 million to construct, including contingencies. Some components of the building and site could be developed in phases over an extended period of time. A summary breakdown of the site and building cost is provided in Appendix D.

#### Alternative D: Folk Art Center

This alternative is located at the Folk Art Center site at Milepost 382 of the parkway. Alternative D expands and renovates the existing Folk Art Center building to accommodate the functions of the Folk Art Center and the regional destination visitor center. This building addition joins at the existing theater area on the east side of the Folk Art Center building. Existing Folk Art Center programs would be linked and complementary to new regional destination visitor center programs. Access to the site is provided by an existing 250 foot long northbound to westbound entrance turn lane located in the median of the parkway. See the following Figure 6 for existing conditions at the Folk Art Center site.

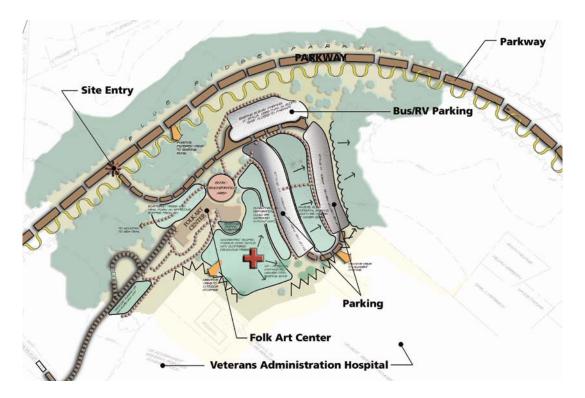


FIGURE 6. EXISTING CONDITIONS AT FOLK ART CENTER SITE



FIGURE 7. EXISTING CONDITIONS AT FOLK ART CENTER SITE SHOWING ARCHITECTURAL CHARACTER AND SITE HIGH POINT

Visitors arriving at the site by car would drive past the building and the entrance area to the parking facility located on the eastern portion of the site. After visitors drive through the entrance road and park their vehicles, they would walk to the visitor arrival location that includes an interpretive plaza. Visitors by bus or recreational vehicle would be dropped off at the entrance plaza. Drivers would proceed to the turnaround, and drive back to a bus/recreational vehicle/employee/volunteer parking areas located to the west of the building. Service vehicles also have building access from this bus/recreational

vehicle area but would access the site through a separate entrance on Riceville Road. A new connector road would be established in this alternative from the site entry road for bus or recreational vehicle travelers that do not wish to proceed to the arrival area. Figure 8 shows the proposed site plan for Alternative D.



FIGURE 8. ALTERNATIVE D AT FOLK ART CENTER

The design team estimated that 336 parking stalls would be required for the Folk Art Center site for this alternative (*see Appendix C*). A larger number of stalls are required for Alternative D due to the co-location of regional destination visitor center and Folk Art Center functions within the same building and site, and the potential increased length of stay due to this co-location. The required parking is accommodated primarily through an added level of surface parking east of and at a lower topographic elevation than existing parking bays.

Once in the renovated facility of this alternative, visitors can navigate between the new gift shop, marketing center, exhibitions and theater or existing program functions of the Folk Art Center.

In addition to parking and the interpretive plaza, other site features proposed in this alternative include an interpretive theme garden, outdoor classroom opportunities, artisan demonstration area and trails through the site leading to the Mountain to Sea Trail.

The building program for Alternative D is shown in Appendix D.

Electric, sanitary sewers, telephone, water utility services are currently provided to the Folk Art Center building. However, it is assumed that most utilities would need to be upgraded to accommodate the regional destination visitor center.

Alternative D would fulfill the three objectives for the regional destination visitor center. First, this alternative offers an interpretation of the Blue Ridge Parkway in an interactive, entertaining format. It contains the immersive digital theatre that would dramatically portray some feature associated with the parkway. It also contains an area for parkway information and exhibits regarding the parkway. This would provide information regarding the entire Blue Ridge Parkway, not just the immediate vicinity. Secondly, this facility accommodates a broad range of visitors. Specifically, the regional destination visitor center would provide a broader and more formal educational forum for school children and college students than is currently available. A dedicated educational center would be provided that would have programs oriented toward students. Third, the regional destination visitor center would provide a specific area to link visitors to Western North Carolina tourism centers and attractions in partnership with the Blue Ridge National Heritage Area.

The environmental effects of Alternative D are summarized in the Summary of Environmental Consequences (*Table 4*) shown at the end of this section. Additional details are provided in the Affected Environment/Environmental Consequences section.

Alternative D, as described, is estimated to cost approximately \$10.2 million to construct, including contingencies. Some components of the building and site could be developed in phases over an extended period of time. A summary breakdown of the site and building cost is provided in Appendix D.

## Alternative E: Folk Art Center

This alternative is also located at the Folk Art Center site, but unlike Alternative D, this site utilizes a separate building for the regional destination visitor center. The new regional destination visitor center building is located as a vista for drivers on the site entry road. This entry road continues past the front of the new building to the car parking area. The regional destination visitor center building and the Folk Art Center building would relate to one another via a shared entrance/arrival area to include a dropoff motor court and interpretive plaza. Visitors by bus or recreational vehicle may drop off passengers, then proceed to the turnaround, then drive back to a bus/recreational vehicle/employee/volunteer parking area located west of the Folk Art Center building in similar fashion to Alternative D. The parking area for buses, employees and volunteers is in the same location but has a slightly different configuration than in Alternative D. Similar to Alternative D, service vehicles for the Folk Art Center have a separate entrance from Riceville Road near the bus/recreational vehicle parking. Bus or recreational vehicle travelers would also have a direct connector from the entry road to their designated parking area. In this alternative, the new separate regional destination visitor center building would have its own service entrance located at the northeast corner of the building. Figure 9 shows the proposed site plan for Alternative E.

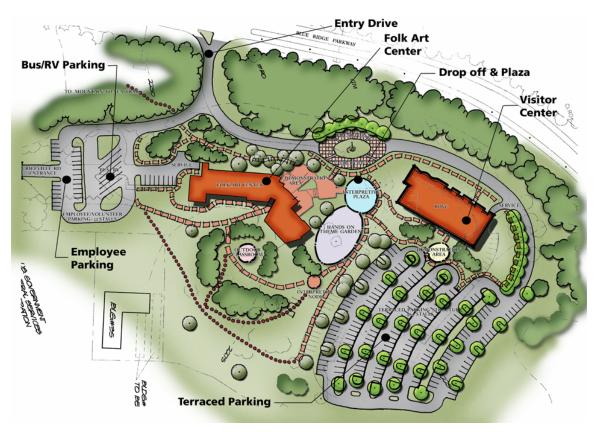


FIGURE 9. ALTERNATIVE E AT FOLK ART CENTER

While this alternative utilizes the same number of parking stalls as Alternative D (337), the stalls in this concept are arranged in a multilevel parking deck that utilizes the sloped character of the site. One level would be partially covered by a level above it. Utilizing site topography and locating parking at the back of the building reduces visual impact from the parkway. By having parking at the back of the new building, visitors are drawn to the new regional destination visitor center from the main entrance or parkway side. The building entrance is marked by a focal element. Once in the new building, visitors encounter a dramatic lobby space, Visitors can then navigate between program elements along a central corridor. The separation of interior spaces by a corridor allows functions to be either opened to landscapes on the southern side, or shielded from the sun as functionally necessary on the northern side.

In addition to parking and an interpretive plaza, other site program components include an interpretive theme garden, outdoor class, artisan demonstration area and trails through the site and a connector that leads to the Mountain to Sea Trail.

The building plan for Alternative E is not refined to the same level as the preferred alternative. Alternative E would contain features similar to the preferred alternative and each feature would be approximately the same size as Alternative B. However, the layout could vary from Alternative B, due to the unique topographic characteristics of each site.

Electric, sanitary sewers, telephone, water utility services would be extended from the existing main lines serving the Folk Art Center building. However, it is assumed that most utilities would need to be upgraded to accommodate the regional destination visitor center.

Alternative E would fulfill the three objectives for the regional destination visitor center. First, this alternative offers an interpretation of the Blue Ridge Parkway in an interactive, entertaining format. It contains the immersive digital theatre that would dramatically portray some feature associated with the parkway. It would also contain an area for parkway information and exhibits regarding the parkway. This would provide information regarding the entire Blue Ridge Parkway, not just the immediate vicinity. Secondly, this facility accommodates a broad range of visitors. Specifically, the regional destination visitor center would provide a broader and more formal educational forum for school children and college students than is currently available. A dedicated educational center would be provided that would have programs oriented toward students. Third, the regional destination visitor center would provide a specific area to link visitors to Western North Carolina tourism centers and attractions in partnership with the Blue Ridge National Heritage Area.

The environmental effects of Alternative E are summarized in the Summary of Environmental Consequences (*Table 4*) shown at the end of this section. Additional details are provided in the Environmental Consequences section.

Alternative E as described is estimated to cost approximately \$12.2 million to construct, including contingencies. Some components of the building and site could be developed in phases over an extended period of time. A summary breakdown of the site and building cost is provided in Appendix D.

## MITIGATION MEASURES OF THE ACTION ALTERNATIVES

For all action alternatives, best management practices and mitigation measures would be used to prevent or minimize potential adverse effects associated with the construction and operation of the regional destination visitor center. These practices and measures would be incorporated into the project construction documents and plans to reduce the magnitude of impacts and ensure that major adverse impacts would not occur. Mitigation measures undertaken during project implementation would include, but would not be limited to those listed below. The impact analysis in the "Environmental Consequences" section was performed assuming that these best management practices and mitigation measures were implemented as part of all action alternatives.

## Practices to Minimize Effects on Air Quality

The contractor should implement best management practices to reduce air quality impacts during construction, including turning off engines when not in use and sprinkling the construction site with water to avoid dust.

#### Practices to Minimize Effects on Soil

Best management practices would be implemented during construction to prevent soil erosion due to wind and rain. The erosion prevention practices would include using silt screening around any disturbed areas, mulching all exposed slopes, placing staked hay bales in drainages, and sprinkling exposed soil to prevent wind erosion. Upon completion of the construction project, all disturbed soils would be sodded or seeded with grasses to prevent erosion.

### Practices to Minimize Effects on Water Quality

All appropriate best management practices would be implemented during construction to prevent degradation of local waters and watersheds. Post construction mitigation measures would include sodding or seeding all exposed soils to prevent erosion, performing routine maintenance on all stormwater treatment facilities, keeping trash and debris cleared up, and avoiding using chemical pesticides and fertilizers on the landscape. The effects of the build alternatives on water quality would be adverse, and long term, but local, indirect and negligible.

#### Practices to Minimize Effects on Wildlife

Mitigation for the minor loss of habitat would include the use of native trees, shrubs, and ground cover in the landscaping, removing the nuisance exotic vegetation in the remaining habitat, and providing educational materials and demonstration areas for the visiting public. The education materials would promote backyard habitat development and other ways homeowners can provide wildlife habitat.

#### Practices to Minimize Effects on Vegetation

As stated, local land development codes would require the replacement of a percentage of the trees lost to construction as landscape features. The number of trees planted usually depends upon the quality, size and species of tree. Exotic trees and small saplings would not require replacement. If necessary, as further mitigation, the park staff may remove the nuisance vegetation from the remaining forested area to restore the vegetation community.

#### Practices to Minimize Effects on Cultural Resources

Mitigation measures for the build alternatives include, but may not be limited to, the following:

Mitigation measures for the cultural landscape would include minimal disruption and disturbance of local vegetation, dust abatement, and replanting and relandscaping any areas affected by construction activities. Mitigation measures for the historic masonry box culvert would include utilizing existing stone to veneer the new concrete abutment wing, and parapet walls.

Mitigation measures reduce adverse effects on archaeological sites. The assumed (and preferred mitigation under federal guidelines) is avoidance. Avoidance may be accomplished through redesign of the proposed construction, utility corridors, construction staging areas and borrow pit excavations. Avoidance preserves the integrity of archaeological sites and protects their research potential (i.e., National Register of Historic Places eligibility). Avoidance also avoids costs and potential construction delays associated with data recovery. Traditionally, data recovery of archaeological sites through professional techniques such as surface collection, mapping, photography, subsurface excavation, technical report preparation and dissemination, has been the standard mitigation measure. However, data recovery is labor intensive (i.e., costly) but may be necessary if National Register of Historic Places-eligible sites cannot be avoided. Data recovery of archaeological information is now considered, in and of itself, an adverse effect under the revised Section 106 regulations (36CFR800.5(a)(2)(i)). Because the project area at the build sites has not been systematically surveyed for archaeological resources and because intact prehistoric and historic archaeological sites may occur in undisturbed areas proposed for infrastructure corridors, a Phase I archaeological survey is recommended prior to construction. The Phase I survey would consist of a systematic series of shovel probes to identify archaeological sites and to determine their extent and integrity. If intact archaeological sites are identified, Phase II cultural resources studies should be designed in consultation with the North Carolina State Historic Preservation Office and implemented to determine the National Register of Historic Places eligibility of the cultural resources. If National Register of Historic Places-eligible resources occur and cannot be avoided through project redesign, Phase III data recovery investigations should be developed in consultation with the North Carolina State Historic Preservation Office and implemented prior to construction.

Mitigation measures for the historic masonry box culvert would include utilizing existing stone to veneer the new concrete abutment, wing, and parapet walls.

#### Practices to Minimize Effects on Socioeconomics

For Alternatives B and C, mitigation for the potential reduction in visitation to the Folk Art Center would include the provision of a kiosk or other promotional device inside the regional destination visitor center that would provide information regarding the location and features of the Folk Art Center to encourage Parkway visitors to visit the Folk Art Center.

## Practices to Minimize Effects on Visitor Use and Experience

For Alternative D located at the Folk Art Center, alternative access to the property and to the Allanstand Craft Shop would be provided so the shop would not have to completely cease operations during construction. Signs would be posted on the parkway listing the activities and operations at the Folk Art Center that are open despite the construction and directions around the construction would be provided to minimize the effects of construction on the operation of the Folk Art Center and the Allanstand Craft Shop. For Alternative E located at the Folk Art Center, alternative parking would be provided during construction for Folk Art Center visitors and signs would be placed on the parkway indicating that the Folk Art Center is operational. For Alternatives B and C, mitigation for the potential reduction in visitation to the Folk Art Center would include the provision of a kiosk or other promotional device inside the regional destination visitor center that would provide information regarding the location and features of the Folk Art Center to encourage Parkway visitors to visit the Folk Art Center.

### Practices to Minimize Effects on Soundscape and Noise

The contractor that constructs the regional destination visitor center would comply with best management practices to reduce the effects of construction noise on the surrounding area. Heavy equipment and truck engines would be properly muffled and would be turned off when not in use.

## Practices to Minimize Effects on Concessions and Commercial Services

For Alternative D located at the Folk Art Center, alternative access to the property and to the Allanstand Craft Shop would be provided so the shop would not have to completely cease operations during construction. Signs would be posted on the parkway listing the activities and operations at the Folk Art Center that are open despite the construction and directions around the construction would be provided to minimize the effects of construction on the operation of the Folk Art Center and the Allanstand Craft Shop. For Alternative E located at the Folk Art Center, alternative parking would be provided during construction for Folk Art Center visitors and signs would be placed on the parkway indicating that the Folk Art Center is operational.

For Alternatives B and C, mitigation for the potential reduction in visitation to the Folk Art Center would include the provision of a kiosk or other promotional device inside the regional destination visitor center that would provide information regarding the location and features of the Folk Art Center to encourage visitors to visit the Folk Art Center.

## ALTERNATIVES CONSIDERED BUT DISMISSED

Several conceptual plans have been completed for a visitor center in conjunction with overall master planning for the Hemphill Knob headquarters site. Previous conceptual planning has not been completed at the Folk Art Center site for a similar regional destination visitor center facility that satisfies the purpose and need mentioned herein. The following is a description of previously completed concepts, listed chronologically, as the first plans to the most recent plans dismissed and reasons for dismissal:

 A site evaluation for a Mountain Experience Center was completed by a local Asheville area architectural consultant in June 1980. This study was initiated in December 1979 between area state and federal agencies that formed a coordinating council. The coordinating council formed site selection and program development committees. The site evaluation report involved a points-driven, site selection process evaluating various site criteria. Out of 30 sites evaluated, 3 primary and 3 alternative sites were short listed. The Hemphill Knob site received the most points. As part of this report, a conceptual plan was generated for the Hemphill Knob and other sites. After the report was completed, the consultant prepared an in-depth analysis of the short listed sites and investigated the availability of sites for potential acquisition. The Mountain Experience Center report led to a Development Concept Plan / Environmental Assessment for locating the parkway headquarters at the Hemphill Knob site. This document was completed in June 1989. Concept A within the Development Concept Plan / Environmental Assessment included both headquarters and visitor center facilities at Hemphill Knob. Concept B was the no action alternative.

The Mountain Experience Center Plan for Hemphill Knob was dismissed from the Hemphill Knob plans for political and budgetary considerations, but sufficient space for a future visitor center and required parking was retained as part of the plans. The parkway headquarter's office needs were considered great enough to warrant a separate building that would not be a part of a future visitor center. Many of the general mountain experience concepts were carried over into present day plans including a desire to utilize modern technology as an interactive tool to inform visitors and the need for strong ties to the overall cultural and physical features of the Blue Ridge Parkway.

- 2. The Advantage West regional destination visitor center report was completed in 1996. The conceptual site plan completed as part of this report was dismissed due to its close proximity to the parkway and its disturbance to site vegetation and existing grading. The building concept in this plan also included a large format theater that required a building profile that detracted from the parkway visual experience. The theatre concept was later changed to a smaller format theatre that reduced the building size.
- 3. Concepts A through D, generated in preparation for the Choosing by Advantages process held at the Blue Ridge Parkway headquarters November 29 through December 3, 2004, were ultimately dismissed. During the course of the Choosing by Advantage process, Alternatives A through D were eliminated from further analysis and replaced with four updated versions of these plans, A' through D'. Alternative A' through D' were later renamed as Alternatives B, C, D, and E. The no action alternative was Alternative A. The following description offers reasons for dismissing Concepts A through D:

#### Concept A and B:

During the Choosing by Advantage process, these two concepts at the Hemphill Knob site were dismissed because the building and site entrance road did not provide a desirable sense of visitor arrival and orientation. The building placement in Concept A adversely affected vegetation in the major swale to the east of the existing headquarters building. The parking layout in Concept A was also too rigid with no islands and no orientation to the building entry, creating more potential vehicular-pedestrian conflicts. The Concept A proposed site uses are near the headquarters facility, potentially causing disturbance with headquarters occupants. These uses included an outdoor class and associated trails.

## Concept C and D:

These concept plans were located at the Folk Art Center site. During the Choosing by Advantages process, Concept C was dismissed because the parking and road layout circles the entire building. This creates unpleasant onsite visitor views and also creates unpleasant parkway traveler views. The circulation pattern also jeopardizes visitor safety through additional pedestrian/vehicular conflicts. Concepts C and D were dismissed because they utilized an increased amount of surface parking to satisfy the anticipated longer visitor stays with the combined Folk Art Center and regional destination visitor center facilities. This increased pavement negatively effects onsite vegetation and reduces the amount of pervious surface on the site. The additional parking is also further from proposed facilities, increasing visitor walking distance to the facility.

These alternatives were also dismissed because they lack a direct vehicular connector from the entrance road to the proposed bus/recreational vehicle parking area and the proposed parking and road layout does not relate to the adjacent building #350 site parking and road layout.

## THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that would best promote the national environmental policy expressed in the National Environmental Policy Act. The environmentally preferred alternative would cause the least damage to the biological and physical environment, and would best protect, preserve, and enhance historical, cultural, and natural resources.

Section 101(b) of the National Environmental Policy Act identifies six criteria to help determine the environmentally preferred alternative. The act directs that federal plans should:

Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;

Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;

Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;

Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The alternatives will be analyzed by determining the alternative that best meets each criteria. The alternative that best satisfies the criteria will become the environmentally preferred alternative.

*Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations* – Each of the build alternatives satisfies this criteria, as the enhanced interpretation provided by the regional destination visitor center programs would provide information to the public regarding the history, culture, and features of the parkway. However, Alternatives D and E could restrict or eliminate the expansion program planned for the Folk Art Center. This has the potential of reducing the interpretive programs provided at the Folk Art Center. Advantage – Alternative B and Alternative C

Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings – Alternatives D and E are located on a smaller site at the Folk Art Center; therefore, the regional destination visitor center sites at the Folk Art Center are more crowded than the Hemphill Knob sites. The buildings at the Folk Art Center site can be easily seen from the parkway, while the buildings at the Hemphill Knob site would be less visible, at least during the summer months when vegetation is thick. The view from the visitor center sites at the Folk Art Center consists of trees, parking, and the Veterans Hospital. The view from the Hemphill Knob sites would include trees and parking, but would also include mountains in the background. Non park related land uses are closer to the visitor center sites at the Folk Art Center sites at the Folk Art Center, and they could be impacted by exhaust emissions and noise from the vehicles visiting the visitor center. Alternative B is more isolated from the headquarters building than Alternative C, and would therefore produce fewer impacts than Alternative C. The view would also be more natural from Alternative B. Advantage – Alternative B.

Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences – Alternative B and C would provide the widest range of beneficial uses, as these alternatives would not disturb the future plans of the Folk Art Center to expand their building and their operation. Alternative B would better achieve this criteria as it is located further from the headquarters and other development and would have less effect on the other uses. None of the build alternatives would have long term effects that would severely impact the natural environment. Alternatives D and E would have slightly greater adverse effects regarding air quality and noise impacts to the surrounding neighborhood during construction due to the proximity of the surrounding land uses and the fact that both visitor center and Folk Art Center traffic would be combined at this site, but these effects would be minimal during operation of the regional destination visitor center. Alternatives D and E would also have slightly greater long term transportation impacts due to the combined traffic. The construction of the regional destination visitor center would have moderate short term adverse effects on the income to the artisans at the Folk Art

Center with Alternative D and minor to moderate short term adverse effects with Alternative E due to the disruption during construction at the Folk Art Center. However, once construction is completed, the artisans would enjoy increased long term visitation and possibly higher incomes with Alternatives D and E. Alternatives B and C could reduce the visitation at the Folk Art Center and possibly reduce the income of the artisans as a result. <u>Advantage – Alternative B</u>.

Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice – Each of the alternatives could have a moderate adverse effect on archaeological resources, primarily due to the possibility of archaeological resources in non-surveyed areas. Alternatives B and C would allow the Folk Art Center to move forth with its expansion plans which would allow increased interpretation of historic mountain culture. This expansion could not occur with Alternative D as the building is being used for the regional destination visitor center and may not occur with Alternative E due to lack of space at the site for expanded parking. <u>Advantage – Alternative B and Alternative C.</u>

Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities - Each of the alternatives would have a minor, short term beneficial effect on the economy of the Asheville area due to the construction of the regional destination visitor center. However, the construction activity for Alternative D would also have a moderate adverse effect on the income of the artisans at the Folk Art Center as the Allanstand Craft Shop could be affected during construction. The construction activity for Alternative E would have a minor to moderate adverse effect on the income of the artisans at the Folk Art Center as they could lose business during the construction of the visitor center as the parking area would be disrupted. However, once the visitor center is constructed, the artisans at the Folk Art Center would probably benefit from having the additional visitation at the combined visitor center / Folk Art Center under Alternative D and could experience increased sales at their craft shop. Under Alternative E, the likelihood of increased sales is slightly decreased from Alternative D as the visitor center building is separate from the Folk Art Center, Under Alternatives B and C, visitation at the Folk Art Center could likely be reduced, which could lead to decreased sales at the craft shop. Alternative D would preclude any expansion of the Folk Art Center building and program, as the Folk Art Center would be used for the regional destination visitor center. Alternative E would not disturb the Folk Art Center building, but would limit the additional parking that is available to accommodate the Folk Art Center expansion. Advantage - Alternative E.

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources – Each of the alternatives involve new construction of the regional destination visitor center building, with the exception of Alternative D which would be using the existing Folk Art Center building as a base for the combined regional destination visitor center/ Folk Art Center. Alternative C would take advantage of the adjacent ravine that could compound summer breezes and help to cool the building. Alternative B would be located in a wooded area that

could provide shade to help cool the building in the summer. However, a renewable resource, trees, would have to be taken out to provide room for the Alternative B building. Trees would also need to be taken out to provide room for the Alternative E parking facility. Alternative E would be located in the middle of a parking area and would not have nearby trees to provide cooling shade in the summer. <u>Advantage – Alternative D.</u>

As Alternative B has the advantage in four of the six criteria, Alternative B, the preferred alternative, is also the environmentally preferred alternative.

### ALTERNATIVES COMPARISON TABLE

Each of the alternatives was evaluated to determine whether they met the objectives that the National Park Service set for the regional destination visitor center. Table 2 describes whether the alternative satisfies each particular objective.

OBJECTIVE	ALT. A	ALT B	ALT C	ALT D	ALT E
Interpretation of natural and cultural resources along the Blue Ridge Parkway via an entertaining, immersive, and interactive format in which the public can participate through the use of state-of-the-art-technology.	NO	YES	YES	YES	YES
An educational forum via a range of programs, workshops, and media that facilitate learning for a broad range of visitors (i.e., area residents, school groups, college students, and the public).	NO	YES	YES	YES	YES
Information and orientation to the Blue Ridge Parkway and to link the public to community functions and attractions within the Asheville community and the greater western North Carolina region.	NO	YES	YES	YES	YES

#### TABLE 2. ALTERNATIVES COMPARISON

#### Summary of Environmental Consequences/Impact Comparison Matrix

The terms used to define the magnitude or intensity of the effects are described in Table 3. Table 4 presents a summary comparison of the effects of the alternatives based on the evaluation of the impact topics in the Environmental Consequences section of this document.

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Air Quality	No changes in air quality would occur or changes would be below or at the level of detection, and if detected, would have effects that would be considered slight and short-term.	Changes in air quality would be measurable, although the changes would be small, and the effects would be localized. No air quality mitigation measures would be necessary.	Changes in air quality would be measurable, would have consequences, although the effect would be relatively local. Air quality mitigation measures would be necessary and the measures would likely be successful.	Changes in air quality would be measurable, would have substantial consequences, and be noticed regionally. Air quality mitigation measures would be necessary and the success of the measures could not be guaranteed.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.
Soils	Soils would not be affected or the effects on soils would be below or at levels of detection. Any effects on soil productivity or fertility would be slight and would return to normal shortly after completion of project activities.	The effects on soils would be detectable, but effects on soil productivity or fertility would be small. If mitigation was needed to offset adverse effects, it would be relatively simple to implement and would likely be successful.	The effect on soil productivity or fertility would be readily apparent and would result in a change to the soil character over a relatively wide area.	The effect on soil productivity or fertility would be readily apparent and would substantially change the character of the soils over a large area in and out of the park. Mitigation measures to offset adverse effects would be needed, and their success would not be assured.	Short-term - Following completion of the project, recovery would take less than a year. Long-term - Following completion of the project, recovery would take more than a year.

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Water Quality	Impacts would not be detectable. Water quality parameters would be well below all water quality standards for the designated use of the water. No vegetation or wildlife effects associated with altered water quality would be evident.	Impacts would be measurable, but water quality parameters would be well within all water quality standards for the designated use. State water quality and anti-degradation policy would not be violated. Changes in vegetation or wildlife use and health associated with water quality would be slight but measurable.	Changes in water quality would be measurable and readily apparent, but water quality parameters would be within all water quality standards for the designated use. State water quality and antidegradation policy would not be violated. Changes in vegetation and/or wildlife use and health associated with water quality would be measurable and readily apparent. Mitigation would be necessary to offset adverse effects, and would likely be successful.	Changes in water quality would be readily measurable, and some parameters would periodically be approached, equaled, or exceeded. State water quality regulations and antidegradation policy may be violated. Changes in vegetation and/or wildlife use and health associated with water quality would be measurable and readily apparent, even to a casual observer. Extensive mitigation measures would be necessary and their success would not be assured.	Short-term - Following implementation activities, recovery would take less than one year Long-term - Following implementation activities, recovery would take longer than one year.

ΙΜΡΑCΤ ΤΟΡΙΟ	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Wildlife	Wildlife and their habitats would not be affected or the effects would be at or below the level of detection and would not be measurable or of perceptible consequence to wildlife populations.	Effects on wildlife or habitats would be measurable or perceptible, but localized within a small area. While the mortality of individual animals might occur, the viability of wildlife populations would not be affected and the community, if left alone, would recover.	A change in wildlife populations or habitats would occur over a relatively large area. The change would be readily measurable in terms of abundance, distribution, quantity, or quality of population. Mitigation measures would be necessary to offset adverse effects, and would likely be successful.	Effects on wildlife populations or habitats would be readily apparent, and would substantially change wildlife populations over a large area in and out of the national park. Extensive mitigation would be needed to offset adverse effects, and the success of mitigation measures could not be assured.	Habitats and populations: Short-term - Recovers in less than a year after project completion. Long-term - Takes more than a year to recover after project is complete.
Vegetation – Native Plant Communities	Individual native plants may occasionally be affected, but measurable or perceptible changes in plant community size, integrity, or continuity would not occur.	Effects to native plants would be measurable or perceptible, but would be localized within a small area. The viability of the plant community would not be affected and the community, if left alone, would recover quickly.	A change would occur to the native community over a relatively large area that would be readily measurable in terms of abundance, distribution, quantity, or quality. Mitigation measures to offset/minimize adverse effects would be necessary and would likely be successful.	Effects to native communities would be readily apparent, and would substantially change vegetative community types over a large area, inside and outside the park. Extensive mitigation would be necessary to offset adverse effects and success would not be guaranteed.	Short-term: Recovers within one year. Long term: Takes more than one year to recover.

ΙΜΡΑCΤ ΤΟΡΙΟ	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Cultural and Historical Resources	The effect is at the lowest levels of detection– barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.	Adverse impact – disturbance of an archeological site(s) results in little, if any, loss of integrity; impact would alter a feature(s) of a structure or building, alter a pattern(s) or feature(s) of the cultural landscape, or alter access to an ethnographic resource but would not diminish the overall integrity of the resource or landscape; would affect the integrity of few items in the museum collection but would not degrade the usefulness of the collection for future research and interpretation. For purposes of Section 106, there would be no adverse effect. <b>Beneficial impact</b> – maintenance and preservation of an archeological site(s); stabilization/	Adverse impact – disturbance of an archeological site(s) results in loss of integrity; impact would alter a feature(s) of the structure or building, alter a pattern(s) or feature(s) of the cultural landscape, or destroy access to or alter features or landscapes of an ethnographic resource, diminishing the overall integrity of the resource or landscape; would affect the integrity of many items in the museum collection and diminish the usefulness of the collection for future research and interpretation. For purposes of Section 106, the determination of effect would be adverse effect. A memorandum of agreement is executed among the National Park Service and applicable state or tribal	Adverse impact – disturbance of an archeological site(s) results in loss of integrity; impact would alter a feature(s) of the structure or building, alter a pattern(s) or feature(s) of the cultural landscape, or destroy access to or alter features or landscapes of an ethnographic resource, diminishing the overall integrity of the resource or landscape; would affect the integrity of most items in the museum collection and destroy the usefulness of the collection for future research and interpretation. For purposes of Section 106, the determination of effect would be adverse effect. The National Park Service and applicable state or tribal historic preservation officer are unable to negotiate and execute a memorandum of agreement in accordance with 36 CFR 800.6(b). <b>Beneficial impact</b> – active intervention to preserve an archeological site(s); restoration of a structure or	<ul> <li>Short-term – Effects on the natural elements of a cultural landscape may be comparatively short-term (less than a year) until new vegetation grows or historic plantings are restored.</li> <li>Few impacts to museum collections would be short term. An example of short term would be the collection packed and stored (and perhaps moved) while the repository is remodeled or a new one constructed.</li> <li>Long-term – Because most cultural resources are non-renewable, any effects on archeological, historic, or ethnographic resources would be long-term.</li> <li>Effects on the cultural landscape would persist for more than a year.</li> <li>Any damage to any artifacts would be permanent.</li> </ul>

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Cultural and Historical Resources (Cont'd.)		preservation of features of a structure or buildings in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties; preservation of landscape patterns and features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscape; re- establishment of access routes to ethnographic resources; stabilize the current condition of the collection or its constituent components to minimize degradation. For purposes of Section 106, the determination of effect would be no adverse effect.	historic preservation officer and, if necessary, the Advisory Council on Historic Preservation in accordance with 36 CFR 800.6(b). The mitigative measures identified in the MOA reduce the intensity of impact from major to moderate. <b>Beneficial impact</b> – stabilization of an archeological site(s); rehabilitation of a structure or building in accordance with the <i>Secretary of the</i> <i>Interior's Standards for</i> <i>the Treatment of</i> <i>Historic Properties;</i> rehabilitation of a landscape or its patterns and features in accordance with the <i>Secretary of the</i> <i>Interior's Standards for</i> <i>the Treatment of</i> <i>Historic Properties with</i> <i>Guidelines for the</i> <i>Treatment of Cultural</i> <i>Landscapes;</i> improve the condition of the collection or its	building in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties; restoration of a landscape or its patterns and features in accordance with the Secretary of the Interior's Standards for the Ireatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes; secure the condition of the collection as a whole or its constituent components from the threat of further degradation. For purposes of Section 106, the determination of effect would be no adverse effect.	

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Cultural and Historical Resources (Cont'd.)			constituent parts from the threat of degradation. For purposes of Section 106, the determination of effect would be no adverse effect.		
Socio-Economics	No effects would occur or the effects to socioeconomic conditions would be below or at the level of detection. The effect would be slight and no long-term effects to socioeconomic conditions would occur.	The effects to socioeconomic conditions would be detectable. Any effects would be small and if mitigation is needed to offset potential adverse effects, it would be simple and successful.	The effects to socioeconomic conditions would be readily apparent and likely long-term. Any effects would result in changes to socioeconomic conditions on a local scale. If mitigation is needed to offset potential adverse effects, it could be extensive, but would likely be successful.	The effects to socioeconomic conditions would be readily apparent, long-term, and would cause substantial changes to socioeconomic conditions in the region. Mitigation measures to offset potential adverse effects would be extensive and their success could not be guaranteed.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.
Visitor Use and Experience	Visitors would not be affected, or changes in visitor experience and/or understanding would be below or at the level of detection. The visitor would not likely be aware of the effects associated with the alternative.	Changes in visitor experience and/or understanding would be detectable, although the changes would be slight. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.	Changes in visitor experience and/or understanding would be readily apparent. The visitor would be aware of the effects associated with the alternative and would likely be able to express an opinion about the changes.	Changes in visitor experience and/or understanding would be readily apparent and have important consequences. The visitor would be aware of the effects associated with the alternative and would likely express a strong opinion about the changes.	Short-term – Effects occur only during project implementation activities. Long-term – Effects extend beyond project implementation activities.

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Natural Soundscape	Natural sounds predominate. Noise impacts are not audible in most of the project area. Where noise is audible, it is for short duration with significantly lengthy periods of time that are noise-free.	Natural sounds usually predominate. Noise impacts are not audible in most of the project area. Where noise is audible, impacts occur for short durations frequently during the day, and occasionally audible between sunset and sunrise.	Natural sounds compete with human-caused sounds. Noise impacts are commonly audible in some areas of the park. In locations where noise is commonly audible, it occurs occasionally between sunset and sunrise. Noise is sometimes audible at places outside of the project area.	Natural sounds are dominated by human-caused sounds throughout the daytime hours. Natural sounds in the project area are commonly impacted by noise during extended periods of time and frequently between sunset and sunrise. Noise is frequently audible at places outside of the project area and is affecting wildlife.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.
Park Operations	Park operations and energy use would not be affected or the effect would be at or below levels of detection, and would not have an appreciable effect on park operations.	The effect would be detectable but would not be of a magnitude that it would appreciably change park operations or energy use. If mitigation were needed to offset adverse effects, it would be relatively simple and likely successful.	The effects would be readily apparent and would result in a substantial change in park operations and energy use in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.	The effects would be readily apparent and would result in a substantial change in park operations and energy use in a manner noticeable to staff and the public and be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, and their success would not be assured.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.

IMPACT TOPIC	NEGLIGIBLE	MINOR	MODERATE	MAJOR	DURATION
Transportation, Local and Regional	There would be no measurable impact on local or regional transportation.	Potential impacts would be identified between the alternatives and local and regional transportation. However, those impacts would be minor and could readily be reconciled to the satisfaction of all parties.	Substantive potential impacts would be identified between the alternatives and local and regional transportation. Although the impacts could probably be reconciled by negotiation, this could require an amendment to or variance from the plan, policy, or control.	A readily apparent impact would be identified between the alternatives and local and regional transportation. The impact probably could not be reconciled by negotiation and would result in a situation that was substantially out of compliance with land use plans, policies, or controls of a local, regional, state, or other federal organization or agency.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.
Concession Operations and Commercial Services	Concession providers would not be affected, or changes in concession services would be below or at the level of detection. Any effects would be short-term. The concession provider would not likely be aware of the effects associated with the alternative.	Changes in concession services would be detectable, although the changes would be slight. The concession provider would be aware of the effects associated with the alternative, but the effects would be slight.	Changes in concession services would be readily apparent. The concession provider would be aware of the effects associated with the alternative and would likely be able to express an opinion about the changes.	Changes in concession services would be readily apparent and have important consequences. The concession provider would be aware of the effects associated with the alternative and would likely express a strong opinion about the changes.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.

### TABLE 4. SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Air Quality	No short or long term, direct or indirect, adverse or beneficial effects	Minor, short term, local, indirect adverse effect and negligible, long term, local, indirect adverse effect	Minor, short term, local, indirect adverse effect and negligible, long term, local, indirect, adverse effect.	Minor to moderate, short term, local, indirect adverse effect and negligible to minor, long term, local, indirect adverse effect	Minor to moderate, short term, local, indirect adverse effect and negligible to minor, long term, local, indirect adverse effect
Soils	No measurable, indirect or direct, long or short term, adverse or beneficial, regional or local effects	Negligible short-term, local, direct adverse effects	Negligible short-term, local, direct adverse effects	Negligible short-term, local, direct adverse effects	Negligible short-term, local, direct adverse effects
Water Quality	No measurable, adverse or beneficial, short or long term, indirect or direct effects	Negligible long term, local, indirect adverse effects	Negligible long term, local, indirect adverse effects	Negligible long term, local, indirect adverse effects	Negligible long term, local, indirect adverse effects
Wildlife	No adverse or beneficial, direct or indirect, short or long term measurable effects	Negligible adverse, direct, long term effects	Negligible adverse, direct, long term effects	Negligible adverse, direct, long term effects	Negligible adverse, direct, long term effects

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Vegetation	No adverse or beneficial, short or long term, regional or local, direct or indirect, measurable effects	Negligible adverse, direct, short term effects	Negligible adverse, direct, short term effects	Negligible adverse, direct, short term effects	Negligible adverse, direct, short term effects
Cultural Resources	No short term or long term, beneficial or adverse, direct or indirect, local or regional effect on historic structures, archaeological resources, cultural landscape, museum collections or currently unidentified ethnographic resources.	Moderate, long-term adverse effects on archaeological resources. The North Carolina State Historic Preservation Office considers several areas beyond the previously surveyed areas to have a high probability for the presence of prehistoric or historic archaeological sites. Linear corridors for infrastructure could occur in undeveloped areas with intact archaeological sites, some of which may be National Register of Historic Places-eligible. Construction would	Moderate, long-term adverse effects on archaeological resources. The North Carolina State Historic Preservation Office considers several areas beyond the previously surveyed areas to have a high probability for the presence of prehistoric or historic archaeological sites. Linear corridors for infrastructure could occur in undeveloped areas with intact archaeological sites, some of which may be National Register of Historic Places-eligible. Construction would	Moderate, long-term adverse effects on archaeological resources. The North Carolina State Historic Preservation Office considers several areas beyond the previously surveyed areas to have a high probability for the presence of prehistoric or historic archaeological sites. Linear corridors for infrastructure could occur in undeveloped areas with intact archaeological sites, some of which may be National Register of Historic Places-eligible. Construction activity would have minor, short-term adverse effects on the cultural landscape due to vegetation removal and construction grading. This	Moderate, long-term adverse effects on archaeological resources. The North Carolina State Historic Preservation Office considers several areas beyond the previously surveyed areas to have a high probability for the presence of prehistoric or historic archaeological sites. Linear corridors for infrastructure could occur in undeveloped areas with intact archaeological sites, some of which may be National Register of Historic Places-eligible. Construction activity

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Cultural Resources (cont'd.)		have a moderate, long- term adverse affect on historic resources. Construction of the northbound to westbound left turn land would affect an historic box culvert on the Parkway near the entrance to Hemphill Knob site. Construction activity would have minor, short-term adverse effects on the cultural landscape due to vegetation removal and construction grading. This alternative would have no effects on ethnographic resources or museum collections.	have a moderate, long- term adverse affect on historic resources. Construction of the northbound to westbound left turn land would affect an historic box culvert on the Parkway near the entrance to Hemphill Knob site. Construction activity would have minor, short-term adverse effects on the cultural landscape due to vegetation removal and construction grading. This alternative would have no effects on ethnographic resources or museum collections.	alternative would have no effects on historic structures, ethnographic resources, or museum collections.	would have minor, short-term adverse effects on the cultural landscape due to vegetation removal and construction grading This alternative would have no effects on historic structures, ethnographic resources, or museum collections.
Socioeconomics	No short term or long term direct or indirect, beneficial or adverse effects	Construction would have a minor, short term, local, indirect beneficial effect on the economy of the Asheville Metropolitan area. Implementation would have a minor, long term, regional,	Construction would have a minor, short term, local, indirect beneficial effect on the economy of the Asheville Metropolitan area. Implementation would have a minor, long term, regional,	Construction would have a minor, short term, regional, indirect beneficial effect on the economy of the Asheville Metropolitan area. However, the construction could have a moderate, short term, direct adverse effect on the income of artisans that sell crafts at	Construction would have a minor, short term, regional, indirect beneficial effect on the economy of the Asheville Metropolitan area. However, the construction could have a minor to moderate,

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Socioeconomics (cont'd)		indirect beneficial effect on the economy of the Asheville area. Implementation could also have a minor to moderate, long term, indirect, local adverse affect on the income of artisans that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to the possible loss of business.	indirect beneficial effect on the economy of the Asheville area. Implementation could also have a minor to moderate, long term, indirect, local adverse affect on the income of artisans that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to the possible loss of business.	the Allanstand Craft Shop located at the Folk Art Center. Implementation would have a minor, long term, regional, beneficial effect on the economy of the Asheville area and it could also have a long term, minor to moderate, beneficial effect on the income of artisans that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to additional visitors attracted to the Visitor Center.	short term, indirect adverse effect on the income of artisans that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to the disruption of construction activities. Implementation would have a minor, long term, regional, beneficial effect on the economy of the Asheville area and it could also have a long term, minor, indirect, beneficial effect on the income of artisans that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to additional visitors attracted to the Visitor Center.

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Visitor Use and Experience Visitor Use and Experience (cont'd)	No short term or long term, direct or indirect, adverse or beneficial effects	Negligible, short term, local, direct adverse effects and moderate to major, long term, regional, direct beneficial effects on visitor use and experience due to the enhanced interpretation provided by the programs at the Visitor Center Minor, long term, local, direct beneficial effects from opportunities to view the surrounding viewshed from the regional destination visitor center and minor, long term, local, direct adverse effects to the viewshed from the parkway.	Negligible, short term, local, direct adverse effects and moderate to major, long term, regional, direct beneficial effects on visitor use and experience due to the enhanced interpretation provided by the programs at the Visitor Center. Moderate, long term, local, direct beneficial effects from opportunities to view the surrounding viewshed from the regional destination visitor center due to the mountain scenery visible from the Visitor Center and minor, long term, local, direct adverse effects to the viewshed from the parkway.	Moderate, short term, local, direct adverse effects on visitor use and experience and moderate, short term, local, direct adverse effects on viewshed during the construction period due to disruption of Folk Art Center activities. Moderate, long term, regional, direct beneficial effects on visitor use and experience due to the increased interpretation programs at the Visitor Center; however, the planned expansion of the Folk Art Center by the Southern Highland Craft Guild could be adversely affected. Implementation would result in minor, long term, local, direct adverse effects on the viewshed as the facility could be seen from the parkway.	Moderate, short term, local, direct adverse effects on visitor use and experience due to the disruption of activities at the Folk Art Center due to construction and moderate, short term, local, direct adverse effects on viewshed during the construction period due to the close proximity of the site to the parkway. Implementation would produce moderate to major, long term, regional, direct beneficial effects on visitor use and experience due to the increased interpretation programs at the visitor center and moderate, long term, local, direct adverse effects on viewshed as the facility
					can be easily seen from the parkway.

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Noise / Soundscape	No short term or long term, direct or indirect, beneficial or adverse effects	Minor, short term, local, direct, adverse effect due to construction noise and a negligible, long term, indirect, local, adverse effect due to operation.	Minor, short term, local, direct, adverse effect due to construction noise and a negligible, long term, indirect, local, adverse effect due to operation.	Minor to moderate, short term, local, direct adverse effect on the nearby residences and Veterans Hospital due to construction noise and a minor, long term, local, indirect, adverse effect on residences and the Veterans Hospital due to increased traffic.	Minor to moderate, short term, local, direct adverse effect on the nearby residences and Veterans Hospital due to construction noise and a minor, long term, local, indirect, adverse effect on residences and the Veterans Hospital due to increased traffic.

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Park Operations	No long term or short term, direct or indirect, adverse or beneficial effects	Minor, short term, local, direct adverse effects on park operations due to congestion in the headquarters parking lot and moderate, long term, local, direct beneficial effects due to increased efficiency in the interpretive program	Minor, short term, local, direct adverse effects on park operations due to congestion in the headquarters parking lot and moderate, long term, local, direct beneficial effects due to increased efficiency in the interpretive program	Moderate, short term, local, direct adverse effects on park operations due to disruption of current activities at the Folk Art Center and minor to moderate, long term, local, direct beneficial effects due to efficiency in the interpretive program, although the program at the Folk Art Center would be discontinued.	Minor, short term, local, direct adverse effects on park operations due to disruption of current activities at the Folk Art Center and minor to moderate, long term, local, direct beneficial effects due to efficiency in the interpretive program, although the program at the Folk Art Center would probably be discontinued.
Transportation	No short term or long term, direct or indirect, adverse or beneficial effects	Minor, short term, local, indirect adverse effects due to construction traffic and minor, long term, local, indirect adverse effects due to increased traffic to the visitor center	Minor, short term, local, indirect adverse effects due to construction traffic and minor, long term, local, indirect adverse effects due to increased traffic to the visitor center	Minor, short term, local, indirect adverse effects due to construction traffic and minor to moderate, long term, local, indirect adverse effects due to increased traffic to the visitor center and the Folk Art Center	Minor, short term, local, indirect adverse effects due to construction traffic and minor to moderate, long term, local, indirect adverse effects due to increased traffic to the visitor center and the Folk Art Center

Impact Topic	Alternative A - no action	Alternative B preferred alternative	Alternative C	Alternative D	Alternative E
Concession Operations and Commercial Services	No short term, direct or indirect, adverse or beneficial effects	No short term, direct or indirect, beneficial or adverse effect and a minor, long term, regional, direct beneficial effect on the concession and commercial operations associated with the parkway as concession operations would increase. However, the implementation of the regional destination visitor center at Hemphill Knob could also have a minor to moderate, long term, indirect, local adverse affect on the Southern Highland Craft Guild concession that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to decreased visitation.	No short term, direct or indirect, beneficial or adverse effect and a minor, long term, regional, direct beneficial effect on the concession and commercial operations associated with the parkway as concession operations would increase. However, the implementation of the regional destination visitor center at Hemphill Knob could also have a minor to moderate, long term, indirect, local adverse affect on the Southern Highland Craft Guild concession that sell crafts at the Allanstand Craft Shop located at the Folk Art Center due to decreased visitation.	Moderate, short term, local, direct adverse effect on the concession operations and commercial services at the parkway due to the disruption of the activities at the Folk Art Center, including the Allanstand Craft Shop. Minor, long term, local, indirect beneficial effect on the concession and commercial operations associated with the parkway due to increased concession activity and a minor to moderate, long term, indirect, local beneficial affect on the Southern Highland Craft Guild concession that sell gifts and crafts at the Allanstand Craft Shop located at the Folk Art Center due to the increased visitation in the building.	Moderate, short term, local, direct adverse effect on the concession operations and commercial services at the parkway due to the disruption of the activities at the Folk Art Center, including the Allanstand Craft Shop. Minor, long term, local, indirect beneficial effect on the concession and commercial operations associated with the parkway due to increased concession activity and a minor, long term, indirect, local beneficial affect on the Southern Highland Craft Guild concession that sell gifts and crafts at the Allanstand Craft Shop located at the Folk Art Center due to the increased visitation at the nearby visitor center.