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Rocky Knob Sustainable Tourism Centerpiece Project



Final Report



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Executive Summary

- The Floyd and Patrick County region has existing potential tourist assets that can be better marketed through a visitor's center. For example, the GIS-based community asset inventory identified approximately 400 potential business (e.g. restaurants, galleries) and public attractions (festivals), and meeting locations (centers, schools) in the region. The region supports over 150 miles of state designated birding and wildlife trails and 116 miles of state scenic byways. In addition, 73 options for accommodations (e.g. hotels, B & B's, cabins, campgrounds, etc.) were identified and mapped across the two counties. Community assets located within the identified zone of influence should, when possible, be leveraged and linked with assets across the broader region.
- The zone of influence (ZOI) was delineated along the political boundaries of Floyd and Patrick counties. The ZOI was delineated after conducting a thorough community mapping inventory across the region.
- Results from the community-centered interviews, workshop feedback questionnaires, field notes, media, blogs, other internet sources, and previous reports indicate the following as major areas of consideration in terms of development of a Rocky Knob Tourism Centerpiece:
 - Authenticity: Historical, natural, and agricultural
 - Sustainability: Water issues, light pollution, built in scale with the surroundings, utilizing local resources – agriculture, artisans, builders, workers, etc.
 - Respect: for local residents, existing businesses and projects, and the integrity of the parkway
 - Positive Economic Impact: for the community
 - Political Sensitivities: minimize misinformation, keep stakeholders involved in an equitable way
 - Target Markets: minimize negative tourism impact, keep land prices reasonable
 - Programming Tips: themed visitor center, similar to Tamarack or Peaks of Otter
- The results of the community asset/resource inventories and survey of current visitors directed a suitability analysis and development of seven potential tourism scenario concepts.
- The visitor survey found that agritourism businesses (e.g., wineries, local produce markets), parks, and cultural/historic sites are the types of attractions within Floyd and Patrick Counties that are most utilized by current visitors. Survey results suggested two broad themes for a tourism centerpiece – (1) local products and (2) mountain life. Also, survey findings support locating a destination centerpiece near the intersection of the Blue Ridge Parkway and either route 8 or route 58.
- In the general population study of potential visitors to the Floyd and Patrick counties region, when respondents were asked specifically: “How likely would you or the members of your household be to visit the following types of tourist attractions in the Floyd and Patrick County region,” the most popular responses included:
 - A regional touring center (RTC) that reveals key cultural and natural history events in the area;

- An agritourism heritage center (ATC) that presents the rural roots and agricultural heritage of the region;
- Results of the economic impact revealed that the projected annual incremental impact associated with an increase in visitation to the Trillium Mountain Life Visitor Center and Nature Trail will range from \$1,313,398 to \$9,295,763 per year. This amount is dependent on how many nature-based and heritage tourists visit the centerpiece and how successful the facility is in extending the visitor's length of stay. The potential employment impact associated with Trillium is estimated between approximately 26 and 178 jobs.
- Likewise, results of the scenario based economic impact analyses reveal that the annual incremental impact associated with an increase in visitation to Miller's Way Farm Life Visitor Center and Trail ranges from \$967,888 to \$8,996,721 per year depending on how many additional day trippers, art, wine and heritage tourists visit the centerpiece and how successful the facility is in extending visitors' length of stay. The projected number of jobs associated Miller's Way is estimated between approximately 20 and 176 jobs depending on visitation and length of stay variables.
- Overall, a new tourism center is expected to generate an extensive increase in economic impacts in the Floyd and Patrick County Region. However, caution should be exercised in understanding the economic impacts of the two different options of the Regional Tourism Center and Agritourism Center. Differences in economic impacts may result from the assumption used that each tourism center will attract different tourist groups. Consequently, when this assumption is altered, estimated economic impacts will also change.
- Floyd and Patrick Counties possess several viable tourism products and attractions. In order for these attractions to produce economic impacts, non-local visitors must inject money into the local economy when visiting these attractions. If public agencies and private businesses set their goals and objectives for more effective management and marketing programs to attract more visitors, the result will be an increase in economic impacts at the regional level.

Authorship and Acknowledgements

The following individuals (presented in alphabetical order) are the primary project leaders and authors of this report:

Cari Goetcheus - Assistant Professor, Clemson University, Department of Planning and Landscape Architecture

Dr. Jeffrey C. Hallo - Assistant Professor, Clemson University, Department of Parks, Recreation and Tourism Management

Dr. John A. McGee – Assistant Professor, Virginia Polytechnic Institute and State University, Department of Forest Resources and Environmental Conservation / Virginia Cooperative Extension

Dr. Nancy McGehee - Associate Professor, Virginia Polytechnic Institute and State University, Department of Hospitality and Tourism Management

Dr. William C. Norman - Associate Professor, Clemson University, Department of Parks, Recreation and Tourism Management.

Dr. Chi-Ok Oh – Assistant Professor, Michigan State University, Department of Community, Agriculture, Recreation and Resource Studies

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Notes on Data, Analyses, and Recommendations

Data, analyses, and recommendations presented in this report are intended for informational use only by Blue Ridge Heritage Inc. and the National Park Service. They do not represent any predictions of future events or financial returns. The sole intended purpose of this report is to help inform the development of a sustainable tourism centerpiece for the Rocky Knob region of Virginia. The information contained in this report is provided without any warranty expressed or implied. It is the responsibility of the reader to determine the usefulness of this report. Decisions made resulting from this report are at the discretion of Blue Ridge Heritage Inc. and the National Park Service.

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Community Asset/Resource Inventory Part I

Community Asset/Resource Inventory Methods

To determine the breadth of community assets/resources that might potentially play a role in the development of the Rocky Knob Destination Centerpiece, the team conducted an inventory on three levels or scales of geography. These inventory levels included:

- Level 3: Multi-state – Provided a cursory assessment of potential distant markets and potential drivers;
- Level 2: Regional Inventory – Provided an inventory of natural features and potential assets in surrounding counties and nearby localities that may be leveraged to support a regional market (Figure 1);
- Level 1: Local Level Inventory – Identified existing local amenities and attributes in Patrick and Floyd counties.



Figure 1: Regional Inventory

All three of these inventory levels supported the community mapping and planning process. This “tiered” zone of influence (ZOI) generated a comprehensive understanding of potential tourism opportunities / linkages outside of the two focus counties. In addition, the tiered approach enabled project partners to identify and emphasize Patrick and Floyd County’s distinctive and unique assets, attributes, and opportunities.

Data to support the three inventory levels were acquired from federal, state, regional, and local sources (including communities in both North Carolina and Virginia). Business data were address matched and geocoded by the project team, while geospatial data were acquired from third party vendors, including Environmental Systems Research Institute (ESRI). Business data were purchased from vendors, including InfoUSA. Further, local stakeholders provided value added information by locating unidentified (unmapped) tourism assets, and by verifying existing (mapped) tourism assets through both individual meetings, and community meetings held in both Stuart and Floyd, VA (Figure 2).



Figure 2: Stakeholder Meetings in Floyd and Stuart,VA in September 2008

Metadata was developed in compliance with the Federal Geographic Data Committee's (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM), for any final versions of geospatial data that were created "in house". In addition, project members collected and catalogued metadata for spatial data acquired from outside sources when it this information was available.

Level 3: The Multi-state Assessment

The Multi-state inventory provided a cursory-level summary of basic demographic information associated with potential tourist market areas within a 4-hour distance of Rocky Knob. These distances were not delineated "as the crow flies" but were based on estimated driving times, which integrated multi-state road networks (interstate, primary, secondary roads) as well as speed limits associated with these road segments (Figure 3).

Spatial data to support Level 3 was acquired from the US Census Bureau (demographics) and third party vendors (street networks with speed limits).

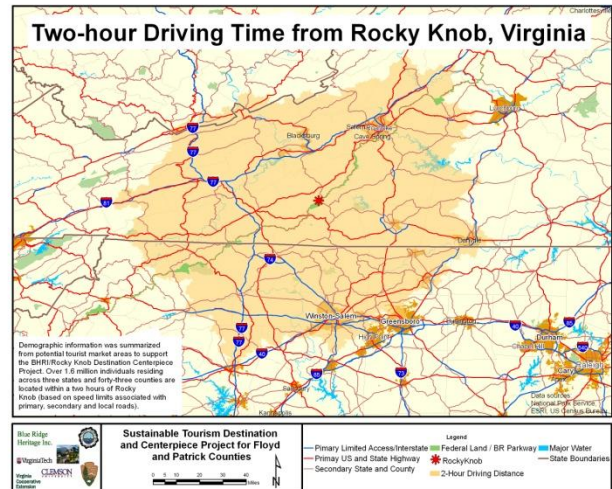


Figure 3: Multi-state Assessment

Level 2: The Regional Inventory

The regional assessment included Floyd County, Patrick County, as well as nine adjacent counties, and nearby cities and towns (Figure 4).

The counties associated with this regional assessment included:

- Carroll (VA)
- Floyd (VA)
- Franklin (VA)
- Henry (VA)
- Montgomery (VA)
- Patrick (VA)
- Roanoke (VA)
- Rockingham (NC)
- Stokes (NC)
- Surry (NC)



The cities / towns associated with this regional assessment included:

- Galax
- Martinsville
- Radford
- Roanoke
- Salem

Figure 4: Regional Inventory

Approximately 158 data layers were compiled for Level 2, as summarized in Appendix A. These spatial data layers were collected from an array of sources, including county / local tourist boards and other local government entities, state agencies (both in North Carolina and Virginia), federal agencies, nonprofits, university research centers, and private sector, licensed data (See Figure 5).

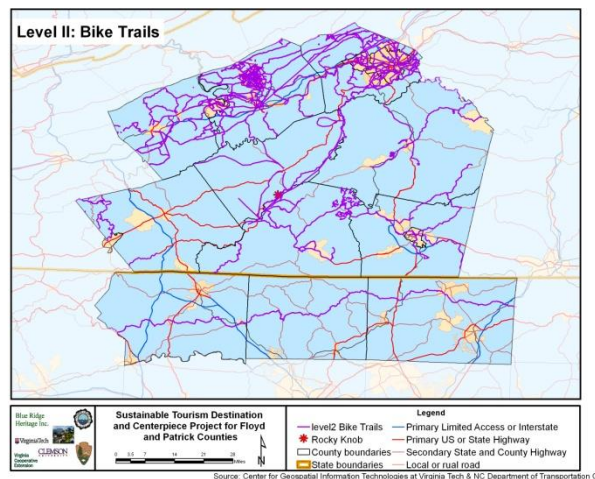


Figure 5: Regional Inventory

Level 1: The Local Level Inventory

The local level assessment focused on the specific resources of Floyd and Patrick counties (Figure 6). While geospatial data associated with Level 3 (Multi-state Assessment) and Level 2 (Regional Assessment) was collected at a reconnaissance-level (ie. locations of feature were not required to be exact), the geospatial data associated with Level 1 has been verified and cross-checked by the project team, as well as by representatives and stakeholders from Floyd and Patrick counties.

The GIS-based community resource inventories for Floyd and Patrick Counties was acquired from local governments, planning district commissions, the private sector, state agencies, federal agencies, non-profits, and other research centers at Virginia Tech. In addition spatial data were developed in-house, based on tourist information collected from meetings and Websites. Data was often geocoded using the Virginia Base Mapping Program (VBMP) E-911 road centerline (RCL) database and other address centerline databases. Often, high resolution aerial photography, digital raster graphics (DRG's) site visits, GPS coordinates, and local knowledge were used to confirm tourism related spatial data. Level 1 data layers are listed in Appendix A.

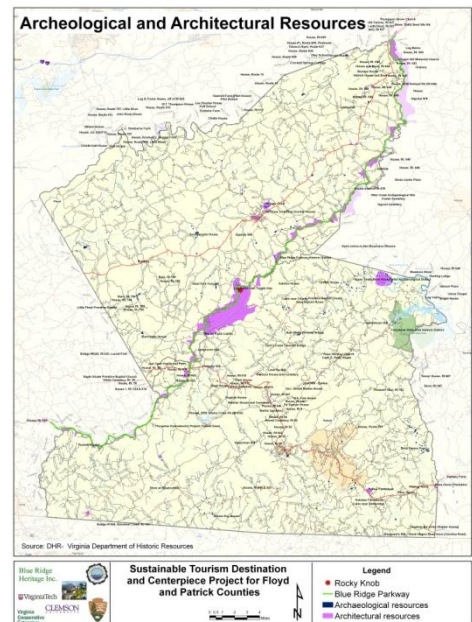


Figure 6:
Local Level Inventory Mapping
(Level 2)

To assist the McHargian land use suitability and scenario development process, an enhancement to the Level 2 & Level 1 asset inventory was undertaken, emphasizing a detailed resource inventory and analysis of the following aspects (as found in Appendix A):

- Geology
- Hydrology
- Topography (elevation, slope, aspect)
- Soils
- Vegetation
- Wildlife Habitat
- Climate
- History
- Demographics
- Economics
- Transportation/Circulation
- Infrastructure
- Land Use/Land Ownership
- Recreation/Tourism
- Visual Assessment

Community Asset/Resource Inventory Part II

Community Interviews and Data Collection Methods

Data were gleaned from the Floyd and Patrick County region during the summer and fall of 2008. Individual interviews were conducted and short, open-ended questionnaires were distributed and collected during the regional workshops which were held in the Fall of 2008.

Interviews. Seventeen interviews were conducted, nine in Floyd County and eight in Patrick County. Interviews lasted from 1-3 hours (average just under 2 hours). The interviewer kept written notes. Interviewees included:

- New Comers and Old-Timers
- Farmers
- Entrepreneurs
- Tourism Promoters
- Tourism Developers
- Government officials
- Historians
- Artisans
- Parkway Neighbors

Workshop feedback questionnaires. Twenty-four questionnaires were completed at the two fall workshops, thirteen from the Stuart meeting and eleven from the Floyd meeting. Three basic questions were asked: 1) What do you feel is the most important thing the Rocky Knob research team should know as we work on the project? 2) When you visualize some sort of centerpiece attraction at or near the Rocky Knob section of Floyd and Patrick Counties, what do you think of? For example, what kind of activities would you like to see taking place? Who would you like to see utilizing the facility? How do you think this attraction could enhance the current tourism product in the area while not taking away from existing businesses? 3) Just as importantly, when you visualize a centerpiece attraction at or near the Rocky Knob section of Floyd and Patrick counties, what do you NOT want to see?

Other data sources. In addition to the interviews and workshop questionnaires, the investigator kept a field journal, recording observations at various community meetings and other public functions. Media reports and articles were also analyzed as well as blogs and other internet sources. Previous reports related to the Rocky Knob project were also accessed.

Emergent Themes and Supporting Comments

As a result of analysis of the data, seven key themes emerged: Authenticity, Sustainability, Respect, Positive Economic Impact, Political Sensitivities, Target Markets, and Programming Tips. The following is an overview of each theme, including sub themes and supporting quotes taken from the interviews and questionnaires.

Authenticity

Maintain historical and cultural integrity. Community stakeholders were quite concerned with preserving the historical and cultural integrity of the region. There are several large-scale resort/theme park type operations within a half-day's drive of the region, and those were often cited as something that residents did not want. The following quotes reflect this:

“NO Widespread commercialism or themes not consistent with local history, architecture and natural resources/ beauty.”

“No Dollywood” ... “No Pigeon Forge” ... “No waterparks”

“Whatever you do, it should be seen as preserving the Appalachian way of life”

Preserving the Natural Beauty of the Region. Many respondents expressed a desire to maintain the natural surroundings and unique natural history and resources of the region. One community member stated that we must remember that preservation of natural species and resources is the first priority. His comment echoed that of many others who felt that the plan must address existing environmental issues before economic issues are discussed. For example:

“The most important thing is preserving and enhancing the natural beauty and cultural heritage of the area. “

“Do not destroy the natural beauty and existing topography.”

Agritourism. In addition to preserving the natural beauty and history of the region, recognition of the area's agricultural history as well as current agricultural activities was expressed as important to those with whom we spoke. Many saw the centerpiece as both a showcase of the best of the region and as a springboard out into the community:

“Would like to see a tourism centerpiece that also provided education/training for the community ‘folkways’, how to farm organically, etc.”

“Have an on-site restaurant and garden, even work horses demonstrated.”

“Agricultural products showcased – 1930's farm – how it was when the BRP came through, chestnut blight, and efforts to recover.”

Sustainability

Water issues. In terms of sustainability, this was the most frequently-mentioned issue. The Rocky Knob region is both a headwaters area for much of the eastern part of Virginia; yet it also has no water flowing into the region and therefore is very susceptible to drought and other water-related issues. Any centerpiece project would have to take this into consideration. The following quotes illustrate this concern:

“We are the headwaters region, so we need to be very sensitive to how something might impact the water system.”

“This area is already dealing with drought conditions here, so any new construction would need to be water-efficient – rain water collection, re-using gray water for irrigation, all this would be very important.”

The appropriate scale: what the existing infrastructure can support. A preference was expressed for a small-scale project that complements both the local resources and the potential markets. This scale was best illustrated with the following quote:

“A small environmental education center with a model home and garden that has all the latest technology to make it a low impact, low energy small home. With a larger conference rooms attached for classes and seminars (holding approx. 30 max). This could be used in conjunction with local colleges to teach courses and seminars to teachers, city planners, developers, environmentalists.”

Utilizing local resources – agriculture, artisans, builders, workers, etc. Maximizing the existing abundance of arts, crafts, and other skill-sets and resources in the area was also stressed. Residents feel strongly about keeping the economic benefits local and generating employment within the two-county region. For example, informants pointed out the following as available in the region:

“Local Artisans, craftsman demonstrating their skills. “

“A working organic garden that would supply the facilities restaurant”

“Alternative Fuels/Energy originating right here in the region.”

“Alternative Building Techniques”

“Green” living – pottery, weaving, woodwork, other ‘functional’ art

“Workshops that provide a ‘taste’ of these things, but lots of guidance and assistance to go to existing venues to spend money there, or come back and spend more time actually living on an organic farm, learning to spin or throw pots, learning to create from wood and other organic things.”

Minimal light pollution at night. While not expressed as often as some of the above-mentioned issue, there was a small but vocal contingency that voiced concern for possible light pollution issues.

“Diminishing natural resources/a dark sky at night/no artificial lights, just moon and stars.”

Respect

Local residents. Above all, this was the most-often expressed issue within the theme of respect. Many of those interviewed and those who completed the questionnaire felt that inclusion of a wide variety of opinions expressed by the residents was vital to the success of the project. Comments included:

“Be sure to listen to the local landowners and their feeling and desires are important to them. Some people’s land joins the Blue Ridge parkway.”

“Preserve the culture, history and existing landscape as much as possible, be sensitive to the native’s way of life, etc. The project should reflect the unique characteristics of the area, not be a replica of what can be found elsewhere.”

“...my feeling on the question of scope of development (if there has to be development at all) is that heavily promoted tourism should be confined to relatively small areas or corridors...”

The existing businesses and projects. Related to the comments regarding the inclusion of the overall community, a specific subset was also pointed out: existing businesses (both tourism and non-tourism). These comments illustrate that concern:

“It should enhance existing tourism businesses. It should add to what we have and not duplicate.”

“More retail businesses would enhance the present businesses. We need to capture the dollars of the tourists that are already here. We need a space for local people to lease and create their own businesses.”

The integrity of the Parkway. Many respondents were very protective of the legacy and integrity of the Blue Ridge Parkway. They are wary of large-scale, theme-park-type attraction development that would lessen the beauty of the parkway and its surroundings. For example:

“No theme parks, no zoo. Leave what [is] located on the parkway just like it is now, add new places that will fit into the location. “

Positive Economic Impact

Keep it local. Both interviewees and respondents to the questionnaire strongly expressed a need to keep the economic impacts close to home. This of course ties in with the sustainability theme as well:

“Result should truly be an economic development producer at the same time a significant tourist attraction. Providing new jobs for Patrick and Floyd.”

“Meadows of Dan is under-served. We need tourist services, opportunities for jobs and for local people to create their own businesses- bakeries, ice cream, food, crafts,

shops, We need this federal money to build infrastructure – walking trails to Meadows of Dan. We need a rustic lodge with a meeting space for businesses, churches, classes, etc.”

“Definitely No souvenir shops with items ‘made in China’, which has been done to death! There is also some bitterness over jobs lost to other countries. Keep it USA”

“Keep away the brand name advertising – McDonald’s, Motel 6 – this kind of thing.”

Political Sensitivities

Every community has its own unique political issues, and the Floyd Patrick region is no exception. Many expressed concerns that any centerpiece project should make both counties feel equally included. One interviewee put it best, including the fact that this will be challenge:

“The most important thing is that each county feel equally vested in the project – if citizens from one county or the other are allowed to “take over” it will create resentment on the other side. This may mean dragging folks to meetings and events to ensure equal vesting. Each county claims Rocky Knob as its own and needs to retain a feeling of ownership while developing a spirit of cooperation. No small task.”

Appropriate Target Markets

Minimize tourist impact. Interviewees were often very insightful of the need for the very careful selection of target markets. Often the largest markets are not necessarily the most desired:

“First- don’t destroy too much nature on your site, directly. Second- Try to acquire lots of buffer land to be kept as wild as possible. Then try to design an attraction that won’t attract people whose presence would be detrimental to the area.”

“I am concerned about the potential for second home ownership and the resulting increase in my property taxes.”

“Also, from my selfish “keep land values down” perspective, it seems safer to sell what the county was than what it is or could be (for enough money). Perhaps I should be more appreciative of the NPS for having done that for all these years, and for not inducing travelers to take the next exit and seek out a realtor.”

Specific Programming

Visitor center programming suggestions. Respondents from both groups provided a number of specific programming recommendations, including the true incorporation of existing local attractions, activities, and events. Some existing centers were pointed out as good examples, including the Peaks of Otter and Tamarack, in Beckley, WV.

“I would like to see an attempt at some thematic connectedness – the center could be a place to truly find out what there was to do in the area. It would be great to have demonstrations on weekends – allowing groups to take turns promoting their attractions.”

“... one thing I recall from early meetings of the advisory board is the idea of having a facility, or (more likely) part of a facility, that could be used on a rotating basis for exhibits and or activities focusing on some particular aspect of whatever the theme turns out to be. Ex. One month this could be about local botany, another month about local fauna, another about local craftwork, maybe a month for moonshine, etc. etc. “

“...the focus of it should be such that local people would see it as a destination that they themselves might enjoy as tourists, as "part of the crowd" somewhat like the Country Store, as opposed to finding themselves on display through the windows of the cars of tourists directed down this or that self guided tour of the antebellum outhouses of Floyd County.”

Major Findings

Results from the interviews, workshop feedback questionnaires, field notes, media, blogs, other internet sources, and previous reports indicate the following as major areas of consideration in terms of development of a Rocky Knob Tourism Centerpiece:

- Authenticity: Historical, natural, and agricultural
- Sustainability: Water issues, light pollution, built in scale with the surroundings, utilizing local resources – agriculture, artisans, builders, workers, etc.
- Respect: for local residents, existing businesses and projects, and the integrity of the parkway
- Positive Economic Impact for the community
- Political Sensitivities: minimize misinformation, keep stakeholders involved in an equitable way
- Target Markets: minimize negative tourism impact, keep land prices reasonable
- Programming Tips: themed visitor center, similar to Tamarack or Peaks of Otter

Several conclusions and recommendations emerged from interviews and subsequent analysis:

Focus on “Appalachian/Blue Ridge Life: The original sustainable community!” In other words, showcase how past self-sufficiency can show the way to the future and exemplify it through state of the art technology in building, programming, and operations.

Design a venue as a channel of distribution. Create a Visitor Center that is state of the art, with exhibits showcasing local talents and businesses that encourage visitors to further explore off the parkway.

Tell the WHOLE story. Respect the polyvocality of the region. Respect the sacrifice of past generations, respect the lifestyle of current residents, and respect the integrity of the Parkway.

Be particularly sensitive to existing carrying capacity and infrastructure. Attention must be paid to the sensitive ecological issues that are part of the region.

Survey of Current Visitors

Methods

A survey of current visitors to the Rocky Knob area (consisting of the Blue Ridge Parkway and Floyd and Patrick Counties) was conducted over four two-day sampling periods. One sampling period occurred in each of the months of July through October, 2008. Study participants were selected using systematic random sampling procedures (i.e., every n^{th} visitor) from the population of visitors to Mabry Mill and from the towns of Floyd and Stuart. Mabry Mill is the primary visitor attraction along the Blue Ridge Parkway in the two counties, and Floyd and Stewart are the largest towns within Floyd and Patrick Counties, respectively. Only visitors to Floyd and Patrick counties were included in the study. All visitors, regardless of the amount of time spent within the two-county region were eligible to participate in the study.

Study participants were asked to carry a GPS unit in their car during their visit to the Blue Ridge Parkway and Floyd and Patrick Counties. These units were programmed to collect data points at 15 second intervals. Participants were instructed to return the GPS once they either left the state or returned home (whichever came first) in a pre-addressed, pre-stamped box provided to them. A car charger was provided with the units to allow tracking to continue during multi-day trips. Participants were also asked to complete a survey (Appendix D) after their visit to the counties. This survey was returned with the GPS units. Names and contact information were collected from each participant and used, based on a modified Dillman (2007) approach, to follow-up with respondents who did not immediately return their GPS units. GPS units received by mail were downloaded to a computer, cleared of memory, and reused in subsequent sampling. Collected GPS data were mapped and analyzed using ARC GIS 9.1 software. Likewise, surveys received were coded and analyzed in a statistical software package (i.e., SPSS).

Major Findings

A total of 490 visitors to Floyd and Patrick Counties were asked to carry a GPS unit and complete a survey, and 323 (65.9%) agreed to participate. Of these participants, 311 (96.6%) returned a GPS unit and a survey.

Figure 7 shows the distribution of visitor use within the counties. Also, the density of points on this map indicates the relative intensity of use, since the GPS receivers were all set to collect data at equal time intervals. However, the intensity and specific locations of use are better seen when the scale of this map is increased, as on a map of the Meadows of Dan area of Patrick County (Figure 7). This allows for the individual sites visited and the intensity of visitation to be better visualized. These results support locating a destination centerpiece near the intersection of the Blue Ridge Parkway and either route 8 or route 58. Also, these results indicate that agritourism businesses (e.g., wineries, local produce markets), parks, and cultural/historic sites are the types of attractions within Floyd and Patrick Counties that are most utilized by existing visitors. This suggests that these types of attractions may be of interest to potential visitors if a tourism centerpiece was developed related to agricultural, natural, or historic/cultural resources of these counties.

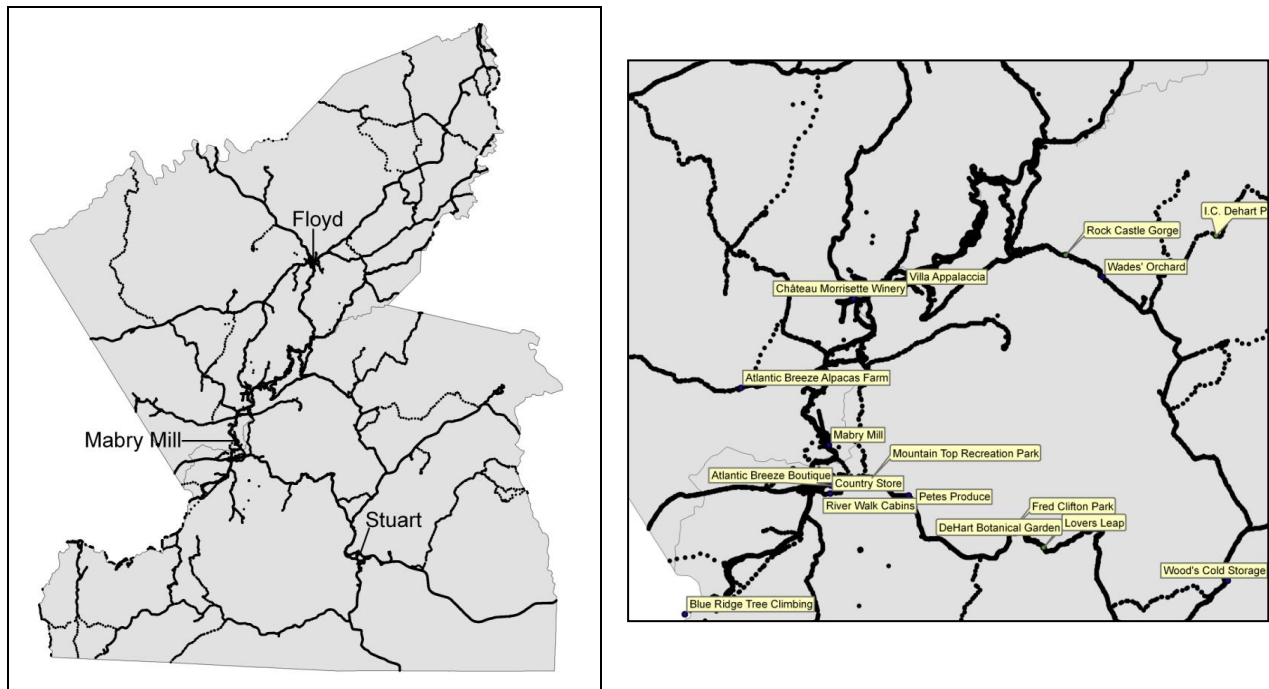


Figure 7: Maps of Floyd and Patrick Counties (left) and the Mabry Mill/Meadows of Dan area (right) showing visitor use distribution and intensity based on the raw GPS data. Parks and agritourism sites are identified in the map on the right.

Complete results of the survey of current visitors are included in the Appendix E. Results from a question exploring respondent's likelihood of visiting an attraction based on different themes may be most relevant in helping to inform the development of a sustainable tourism centerpiece for the Rocky Knob Area. A factor analysis of response to this question indicated two primary themes for a centerpiece – (1) local products and (2) mountain life. A tourism centerpiece designed on a local products theme (based on survey results) might include the following aspects: local artistry or crafts, agriculture and farming, organic farming, sustainable living techniques, and local foods. A tourism centerpiece designed on a mountain life theme (based on survey results) might include the following aspects: changes in mountain life over the past century, traditional skills for mountain and outdoor living, nature and natural history, Native American heritage, studies of mountain people, and mountain history and folklore.

In addition, this survey provided other findings that may also be relevant to the development of a tourism centerpiece or to tourism, in general, within the Rocky Knob area. First, survey results indicated that a typical visitor comes to Floyd and Patrick Counties as their primary destination, visits more than once, and stays for a few hours on each visit. Second, appreciative and social activities (e.g., sightseeing, scenic driving, visiting natural or historic sites, visiting friends or family, and attending festivals or events) were the primary reasons for many people's visit. Third, most visitors spent little time planning their trip, and the trip factors most important to visitors were those that are associated with more spontaneous, serendipitous travelers. Finally, a 'typical' visitor is from either NC or VA, college educated, and between 48 and 67 years old.

Tourism Scenario Suitability Analyses and Concepts

Tourism Scenario Suitability Analyses and Concepts

Summaries of the seven tourism scenarios examined in the suitability analyses are provided below.

1. Regional Sustainability Scenario

From 1990 to 2000, the average population increase in Floyd and Patrick counties was 12%; using that figure to project future population growth, there will be an increase of 10,100 residents by 2060 for a total population of 30,000 people. In comparing national land cover data from 1992 to 2001 data; it was found that Floyd and Patrick counties lost 16,865 acres of forested land and 15,078 acres of farmland, while they gained 24,731 acres of developed land. Extrapolating this rate of loss to 2060, it is possible that the region may lose 101,190 acres of forested land and 90,468 acres of farmland, while gaining 148,386 acres of developed land.

This scenario embraces a balance between existing county physical and human resources and future resident's needs. Hence, in addition to designing a single sustainable building and site along the Parkway for economic development, this scenario addresses five scales of sustainability for Patrick and Floyd counties:

- Region
- Town
- Neighborhood
- Site
- Building

For this scenario, "Sustainability means to simultaneously address environmental, economic, and social issues in a manner that enables communities to meet their current needs while also providing for the needs of future generations. The vision is to introduce sustainable living into Floyd and Patrick counties by educating the public about green ideology while stimulating the local economy and preserving cultural, historical, and environmental integrity." Scenario conceptual drawings can be found in Appendix F.

a. Suitability Analyses

In order to craft a sustainable plan on a county wide level, a suitability analysis was conducted to determine the most appropriate land for a variety of uses including residential, commercial, and industrial. Often, this effort provides critical information to support the development of a zoning map or master plan. The first step in the suitability analysis identified areas to protect from development including water bodies, streams, rivers, forests, federally conserved lands, and creating buffers around all known historic sites. The second step was defining criteria by which to locate future industrial, commercial, and residential land uses, such as areas with favorable slopes for building, optimal soil qualities (deepest and least organic content), and substantial distances from federal conservation lands, productive farmlands and protected areas. Areas identified as suitable for residential development include those within close proximity to major and secondary roads, schools and emergency services. Suitable areas for urban or commercial development had a close proximity to similar existing districts, along with appropriate distances

from major and secondary roads. Areas most suitable for industrial use were closest to surrounding interstates, airports, railroads, and major highways.

At the Town scale, a more detailed suitability analysis was undertaken for Meadows of Dan, not only to determine the most appropriate locations for future growth, but also to identify the best location for a proposed Sustainable Education Center. To concentrate development at the town scale to take advantage of existing infrastructure and other amenities, a 2 mile radius from the intersection of the Blue Ridge Parkway and Highway 58 was delineated as the boundary. Criteria used to determine the most appropriate areas for development included optimal slope for building, protection of forests, ecologically-sensitive or scenic areas and areas of historic or cultural importance, yet close proximity to roads.

A Neighborhood and Site scale suitability analysis was also undertaken to determine the most appropriate parcel within Meadows of Dan for the proposed visitor center, as well as to identify the most sustainable locations on the site for storm water management, parking, building location and other site functions.

b. Scenario Concept

The result of the various suitability analyses at the regional scale was development of a master land use plan for Floyd and Patrick counties which not only identified areas for protection, but proposed locations for low-, medium-, and high-density residential as well as commercial and industrial land uses. As expected, a majority of the land in both counties was designated for protection, while the most suitable areas for residential and commercial development were located around existing like developments, and industrial use was more appropriate near major transportation routes. Several existing areas, specifically Meadows of Dan, Floyd and Stuart were highlighted for these kinds of development because of their extant amenities and infrastructure, as well as opportunity for mixed land uses emphasizing future redevelopment.

With a concern for unregulated growth and development potentially leading to suburban sprawl in the Meadows of Dan area, a future land use plan was also developed at the Town/Neighborhood scales applying sustainable neighborhood design principles emphasizing protection of open space. The most important aspect of the design would be to locate home sites, as well as road systems, infrastructure, and any trails or walking paths in a way that has the least impact on the environment as possible. That plan designates a large portion of additional conservation land be added as buffer to the current federally conserved lands. Within the 2 mile radius land use plan boundary, low to medium density residential (1 unit per 5 acres, and 1 unit per 1 acre respectively), mixed-use, and industrial land uses are located compactly along transportation corridors that minimize impact on the existing character and quality of Meadows of Dan. With the quantity of local residents and visitors that frequent Meadows of Dan, it is expected that their exposure to its sustainable-based town model could potentially influence application of those ideals elsewhere throughout Floyd and Patrick Counties and hopefully beyond.

At the Sustainable Education Center site scale, the potential for this site to act as a model development is being embraced. It is proposed that the 194-acre site, at the highly trafficked intersection of the Blue Ridge Parkway and Highway 58, be developed in a completely sustainable manner. The existing site amenities include forests, farmlands, and various buildings

and establishments. Forest lands as well as the existing crops would be conserved, although there will be an ultimate conversion of current farming practices from conventional to organic.

Because this site design has the potential to show innovative leadership in sustainable design, and particularly, sustainable agriculture, the site is intended to facilitate research and outreach efforts focused on organic agriculture and farming techniques. Research cabins have been located throughout the site to be utilized by state-supported universities, other research institutions and even Meadows of Dan Elementary School for outreach. Along with the Sustainable Education Center and the existing barnyard facilities, these research cabins will primarily by “green” technologies and building techniques, including solar, water, and possibly, wind operating systems.

In order to minimize stormwater runoff from the proposed site, a 30’ vegetative buffer will be planted in areas where crops are bordered with roadways. This not only filters “dirty” runoff water from the road, but also promotes the vegetative absorption of pesticides and other chemicals from surrounding (non organic) agricultural fields. The site’s existing low-lying topography also has potential to support constructed wetlands which will act as “catch basins” for each of its surrounding watersheds and, in turn, act to purify water that may be used for irrigation within the farm. Visitors may explore the grounds by electing to either walk on designated tour routes or use the recreation trail that meanders throughout the woodlands and access points.

The proposed LEED certified Sustainable Education Center will be compactly developed on an 8 acre undeveloped area and will follow a set of environmental guidelines that minimize the heat-island effect by:

- limiting the area of paved surfaces,
- controlling storm water runoff by improving vegetative cover,
- establishing a water collection pond,
- using natural ways of ventilation and lighting, and;
- mitigating temperature.

The proposed building will not only showcase local sustainability and the most advanced green building technology, but also local culture through artisan’s workshops and live bluegrass music. The majority of the 12,000 sq. ft. building will be located underground with only the front façade visible, expressing the local character in its style of architecture. By delineating the long front façade as three separate one story storefronts, the building reflects human scale, and establishes a better sense of place with wooden front porches. A vegetated courtyard would separate the building façade from the road using native grasses and trees.

The green roof, which covers approximately 10,000 sq. ft., is truly unique in its size, technology, and accessibility. This roof is accessible by wooden stairs from the front façade, or from walkways on top of the roof that lead to the nature walk and parking lot. Guests may witness the process of filtering and directing storm water towards a rain collection pond via the water observatory located within the building. Natural sun light will be used to daylight the building, wind collection will be directed into ventilation ducts to ventilate the building, and the underground location of the majority of the building will reduce cooling and heating costs.

Lastly, all materials used for the construction of the building will be locally manufactured and recycled.

To implement the regional and local land use plans it will be essential to work with local governments to establish new land use policies and design parameters such as environmental and design guidelines. The Sustainable Education Center will promote economic development through sustainable agriculture and associated research opportunities. Two particular organizations considered to be approachable for funding options include Southern Region Sustainable Agriculture Research and Education (SARE) and The Organic Farming Research Foundation (OFRF). Both organizations provide various grants that range from on-site research to community innovation grants that incorporate sustainable agriculture within design processes. Additionally, the Organic Trade Association (OTA) is a membership-based organization for the organic industry that benefits everything from farmers and the environment to the public and the local economy. Involvement with this association would assist in creating an intellectual commodity, not only the research farm in Meadows of Dan, but of the entire regional sustainability initiative. Local support can be engaged via innovative community participation ranging from community charettes to “green festivals.” All of the activities at the center are intended to instill in visitors, researchers and residents not only the possibility but benefits of a sustainable future.

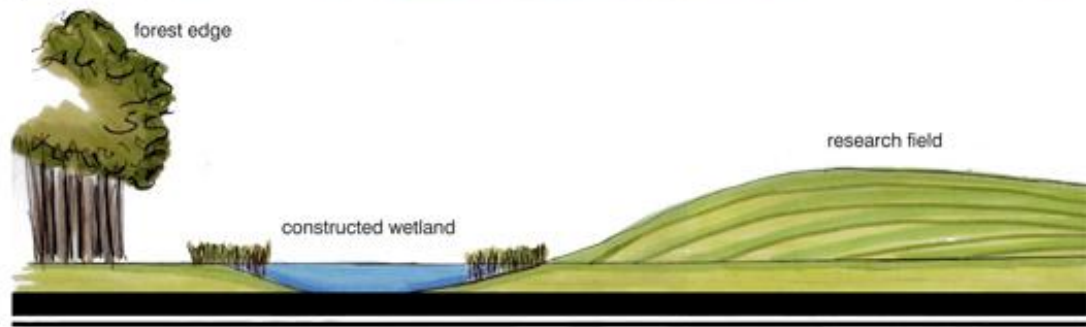
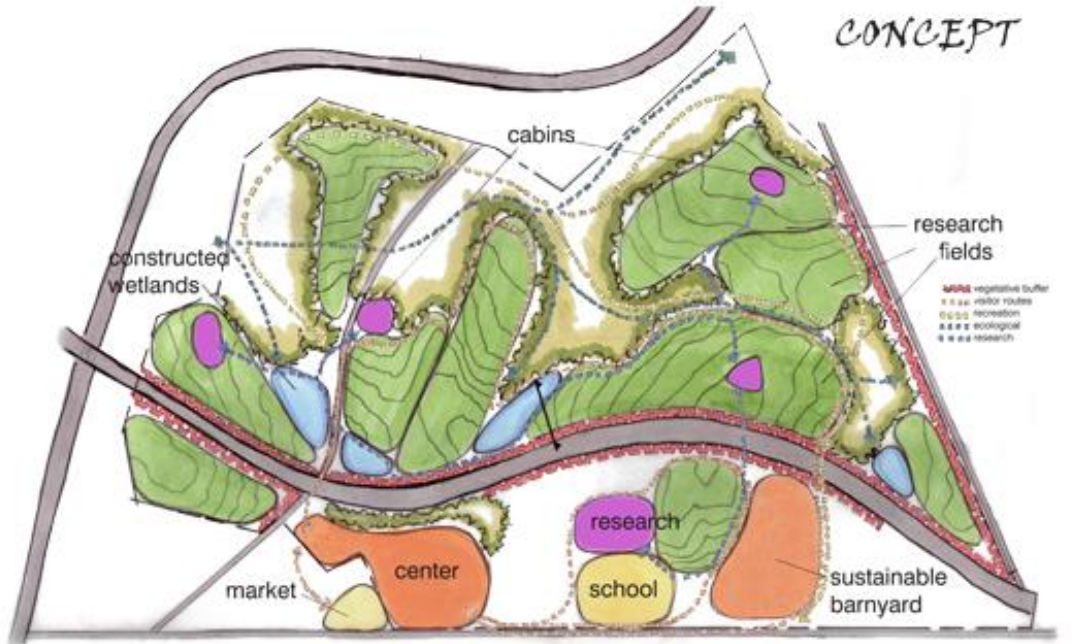
sustainable site



aerial of existing location

A 194 tract of land located at the intersection of the Blue Ridge Parkway and Highway 58, this sustainable destination consists of an organic research farm with supporting "green built" facilities. The site reflects sustainable design with features including constructed wetlands and vegetative buffers that preserve the site's ecological state. Visitors to the Meadows of Dan organic farm may choose to explore the grounds and observe organic farming practices, visit the local organic farmer's market, and learn more about "green" practices at the sustainable education center.

- site guidelines:**
- environment**
 - Minimize storm water runoff, reduce pollution, and soil erosion
 - Preserve existing ecosystem
 - Promote organic farming
 - economy**
 - Preserve productive farmland
 - Introduce a variety of uses
 - Improve agricultural economy
 - society**
 - Educate local residents and visitors on green living



CLEMSON UNIVERSITY
VirginiaTech

Blue Ridge Heritage Inc.
Virginia Cooperative Extension

sustainability initiative
m. barcelos | w. darby | r. yonce
larch 351 | fall 2008

Figure 8: Conceptual design for a Sustainability Education Center in Meadows of Dan.

2. Regional Heritage and Nature Tourism Scenario

Floyd and Patrick counties pride themselves on their rural mountain heritage, scenic mountain vistas, natural areas and artistic ingenuity. During the community asset inventory, a plethora of natural and cultural amenities were identified and located throughout both counties. The intent of this scenario is to reveal the wonders of the counties to local residents and visitors alike. The goals of this scenario are to:

- Simultaneously conserve and perpetuate heritage and natural amenities *in situ*,
- Provide an educational experience for local residents and visitors of all ages by providing access to resource information at both a centrally located interpretive site/building and through “guided wanderings,”
- Develop a series of travel routes that highlight the various types of amenities in the counties, emphasizing Bushcraft skills, Native American History, Local History, Rock Churches, Local Flora, Agriculture, and Wineries. These travel routes would be continually researched and reflected upon to evolve over time.
- Provide opportunities for visitors to venture beyond the main transit corridors to have a true economic impact in the counties.

Conceptual drawings for this scenario can be found in Appendix F.

a. Suitability Analyses

In order to create opportunities to visit natural and cultural resources throughout the counties, it was necessary to assess relationships between current traffic density patterns, extant hiking/walking/biking trails and specific desirable amenities such as historic mill sites, the stone churches, as well as agritourism opportunities and wineries. As a result, over 15 suitability maps identified “hot spots” of extant amenities throughout Floyd and Patrick counties. These “hot spot” suitability maps (found in Appendix F) assisted in determining if there was enough of a concentration of combined resources to support development of a series of tour routes along the back roads of the two counties

An analysis of the route networks indicated that Mabry Mill was a prime location for visitors to experience the route network system. Suitability maps further assisted in measuring the quality of the land surrounding Mabry Mill for a short trail network. The criteria for locating trails included: proximity to Mabry Mill, proximity to the Blue Ridge Parkway, on federally owned parcels, and percent slope. Proximity to Mabry Mill and the Parkway was desired to consolidate the experience so as to interest drivers making a quick rest stop feel that they can expend a small amount of time to explore the trails and not be too far off their preferred travel route. To minimize impact on private lands, the trail network is best located on current federally owned land as well as shallow slopes to accommodate for a wide range of ages and physical abilities of visitors. From these suitability maps, it was then possible to guide visitors to discover Floyd and Patrick counties, as seen in the drawings in Appendix F.

b. Discover Floyd and Patrick Counties!

The *Discover Floyd and Patrick Counties!* concept combines an interpretive building addition to the NPS Mabry Mill facility and associated new trails, with a series of self-guided travel routes that wander throughout both counties.

The key to the success of this concept is branding-*Discover Floyd and Patrick counties!* Because the attractions will be scattered across the counties, to unify them as part of a larger accessible interconnected system, a brand/logo and signage system will be developed. *Discover Floyd and Patrick Counties!* is not only the concept but also the visual representation of the branding. This logo functions in both color and grayscale conditions for easy photocopying and publication via radio, television, and internet advertisements. The Old World style of the word "Discover" aims to capture the style, charm, and character of Floyd and Patrick counties.

One of the critical aspects of the self-guided travel routes is the ability for an individual to feel like they are wandering into the unknown to discover interesting things, yet feel safe that they will not get lost in the process. The proposal is to use user-friendly Global Positioning System (GPS) units preloaded with detailed information on lodging, dining and entertainment options, local history and other attractions throughout the two counties, as well as the numerous designated travel routes. Inviting commercial sponsorship of the GPS units, for example through GPS unit manufacturer Tom-Tom, could potentially result in a consumer market that has become familiar with its product and feels comfortable buying a product that they have experienced and trust.



Figure 9: Example of the GPS Navigation and Kiosk System.

Following the initial success of the *Discover Floyd and Patrick counties!* concept, further development of the route system could utilize a membership method of subscription. As visitors continue to be drawn off the Blue Ridge Parkway into the surrounding areas, local businesses will notice the power of *Discover Floyd and Patrick counties!* to draw tourism dollars deep into the heart of the two counties. This will result in interest in membership by local business owners who desire to access those tourism dollars. To further engage local support, the opportunity for customizing routes is possible. For example seasonal routes such as Halloween or Christmas-related routes, or unique local activities, such as the horse-drawn carriage loops can easily be added to the *Discover Floyd and Patrick counties!* GPS program thus assimilating new networks and trails. This is a non-invasive way to draw commercial interest to Floyd and Patrick at the pace and scale that the inhabitants of the counties choose.

The Mabry Mill interpretive addition will provide an overview of county resources for those visitors who are not interested in wandering far off the Blue Ridge Parkway. The proposed trail network at Mabry Mill consists of three separate routes: a native fauna trail, a native flora trail, and a bushcraft skill trail. Designed to offer education and entertainment for a broad audience, the native flora and fauna trails focus on endangered species providing information on what threatens these subjects and what society and individuals can do to protect these species into the future. The bushcraft skills trail teaches visitors at each feature node about a different skill set that would be useful in the wild. Everything from firecraft to sheltercraft is illustrated and demonstrated at each site, where applicable. In addition to the three walking trails, a separate biking trail surrounds the bushcraft skills trail, taking advantage of the same feature nodes, with the object of offering an option to visitors with bicycles. The trails are short, comfortable walks (approximately 1.5 miles) that are intended to appeal to the road-weary travelers, looking for an opportunity to stretch their legs. A system of signage for trail features and directional purposes has also been created for: direction and identification purposes, information panels, and cabin-style information hubs.

Ultimately the intent of the small interpretive center and trails is to entice visitors who enjoy themselves at those points, to venture out into the counties to *Discover Floyd and Patrick counties!* various self-guided tour routes. To assist safe wanderings, a system of comprehensive information stations located along the Blue Ridge Parkway and throughout Floyd and Patrick counties will not only preserve the counties' historical and natural amenities, but allow visitors to penetrate deeper into the local economies.

Utilizing existing structures, major and secondary roads, single attraction routes were developed, for example a winery route, a historic rock church route, etc. In overlaying the single attraction routes, mixed attraction routes naturally emerged that then provided long distance visitors to see a variety of differing attractions through the course of a single route. Using the interstates and highways allows visitors to travel from greater distances more directly, while the less travelled roads affords visitors the opportunity to more closely explore the hidden charms within the counties, yet still guide them in an organized fashion. Although the routes initially intend for visitors to use their own private vehicles, future opportunities may allow public transit to assist in movement between amenities.

Through the combination of an interpretive facility at Mabry Mill, new trails, and GPS guided discovery routes, this diverse yet easy to navigate system encourages visitors to visit the counties

for different durations and purposes. The various natural, cultural and historic amenities will be perpetuated through education as locals and visitors *Discover Floyd and Patrick Counties!*

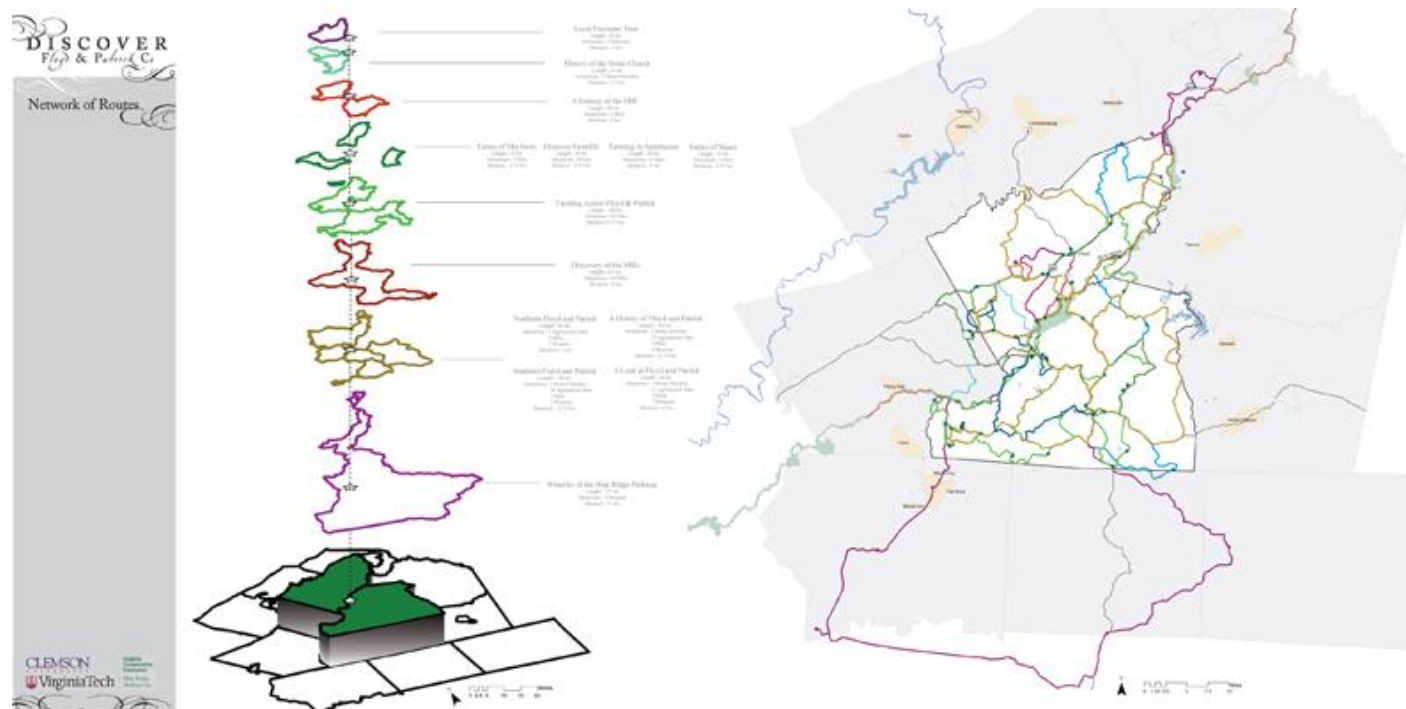


Figure 10: Self-guided travel routes as a part of *Discover Floyd and Patrick Counties!*

3. Agritourism Scenario

Floyd and Patrick counties have long sustained an agricultural heritage. Embracing these historic and cultural traditions, the intent of this scenario is to enhance the local economy through establishment of a self-sustaining agritourism network. The network would consist of a central farm hub with slow food restaurant and agri-tour routes. All of these features would reinforce to locals and visitors alike sustainability from seed to consumption. Viewed at four scales (regional, county, town and site), this scenario ties the scales together by combining farms and people through tourism, sustainability and nature, resulting in a plan that enhances the economic stability of Patrick and Floyd counties. Conceptual drawings for this scenario can be found in Appendix F.

a. Suitability Analyses

Using many of the inventory data maps, suitability analysis maps were created for the regional, county, town and site scales. To locate potential visitors of the agritourism network, at the regional scale large and medium population centers were identified, with the closest centers located near the southern border of Virginia, including Charlotte, Raleigh-Durham, and Winston-Salem, North Carolina. These and other within several hours drive, make Floyd and Patrick counties easily accessible for potential users.

At the county and town scales, a suitability analysis was undertaken to identify route locations for the proposed agritourism trails. Cross referencing proximity to highways and major roads, major urban centers and existing potential agricultural resources, ultimately 57 features were identified for use in creating the routes.

Finally, in order to integrate the various trails, a suitability analysis was undertaken to locate a central hub for the agritourism network. The criteria for the suitability included a parcel of existing farmland or pastureland, land suitable for agricultural businesses such as vineyards, orchards, berry, tobacco, and corn production based on slope, aspect, elevation, and depth of soil, proximity to highways and major roads, and proximity to existing agritourism sites.

The suitability map results revealed that although the majority of the desirable sites were located along the major roads and around centers of high population, there also were a select few sites that lay off the “beaten path” indicating that some agritourism sites might thrive away from main locales. Three potential sites were noted as most suitable for the central hub: near the town of Vesta, in Woolwine, or southwest of Floyd along Highway 221. The Highway 221 location was ultimately chosen due to its proximity to the Floyd urban center.

Many people enjoy learning about local food and products, yet, there seems to be a disconnect between the process and the product. One of the goals of this scenario is to engage this existing interest with access to the process so visitors could see how the process resulted in the local products.

The *Slice of Floyd and Patrick County Agritourism Trails* network consists of three trails evenly distributed between the two counties. The “Farms and Produce Trail” has thirty-two individual farms and establishments that produce food or organic products and sell them for a profit. Travelers will visit various farms and see what goes into the production of their favorite foods. The major focus will be the farming process, from beginning to end. Everyone loves to snack on apples, and farms on this trail will allow users to see the lifespan of the apple, from seed to picking to consumption. The “Animal Trail,” has eleven farms or establishments that primarily focus on producing animal products. If a product is derived directly from an animal, or an animal plays a role in its production, you can find it on this trail. On this trail you will follow the milk process from milking the cow, to pasteurization and packaging. There will be hands on educational opportunities at these farms allowing visitors to gain a personal experience with the animals; the emphasis is for visitors to leave with an appreciation of the large role non “meat producing” animals play in people’s lives. The “Seasonal Activities Trail” consists of fourteen locations that link farms and businesses that offer seasonal recreational activities. If a family wants to pick their own Halloween pumpkin, cut their own Christmas tree, or go to a corn maze, pick strawberries or blueberries, then they can do so along this trail. Only a portion of this trail will be in operation at any given time throughout the year, calling more attention to the specific seasonal locations along this trail, exposing visitors to local culture and tradition.

Each individual site will be marketed as a unique and special location. Further, there will be self guided tours in addition to guided tours; people will be able to choose how they want experience the area. Finally, a signage hierarchy will be created for each of these trails to accommodate direction, identification, as well as boundary definition

A typical experience along any of the trails will include views of open farmland, pastures and mountain scenery; sites and attractions directly related to the agriculture trails; hotels, restaurants, art centers, etc. also dispersed along the trails; and information kiosks at farm stands scattered throughout the network.

The Blue Ridge Slow Food Farm and Restaurant, central hub for the agritourism trail network, will showcase local products found throughout the two counties. The intent is to offer a concentrated educational experience to visitors, exposing them to farm processes, walking trails, farm animals, crops, a historic farmstead and agriculture museum, access to local products and a dining opportunity. The hope is that by exposing the visitor to the Blue Ridge Slow Food Farm as a preview of what they'll see on the various trails, they'll be engaged to seek out unique sites on their own along the trails.

Upon arriving at the Blue Ridge Slow Food Farm, the visitor parks in a sustainable material parking area where the parking spaces are defined by low shrubs. Alighting from their car, the visitor walks through a cherry orchard surrounded by agricultural plots transitioning into the heart of the farm. East of the parking lot is a 5-acre interactive farming plot where farm visitors can participate in physically planting crops, gaining instruction on various farming techniques and hands-on experience. In an ideal situation, with the plant nurtured over the next year by staff, the visitor would return, check on their plant and have an opportunity to purchase it. This may give people an incentive to return time and again.

From the interactive farm plot, the visitor ventures through an apple orchard and cherry orchard to the 8,000 square foot restaurant with attached market, located in a rehabilitated barn. The menu consists of local produce and meats, as well as organic goods, all supplied by farmers within a twenty five mile radius. Surrounding the restaurant are various agricultural plots including: organic gardens free of any pesticides or chemicals; an heirloom garden full of rare species of vegetables; and a series of blackberry, blueberry and raspberry patches.

Extending from the front of the restaurant through the heart of the farm is a central walkway of Sugar Maples. South of the central walkway is where the visitor will find three types of farm animals: ponies, dairy cattle and goats. A five-acre plot in the southeastern corner is where ponies graze, until they are asked to provide a ride to visitors touring the site. Adjacent to the ponies is a 15-acre cow pasture and dairy cattle barn where milking demonstrations occur. Finally there is a small area for goats, where demonstrations of how goat cheese is made will entertain the guests. All of these working animal pens are shielded from the restaurant using a vegetative buffer, in an attempt to minimize any "smells" that may venture towards the main building.

North of the central walkway are a series of areas intended as the concentrated educational section of the Blue Ridge Slow Food Farm. The agricultural history garden provides an outdoor narrative of the evolution of farming equipment and techniques. The garden is divided into four sections, three of which each represent a different century of American farming, while the fourth represents the future of farming in Floyd and Patrick counties. Upon interacting with these exhibits, when visitors are out on the agricultural trails, they will recognize the various farming technologies seen earlier at these demonstration gardens. East of the agricultural history garden is a model barn. As some of the visitors many reside in more urban areas and have not had exposure to farm life or structures, this re-located barn not only showcases the typical

architectural style of barns in the Floyd and Patrick counties, but also reveals its upkeep and use. Adjacent to the model barn is the seasonal activities plot, where one can enjoy a trip through a corn maze or cut down their own Christmas tree, depending on the time of the year.

North along a wooded trail lies an 18th century historic farmstead, the final attraction on the grounds of the Blue Ridge Slow Food Farm. Separated from the main farm, this site provides an ambience of a historic farmstead, with pieces of colonial farm equipment and farming technologies of that era reproduced for educational opportunities.

In keeping with the sustainability aspect of the Blue Ridge Slow Food Restaurant and market, a number of local supporting farms in the two counties would provide extra needed supplies not produced on the farm itself. These farms would be chosen based on their proximity to the Blue Ridge Slow Food farmsite, and their capacity to produce the needed goods initially, then expand to additional farms over time. The farms will place their business cards at the restaurant, which will help to market their specific agri-business products.



Figure 11: Site Design Conceptualization of the Blue Ridge Slow Food Farm and Restaurant

4. Regional Sustainable Artisan School Scenario

The Appalachian Region hosts many people with unique sets of traditional and modern musical and artistic skills, many of which are inspired by the landscape found only in the mountains. There is a rudimentary existing artisan infrastructure in Southwest Virginia including trails (the Crooked Road: Virginia's Heritage Music Trail and 'Round the Mountain: Southwest Virginia's Artisan Network) studios, galleries and art centers (Heartwood in Abingdon, the Jacksonville Center for the Arts in Floyd and the Blue Ridge Music Center in Galax). Even with these varied resources, it is clear that with the large number of artisans located in Floyd and Patrick counties and beyond, there is a need for an all encompassing regional artisan center.

The vision for this center responds to those desires by embracing four main components: creative production, resource production, exhibition and education. Creative production embraces the concept of providing inspirational space where artisans can produce their craft, while resource production allows for an area on site to sustainably grow materials so they can then be harvested for use by the artisans. Exhibition space allows artists a place where they can show their craft to the public, while educational space allows workshops and classes of varying lengths to occur throughout the year. Conceptual drawings for this scenario can be found in Appendix F.

In an effort to collaborate with existing resources and organizations, members of existing organizations will be asked to participate in steering committees for the regional artisan center, as well as be provided with benefits for their participation in the new center including opportunities for joint fundraising events at the various resource sites.

a. Suitability Analyses

A suitability analysis was undertaken to determine the best location for an artisan school based on the following criteria:

- Located in a rural area to create a retreat atmosphere as a distinct artist colony.
- Separate from existing artists, studios and galleries to provide a place for reflection and retreat where artists could temporarily reside while producing their art;
- Site that has inspirational features (slopes, proximity to bodies of water, conservation areas, historic sites, mining sites, etc.) to instill creativity and provide few distractions for artisans to be able to focus on their artwork
- Diverse vegetation resources
- On or adjacent to an area where there has been a large amount of vegetation loss affording the opportunity to create a regenerative landscape which allows artisans to harvest existing resources to create their own work. Hence, a cycle of regeneration. This is similar to how artisans work, taking something that may be underused or undesirable and creating something beautiful and useful.
- Short traveling time from Roanoke, VA and Mount Airy, NC so as to potentially attract some or all of the large populations.

Quartz Creek Regional Artisan School

Intended to not only act as a regional artisan center, but also as a local economic stimulus, the center will impact the local community and region by: creating jobs as faculty, administration, staff and facility maintenance personnel; generating revenue by offering classes, workshops, accommodations and the sale of art; attracting visitors locally, regionally and from the

southeastern United States, as well as creating a network of artisans and artisan centers that create a synergy to create other economic gains through collaboration.

To create a dynamic entrance to the facility “The Blue Ridge Artway” will be established. The “Artway” features 15 competition-winning art pieces sited in open areas along the main route to the facility. A regional funded Sculpture Competition would create an opportunity for local and regional artists to showcase their individual crafts. Competition judges include renowned regional artists, members of the local communities and Blue Ridge Heritage Inc.

Some of the key programming aspects of the Quartz Creek site are: private and multi-use studios, resource plots, galleries, rehearsal space, concert areas and a multifunctional main building.

In the conceptual site design, the center lies in a valley with fairly steep mountains all around, it was critical to study slope, hydrology, open areas, existing structures and roadways to create the most symbiotic artisan center possible. The existing entry road meanders across the site towards the main building at the rear of the cleared floor of the valley. The entry road “Artway” concept locates sculptural art pieces in front of evergreen backdrops. The evergreens act not only as dark backgrounds to the contrasting art pieces, but also screen the road corridor adding mystery to the entry experience. Within the rhythm of the evergreen screens, the visitor passes a large variety of resource plots, containing trees, shrubs, grasses and other natural resources. These managed plots, not only allow artisans to collect materials for their art work, but act as places of regeneration, where replanted trees replace building materials harvested on site.

At the end of the entry road is the glass main gallery and small visitor parking lot. A series of paths lead from the gallery to the main multi-purpose building, which is nestled in the woods on the edge of a steeper slope. Conferences, workshops and classes are held in the building, as well as serving as the dining facility and event gathering space. A rehearsal building and rear patio adjacent to the main building are used for concerts, practice sessions and other outdoor events.

Three 3-story multi-use studios are located around the site. Each multi-use studio has a gallery on the bottom floor constructed primarily of glass for easy visual access, while the second floor is a working studio space and the top floor is where the artist resides. West of the main building the multi-use studio is the modern art studio adjacent to a small existing pond. A traditional art studio is located in a small group of trees on the east side of the site with two small outdoor studios and a large open area. At the north end of the site, a folk art studio is located adjacent to another small existing pond.

To accommodate artists that prefer to work in seclusion, eight small satellite studios each with living spaces are located on the edges of the site within the existing trees. These studios are connected to the central site by a system of trails. Finally, a large working open space edged on one side with “junk or found object” material bins will be located adjacent to the Junk Art studio.

Development of the artisan center is divided into three phases:

Phase One:

- Entry Road with evergreen backdrops and sculptural art pieces
- Main multifunctional Building
- Three multi-use studios
- Resource plots

Related pathways

Phase Two:

Satellite Studios and connecting Trails

Junk Art Studio and workspace

Phase 3:

Continued maintenance

Additions and/or renovations

As a part of the marketing campaign, a list of locations were identified where the artisan center could be promoted, including the Welcome Centers throughout Virginia and North Carolina, focusing on Roanoke and Greensboro. Additionally, collaboration with existing artisan centers and trails in the Southwest Virginia corridor would stimulate the network. Marketing will focus on existing artists, studios and galleries within Floyd and Patrick County via a plethora of media such as flyers, magazine and newspaper articles and a website linked to similar types of resources in the regional and beyond.

A number of potential private and public regional and national funding partners have been identified including: private organizations like the Virginia Department of Housing and Community Development, the Virginia Tourism Corporation, the Virginia Commission for the Arts, Round the Mountain, Patrick County, the National Endowment of the Arts, the Crooked Road Heritage Music Trail, the Commonwealth of Virginia and the Appalachian Regional Commission to name just a few. Fundraising events such as open houses and auctions will also occur for development and continued support of the facility and its programs. Quartz Creek is an all encompassing artisan center, providing artisans and tourists spaces for the production and exhibition of artistic crafts as well as education of artistic minds within the inspirational landscape of the Appalachian Mountains.

Quartz Creek

Master Plan



Phase 1

- Roadway
- Main building
- 3 Multi-use studios
- Artway display
- Evergreen Backdrop
- Necessary connection pathways (non-recreational pathways)
- Resource Plots

Phase 2

- Satellite Studios
- Trails
- Junk art studio

Phase 3

- Maintenance
- Additions/Renovations

Figure 12: Quartz Creek, Conceptual Site Design for a Regional Sustainable Artisan Center

5. Biodiversity Conservation Network Scenario

The Rocky Knob area of the Blue Ridge Parkway encompasses one of the richest wildlife habitats in the counties and along the length of the Blue Ridge Parkway. With minimal development in Floyd and Patrick counties, and several extant locally and federally conserved areas, there is an opportunity to create an overarching nature-based attraction that is spread across both counties, as an additional feature to a center. This scenario studies opportunities to create a network of conserved land patches and corridors that enhance biodiversity, movement of species and provides a long-term environmental protection strategy. Conceptual drawings for this scenario can be found in Appendix F

a. Suitability Analyses

In planning an ecological network for the region of Patrick and Floyd counties, GIS models were created based on eight focal species habitat requirements and migratory behaviors. Focal species act as umbrella species that encompass criteria for a much broader range of species that exist in the region. Hence if habitats for the focal species can be identified, in actuality a larger number of species can survive in the identified habitats. The criteria for identifying focal species was based on: species type (i.e. mammals, amphibians, reptiles, birds), conservation importance (based upon four tiers of importance established by Virginia's Comprehensive Wildlife Conservation Strategy), habitat types (open water, deciduous forests, coniferous, mixed-forests, open vegetation, herbaceous scrub-shrub, barren, balds, developed, wetland, emergent wetland, wooded wetland), and habitat features (edge, forest, aquatic). Modeling the habitat needs of the species inevitably gave us a map output that identified potential areas of corridor design.

For each of the eight focal species (Southern flying squirrel, red fox, queen snake, bog turtle, barn owl, spotted salamander, Allegheny woodrat) suitable habitats were mapped based on each species preferred land cover, slope, gap analysis data, proximity to water, and proximity to roads. Eight separate suitability maps were created to determine primary nodes and connections for each species individually, then overlaid to determine those same aspects collectively.

Biodiversity Protection Strategy

To develop the ecological network of conserved land patches and wildlife corridors, existing conserved lands (state parks, federal parks, wildlife management areas, etc.) were overlaid with the combined eight focal species preferred habitats. The collective nodes and connections then created the framework for the Biodiversity Protection Strategy design across the two counties. Ultimately six phases were proposed for development of the overall Biodiversity Protection Strategy:

Phase I: Linking existing conservation patches (Fairy Stone State Park to Rocky Knob to Bull Mountain)

Phase II: Expanding corridors north and south of the central conservation patch

Phase III: Expanding corridors further north and south

Phase IV: Linking central conservation patch and Parkway

Phase V: Linking vital wetland habitat

Phase VI: Future Linking of the greater region

Utilizing existing case studies and research results, at the site level three wildlife corridor designs addressed species movement challenges at the vegetation edge, in vegetation gaps and at the roadside.

Designing a wildlife corridor and biodiversity protection strategy begins with a vision and an economic incentive for executing such a plan. Implementation of the plan requires a toolbox of implementation mechanisms from funding, to public support, and community involvement. An implementation strategy was designed that covers ground in community support, stakeholder contribution, policy arrangement, and management strategies, all of which determines the effectiveness of the plan; executing a plan without an implementation strategy is prone to failure. By educating and involving stakeholders and community members, the plan is likely to be carried out in full.

This plan preserves biodiversity in the region by providing viable habitat for umbrella species in an unfragmented, continuous manner; the corridor plan provides for long-term economic growth, and supports the region's character by accentuating its' assets and the region's cultural heritage.

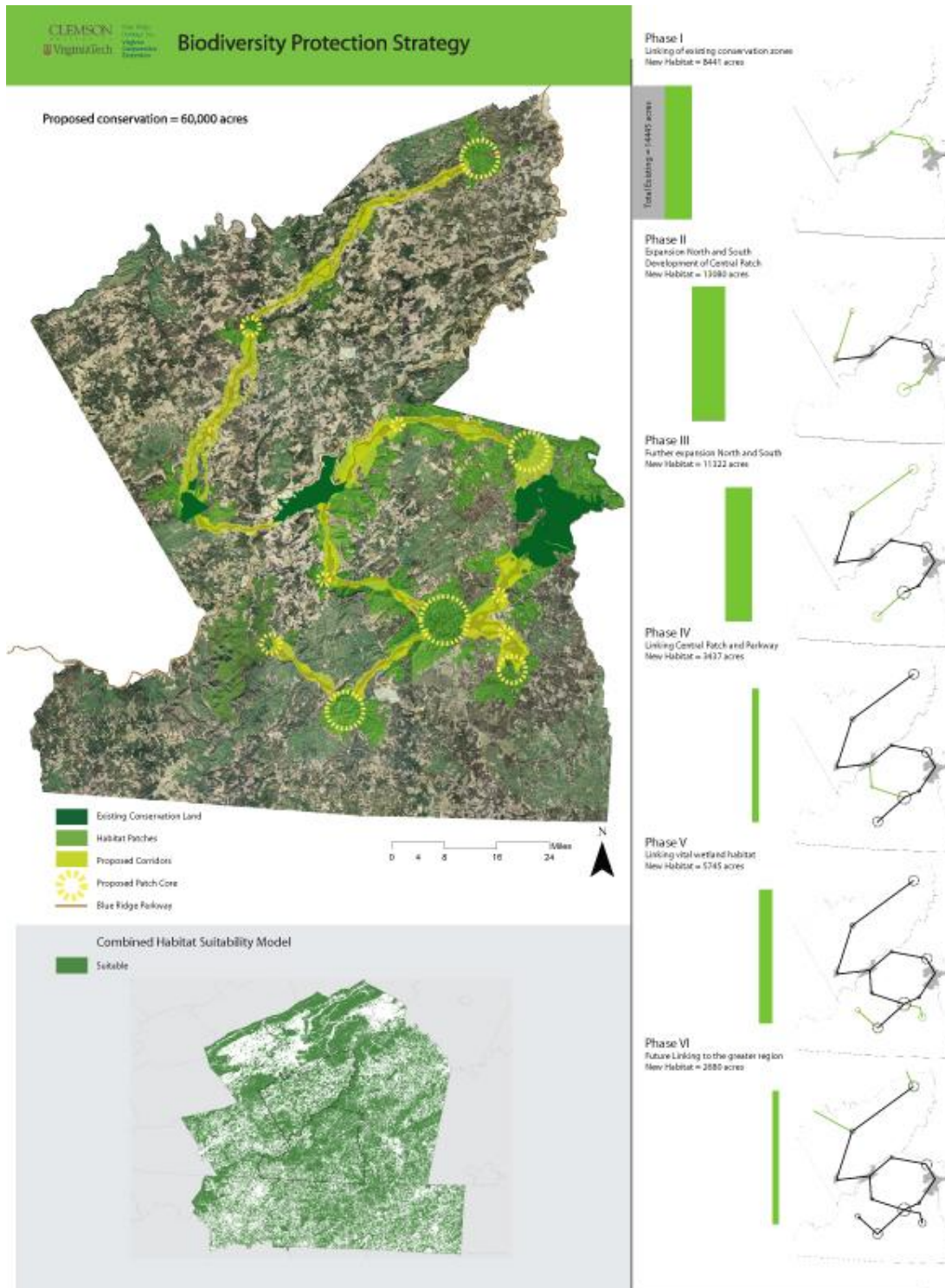


Figure 13: Biodiversity Protection Strategy and Phases.

6. Water Conservation and Recreation Network Scenario

Floyd and Patrick counties serve as a source of water for nearly one million people in the surrounding urban areas such as Danville, Roanoke, Blacksburg, and Radford in Virginia, and various municipalities in North Carolina. The streams and rivers which provide these areas water have not been adequately protected. While protecting and conserving these vulnerable watersheds, it is also desirable to create a network of greenways for recreational use. This scenario's goal is not only to protect the headwaters but also provide a low-impact green network that would entice a variety of both local and visiting "adventurers" to experience the natural beauty of the counties.

a. Suitability Analysis

Two suitability maps were created: one to determine water resource vulnerabilities and the other to identify desirable recreational opportunities. Criteria for the water resource vulnerabilities map included: water bodies, impaired waterways, existing private or publicly conserved and protected lands, land cover, land use, proximity to roads, slope, soil erodability, and canopy cover. Criteria for desirable recreational opportunities included: existing trail systems, waterways, existing private or publicly conserved and protected lands, slope, canopy cover, proximity to urban areas and historic sites and features.

In studying the simultaneous goals of water protection and development of a recreation trail network, several objectives were established:

- To establish recreation network connections by creating new trails.
- To develop walk-able and accessible trails and connections representing a broad range of recreational activities such as hiking, biking, fishing, boating, and bird watching.
- To identify and conserve sensitive areas in proximity to selected trails based on environmental sensitivity, ecological stability, and cultural importance by using the most up-to-date information such as existing policies and ecosystem requirements.
- To establish and protect sensitive areas with greenways, blueways, and other natural trails, utilizing the counties hydrology features (rivers, lakes, streams, springs, etc.) as building blocks.
- To protect existing and new trail networks with greenways, blue ways, and other natural buffers.
- To address conservation/human use compatibility issues along these trails by developing specific design and management guidelines for different land cover/slope/land use combinations..
- To increase public awareness of the relationship between conservation and public enjoyment of outdoor spaces
- To encourage surrounding counties to create their own conservation/recreation network.
- To develop design and management guidelines for these conservation/recreation networks.

With an understanding of the objectives for the conservation/recreation network, the two suitability maps were overlaid resulting in a design framework for location of new trails and recreation connections, as well as areas in need of immediate conservation measures.

One of the key design aspects to be pursued to assist in providing both water quality protection and a pleasant recreational experience is the use of buffers. Some key features of buffers include:

- Maintaining healthy buffers between developed areas and streams is the best, most inexpensive and effective way of protecting watersheds.
- Buffers maintain functioning riparian vegetation; they keep floodplains intact and filter water draining into open water bodies thus protecting water quality; they reduce the need for bank stabilization and keep homes and businesses out of harm's way, while providing open space, recreation, trails, and wildlife habitat.
- Streams and watersheds are very diverse by nature and one buffering formula will not fit all streams equally.
- Establishment, conservation, and enhancement of streamside and wetland buffers links the majority of our objectives.
- Buffers around wetlands and waterways protect riparian habitats, which over 80% of wildlife uses.
- Buffers can minimize the devastating damage that livestock grazing on small acreage can have on a stream channel and associated riparian vegetation.
- Buffers are open space. They are natural breaks in the landscape and watershed that provide consistent avenues of wildlife habitat corridors, storm drainage, aesthetic and economic value.
- Waterways and buffers lay out a natural framework for trails, a community asset.
- A trail system is quite compatible with streamside buffers.
- Trails provide access to "wild refuges" in urban areas as well as providing alternatives to driving. Because poorly sited or random trails may have negative impacts to watercourses, trails should be actively designed to maintain vegetative buffers between trails and stream banks, to incorporate drainage designs to avoid channeling silt into streams, to size bridge crossings to avoid hydrologic constrictions that cause erosion, and to avoid directing users into critical habitats. Making healthy streamside corridors available to the public encourages an appreciation and awareness of our communities' natural resources and fulfills a need for wildness we all have.

Based on the suitability analysis, three major trail networks were created covering a wide range of area across the two counties. The trail networks are geographically diverse, yet connect to existing trails along the Blue Ridge Parkway, while creating linkages to other surrounding county recreation systems. Many of the proposed trail networks utilize existing trails and roads as a base, although seven new trail spurs or connections will need to be constructed to fully complete the proposed recreation network. When all of the proposed trail networks are in place, there will be over 180 miles of trails available for public enjoyment. Refer to Appendix F for conceptual drawings of the trails.

Recreation trailheads begin in Floyd, Stuart and Meadows of Dan, each with sub-trailheads. The main trailhead located in the town of Floyd allows easy access for users to enter town and take advantage of what Floyd has to offer. This inflow of people should boost sales in businesses like restaurants and bed and breakfasts, as well as supporting local farms and artists when visitors buy local goods. The new trail connects to a sub-trailhead at Hawks Nest Retreat, located in the north part of the county. The Floyd network provides diverse traveling experiences from leisurely strolls to grueling two day hiking or biking excursions. Additionally, there is also a one-day loop from Floyd to the Villa Appalachia Winery. This network creates the largest opportunity for the development of new businesses related to the overall conservation and recreation network. Outdoor goods, trail guide services, and bike rentals are all potential

businesses opportunities. The Floyd network has the least amount of elevation change, making it the easiest of the three new trails to navigate. However, it has the potential to be the most traveled as it offers linkages to the more heavily populated northern portion of the county near the Radford area, Floyd, and the Blue Ridge Parkway.

The primary trailhead for the Meadows of Dan Loop, located in Patrick County, is in the Dan River Park. Dan River Park is the result of actions taken by the residents of Ararat whom were unsatisfied with their local recreation opportunities. The residents created Dan River Park which contains baseball and soccer fields, as well as a parking lot. This site acts as a great jumping off point for the proposed trail. This trail would take approximately seven and one-half hours to hike or one hour and forty five minutes to bike. The entire Meadows of Dan loop is adjacent to pristine forested environment, coupling our efforts to enhance protect of a currently impaired waterway, while also protecting a waterway that is as yet in unimpaired condition.

The trail network at Fairystone State Park on the eastern border of Patrick County has been connected to the new Stuart trail, with a trailhead in the town of Stuart. These trails also connect to trails along the Blue Ridge Parkway. All of these connections improve the potential for visitors to travel throughout the entire two-county area, affording the opportunity for further dispersion of money into the local communities. The Phillpott Reservoir offers a long list of recreational activities and with the new link to the town of Stuart provides residents a new way to access these opportunities. This trail network also provides opportunities for new businesses such as bike rentals/repairs, food and beverage outlets, and lodging. The Stuart trail network protects the South Mayo River, one of the regions many impaired waterways. Mill Creek and Little Spencer Creek are in much better condition, with additional protections from the new trails buffering system implemented along these waterways in an effort to both conserve and preserve.

As a result of the proposed conservation and recreation network, the counties' fragile water resources are in less danger of negative human interference and Floyd and Patrick counties have an integrated and protected network of recreational trails representing all modes of recreation. The ecosystems adjacent to these trails are protected, managed, and restored utilizing privately owned lands as well as those already under public ownership and protection. County residents have a plan to conserve and sustain their natural resources for the people of the region for many years to come.

Conservation and Recreation Networks

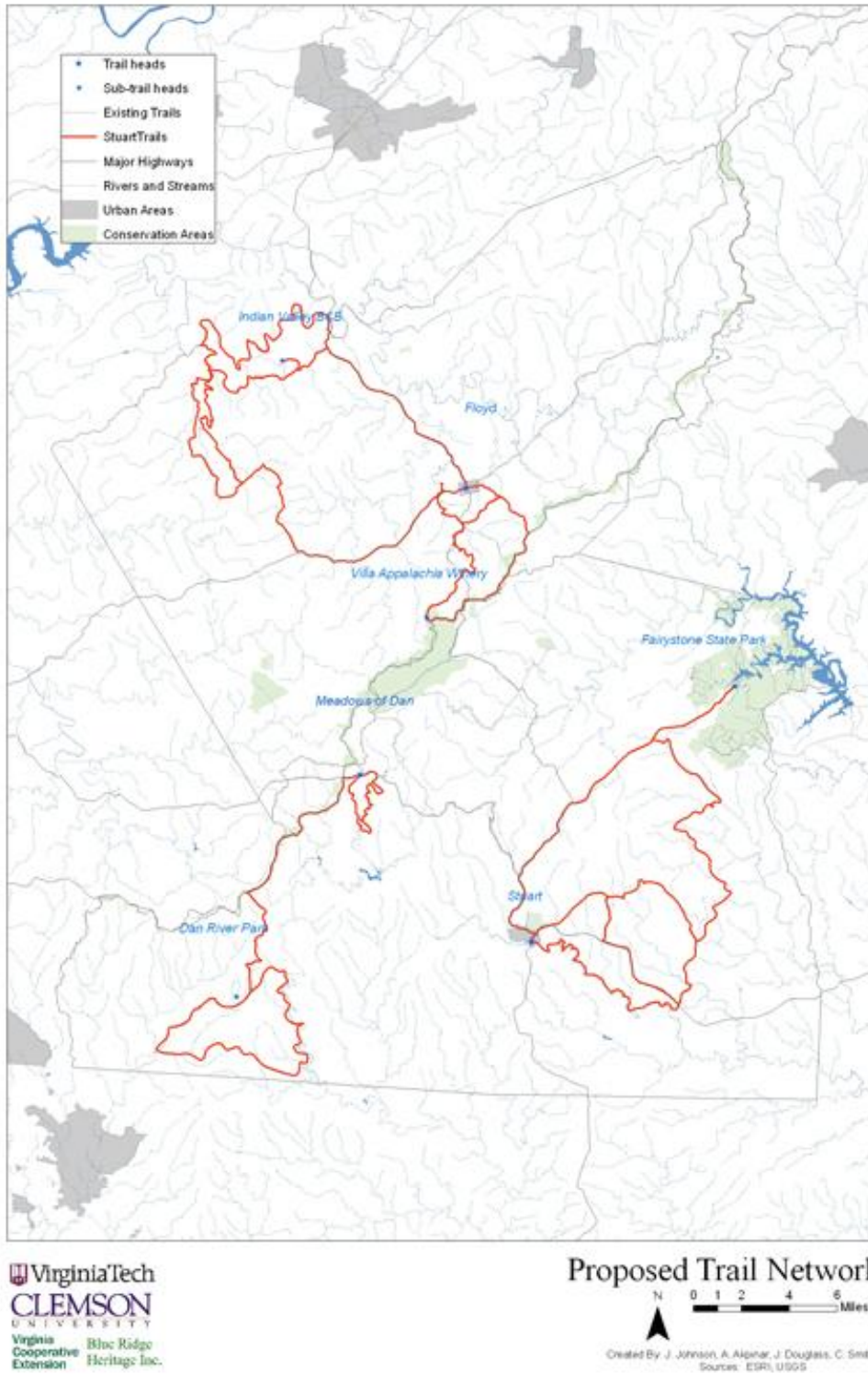


Figure 14: Conservation and Recreation Network new trail proposals.

7. Oak Savannah Restoration and Woodland Bison Reintroduction Scenario

The ecology of southwestern Virginia was quite different in the 1800s than it is today. A Virginia Oak Savannah consisting of three or four varieties of Oaks as well as Hickory and similar types of large canopy trees, few to no shrubs, and numerous grasses and forbes would have been the predominant vegetation—affording long views under tree canopies with no shrub layer. Woodland bison roamed unfettered by predators providing a balance in the ecosystem. Today, in Russia, Canada, Alaska, the Rocky Mountains and grasslands in the Midwestern United States, bison have been successfully reintroduced into the ecosystem. This design scenario intends to reestablish the Oak Savannah ecology and then reintroduce Woodland Bison into the original ecology of southwestern Virginia. Conceptual drawings for this scenario can be found in Appendix F.

a. Suitability Analyses

Suitability analysis within Floyd and Patrick counties initially focused on site selection with the criteria for the suitability maps including: access to existing infrastructure, proximate to tourist destinations, limited possibility to disrupt cultural landmarks or conservation areas, few roads, access to water sources (rivers, ponds, and lakes), shallow slopes, limited negative impact on existing mammals, birds and herps, preferred vegetation of grasses, crops, forested areas. Based on research of other bison conserves, it was found that minimally 150 acres was needed to sustain 12-16 bison as a starter herd. Hence, and overlay of groups of large parcels further refined the suitability maps. The groupings were inspected and six chosen and inspected based on the variables below:

1. Impact on environment
2. Infringement on existing infrastructure
3. Slope and elevation change based on contours
4. Percent forest cover
5. View to and from Buffalo Mountain
6. Potential for expansion
7. Proximity to existing attractions, Blue Ridge Parkway, and surrounding cities
8. Existing parcel ownership
9. Existing conservation easements

Scrutiny of the six sites led to choosing a site within a few miles of the Blue Ridge Parkway with excellent connections to Highway 221. The chosen site offers strong hot spots of suitability coupled with large tracts of existing grassland, while crossing over few roads and waterways. The included parcels had the lowest number of existing dwellings and the surrounding spaces easily allowed for expansion. The viewshed to Buffalo Mountain is centered in the core of the conserve with quick access to Highway 221. Aerial photography confirms minimal slope, great view points, and land diversity. Most importantly, the site provides great access to local and regional populations feeding tourism, support, and growth.

b. Oak Savannah Restoration and Woodland Bison Reintroduction Scenario

This design scenario consists of oak savannah reintroduction and implementation of a bison population to act as a keystone species and cultural icon. The successful implementation of this proposal would act as starting blocks for connections to increased tourism, economic boost, education, culture, and research. The vision for this scenario is based on six key points:

1. Ecological

2. Bison
3. Tourism
4. Culture
5. Education
6. Research

Following identification of the site, planning studies outlined a four phase approach to full implementation of the project. The first phase requires the purchase of 3 parcels that are then divided into two parts, A and B, for the oak savannah reintroduction. Part A will go through the sequence of native grass reintroduction one year ahead of part B, because it is smaller and it involves less deforestation. Each plot will be thinned, burned, and seeded. Seeding will commence each year for the first three years, while burning will take place every other year after the initial fire. During native flora growth a perimeter fence will be constructed approximately 50 feet from the property line with 50 feet between the fence and the inner trees' edge to avoid potential damage from fallen trees. Inside of the fenced grassland, a gravel tour track will be constructed to circle phase 1 providing scenic views and intimate access to the bison in their habitat. The tour track will be accessed through a central electronic gate after a \$5.00 admission charge. During construction and oak savannah production, 12-14 bison will be brought into a 50 acre fenced holding area to ensure acclimation and health. The bison would be released to the larger Oak Savannah area during year 5 upon completion of parts A and B.

Because the primary focus and bulk of funding will be reserved for standardizing flora reintroduction, bison acquisition, and setting up infrastructure, Phase 1 has minimal site specific construction. In order to attract tourists to the conserve and ensure future viability of the attraction, a basic management facility will be established to monitor bison health, hold the starter population, and offer visitor interaction with the bison. A temporary interpretive center will be established to explain the ecological change and cultural significance of the landscape; a small café will serve buffalo burgers and concessions with ingredients provided by local farmers and vendors.

Similar to Phase 1, Phase 2 will use a two-part process to reintroduce the oak savannah reintroduction and create infrastructure construction regimes on two new purchased parcels. Part A will require significant thinning, while Part B will undergo minimal thinning, then be quickly subjected to burning. A new fence and gravel track will be constructed while the native flora is growing. The existing fence bordering the new parcels will be removed and recycled, while new fencing is added and the tour track is expanded and connected. The bison population will be extended to 40 when Phase 2 opens to the public.

During Phase 2, two major construction projects will take place between years 6-10. A new interpretive center will be constructed and act as the starter building for a core facility integral to learning, preservation, and community participation. This starter facility will include a learning room, interactive displays, and information desk. The keystone building for this phase will be the formal restaurant. It will be designed using native architectural styles using materials gathered from the site. The restaurant menu will offer native game species and dairy and crop products from local suppliers. The dining room will be filled with windows to immerse diners in the preserved landscape and the building will be sited to take full advantage of views to Buffalo Mountain. A large banquet room will offer discounts for community use, as well as host many local and regional business functions, along with local music and cultural events to encourage

community partnership. These core buildings will anchor the main entrance and will be accessible without entrance into the bison conserve.

Coupled with the construction of these core facilities, the conserve will start to develop annual events based around burning schedules or the bison roundup. Along the tour tracks, extended conserve views will be identified and accentuated with the construction of basic overlooks along the contour lines, which will be either fenced or enclosed with 10 foot cattle grates.

Phase 3 requires the acquisition of four parcels. Their proximity east of the existing conserve will allow for dedicated construction and development without infringing on the existing conserve. By this time, flora integration and burning schedules will be standardized, so this space will be processed as a whole, rather than in parts like the first two phases. Fence and track construction will commence consecutively with the grassland reintroduction following previously established protocols. Land survey will also be performed in order to identify potential building sites for view towers and lookout buildings. Upon completion of the flora introduction, the bordering fence will be removed and new fence connected, while the tour track expansion follows after the fence. With the additional land mass, the bison population will be supplements to reach a total of 70 by year 15.

Phase 3 will seek to expand on the construction of Phase 2 and work to extend more connections to the community and region. One of the major construction projects will be of a learning facility anchored by the interpretive center, which will provide educational venues from elementary to graduate level work. Coupled with these learning facilities will be an expansion of the management facilities to accommodate more growth in the herd. Strong following behind annual festivals will center this as a destination amongst regional tourists, and partnerships with local businesses will strengthen the economy and an overall sense of well being among citizens. Expanded learning facilities will also provide education to farmers encouraging a switch to bison ranching in hopes of extending the oak savannah ecology and opening a new and growing income stream to the two county base. With a growing popularity attached to the learning center, development plans will commence for the construction of core research facilities aimed at establishing a regional hub for both native grassland reintroduction and bison preservation.

Phase 4 utilizes the purchase of one additional large parcel east of Phase 3. As established, a five year ecology reintroduction regime will be followed. Flora introduction, burning, and infrastructure changes will commence as depicted on the outline and at year 20 the new space will open to an extended bison population exceeding 100 animals.

With the growing tour track expanse and land ownership, the conserve will offer many unique subspaces and a wealth of memorable views. Groundwork and construction started in Phase 3 will be completed and multiple viewing towers and outlook buildings will be installed by Phase 4. Viewing towers will be accessed by a switchback ramp climbing three stories to a covered viewing space. The previously inaccessible panoramic views will allow visitors to engage the surrounding landscape and regional beacons, like Buffalo Mountain, the Blue Ridge Parkway, and Floyd. More permanent outlook buildings will be constructed in quantities of two or three, providing a second story viewing deck with cover, plus restroom facilities and informational resources accommodating visitors at locations miles away from the entrance and core facilities. At 20 years, the conserve will hold a strong regional attraction and will act as a hub for both local and visiting populations. It will establish bonds with multiple partnering organizations and

will garner strong support for continued expansion. Most importantly, it will embody local pride, establish cultural significance, and offer unheralded ecological gains through conservation, research, and education. The overall vision of bringing visitors in contact with the historical roots of the land, provide an economic stimulus for the two counties and their businesses, and restore natural ecology unseen in this region since the 19th Century will have been successfully implemented.



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20 Year Perspective
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Figure 15: View from Bison Reintroduction Center in the Buffalo Mountain region.

Major Findings

The results of the Community Asset/Resource Inventory Parts I & II, and the survey of current visitors directed the suitability analysis and development of seven tourism scenario concepts. The brief descriptions provided above highlight the intent of each scenario exploration, the suitability analysis for each scenario, and details on the scenario concept. The seven tourism scenarios explored include:

- Regional Sustainability Scenario
- Regional Heritage and Nature Tourism Scenario
- Agritourism Scenario
- Regional Sustainable Artisan School Scenario
- Biodiversity Conservation Network Scenario
- Water Conservation and Recreation Network Scenario
- Oak Savannah Restoration and Woodland Bison Reintroduction Scenario

All scenario suitability analyses maps and conceptual drawings can be found in Appendix F.

Survey of Potential Visitors

Method

A quantitative survey was conducted to capture the attitudes and opinions of the potential tourist market for the Rocky Knob/Patrick and Floyd County region of the Blue Ridge Parkway. The research team selected as a sample all persons who in 2008 had requested tourism information for the Blue Ridge region from the Virginia Tourism Corporation. This sample consisted of 2,824 potential visitor inquiries from people residing in the contiguous 48 states. A modified Dillman technique was implemented that included an initial mailing of the survey, followed by a reminder postcard sent two weeks after the initial mailing. Two weeks after the postcard, a second mailing of the survey was sent to those who had not yet replied. A total of 891 surveys were returned, but 39 of those were determined to be undeliverable and 40 were considered unusable, resulting in 812 useable surveys, with a response rate of 28.8%. Respondents were from 44 of the 48 states, with the top five home states being: Virginia, Pennsylvania, North Carolina, New York, and Florida.

The survey instrument used for the study contained 21 questions (Appendix G). Four questions asked about basic demographics: education, age, gender, and income. Respondents were also asked three general questions about travel planning activities and intentions for travel: preferred information sources, use of the internet for travel planning, and the effect of the current economic situation on travel plans. Next, five questions inquired specifically about travel to Floyd and Patrick counties: whether they had traveled to the area in the past, and if so, how they felt about the region. Following that section, three questions explored general travel preferences: the importance of specific factors toward travel in general, preference for specific tourist attraction features, and importance of features that are sustainable. Five questions then asked about preferences for a potential attraction in Floyd and Patrick Counties related to workshop participation, visitor services, attraction features, attraction themes, and descriptions of five specific scenarios determined from previous research in Floyd and Patrick counties with both residents and visitors.

Survey Results

The results for the demographic component of the survey are as follows. In terms of education, respondents were fairly well-educated, with nearly 70% reporting that they had completed at least some college, which exceeds the US average of 52.5%. The respondent population was also somewhat older than the general US population, with a mean age of 58. Over 50% of respondents were between the ages of 50-69. This is not surprising, as this is both typical of general population studies and the group most likely to be interested in traveling on the Blue Ridge Parkway, based on past surveys conducted by the National Park Service. In terms of gender, the sample was nearly evenly split, with only slightly more women than men responding. When asked about income, nearly one-fifth declined to answer, which is not surprising given the sensitive nature of the question for some. Of those who did respond, the median household income was in the \$50,000-74,999 range, which is higher than the national median of \$44,389. Two groups garnered the largest number of responses: nearly one-fifth (18.5%), reported making

between less than \$24,999 and \$34,999; over one-quarter (26.4%) reported earning between \$50,000 and \$99,999.

In order to learn more about the potential travel market to Floyd and Patrick Counties, respondents were asked about their preferred information sources when planning a trip within the United States (Table G-6), and in particular, the use of the internet when making travel plans (Table G-7). Preferred information sources included: Travel guidebooks, recommendations from friends/relatives, visitor centers, state tourism offices, and magazine articles. The least-used sources included destination-related blogs, e-mail advertisements, business advertisements, and recommendations from travel agents. Of the 60% of respondents who reported using the internet for travel information, most limited their use to researching the area, downloading maps and obtaining price information. They did not use the internet for purchases or personal recommendations.

Given the timely nature of this study, survey respondents were asked how the current economic situation might affect their likelihood to travel for pleasure in general in 2009. Nearly half — 49.4 per cent — reported that the economy would have no impact, while 35 per cent indicated they would be less likely to travel. The remainder — more than 15 per cent — reported that they would be more likely to travel. When asked specifically about how the economy might impact travel to Floyd and Patrick counties, over half indicated it would have no impact, and nearly one-fifth reported they would be more likely to travel to the region.

Five questions inquired specifically about travel to Floyd and Patrick counties: whether they had traveled to the area in the past, and if so, how they felt about the region. When asked about their familiarity with the region, respondents were nearly evenly split between those who were not at all familiar with the region and those who were at least somewhat familiar to very familiar with the region (48% and 51.5%, respectively). Nearly 40% of respondents had visited the region. Of those who had visited the Floyd and Patrick counties region in the past, only 14% indicated that this was their primary destination. In addition, of those who had visited in the past, the three primary reasons for visiting were “Passing through,” “sightseeing,” and “driving the Blue Ridge Parkway.” It is important to note that of the 348 respondents who reported visiting the region, only 243 responded to this question. Perhaps the most interesting response to this grouping of questions is the last: when asked about their likelihood of traveling to the Floyd and Patrick counties region within the next two years, only 11% indicated that this was not likely. The rest indicated that they were at least somewhat likely, with nearly half responding that they were moderately to very likely to travel to the region in the next two years.

Three questions explored general travel preferences: the importance of specific factors for pleasure travel in general, preference for specific tourist attraction features, and importance of features of sustainability. The first series, the importance of specific factors for pleasure travel in general, was designed as a way to learn about logistical preferences (e.g., trip planning, organization, and itineraries) (Table G-16). Respondents were asked to indicate, on a scale of 1-4 (one being not important, 4 being very important), their level of importance for the factors listed. Respondents were most interested in: Exploring the area, Being able to find your way around on your own, Being able to escape crowds, and Being able to wander without a specific itinerary. Respondents were least interested in: Being able to take an organized tour, Following a planned itinerary, Being able to follow a themed route (e.g., wine trail, craft trail), and Keeping to your

plans. These responses are very interesting in that, contrary to popular thinking in tourism development, these respondents were interested in a less structured or themed experience, shunning organized tours and planned itineraries, but still wanted to be well informed and feel confident about finding their way around.

The next series in this section, preference for specific tourist attraction features, asked respondents to indicate their preferences for approximately 40 items related to visiting a tourist attraction (Table G-17). As indicated in Table 17, respondents felt quite strongly about a number of these items, primarily focusing on facility staff (they are knowledgeable and interesting, courteous, offering good service) and feeling safe and welcome at the site. Interestingly, respondents also found the need for sufficient parking to be important as well.

The last series in this section asked specifically about tourist attractions and sustainability. Thirty-four items were listed in the question that asked about the importance of these features for respondents when they visited an attraction. While none of the items measured particularly strongly (only 1 item, Provides positive experiences for both visitors and hosts in the region, measured above 3.3), nearly half of the items list garnered at least a three out of four on the four point scale (four being very important). These included both environmentally- and socially-sustainable items.

The next section of the questionnaire included five questions that asked about preferences for a potential attraction in Floyd and Patrick Counties related to workshop participation, visitor services, attraction features, attraction themes, and descriptions of five specific scenarios determined from previous research in Floyd and Patrick counties with both residents and visitors. Nearly 60% expressed an interest in “participating in a hands-on, interactive workshop or class that results in a finished product which you can take home if this were available at an attraction in the Floyd and Patrick County region” (Table G-19). Of those who were interested, most preferred a short workshop of between one hour and one-half day (Table G-20). Visitor services are a vital part of any tourism product (Table G-21). When asked about visitor services, respondents were especially interested in accurate sources of information, including local brochures and travel guides, printed road maps, and directions to local attractions and stops. They were least interested in information that connects themes at the facility to places you can visit in the region, an interactive information kiosk, and audio tours of the region.

Programming is also very important to the success of any attraction. An exhaustive list of nearly fifty possible programming features was included in the questionnaire (Table G-22). Surprisingly, while all the items received a response of at least “Somewhat Important”, or two on a scale of one to four, only five items scored higher than a three, or “Moderately Important.” Two of the items that made a strong showing support the findings of the previous list related to visitor services. They were: staff available to answer questions and driving/sightseeing tours of local areas or attractions. The other three items that scored higher than a three were all related to a “buy local” theme: located near an area with locally owned shops and restaurants, a restaurant that serves local foods, and a store that sells locally processed food and drink such as jams, breads, or wine.

The next two items in this section were designed to complement each other as well as providing two different approaches so as to gain a better understanding of the potential visitor to the Floyd and Patrick Counties region. First, respondents were asked “How likely would you or the

members of your household be to visit an attraction in Floyd and Patrick counties that showcases the following themes? Each theme would be based on events, people, or products from Floyd and Patrick counties” (Table G-23). Next, they were given slightly more detailed and specific scenarios that embodied the themes. Specifically: “How likely would you or the members of your household be to visit the following types of tourist attractions in the Floyd and Patrick County region?” (Table G-24). For the first question, respondents reported that they were most likely to visit an attraction that featured mountain history and folklore and nature and natural history. For the second question, the most popular responses included an agritourism heritage center that presents the rural roots and agricultural heritage of the region, and a regional touring center that reveals key cultural and natural history events in the area. These two questions will be examined with greater detail in the conclusions section of the report.

Major Findings

In a culmination of the aforementioned descriptive analysis, regression analysis was also conducted that was aimed at determining the most significant themes, services, and programming. At this point, both the agritourism heritage center that presents the rural roots and agricultural heritage of the region and a regional touring center that reveals key cultural and natural history events in the area remained the most popular options amongst respondents. Table 1 summarize the elements that were reported as most important for each center, as well as highlighting elements that respondents did NOT feel were important. Greater discussion of these elements, including their similarities and differences, as well as how they fit in with the larger project will follow in the conclusions section of the report.

Table 1: Center Preferences of Respondents

Option A: Regional Touring Center

What visitors want in a regional tourism center:

- Topical themes of interest in the touring center
 - Changes in mountain/rural life over the last 100 years
 - Nature and natural history
 - Local products
 - Mountain history and folklore
- Use to help explore the area
- Use to help follow a themed route
- Use to help wander without a specific itinerary
- Have an option to take organized tour (at the site)
- Assist with not having to get from place to place quickly
- Use to help find your way around on your own
- Amenities/content characteristics of a touring center
 - Educational opportunities for both adults and children
 - Authentic to region
 - Location of site is not necessarily accessible from main road
 - Informative signage (both way-finding and interpretive)
 - Attraction includes some interactive technology
 - Does not have to be near other attractions
- Sustainability features of a touring center

- Educates visitors about protecting the local environment during their stay
- Provides financial benefits and empowers local people
- Uses native plants appropriate for local ecology
- Services offered that are important to a tourist centerpiece in general
 - Audio tours of region
 - Local cultural history field guide
 - Customized activity maps
 - Purchase tickets for tours, attractions, and events
- Programmatic features important in an attraction located specifically in Floyd and Patrick
 - Educational exhibits and displays on the natural history of the area
 - Presentations by naturalists knowledgeable about the area
 - Educational exhibits and displays on the cultural history of the area
 - Audio tours of the local area or attractions
 - Walking trail
 - A store that sells recordings of local musicians
 - Not necessarily important to include an outdoor amphitheatre
 - Not necessarily important to include interactive educational opportunities for families
 - Not necessarily important to include on-site demonstration gardens of locally grown fruits and vegetables
- Based on GIS analysis the center would be located adjacent to the Blue Ridge Parkway (near Route 58), taking advantage of transportation access (I-77, and Routes 221 and 58), proximity to existing business, and tourism assets.
- Characteristics that visitors do NOT necessarily want in a regional tourism center:
 - Use to help escape crowds
 - Use to help “accidentally” discover places not on a planned itinerary
 - Keeping them strictly to their plans
 - Use to help follow a planned itinerary
 - Hands-on, product-oriented workshops

Option B: Agritourism Center

What visitors want in an agritourism center:

- Topical themes of interest in the agritourism center
 - Local foods
 - Changes in mountain/rural life over the last 100 years
 - Local products
 - Organic farming and sustainable living
 - Local artistry or crafts
 - Agriculture and farming
- Use help follow a themed route
- Use to help explore the area
- Use to help wander without a specific itinerary
- Amenities/content characteristics of a touring center
 - Experience is participatory
 - Attraction is authentic to region
 - Site makes visitors feel safe and welcomed
 - Location of site is not necessarily accessible from the main road

- Attraction includes some interactive technology
- Sustainability features of the agritourism center:
 - Builds environmental and cultural awareness and respect in the region
 - Provides financial benefits and empowers local people
 - Uses local vegetables, produce and other farm products
 - Established environmental tobacco smoke control
 - Raises sensitivity to host communities' political, environmental, and social climates
 - Not necessarily important to use fuel efficient vehicles
 - Not necessarily important to donate part of profits to conservations/management of natural and protected areas
- Workshops that provide hands-on experiences and a result in a product (at an attraction within Floyd and Patrick)
- Services offered that are important to an agritourism centerpiece in general
 - Audio tours of the region
 - Local cultural history field guide
 - Customized activity maps
 - Purchase tickets for tours, attractions, and events
- Programmatic features important in an attraction specifically located in Floyd and Patrick
 - A store that sells local agricultural products such as fresh fruits and vegetables
 - Educational exhibits on the natural history of the area
 - A restaurant that serves local foods
 - Located near an area with local owned shops and restaurants
 - Dance performances
 - Educational exhibits and displays on the cultural history of the area
 - An indoor theater
 - On-site demonstration gardens of locally grown fruits and vegetables
 - Not necessarily important to include interactive educational opportunities for organized groups
 - Not necessarily important that it is located within a mile of the Blue Ridge Parkway
 - Not necessarily important to include an outdoor amphitheatre
 - Not necessarily important to include touch-screen exhibits
- Site location based on GIS analysis suggests that the center would be located off of Route 8 between Route 221 and the Blue Ridge Parkway on an existing farm.

- Respondents were slightly older, more educated, and have a slightly higher income than the average American

- Over half of the respondents were at least somewhat familiar with the Floyd and Patrick counties region of Virginia

- In terms of travel in general, respondents were most interested in:
 - Exploring the area
 - Being able to find your way around on your own
 - Being able to escape crowds

- Being able to wander without a specific itinerary
- In terms of general travel, respondents were least interested in:
 - Being able to take an organized tour
 - Following a planned itinerary
 - Being able to follow a themed route (e.g., wine trail, craft trail)
 - Keeping to plans
- When asked about attraction programming, respondents scored five of the fifty possible items higher than a three, or “Moderately Important.” They were:
 - Staff available to answer questions
 - Driving/sightseeing tours of local areas or attractions
 - Located near an area with locally owned shops and restaurants,
 - A restaurant that serves local foods
 - A store that sells locally processed food and drink such as jams, breads, or wine
- When asked “How likely would you or the members of your household be to visit an attraction in Floyd and Patrick counties that showcases the following themes,” respondents reported that they were most likely to visit:
 - An attraction that featured mountain history and folklore
 - Nature and natural history
- When asked more specifically: “How likely would you or the members of your household be to visit the following types of tourist attractions in the Floyd and Patrick County region,” the most popular responses included:
 - An agritourism heritage center that presents the rural roots and agricultural heritage of the region
 - A regional touring center that reveals key cultural and natural history events in the area

Economic Impact Analysis of a Potential Rocky Knob Centerpiece

Introduction

When non-local visitors select a specific destination, expenditures from these individuals inject new money into the county's local economy. These expenditures from non-local visitors create additional jobs and income for local residents as well as increase local and state tax revenues. Estimating this impact is useful in future decision-making processes related to economic and tourism development. Economic impact analysis shows the increase in local income levels, regional employment figures and increases in output by local industries caused by visitors to the area. Input-output (I-O) analysis is a modeling technique that measures the interaction between different sectors of a regional economy, and identifies multipliers that reflect total economic activity generated as a result of a specific activity in a particular sector. Results from these studies provide leverage for local officials to justify increases in public spending on infrastructure development, tourism programs and services as well as support services.

Regional and state officials are increasingly using economic impact analysis in policy and planning decisions (Loomis & Walsh, 1997). Economic impact information is an essential policy and planning tool for local governments and decision-makers to assess impacts generated from tourism development (Tyrell & Johnson, 2001). Also, economic impact studies help both public agencies and private businesses set goals and objectives for more effective management programs.

The Rocky Knob Heritage area is located in the Floyd and Patrick County Region of the Blue Ridge Parkway in Southwestern Virginia. The area contains sufficient natural resources and destinations to attract a range of experiential tourists across a broad spectrum such as historical and cultural sites, recreational sites and facilities, parks, small museums, several festivals, and various stopping points. Economic impact information is an essential policy and planning tool for management agencies and decision-makers to assess impacts generated from tourism development. The development of a sustainable tourism centerpiece/attraction requires assessing the potential economic impact that this proposed facility may have on Floyd and Patrick Counties.

The economic impact of a sustainable tourism centerpiece project focuses on estimating and projecting economic impacts for the proposed tourism destination/centerpiece project in the Floyd and Patrick County Region. Results from the study will provide leverage for Blue Ridge Heritage Inc. (BRHI) and local officials to justify increases in public spending on infrastructure development, tourism programs and services as well as support services. The objectives of this economic impact analysis are to: 1) develop economic impact scenarios based on the creation of the proposed destination/centerpiece project options, and 2) determine the overall economic impact on Floyd and Patrick county region based on the impact scenarios.

Methods

Without primary data available, the best alternative is the use of proxy measures. An in-depth search of economic impact literature pertaining to tourism was made for the data used in the economic impact analysis. However, due to the use of secondary data, estimated impacts here should be considered approximate values. To calculate the amount of tourism expenditures by visitors to Floyd and Patrick Counties, diverse sources of information were used. First, visitation statistics were obtained from the National Park Service Public Use Statistics Office (NPS, 2009). According to the NPS, the number of visitors was counted using traffic volumes at three different access roads: US 221, VA8, and US58. Second, those visitors were further segmented into specific tourism groups based on a visitor's primary reason for visiting the Floyd and Patrick County Region asked in the Blue Ridge Parkway visitor survey conducted by McGehee (2009). As a result, six tourism activities were identified: day trips, nature-based tourism, art tourism, festivals, heritage tourism, and wine tourism. Tourists' expenditures were obtained from a variety of analogous economic impact studies. Day trip estimates were derived from a report of national forest recreation visitors conducted by Stynes and White (2006). Nature-based tourism information was obtained from a report of the Badlands National Park visitors (National Park Service, 2000). Art tourism estimates used in the analysis were gathered from a national study conducted on the arts and economic prosperity (Americans for the Arts, 2007). Additionally, information was collected on a similar music festival in a Tennessee county (Arik & Penn, 2005). Heritage tourism expenditures were developed with the aid of a study conducted on heritage tourists to rural Pennsylvania (Shifflet, 1999). Finally, estimation of wine tourists' expenditures were attained from a wine tourism study conducted in Michigan (M. Kim & S. Kim, 2002).

Economic Impact Assessment

The key input used in economic impact analyses is the amount of expenditures by non-local visitors to the region and local counties. The economic impacts begin with the estimation of visitors' expenditures. This new money that remains in the economy generates direct impacts and secondary effects (i.e., indirect and induced impacts) on local and state economies. Indirect impacts imply that beneficiaries from direct expenditures spend part of the receipts on the purchase of trip-related products and services from local suppliers. Moreover, induced impacts are generated from the circulation of wages and salaries paid by the employers of directly and indirectly related industries. The additional ripples of indirect and induced impacts are created in a circular cycle and contribute to total economic impacts. The total economic impact is the sum of direct, indirect, and induced effects.

Diverse multipliers relating to output, indirect business tax, valued added, and employment can be derived from I-O analysis (Fletcher, 1989). Total output is used to estimate the degree of the interdependence of sectors; the larger the output multiplier, the greater the interdependence of the sector on the rest of the regional economy. Indirect business tax measures sales, excise, and other taxes paid during normal operation of industry but does not take into account taxes paid based on net income. Value added implies the direct and secondary impacts generated from the production of output and is equivalent to the value of total output minus input purchases. This includes employee compensation, proprietary income, other property type income, and indirect business taxes. Employment indicates the number of jobs generated from the additional production and includes full-time and part-time jobs (Minnesota IMPLAN User's Manual,

1997). To be as accurate as possible in analyzing the various economic impacts on the local or regional level, researchers used the I-O modeling developed by IMPLAN, a modeling technique designed for the purpose of economic impact analysis (Minnesota IMPLAN User's Manual, 1997). IMPLAN is a computer-based input-output system that provides a flexible technique for analyzing a wide variety of situations and problems (Uysal, Pomeroy, & Potts, 1992; Minnesota IMPLAN User's Manual, 1997).

Economic Impacts of Tourism on the Floyd and Patrick County Region

This section provides an estimate of the economic impacts of various types of tourism on the Floyd and Patrick County Region (FPCR). With respect to the tourism and recreation resources in the region, the economic impacts are estimated based on the following classification: day trip, nature-based tourism, art tourism, festivals, heritage tourism, and wine tourism. All of the estimated impacts are values in 2008.

Present Economic Impacts of Tourism

1. Day Trip

The economic impacts of day trippers were estimated to determine the effects of the largest part of visitors on the local economy. Total expenditures of day trips on the FPCR were calculated by multiplying average daily expenditures of visitors by the estimated number of day trippers (Table 2).

Table 2: Estimated Total Expenditures of Day Trippers.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$0.00	125,378	1	\$0.0
Eating/ drinking	\$7.10	125,378	1	\$889,983.5
Retail	\$3.97	125,378	1	\$497,998.1
Entertainment/ Recreation	\$4.75	125,378	1	\$596,158.1
Auto	\$8.86	125,378	1	\$1,110,516.2
Other	\$2.25	125,378	1	\$282,046.2
Total	\$26.93			\$3,376,702.1

Average daily expenditures of day trippers were \$26.93. The majority of day trippers' expenditures were spent on autos followed by eating/drinking, entertainment/recreation, retail, and other, respectively. Accordingly, total expenditures of day trippers were approximately \$3,376,702.

Table 3: Estimated Impacts of Day Trippers.

Variable	Economic Impact
Direct Impact	\$1,881,233
Indirect Business Tax	\$161,549
Value Added	\$1,231,420
Total Output	\$2,482,301
Employment	52.4

Table 3 reports the local economic impact of day trips divided into direct impact, indirect business tax, value added, total output, and employment impact. Day trips to the FPCR were estimated to provide a direct impact of \$1,881,223, total output impact of \$2,482,301, indirect business tax impact of \$161,549, value added impact of \$1,231,420, and employment impact of 52.4 jobs.

2. Nature-based Tourism

Nature-based tourism is usually defined as recreational activities that focus on nature in more pristine and remote locations. Nature-based travelers are one of the most important tourism-related customers in the FPCR because the area lies adjacent to the natural surroundings of the Blue Ridge Parkway. In addition, the area has several nature-based tourism attractions, such as Fairy Stone State Park and Buffalo Mountain. The total direct impact of nature-based tourism was calculated by multiplying average daily expenditures of the travelers by the estimated number of nature-based tourists by the average number of days in the FPCR (Table 4).

Table 4 Estimated Total Expenditures of Nature-based Tourists.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$25.43	112,040	1.2	\$3,418,590.4
Eating/ drinking	\$9.50	112,040	1.2	\$1,277,205.5
Retail	\$2.23	112,040	1.2	\$299,424.3
Entertainment/ Recreation	\$5.70	112,040	1.2	\$766,323.3
Auto	\$5.28	112,040	1.2	\$710,498.4
Other	\$12.17	112,040	1.2	\$1,635,838.0
Total	\$60.30			\$8,107,879.9

Average daily expenditures of nature-based tourists were \$60.30. The majority of their expenditures were spent on lodging followed by other, eating/drinking, entertainment/recreation,

autos, and retail, respectively. Total expenditures of nature-based tourist in the area were about \$8,107,880.

Table 5: Estimated Impacts of Nature-based Tourists.

Variable	Economic Impact
Direct Impact	\$6,106,999
Indirect Business Tax	\$553,667
Value Added	\$4,142,152
Total Output	\$8,174,812
Employment	154.8

Table 5 reports the local economic impacts of nature-based tourism including direct impact, indirect business tax, value added, total output, and employment. Nature-based tourism was expected to yield a direct impact of \$6,106,999, total output impact of \$8,174,812, indirect business tax impact of \$553,667, value added impact of \$4,142,152, and employment impact of 154.8 jobs.

3. Art Tourism

Art exhibitions and related activities are an important component to an area's quality of life. In addition, art exhibitions also provide economic benefits to the area's local economy. As is well known, the FPCR is fortunate to have diverse art tourism attractions. Calculating the total direct impact of art tourism in the region was achieved by multiplying average daily expenditures of art tourists by the estimated number of tourists by the average number of days in the area (Table 6).

Table 6: Estimated Total Expenditures of Art Tourists.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$0.00	4,001	1	\$0.0
Eating/ drinking	\$15.25	4,001	1	\$61,011.8
Retail	\$8.22	4,001	1	\$32,895.6
Entertainment/ Recreation	\$26.87	4,001	1	\$107,513.4
Auto	\$14.83	4,001	1	\$59,332.6
Other	\$2.34	4,001	1	\$9,343.4
Total	\$67.50			\$270,096.7

Average daily expenditures of art tourists were \$67.50. The majority of non-local art tourists' expenditures were spent on entertain/recreation followed by eating/drinking, autos, retail, and other respectively. Total expenditures of the tourists in the region were approximately \$270,097.

Table 7. Estimated Impacts of Art Tourists.

Variable	Economic Impact
Direct Impact	\$189,788
Indirect Business Tax	\$14,592
Value Added	\$122,399
Total Output	\$252,631
Employment	5.9

Table 7 indicates the local economic impacts of art tourists divided into direct impact, indirect business tax, value added, total output, and employment. They were estimated to generate a direct impact of \$189,788, total output impact of \$252,631, indirect business tax impact of \$14,592, value added impact of \$122,399, and employment impact of 5.9 jobs.

4. Festivals

Festivals and related events are recognized as important components of a region's portfolio of tourism attractions. Accordingly, most local governments and officials have attempted to support festivals because outside money is expected to be injected into the local economy from tourists' expenditures. Floyd and Patrick counties have also promoted a variety of festivals. Calculating the total direct impact of festivals in FPCR was performed by multiplying average daily expenditures of non-local festival visitors by the estimated number of non-local visitors by the average number of days (Table 8).

Table 8: Estimated Total Expenditures of Festival Visitors.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$41.33	9,337	1.8	\$694,523.2
Eating/ drinking	\$17.23	9,337	1.8	\$289,619.7
Retail	\$8.71	9,337	1.8	\$146,314.4
Entertainment/ Recreation	\$5.57	9,337	1.8	\$93,656.2
Auto	\$18.74	9,337	1.8	\$315,008.5
Other	\$3.66	9,337	1.8	\$61,497.2
Total	\$95.24			\$1,600,619.2

Average daily expenditures of non-local festival visitors were \$95.24. The majority of visitors' expenditures were spent on lodging followed by autos, eating/drinking, retail, and entertainment/recreation, respectively. Total expenditures of non-local festival visitors in the region were expected to approximately \$1,600,619.

Table 9: Estimated Impacts of Festival Visitors.

Variable	Economic Impact
Direct Impact	\$1,186,197
Indirect Business Tax	\$106,401
Value Added	\$801,084
Total Output	\$1,584,426
Employment	29.1

Table 9 shows the local economic impacts of non-local festival visitors. Non-local festival visitors were assessed to offer a direct impact of \$1,186,197, total output impact of \$1,584,426, indirect business tax impact of \$106,401, value added impact of \$801,084, and employment impact of 29.1 jobs.

5. Heritage Tourism

The National Register of Historic Places already includes more than 2,000 properties in Virginia (National Park Service, 2009). The FPCR has a rich history such as Mabry Mill and Laurel Hill. Calculating the total direct impact of heritage tourism in the area was achieved by multiplying average daily expenditures of heritage tourists by the estimated number of non-local visitors by the number of days (Table 10).

Table 10: Estimated Total Expenditures of Heritage Tourists.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$0.00	20,007	1	\$0.0
Eating/ drinking	\$30.68	20,007	1	\$613,778.0
Retail	\$28.96	20,007	1	\$579,332.3
Entertainment/ Recreation	\$14.94	20,007	1	\$298,815.8
Auto	\$12.33	20,007	1	\$246,716.8
Other	\$11.44	20,007	1	\$228,848.1
Total	\$98.34			\$1,967,491.0

Average daily expenditures of heritage tourists were \$98.34. The majority of heritage tourists' expenditures were spent on eating/drinking followed by retail, entertainment/recreation, autos, and other, respectively. Total expenditures of heritage tourists in two counties were approximately \$1,967,491.

Table 11: Estimated Impacts of Heritage Tourists.

Variable	Economic Impact
Direct Impact	\$1,173,702
Indirect Business Tax	\$101,789
Value Added	\$762,936
Total Output	\$1,549,732
Employment	32.4

Table 11 indicates the local economic impacts of heritage tourism divided into direct impact, indirect business tax, value added, total output, and employment. Heritage tourists were estimated to create a direct impact of \$1,173,702, total output impact of \$1,549,732, indirect business tax impact of \$101,789, value added impact of \$762,936, and employment impact of 32.4 jobs.

6. Wine Tourism

Agricultural tourism including wine tourism has appeared as a potential and rising area of tourism industry recently (Kim & Kim, 2002). Wine tourism has been changed to a big business. For example, wineries and vineyards in California attracted 10.7 million visitors who spent \$1.2 billion in 2002 (Napa Valley Vintners Association, 2003). The FPCR possesses a couple of promising wineries such as Chateau Morrisette and Villa Appalaccia. Calculating the total direct impact of wine tourism in the region was accomplished by multiplying average daily expenditures of wine tourists by the estimated number of the tourists by the average number of days (Table 12).

Table 12: Estimated Total Expenditures of Wine Tourists.

Sector	Average Daily Spending	Number of Visitors	Average Number of Days	Total
Lodging	\$41.33	10,670	1.5	\$661,450.6
Eating/ drinking	\$23.72	10,670	1.5	\$379,617.2
Retail	\$6.68	10,670	1.5	\$106,937.3
Entertainment/ Recreation	\$22.65	10,670	1.5	\$362,499.2
Auto	\$15.64	10,670	1.5	\$250,325.8
Other	\$2.52	10,670	1.5	\$40,277.7
Total	\$112.53			\$1,801,107.8

Average daily expenditures of wine tourists were \$112.53. The majority of wine tourists' expenditures were spent on lodging followed by eating/drinking, entertainment/recreation, autos,

and retail, respectively. Total expenditures of wine tourists in the region were approximately \$1,801,108.

Table 13: Estimated Impacts of Wine Tourists.

Variable	Economic Impact
Direct Impact	\$1,484,805
Indirect Business Tax	\$122,461
Value Added	\$979,454
Total Output	\$1,984,646
Employment	39.7

The local economic impacts of wine tourism divided into direct, indirect business tax, value added, total output, and employment are reported in Table 13. Wine tourism was estimated to provide a direct impact of \$1,484,805, total output impact of \$1,984,646, indirect business tax impact of \$122,461, value added impact of \$979,454, and employment impact of 39.7 jobs.

Economic Impacts Scenarios

Different economic impact scenarios were further analyzed based on the two different options of a tourism center in the Floyd and Patrick County Region: 1) the Regional Tourism Center and 2) AgriTourism Center. All of the estimates reflect an annual impact.

Regional Tourism Center

The Regional Tourism Center (RTC) presents various topical themes to visitors including changes in mountain and rural life over the last 100 years, nature and natural history, local products and mountain history and folklore. Further, the centerpiece will serve as a base camp for visitors to explore the neighboring area and taking organized tour.

Based on the amenities and content characteristics of the RTC, the majority of the visitors are likely to pursue nature-based tourism and heritage tourism. Since predicting the future behavior of nature-based and heritage tourists is difficult, several different scenarios are presented which include: an increase in the number of tourists and an increase in the number of visitor days. Those economic impact scenarios were applied to the estimated total expenditures of nature-based and heritage tourists and economic impacts were assessed correspondingly.

Nature-Based Tourism

Three different economic impact scenarios for an increase in the number of nature-based tourists (10%, 30%, and 50%) were created to assess the change in economic impacts related to additional tourists (Table 14). As anticipated, an increase in the number of nature-based tourists produces larger economic impacts. For example, a 10% increase (i.e., approximately 11,200 visitors) in the number of nature-based tourists generated the economic impacts of \$8,992,295 in

total output, \$609,034 in indirect business tax, \$4,556,368 in value added, and 170.3 jobs whereas a 50% increase (i.e., approximately 56,000 visitors) in the number generated the economic impacts of \$12,262,220 in total output, \$830,501 in indirect business tax, \$6,213,229 in value added, and 232.2 jobs.

Table 14: Estimated Increase in Economic Impacts Related to an Increase in Nature-based Tourists.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$6,717,700	\$8,992,295	\$609,034	\$4,556,368	170.3
30%	\$7,939,099	\$10,627,257	\$719,767	\$5,384,798	201.2
50%	\$9,160,498	\$12,262,220	\$830,501	\$6,213,229	232.2

When tourists alter their visitation behaviors, the change is normally not restricted to an increase in the number of visitors or an increase in the length of stay, but some combination of both. Three economic impact scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of the tourists and days, respectively) were developed which estimates the additional economic impacts related to an increase in nature-based tourists and length of stay (Table 15).

Table 15: Estimated Increase in Economic Impacts Related to an Increase in Nature-based Tourists and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$7,277,507	\$9,741,652	\$659,787	\$4,936,065	184.4
30% and 0.2 Day	\$9,262,281	\$12,398,466	\$839,729	\$6,282,264	234.7
50% and 0.3 Day	\$11,450,622	\$15,327,774	\$1,038,126	\$7,766,536	290.2

As anticipated, an increase in nature-based tourists and trip days made larger economic impacts. For example, a 10% increase in the number of nature-based tourists and a 0.1 day increase in trip days yielded the economic impacts of \$9,741,652 in total output, \$659,787 in indirect business tax, \$4,936,065 in value added, and 184.4 jobs while a 50% increase in nature-based tourists and a 0.3 day increase in length of stay generated the economic impacts of \$15,327,774 in total output, \$1,038,126 in indirect business tax, \$7,766,536 in value added, and 290.2 jobs.

Heritage Tourism

Three economic impact scenarios for an increase in the number of visitors (10%, 30%, and 50%) were evaluated to determine the increase in economic impacts related to additional heritage tourists (Table 16). As anticipated, an increase in the number of heritage tourists generated larger economic impacts. For example, a 10% increase (i.e., approximately 2,000 visitors) in the number of heritage tourists created the economic impacts of \$2,045,647 in total output, \$134,362 in indirect business tax, \$1,007,075 in value added, and 42.8 jobs while a 50% increase (i.e., approximately 10,000 visitors) in the number of heritage tourists induced the economic impacts

of \$2,789,517 in total output, \$183,220 in indirect business tax, \$1,373,284 in value added, and 58.4 jobs.

Table 16: Estimated Increase in Economic Impacts Related to an Increase in Heritage Tourists.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$1,549,286	\$2,045,647	\$134,362	\$1,007,075	42.8
30%	\$1,830,975	\$2,417,583	\$158,791	\$1,190,180	50.6
50%	\$2,112,662	\$2,789,517	\$183,220	\$1,373,284	58.4

Three economic impact scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in heritage tourists and trip days, respectively) were further included to estimate the additional economic impacts related to an increase in the number of heritage tourists and length of stay (Table 17).

Table 17: Estimated Increase in Economic Impacts Related to an Increase in Heritage Tourists and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$1,602,077	\$2,121,045	\$139,926	\$1,049,497	43.5
30% and 0.2 Day	\$2,153,432	\$2,853,444	\$188,505	\$1,414,155	58.1
50% and 0.3 Day	\$2,784,806	\$3,692,533	\$244,202	\$1,832,301	74.8

As expected, an increase in heritage tourists and length of stay boosted economic impacts. For example, a 10% increase in heritage tourists and a 0.1 day increase in length of stay generated the economic impacts of \$2,121,045 in total output, \$139,926 in indirect business tax, \$1,049,497 in value added, and 43.5 jobs. Similarly, a 50% increase in the tourists and a 0.2 day increase in trip days caused the economic impacts of \$3,692,533 in total output, \$244,202 in indirect business tax, \$1,832,301 in value added, and 74.8 jobs.

Economic Impact of the RTC

Assuming that the majority of visitors to the RTC mainly consist of nature-based and heritage tourists, overall local economic impacts of the centerpiece can be estimated. The estimated annual economic impact of nature-based and heritage tourists in the Floyd and Patrick County Region in 2008 was a direct impact of \$7.3 million, total output impact of \$9.7 million, indirect business tax impact of \$655,000, value added impact of \$4.9 million, and employment impact of 187 jobs. Further, three economic impact scenarios for an increase in the number of visitors (10%, 30%, and 50%) promoted by the RTC indicate a notable increase in economic impacts. For example, a 10% increase (i.e., about 13,200 visitors) in the number of nature-based and heritage tourists created the economic impacts of approximately \$11 million in total output, more than \$740,000 in indirect business tax, \$5.5 million in value added, and 213 jobs. In other words, a 10% increase (i.e., about 13,200 visitors) in the number of tourists creates additional economic

impacts of approximately \$1.3 million in total output, \$88,000 in indirect business tax, \$660,000 million in value added, and 26 additional jobs. If a 50% increase (i.e., approximately 66,000 visitors) in the number, economic impacts were expected to amount to about \$15 million in total output, \$1 million in indirect business tax, and 291 jobs (Table 18).

Table 18: Estimated Increase in Economic Impacts Related to an Increase in Visitors to the RTC.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$8,266,986	\$11,037,942	\$743,396	\$5,563,443	213.1
30%	\$9,770,074	\$13,044,840	\$878,558	\$6,574,978	251.8
50%	\$11,273,160	\$15,051,737	\$1,013,721	\$7,586,513	290.6

Similarly, those scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of tourists and length of stay, respectively) also indicated a considerable increase in economic impacts. Also given a 10% increase in tourists and a 0.1 day increase in length of stay, additional economic impacts will amount to nearly \$2.1 million in total output, \$144,000 in indirect business tax, \$1.1 million in value added, and 41 new jobs. In other words, a 10% increase in tourists and a 0.1 day increase in length of stay generated the economic impacts of nearly \$12 million in total output, \$800,000 in indirect business tax, \$6 million in value added, and 228 jobs. Assuming a 50% increase in the tourists and a 0.3 day increase in trip days, economic impacts were expected to amount to approximately \$19 million in total output, \$1.3 million in indirect business tax, \$9.6 million in value added, and 365 jobs (Table 19).

Table 19: Estimated Increase in Economic Impacts Related to an Increase in Visitors to the RTC and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$8,879,584	\$11,862,697	\$799,713	\$5,985,562	227.9
30% and 0.2 Day	\$11,415,713	\$15,251,910	\$1,028,234	\$7,696,419	292.8
50% and 0.3 Day	\$14,235,428	\$19,020,307	\$1,282,328	\$9,598,837	365.0

Out-of-State Visitors

According to the Blue Ridge Parkway visitor survey conducted by Hallo (2009), 64% of visitors were out-of-state tourists. Applying the same assumption used above, overall local economic impacts of the RTC derived from these out-of-state tourists can be estimated. In brief, a 10% increase (i.e., about 8,400 visitors) in the number of out-of-state nature-based and heritage tourists created the economic impacts of approximately \$7 million in total output, more than \$470,000 in indirect business tax, \$3.5 million in value added, and 135 jobs. If a 50% increase (i.e., approximately 41,900 visitors) in the number, economic impacts were expected to amount

to about \$9.6 million in total output, \$644,000 in indirect business tax, \$4.8 million in value-added and 185 jobs.

Similarly, those scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of tourists and length of stay, respectively) also indicated a considerable increase in economic impacts. A 10% increase in tourists and a 0.1 day increase in length of stay generated the economic impacts of nearly \$7.5 million in total output, \$510,000 in indirect business tax, \$3.8 million in value added, and 145 jobs. Assuming a 50% increase in the tourists and a 0.3 day increase in trip days, economic impacts were expected to amount to approximately \$12 million in total output, \$815,000 in indirect business tax, \$6.1 million in value added, and 232 jobs.

Agritourism Center

In the Agritourism Center (ATC), tourists will enjoy a variety of topical themes such as local foods, local products, local artistry or crafts and organic farming and sustainable living. While the Regional Tourism Center (RTC) focuses on the cultural and natural resources, the ATC is to provide visitors diverse experiences of rural life and agriculture.

Based on the amenities and characteristics of the ATC, the majority of visitors to the centerpiece are likely to engage in day trip, art, heritage and wine tourism activities. It is impossible to predict the future behavior of the tourists who are likely to visit the centerpiece. Consequently, to assess the change in economic impacts, several economic impact scenarios were developed. That is, this study hypothesized two situations of an increase in the number of tourists and a simultaneous increase in the number of trip days and the tourists.

Day Trips

First, three economic impact scenarios for an increase in the number of day trippers (10%, 30%, and 50%) were generated to estimate the change in economic impacts related to additional visitors (Table 20). As expected, an increase in the number of day trippers produced larger economic impacts. For instance, a 10% increase (i.e., approximately 12,500 visitors) in the number of day trippers produced the economic impacts of \$2,730,532 in total output, \$177,704 in indirect business tax, \$1,354,562 in value added, and 57.6 jobs whereas a 50% increase (i.e., approximately 62,700 visitors) in the number generated the economic impacts of \$3,723,450 in total output, \$242,324 in indirect business tax, \$1,847,129 in value added, and 78.6 jobs.

Table 20: Estimated Increase in Economic Impacts Related to an Increase in Day Trippers.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$2,069,357	\$2,730,532	\$177,704	\$1,354,562	57.6
30%	\$2,445,603	\$3,226,992	\$210,014	\$1,600,846	68.1
50%	\$2,821,848	\$3,723,450	\$242,324	\$1,847,129	78.6

When tourists alter their visitation behaviors, the change is normally not restricted to an increase in the number of visitors or an increase in the length of stay, but some combination of both. This study also made use of a combined increase in the number of day trippers and trip days. Three economic impact scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of the tourists and days, respectively) were developed to assess the economic impacts of a combination of additional day trippers and length of stay (Table 21).

Table 21: Estimated Increase in Economic Impacts Related to an Increase in Day Trippers and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$2,977,645	\$3,951,594	\$260,103	\$1,977,170	79.7
30% and 0.2 Day	\$4,178,032	\$5,552,953	\$366,585	\$2,784,602	110.7
50% and 0.3 Day	\$5,581,186	\$7,425,969	\$491,279	\$3,729,864	146.7

As anticipated, an increase in day trippers and trip days generated additional economic impacts. Specifically, a 10% increase in the number of day trippers and a 0.1 day increase in travel days engendered the economic impacts of \$3,951,594 in total output, \$260,103 in indirect business tax, \$1,977,170 in value added, and 79.7 jobs while a 50% increase in day trippers and a 0.3 day increase in length of stay made the economic impacts of \$7,425,969 in total output, \$491,279 in indirect business tax, \$3,729,864 in value added, and 146.7 jobs.

Art Tourism

Three different economic impact scenarios for an increase in the number of art tourists (10%, 30%, and 50%) were evaluated to determine the increase in economic impacts (Table 22). As expected, an increase in the number of art tourists added more economic impacts. For example, a 10% increase (i.e., approximately 400 visitors) in the number of art tourists made the economic impacts of \$277,895 in total output, \$16,051 in indirect business tax, \$134,639 in value added, and 6.5 jobs. Also, a 50% increase (approximately, 2,000 visitors) in the number caused the economic impacts of \$378,947 in total output, \$21,887 in indirect business tax, \$183,598 in value added, and 8.8 jobs.

Table 22: Estimated Increase in Economic Impacts Related to an Increase in Art Tourists.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$208,767	\$277,895	\$16,051	\$134,639	6.5
30%	\$246,723	\$328,419	\$18,969	\$159,118	7.6
50%	\$284,682	\$378,947	\$21,887	\$183,598	8.8

Three scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in art tourists and days, respectively) were created to evaluate the additional economic impacts related to an increase in the number of art tourists and length of stay (Table 23).

Table 23: Estimated Increase in Economic Impacts Related to an Increase in Art Tourists and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$252,027	\$335,939	\$19,718	\$163,650	7.6
30% and 0.2 Day	\$335,749	\$447,739	\$26,419	\$218,503	10.1
50% and 0.3 Day	\$431,132	\$575,145	\$34,079	\$281,080	12.9

An increase in the number of art tourists and length of stay generated economic impacts, as expected. For example, a 10% increase in art tourists and a 0.1 day increase in days of stay made the economic impacts of \$335,939 in total output, \$19,718 in indirect business tax, \$163,650 in value added, and 7.6 jobs while a 50% increase in the tourists and a 0.3 day increase in trip days encouraged the economic impacts of \$575,145 in total output, \$34,079 in indirect business tax, \$281,080 in value added, and 12.9 jobs.

Heritage Tourism

Similarly, three different economic impact scenarios for an increase in the number of visitors (10%, 30%, and 50%) were estimated to determine the increase in economic impacts related to additional heritage tourists (Table 24). As expected, an increase in the number of heritage tourists caused larger economic impacts. For example, a 10% increase (i.e., approximately, 2,000 visitors) in the number of heritage tourists made the economic impacts of \$2,045,647 in total

output, \$134,362 in indirect business tax, \$1,007,075 in value added, and 42.8 jobs while a 50% increase (i.e., approximately, 10,000 visitors) in the number of heritage tourists generated the economic impacts of \$2,789,517 in total output, \$183,220 in indirect business tax, \$1,373,284 in value added, and 58.4 jobs.

Table 24: Estimated Increase in Economic Impacts Related to an Increase in Heritage Tourists.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$1,549,286	\$2,045,647	\$134,362	\$1,007,075	42.8
30%	\$1,830,975	\$2,417,583	\$158,791	\$1,190,180	50.6
50%	\$2,112,662	\$2,789,517	\$183,220	\$1,373,284	58.4

Three scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in heritage tourists and trip days, respectively) were further involved to assess the additional economic impacts related to an increase in the number of heritage tourists and length of stay (Table 25).

Table 25: Estimated Increase in Economic Impacts Related to an Increase in Heritage Tourists and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$1,602,077	\$2,121,045	\$139,926	\$1,049,497	43.5
30% and 0.2 Day	\$2,153,432	\$2,853,444	\$188,505	\$1,414,155	58.1
50% and 0.3 Day	\$2,784,806	\$3,692,533	\$244,202	\$1,832,301	74.8

As expected, an increase in heritage tourists and length of stay boosted economic impacts. For example, a 10% increase in heritage tourists and a 0.1 day increase in length of stay generated the economic impacts of \$2,121,045 in total output, \$139,926 in indirect business tax, \$1,049,497 in value added, and 43.5 jobs. Similarly, a 50% increase in the tourists and a 0.2 day increase in trip days caused the economic impacts of \$3,692,533 in total output, \$244,202 in indirect business tax, \$1,832,301 in value added, and 74.8 jobs.

Wine Tourism

An assumption for increases in the number of wine tourists (10%, 30%, and 50%) was made to assess the change in economic impacts associated with additional visitors (Table 26). As has been suggested above, an increase in the number of wine tourists generated additional economic impacts. Specifically, a 10% increase (i.e., approximately, 1,070 visitors) in the number of wine tourists created the economic impacts of \$2,183,124 in total output, \$134,708 in indirect business tax, \$1,007,407 in value added, and 43.7 jobs. Moreover, a 50% increase (i.e., approximately, 5,340 visitors) in the number generated the economic impacts of \$2,976,987 in total output, \$183,693 in indirect business tax, \$1,469,192 in value added, and 59.5 jobs.

Table 26: Estimated Increase in Economic Impacts Related to an Increase in Wine Tourists.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$1,633,295	\$2,183,124	\$134,708	\$1,007,407	43.7
30%	\$1,930,257	\$2,580,054	\$159,201	\$1,273,299	51.0
50%	\$2,227,220	\$2,976,987	\$183,693	\$1,469,192	59.5

Also, this analysis supposed simultaneous increases in the number of wine tourists and length of stay. Three scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of the tourists and days, respectively) were formulated to estimate the economic impacts of a combination of additional wine tourist and length of stay (Table 27).

Table 27. Estimated Increase in Economic Impacts Related to an Increase in Wine Tourists and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$1,742,181	\$2,328,665	\$143,689	\$1,149,234	46.6
30% and 0.2 Day	\$2,187,624	\$2,924,062	\$180,428	\$1,443,072	58.5
50% and 0.3 Day	\$2,672,664	\$3,572,384	\$220,432	\$1,763,030	71.5

As expected, a concurrent increase in wine tourists and trip days generated a significant economic impact. That is, a 10% increase in the number of wine tourists and a 0.1 day increase in length of stay caused the economic impacts of \$2,328,665 in total output, \$143,689 in indirect business tax, \$1,149,234 in value added, and 46.6 jobs. Further, a 50% increase in winery visitors and a 0.3 day increase in their trip days created the economic impacts of \$3,572,384 in total output, \$220,432 in indirect business tax, \$1,763,030 in value added, and 71.5 jobs.

Economic Impact of the ATC

Assuming that the majority of visitors to the ATC primarily consist of art tourists, wine tourists, heritage tourists, and day trippers, overall local economic impacts of the centerpiece were assessed. The estimated annual economic impact of day trippers, wine, art and heritage tourists in the Floyd and Patrick County Region in 2008 was a direct impact of \$4.7 million, total output impact of \$6.3 million, indirect business tax impact of \$400,000, value added impact of \$3.1 million, and employment impact of 130 jobs. Further, three scenarios for an increase in the number of each tourist (10%, 30%, and 50%) suggested a significant increase in economic impacts (Table 28).

Table 28: Estimated Increase in Economic Impacts Related to an Increase in Visitors to the ATC.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10%	\$5,460,705	\$7,237,198	\$462,825	\$3,503,683	150.6
30%	\$6,453,558	\$8,553,048	\$546,975	\$4,223,443	177.3
50%	\$7,446,412	\$9,868,901	\$631,124	\$4,873,203	205.3

A 10% increase (i.e., about 16,000 visitors) in the number of tourists creates additional economic impacts of approximately \$1 million in total output, \$62,000 in indirect business tax, \$410,000 in value added, and 20 additional jobs. In other words, a 10% increase (i.e., about 16,000 visitors) in the number of tourists who are expected to visit the ATC created the economic impacts of more than \$7 million in total output, \$460,000 in indirect business tax, \$3.5 million in value added, and 150 jobs. A 50% increase (i.e., approximately, 80,000 visitors) in the number of tourists who are expected to visit the ATC generates the economic impacts of about \$10 million in total output, \$630,000 in indirect business tax, \$4.8 million in value added, and 205 jobs. Furthermore, another economic impact scenario (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of the tourists and length of stay, respectively) also revealed a considerable effect (Table 29).

Table 29: Estimated Increase in Economic Impacts Related to an Increase in Visitors to the ATC and Trip Days.

Increase	Direct Impact	Total Output	Indirect Business Tax	Value Added	Employment
10% and 0.1 Day	\$6,576,930	\$8,737,243	\$563,436	\$4,339,551	177.4
30% and 0.2 Day	\$8,854,837	\$11,778,198	\$761,937	\$5,860,332	237.4
50% and 0.3 Day	\$11,469,788	\$15,266,031	\$989,992	\$7,606,275	305.9

Also given a 10% increase in tourists and a 0.1 day increase in length of stay, additional economic impacts will amount to nearly \$2.5 million in total output, \$163,000 in indirect business tax, \$1.2 million in value added, and 47 jobs. In other words, a 10% increase in the tourists and a 0.1 day increase in length of stay caused the economic impacts of nearly \$8.7 million in total output, \$560,000 in indirect business tax, \$4.3 million in value added, and 177 jobs. Supposing a 50% increase in the tourists and a 0.3 day increase in trip days, economic impacts were expected to amount to about \$15 million in total output, \$1 million in indirect business tax, \$7.6 million in value added, and 306 jobs.

Out-of-State Visitors

The Blue Ridge Parkway visitor survey conducted by Hallo (2009) indicated that 64% of visitors were out-of-state tourists. Overall local economic impacts of the ATC derived from these out-of-state tourists can be estimated. In brief, a 10% increase (i.e., about 10,200 visitors) in the number of out-of-state nature-based and heritage tourists created the economic impacts of approximately

\$4.6 million in total output, more than \$290,000 in indirect business tax, \$2.2 million in value added, and 96 jobs. If a 50% increase (i.e., approximately 50,800 visitors) in the number, economic impacts were expected to amount to about \$6.3 million in total output, \$400,000 in indirect business tax, \$3.1 million in value-added and 130 jobs.

Similarly, those scenarios (10% and 0.1, 30% and 0.2, and 50% and 0.3, increase in the number of tourists and length of stay, respectively) also indicated a considerable increase in economic impacts. A 10% increase in tourists and a 0.1 day increase in length of stay generated the economic impacts of nearly \$5.5 million in total output, \$360,000 in indirect business tax, \$2.8 million in value added, and 113 jobs. Assuming a 50% increase in the tourists and a 0.3 day increase in trip days, economic impacts were expected to amount to approximately \$9.7 million in total output, \$630,000 in indirect business tax, \$4.8 million in value added, and 194 jobs.

Economic Impact Scenarios: Summary

The previous analyses examined the total estimated increase in the economic impact of Floyd and Patrick County Region. This section presents the incremental economic impact associated with the development of the Rocky Knob centerpiece attraction. The additional annual economic impact in Floyd and Patrick County Region that can be attributed to the Rocky Knob attraction is based on the six visitation scenarios that were developed for the two different options of a tourism centerpiece (i.e., RTC and ATC).

Regional Tourism Center

For the Regional Tourism Center, the scenarios assess the potential economic impact of the RTC based on the number of additional nature-based and heritage tourists that will visit the Floyd and Patrick County Region annually because of the RTC and the ability of the attraction to extend the average length of stay of the visitor in the region.

Regional Touring Center

10% increase in visitation

Direct Impact:	\$986,285
Total Output:	\$1,313,398
Indirect Business Tax:	\$87,940
Value Added:	\$685,355
Employment:	25.8 jobs

10% increase in visitation and extending the length of stay .1 day

Direct Impact:	\$1,598,883
Total Output:	\$2,138,153
Indirect Business Tax:	\$144,257
Value Added:	\$1,080,474
Employment:	40.7 jobs

30% increase in visitation

Direct Impact:	\$2,489,373
Total Output:	\$3,320,296
Indirect Business Tax:	\$223,102
Value Added:	\$1,669,890
Employment:	64.6 jobs

30% increase in visitation and extending the length of stay .2 day

Direct Impact:	\$4,135,012
Total Output:	\$5,527,366
Indirect Business Tax:	\$372,778
Value Added:	\$2,791,331
Employment:	105.6 jobs

50% increase in visitation

Direct Impact:	\$3,992,459
Total Output:	\$5,327,193
Indirect Business Tax:	\$358,265
Value Added:	\$2,681,425
Employment:	103.4 jobs

50% increase in visitation and extending the length of stay .3 day

Direct Impact:	\$6,954,727
Total Output:	\$9,295,763
Indirect Business Tax:	\$626,872
Value Added:	\$4,693,749
Employment:	177.8 jobs

Results of the economic impact revealed that the projected annual incremental impact associated with an increase in visitation to the RTC will range from \$1,313,398 to \$9,295,763 per year. This amount is dependent on how many nature-based and heritage tourists visit the centerpiece and how successful the facility is in extending the visitor’s length of stay. The potential employment impact associated with the RTC is estimated between approximately 26 and 178 jobs.

AgriTourism Center

The incremental economic contribution of the AgriTourism Center to the Floyd and Patrick County Region was derived from impact analyses based on the amount of additional day trippers, art, wine, and heritage tourists that will visit the Floyd and Patrick County Region annually because of the ATC. The analyses also incorporate the ability of the attraction to extend the average length of stay of the visitor in the region.

AgriTourism Center

10% increase in visitation

Direct Impact:	\$731,177
Total Output:	\$967,888
Indirect Business Tax:	\$62,434
Value Added:	\$407,474
Employment:	20.2 jobs

10% increase in visitation and extending the length of stay .1 day

Direct Impact:	\$1,847,402
Total Output:	\$2,467,933
Indirect Business Tax:	\$163,045
Value Added:	\$1,243,342
Employment:	47.0 jobs

30% increase in visitation

Direct Impact:	\$1,724,030
Total Output:	\$2,283,738
Indirect Business Tax:	\$146,584
Value Added:	\$1,127,234
Employment:	46.9 jobs

30% increase in visitation and extending the length of stay .2 day

Direct Impact:	\$4,125,309
Total Output:	\$5,508,888
Indirect Business Tax:	\$361,546
Value Added:	\$2,764,123
Employment:	107

50% increase in visitation

50% increase in visitation and extending the length of stay .3 day

Direct Impact:	\$2,716,884	Direct Impact:	\$6,740,260
Total Output:	\$3,599,591	Total Output:	\$8,996,721
Indirect Business Tax:	\$230,733	Indirect Business Tax:	\$589,601
Value Added:	\$1,776,994	Value Added:	\$4,510,066
Employment:	74.9 jobs	Employment:	175.5 jobs

Results of the scenario based economic impact analyses reveal that the annual incremental impact associated with an increase in visitation to the ATC ranges from \$967,888 to \$8,996,721 per year depending on how many additional day trippers, art, wine and heritage tourists visit the centerpiece and how successful the facility is in extending visitors' length of stay. The projected number of jobs associated the ATC is estimated between approximately 26 and 178 jobs depending on visitation and length of stay variables.

Assumptions and Limitations

This section provides estimates of the current and future economic impacts of various tourism products in the Floyd and Patrick County Region as a result of a new tourism center planned. Using the best available data for the analysis, the estimated impacts provided in this report should be considered as approximate values. These estimates present decision-makers with likely economic impacts of various tourism products dependent upon the base scenarios being matched by the destination.

Estimated economic impacts in the report should be considered approximate values and are likely to be conservative estimates with the following factors. First, calculating the economic impacts of tourism products to the local region only considers the expenditures of non-local visitors. This assumes that local visitors do not create additional economic impacts because their expenditures are transferred from one sector of the local economy to another. Expenditures of non-local visitors inject new money into the area which cycles through the local economy, creating multiplier effects. These expenditures stimulate both economic activity as well as fiscal revenues (Borden, Fletcher, & Harris, 1996).

Second, festivals were intentionally excluded in the further economic impact analyses because of their unique characteristics. The majority of festival visitors typically come to the Floyd and Patrick County Region in order to enjoy festivals. Accordingly, it is not plausible to assume an increase in the number of festival visitors and their length of stay as a result of a new tourism center. While we provide economic assessment in a conservative manner, additional economic impacts are likely to accrue.

This report assumed that the visitors to the Regional Tourism Center (RTC) are predominantly comprised of nature-based tourists and heritage tourists. Based on the results of several scenarios, the centerpiece generates a substantial increase in economic impacts. A 10% increase in the number of two different tourists creates the economic impacts of approximately \$11 million in total output, \$740,000 in indirect business tax, \$5.5 million in value added, and 200 employments. Also, given a 50% increase in the tourists and a 0.3 day increase in trip days, economic impacts are expected to amount to about \$19 million in total output, \$1.3 million in indirect business tax, \$9.6 million in value added, and 365 jobs.

Similarly, the Agritourism Center (ATC) is expected to attract different tourism groups of art tourists, wine tourists, heritage tourists, and day trippers. The results indicate that the new facility will produce considerable economic impacts on the local economy. A 10% increase in the number of the tourists to the ATC bring the economic impacts of more than \$7 million in total output, \$460,000 in indirect business tax, \$3.5 million in value added, and 150 jobs. In addition, given a 50% increase in the tourists and a 0.3 day increase in length of stay, the local economy may have the benefit of additional impacts which amount to about \$15 million in total output, \$1 million in indirect business tax, \$7.6 million in value added, and 306 jobs.

Overall, a new tourism center is expected to generate an extensive increase in economic impacts in the Floyd and Patrick County Region. However, caution should be exercised in understanding the economic impacts of the two different options of the regional tourism center and agritourism center. Differences in economic impacts may result from the assumption used that each tourism center will attract different tourist groups. Consequently, when this assumption is altered, estimated economic impacts will also change.

The Floyd and Patrick County Region possess several viable tourism products and attractions. In order for these attractions to produce economic impacts, non-local visitors must inject money into the local economy when visiting these attractions. If public agencies and private businesses set their goals and objectives for more effective management and marketing programs to attract more visitors, evidently, the result will be an increase in economic impacts at the county level.

Attraction Marketing

To assist in the future promotion and advertising of the Rocky Knob attraction, further marketing research analysis was conducted for the proposed Regional Touring Center and the Agri-Tourism Center. In addition, market segmentation analysis was conducted to determine if respondents could be clustered into unique groups based on their likelihood of visiting the region and visiting the two different attractions.

Regional Touring Center

The respondents were divided into three groups according to their likelihood of visiting a Regional Touring Center (RTC) that reveals key cultural and natural history aspects of the Floyd and Patrick county region. Group I consisted of 126 respondents (15.8 %), who “definitely or probably would not visit” the attraction. Group II consisted of 366 respondents (46.0 %), who “probably would visit” the attraction. Group III consisted of 304 respondents (38.2 %), who “definitely would visit” the attraction.

- Group I (15.8 %): definitely or probably would not visit
- Group II (46.0 %): probably would visit
- Group III (38.2 %): definitely would visit

The differences between the three groups have important marketing implications.

- There was no significant difference among the three groups in terms of age, gender, household income, education, previous visits to the Floyd and Patrick County region, and the distance between their home and the Floyd and Patrick County region.
- Based on a scale of 1=“Not at all familiar” to 4=“Very familiar,” Group III’s level of familiarity with the Floyd and Patrick County region of the Blue Ridge Parkway (mean=1.85) was significantly higher than that of Group II (mean=1.69), and Group II’s familiarity was higher than that of Group I (mean=1.61).
- Based on a scale of 1=“Not at all likely” to 4=“Very likely,” Group III’s likelihood of visiting the Floyd and Patrick County region in the next two years (mean=2.83) was significantly higher than that of Group II (mean=2.54), and Group II’s likelihood of visiting was higher than that of Group I (mean=2.21).
- In Group I, 47.6% of the respondents were likely to participate in a hands-on, interactive workshop. In Group II, 54.5% of the respondents were likely to participate. In Group III, 71.2% of the respondents were likely to participate.
 - In Group I, more respondents chose “hour long” programs (44.8%) than “half day” programs (34.5%). In Group II and III, more respondents chose “half day” programs (II-39.6%; III-38.3%) than “hour long” ones (II-33.2%; III-27.9%).

- In terms of information source for travel planning, the most popular source for both Group II and Group III were: recommendation from friend and relative, travel guidebook, regional tourism office, state tourism office, magazine article, visitor center, and past experience.
 - Specifically, Group III was significantly more likely to use the following information source than Group II.
 - Visitor center: Group III (73.0%)> Group II (65.0%)
 - Travel guidebook: Group III (72.7%) > Group II (65.6%)
 - State tourism office: Group III (68.4%)> Group II (65.0%)
 - Regional tourism office: Group III (55.9%)> Group II (52.7%)
 - Magazine advertisement: Group III (48.4%)> Group II (40.7%)
 - Newspaper article: Group III (43.4%) > Group II (38.5%)
 - Newspaper advertisement: Group III (28.3%) > Group II (25.7%)
 - Recommendation from travel agent: Group III (24.3%) > Group II (13.4%)
 - E-mail advertisement: Group III (18.8%) > Group II (8.2%)
 - Destination-related blogs: Group III (11.5%) > Group II (4.9%)
- In terms of the purpose of using the Internet for travel information, the most common purpose for both Group II and Group III were: researching the area, maps of the area, and price information.
 - In comparing Group II and Group III, Group III was significantly more likely to use the web for “purchasing tour packages” (34.0%) and “determining when to travel” (56.0%) than Group II (purchase-22.9%; determine-49.5%).
- Regarding the impact of the current economic situation on pleasure travel, Group III had a higher percentage of “more likely to travel” than Group II, in both general travel (III-18.3% vs. II-10.3%) and travelling to the Floyd and Patrick County region (III-23.5% vs. II-15.0%).

Agritourism Center

The respondents were divided into three groups according to their likelihood of visiting an Agri-Tourism Center (ATC) that presents the rural roots and agricultural heritage of the region. Group 1 consisted of 120 respondents (15.0 %), who “definitely or probably would not visit” the attraction. Group 2 consisted of 342 respondents (42.9 %), who “probably would visit” the attraction. Group 3 consisted of 336 respondents (42.1 %), who “definitely would visit” the attraction.

- Group 1 (15.0 %): definitely or probably would not visit
- Group 2 (42.9 %): probably would visit
- Group 3 (42.1 %): definitely would visit

The differences between the three groups have important marketing implications.

- There was no significant difference among the three groups in terms of age, household income, education, previous visits to the Floyd and Patrick County region, and the distance between their home and the Floyd and Patrick County region.
- Based on a scale of 1=“Not at all familiar” to 4=“Very familiar,” Group 3’s level of familiarity with the Floyd and Patrick County region of the Blue Ridge Parkway (mean=1.85) was significantly higher than that of Group 2 (mean=1.67), and Group 2’s familiarity was higher than that of Group 1 (mean=1.63).
- Based on a scale of 1=“Not at all likely” to 4=“Very likely,” Group 3’s likelihood of visiting the Floyd and Patrick County region in the next two years (mean=2.85) was significantly higher than that of Group 2 (mean=2.43), and Group 2’s likelihood of visiting was higher than that of Group 1 (mean=2.36).
- In Group 1, 39.5% of the respondents were likely to participate in a hands-on, interactive workshop. In Group 2, 53.3% of the respondents were likely to participate. In Group 3, 73.7% of the respondents were likely to participate.
 - In Group 1, the number of respondents who chose “hour long” programs and “half day” programs were the same (37.8%). In Group 2 and 3, more respondents chose “half day” programs (2-43.5%; 3-34.6%) than “hour long” ones (2-35.9%; 3-28.6%).
- In terms of information source for travel planning, the most popular source for both Group 2 and Group 3 were: recommendation from friend and relative, travel guidebook, regional tourism office, state tourism office, magazine article, visitor center, and past experience.
 - Specifically, Group 3 was significantly more likely to use the following information source than Group 2.
 - Visitor center: Group 3 (74.7%)> Group 2 (60.5%)
 - Magazine article: Group 3 (68.5%)> Group 2 (57.6%)
 - State tourism office: Group 3 (67.0%)> Group 2 (61.7%)
 - Past experience: Group 3 (62.5%)> Group 2 (51.5%)
 - Regional tourism office: Group 3 (57.4%)> Group 2 (46.8%)
 - Magazine advertisement: Group 3 (51.2%)> Group 2 (37.1%)

- Newspaper article: Group 3 (46.7%) > Group 2 (35.4%)
 - Television: Group 3 (44.0%)> Group 2 (30.7%)
 - Road signs: Group 3 (43.5%) > Group 2 (31.0%)
 - Newspaper advertisement: Group 3 (33.6%) > Group 2 (21.1%)
 - Billboards: Group 3 (28.3%) > Group 2 (21.6%)
 - Recommendation from travel agent: Group 3 (22.0%) > Group 2 (13.2%)
 - Business advertisement: Group 3 (20.5%) > Group 2 (14.0%)
 - E-mail advertisement: Group 3 (17.6%) > Group 2 (8.8%)
 - Destination-related blogs: Group 3 (10.7%) > Group 2 (4.4%)
- In terms of the purpose of using the Internet for travel information, the most common purpose for both Group 2 and Group 3 were: researching the area, maps of the area, and price information.
 - In comparing Group 2 and Group 3, Group 3 was significantly more likely to use the web for “purchasing tour packages” (35.1%), “personal recommendations” (27.0%), and “determining when to travel” (57.8%) than Group 2 (purchase-19.4%; personal-16.9%; determine-45.8%).
 - Regarding the impact of the current economic situation on pleasure travel, Group 3 had a higher percentage of “more likely to travel” than Group 2, in both general travel (3-17.8% vs. 2-8.9%) and travelling to the Floyd and Patrick County region (3-22.8% vs. 2-14.1%).
 - The three groups differed in terms of gender. Group 1 had a higher male percentage (54.7%), while Group 3 had a higher percentage of female (57.9%). In Group 2, the male/female percentage was approximately the same (male-49.9%; female-50.1%).

Market Segmentation

Cluster analysis statistical procedures were conducted to segment the survey respondents into homogeneous groups based on their: 1) likelihood of visiting the Floyd and Patrick County region in the next two years (on a scale of 1=“Not at all likely” to 4=“Very likely”), 2) likelihood of visiting a Regional Touring Center that reveals key cultural and natural history (on a scale of 1=“Definitely would not visit” to 4=“Definitely would visit”), and 3) likelihood of visiting an Agri-Tourism Center that presents the rural roots and agricultural heritage of the region (on a scale of 1=“Definitely would not visit” to 4=“Definitely would visit”). The result was a four-group solution.

- Segment A — the “Premium Target Market”— consisted of 330 respondents (43.7%), who had a high likelihood of visiting the region (mean=3.51) as well as a high likelihood of visiting both attractions (RTC mean=3.48; ATC mean=3.55).

- Segment B — the “Latent Target Market”— consisted of 291 respondents (38.5%), who had a low likelihood of visiting the region (mean=1.84) but a high likelihood of visiting both attractions (RTC mean=3.41; ATC mean=3.42).
- Segment C — the “Latent Agritourism Market”— consisted of 97 respondents (12.8%), who had a low likelihood of visiting the region (mean=1.85), but had a higher likelihood of visiting an Agritourism Center (mean=2.74) than a Regional Touring Center (mean=1.98).
- Segment D — the “Potential Regional Market”— consisted of 37 respondents (4.9%), who had a moderate likelihood of visiting the region (mean=2.16), and had a higher likelihood of visiting a Regional Touring Center (mean=3.22) than an Agri-Tourism Center (mean=1.73).

Although Segment D only covered 4.9 % of the population, Segment D had a higher likelihood of visiting the region than Segment C. Moreover, Segment D’s likelihood of visiting a Regional Touring Center was higher than Segment C’s likelihood of visiting an Agri-Tourism Center. Therefore, Segment D was also included in the analysis.

The differences between the four segments have important marketing implications.

- There was no significant difference among the four segments in terms of age, gender, household income, and education.
- Based on a scale of 1=“Not at all familiar” to 4=“Very familiar,” Segment A had the highest level of familiarity (mean=2.06) with the Floyd and Patrick County region of the Blue Ridge Parkway, followed by Segment D (mean=1.68), Segment B (mean=1.48), and Segment C (mean=1.45).
- Segment A had the highest percentage of respondents (55.5%) who had visited the Floyd and Patrick County region before, followed by Segment D (40.5%), Segment C (33.0%), and Segment B (29.0%).
 - Among those who had visited the region in the past, Segment A had the highest percentage of respondents (40.9%) whose primary destination was the Floyd and Patrick County region (including the Blue Ridge Parkway), followed by Segment D (33.3%), Segment C (24.1%), and Segment B (20.5%).
- Segment A had the highest percentage of respondents (69.1%) who were likely to participate in a hands-on, interactive workshop, followed by Segment B (59.2%), Segment C (48.5%), and Segment D (41.7%).
 - In Segment A, more respondents chose “half day” programs (39.2%) than “hour long” programs (24.9%). In Segment C, more respondents chose “hour long” programs (46.7%) than “half day” programs (33.3%). In Segment B and Segment D, the number of respondents who chose “hour long” programs (B-38.0%; D-33.3%) and “half day” programs (B-39.3%; D-40.0%) were approximately the same.

- In terms of information source for travel planning, there was a significant relationship between the four segments and the information sources used. The following is the percentage of respondents within each segment using the information source.
 - Visitor center: Segment A (75.2%) > B (63.9%) > D (54.1%) > C (45.4%).
 - Travel guidebook: Segment A (73.9%) > B (64.9%) > D (62.2%) > C (58.8%).
 - State tourism office: Segment A (70.3%) > D (67.6%) > B (63.2%) > C (37.1%).
 - My past experience: Segment A (65.2%) > D (51.4%) > B (50.5%) > C (47.4%).
 - Regional tourism office: Segment A (58.8%) > B (50.9%) > D (45.9%) > C (21.6%).
 - Magazine advertisement: Segment A (48.5%) > B (41.2%) > D (32.4%) > C (32.0%).
 - Newspaper article: Segment A (43.9%) > B (40.2%) > C (30.9%) > D (18.9%).
 - Road signs: Segment A (42.4%) > D (32.4%) > B (30.9%) > C (26.8%).
 - Recommendation from travel agent: Segment D (27.0%) > A (21.5%) > B (13.7%) > C (11.3%).
- The only significant difference between the four segments in their use of the Internet was in “determining when to travel.” Segment A had the highest percentage (58.3%) of using the Internet for this purpose, followed by Segment B (50.0%), Segment C (34.5%), and Segment D (30.0%).
- Regarding the impact of the current economic situation on pleasure travel, the majority of all four segments indicated the current conditions had “no impact” on both general travel (A-54.0%; B-47.2%; C-54.6%; D-45.9%) and travelling to the Floyd and Patrick County region (A-56.7%; B-53.3%; C-57.3%; D-56.8%).
 - However, Segment A had a higher percentage of “more likely to travel” than Segment B, in both general travel (A-17.5% vs. B-9.4%) and travelling to the Floyd and Patrick County region (A-25.7% vs. B-11.9%).
 - Segment B had a higher percentage of “less likely to travel” than Segment A, in both general travel (B-43.4% vs. A-28.5%) and travelling to the Floyd and Patrick County region (B-34.7% vs. A-17.6%).

Results of the additional marketing segmentation analysis revealed that four out ten respondents (43.7%), deemed the “Premium Target Market”, were likely to visit the Floyd and Patrick County region in the next two years and expressed an interest in visiting both a Regional Touring Center and an Agri-Tourism Center. As a result, there is the potential to develop the Rocky Knob Attraction that incorporates elements of both scenarios if properly planned, located, designed and promoted.

Conclusions and Recommendations: Tourism Development Scenarios

The preceding sections of this report detail the individual tasks undertaken to develop a sustainable tourism strategy for Floyd and Patrick counties, Virginia. Each of these tasks represents a substantial part of a larger integrated project. Each task builds on the work and outcomes of other tasks previously conducted. This provides opportunities to extend and refine the empirical line of inquiry that underlies the project. Also, this approach allows tasks to validate each other's findings.

This section of the report is intended to (1) describe how the individual tasks build on each other to result in two tourism centerpiece development alternatives (2) provide a detailed description of each development alternative, including site acreage and budget requirements, (3) identify potential funding sources for these development alternatives, and (4) discuss challenges, limitations, and next steps related to the development of these alternatives.

Task synthesis

The first task in this integrated project was a review and validation of Floyd and Patrick counties as a potential zone of influence for tourism development in the Rocky Knob Area. This work consisted of a community asset and resource inventory using both a map-based (i.e., Geographic Information System) approach and qualitative interviews with community and tourism stakeholders. This work showed that Floyd and Patrick counties contain the necessary assets to act as a tourism destination. In addition, the map-based inventory and assessment produced a set of spatial data that were heavily utilized in later tasks. Also, the stakeholder interviews provided information to begin to generate ideas for potential tourism centerpiece topics, and to filter tourism development topics or approaches to only those that would respect and enhance the current way of life in Floyd and Patrick counties. These interviews allowed other tasks to proceed with a reasonable assurance that the results generated would be acceptable, in large part, to residents and community leaders within Floyd and Patrick counties.

The second project task was a needs analysis to determine what attractions tourists and travelers would like to visit. This task relied on two surveys. The first survey conducted for this task was developed, in part, based on outcomes of the community asset and resource inventory described above, and a discussion of these outcomes at a meeting (May 2008) with project researchers, the NPS, and BRHI members. This survey was directed at current visitors to Floyd and Patrick counties, and results from it indicated that current visitors would be most likely to visit a tourism attraction based on two themes – (1) mountain life or (2) local products. The survey of current visitors also suggested some general topics (e.g., organic farming, sustainable living techniques, changes in mountain life over the past century, traditional skills for mountain and outdoor living) that might be included within each of these themes.

The third project task consisted of rigorous suitability analyses of a wide range of tourism development scenarios, including ones focused on mountain life and local products. Work for this task was done at the same time as the survey of current visitors. This task indicated there were seven plausible tourism scenarios including: an ecological sustainability center and site, a regional center emphasizing natural and cultural heritage (i.e., mountain life and related nature/natural history), an agritourism center and routes (emphasizing local products), a regional

artisan school, a unified water conservation and recreation network, a biodiversity conservation concept and a bison reintroduction tourism scenario. Each scenario and related suitability analysis revealed potential ways that aspects of mountain life, nature and natural history, and local products might be incorporated into the final two tourism destination centerpiece alternatives described fully below.

The second survey conducted as part of Task 2 was developed based on results from both the current visitor survey and the tourism scenarios/suitability analyses described above. In addition, a review of the literature on sustainable tourism was used to develop survey questions that examined potential visitors' attitudes towards specific amenities, sustainability features, services, and programming alternatives at a tourism centerpiece. Results from this potential visitor survey supported previous findings that two possible scenarios would be of interest to potential visitors: a centerpiece strategy based on mountain life (including related nature and natural history) or an agritourism heritage center that presents the rural roots and agricultural heritage of the region. In addition, survey results showed what design alternatives for a tourism centerpiece would be favored by visitors.

Information derived from the survey of potential visitors serves as the primary basis for the two tourism development scenarios presented in the next section of this report. Furthermore, the detailed description of each alternative is based on the results of this survey.

The final project task was an economic impact analysis of these two tourism centerpiece development alternatives. This analysis extended the consideration of these alternatives beyond the wants of tourists; it considered the economic suitability and sustainability of each development alternative. Results from this analysis suggested that a new tourism center is expected to generate an extensive increase in economic impacts in the Floyd and Patrick County Region. However, caution should be exercised in understanding the economic impacts of the two different options of the regional tourism center and agritourism center. Differences in economic impacts may result from the assumption used that each tourism center will attract different tourist groups.

To assist in the future promotion and advertising of a Rocky Knob tourism centerpiece, further marketing research analysis was conducted for the two proposed development scenarios. In addition, market segmentation analysis was conducted to determine if respondents could be clustered into unique groups based on their likelihood of visiting the region and visiting the two different attractions. Results of the additional marketing segmentation analysis revealed that four out ten respondents (43.7%), deemed the "Premium Target Market", were likely to visit the Floyd and Patrick County region in the next two years and expressed an interest in visiting both proposed tourism centerpiece alternatives. As a result, there is the potential to develop a Rocky Knob tourism centerpiece that incorporates elements of both scenarios if properly planned, located, designed and promoted.

Trillium Mountain Life Visitor Center and Nature Trail (A Regional Touring Center)

Based on a suitability analysis, the Trillium Mountain Life Center and Trails would best be located in Meadows of Dan, taking advantage of transportation access via Interstate 77, State Highways 221 and 58 and the Blue Ridge Parkway. This location's proximity to existing businesses, tourism assets and infrastructure makes it a wise location investment.

Even though the facility is located adjacent to several main roads, it should still be located some distance off of the interstate, appealing to visitors interested in the facility having authentic charm and not necessarily being "just off an exit."

The Trillium Mountain Life Visitor Center and Nature Trail concept combines a visitor center with associated adjacent new trails, along with a series of self-guided travel routes that wander throughout both counties. Floyd and Patrick counties pride themselves on their rural mountain heritage, scenic mountain vistas, natural areas and artistic ingenuity. The intent of this scenario is to reveal the wonders of the counties to local residents and visitors alike.

The goals of this scenario are to:

- Simultaneously conserve and perpetuate heritage and natural amenities in Floyd and Patrick Counties
- Provide a nature and heritage-based educational experience for local residents and visitors of all ages by providing access to resource information at both a centrally located interpretive site/building and through "guided wanderings"
- Develop a series of travel routes that highlight the various types of amenities in the counties. These travel routes would be continually researched and reflected upon to evolve over time.
- Provide opportunities for visitors to venture beyond the main transit corridors to have a true economic impact in the counties.

A key to the success of this concept is branding. Because the attractions will be scattered across the counties, a brand/logo and signage system should be developed so that it unifies them as part of a large accessible interconnected system. This branding should be used as a logo, functioning in both color and grayscale for easy photocopying and publication via radio, television, and internet advertisements. Also, branded signage promoting the center and helping with wayfinding should be placed on Interstates 81 and 77, and on the Blue Ridge Parkway.

The Trillium Visitor Center will provide an overview of resources located in both Floyd and Patrick counties for those visitors who are not interested in wandering far off the Blue Ridge Parkway. However, this center will also encourage visitors to explore beyond the site and adjacent trails to the two counties. Topical themes highlighted at the Trillium Mountain Life Visitor Center include:

- Changes in mountain/rural life over the last 100 years
- Nature and natural history
- Local products
- Mountain history and folklore

Some of the physical features of the Trillium Mountain Life Visitor Center include:

- Contextual design of the facility to ensure that it blends with regional architecture
- Sustainable design of the facility and opportunities for visitor education on the local environment, as well as appropriate siting of structures on land to take advantage of local climate, as well as appropriate use of native plants to reinforce local ecological communities and wildlife habitats
- Sustainable infrastructure by providing financial benefits and empowering local people through employment and spin off business opportunities related to the center

Program features of the Trillium Mountain Life Visitor Center include:

- Educational exhibits, displays, and interpretive signage on both the natural and cultural history of the area
- Presentations by naturalists knowledgeable about the area
- Audio tours of the local area or attractions
- Handicap-accessible walking trails
- A store that sells a variety of authentic products including crafts, recordings of local musicians, etc.
- Assistance with way-finding
- A variety of educational opportunities for adults and children
- Themed routes with brochures and audio tours
- GPS “guided wanderings” using interactive technologies for serendipitous but safe travel
- Local cultural/history field guides
- Customized activity maps
- Tickets for local tours, attractions and events

The proposed trail network at the visitor center could consist of three separate routes: a native fauna trail, a native flora trail, and a bushcraft skill trail. Designed to offer education and entertainment for a broad audience, the native flora and fauna trails focus on endangered species providing information on what threatens these subjects and what society and individuals can do to protect these species into the future. The bushcraft skills trail teaches visitors at each feature node about a different skill set that would be useful in the wild. In addition to the three walking trails, a separate biking trail surrounds the bushcraft skills trail, taking advantage of the same feature nodes, with the object of offering an option to visitors with bicycles. The trails are short, comfortable walks (approximately 1.5 miles) that are intended to appeal to the road-weary travelers, looking for an opportunity to stretch their legs. A system of signage for trail features and directional purposes should also be created for direction and identification purposes, information panels, and cabin-style information hubs.

Further, to assist in safe wanderings throughout the two counties, a system of comprehensive information stations (unstaffed and accompanied by branded signage) located along the Blue Ridge Parkway and throughout Floyd and Patrick counties will allow visitors to penetrate deeper into the local economies.

Single attraction routes should be developed utilizing existing structures, major and secondary roads. Using the interstates and highways allows visitors to travel from greater distances more directly, while the less travelled roads affords visitors the opportunity to more closely explore the hidden charms within the counties. The single attraction routes guide them in an organized fashion. For example, routes could focus on visiting attractions such as wineries or historic sites.

By overlaying these single attraction routes, mixed attraction routes naturally emerge that may then provide opportunities for visitors to see a variety of differing attractions based on their personal preferences. These routes are designed with the intent that visitors would travel in their own private vehicles, but future opportunities should be sought to allow movement between amenities using public transit.

One of the critical aspects of the self-guided travel routes is the ability for an individual to feel like they are wandering into the unknown to discover interesting things, yet feel safe that they will not get lost in the process. This suggests that it may be an effective tourism development strategy to use Geographic Positioning System (GPS) units preloaded with detailed information on lodging, dining and entertainment options, local history and other attractions throughout the two counties, as well as the numerous designated travel routes. Inviting commercial sponsorship of the GPS units, for example through GPS unit manufacturers, may be a cost-effective strategy for implementing this. GPS manufacturers may see an incentive for such sponsorship in that it could potentially result in a consumer market that has become familiar with its product and feels comfortable buying a product that they have experienced and trust.

Through the combination of a visitor center, new trails, and GPS guided discovery routes, this diverse yet easy to navigate system encourages visitors to wander the counties for different durations and purposes. The various natural, cultural and historic amenities will be perpetuated through education as locals and visitors discover Floyd and Patrick counties.

Results of the economic impact revealed that the projected annual incremental impact associated with an increase in visitation to the Trillium Mountain Life Visitor Center and Nature Trail will range from \$1,313,398 to \$9,295,763 per year. This amount is dependent on how many nature-based and heritage tourists visit the centerpiece and how successful the facility is in extending the visitor's length of stay. The potential employment impact associated with Trillium is estimated between approximately 26 and 178 jobs.

Site Acreage and Rough Budget

Location of site: near the intersection of the Blue Ridge Parkway and route 58

Acreage of site: 20-50 acres

Cost per acre: \$15,000-18,000 (based on current real estate values in the area)

Land cost: \$300,000-900,000

Total square footage of visitor center: 15,000-25,000 square feet

Cost per square foot: \$300 (based on current building costs for LEEDS certified building in the **Floyd-Patrick County area**; this is for the basic shell of the building only)

Building cost: \$4,500,000-7,500,000

Building enhancements: This includes, but is not limited to, architectural drawings, information kiosks, furnishings, etc. \$4,500,000-7,500,000 (based on a 1:1 match with the shell construction as reported by other similar centers)

Site enhancement cost: Parking, trail development, etc. \$3,000,000-4,000,000 (will depend on the length of the trail, the terrain, size/number of demonstration areas, etc.).

Environmental Impact Analysis and Statement: \$250,000

Total **estimated** cost for the Trillium Mountain Life Visitor Center and Nature Trail:
\$15,010,000-24,180,000

Land costs:	300,000	900,000
Building costs:	4,500,000	7,500,000
Building enhancements:	4,500,000	7,500,000
Environmental assessment	250,000	250,000
Site Enhancement cost	3,000,000	4,000,000
20% “uncertainty” costs	2,510,000	4,030,000
Total ESTIMATED cost	15,060,000	24,180,000

Miller’s Way Agricultural Visitor Center and Trail (An Agritourism Center)

Based on a site suitability analysis, the Miller’s Way Agricultural Visitor Center and Trail will be located off of Route 8 between Route 221 and the Blue Ridge Parkway on an existing farm. The criteria for the suitability included a parcel of existing farmland or pastureland; land suitable for agricultural businesses such as vineyards, orchards, berry, tobacco, and corn production based on slope, aspect, elevation, and depth of soil; proximity to highways and major roads; and proximity to existing agritourism sites. Also, the visitor survey revealed a desire to be located near an area with locally owned shops and restaurants. After considering all of these site selection constraints, the most likely sites for this center are located within 5 miles of the town of Floyd.

The Miller’s Way Agricultural Visitor Center and Trail concept embraces agricultural traditions of Floyd and Patrick counties by enhancing the local economy through establishment of a self-sustaining agritourism network. The network would consist of a central farm hub with a “slow food” restaurant and county-wide agri-tour routes. All of these features would reinforce to locals and visitors alike the need for and practices of agricultural sustainability – from seed to consumption. People throughout the United States have increasingly become interested in the idea of agritourism, especially in areas that have a heritage of such industry. Many people enjoy learning about local food and products, yet, there seems to be a disconnect between the process and the product. One of the goals of this scenario is to take advantage of this existing interest by providing opportunities for visitors to see and experience the processes associated with local agricultural products.

Some of the goals of Miller’s Way Agricultural Visitor Center and Trail include:

- Build environmental and cultural awareness and respect in the region
- Provide financial benefits and empower local people
- Use local vegetables, produce and other farm products
- Establish environmental tobacco smoke control
- Raise sensitivity to host communities’ political, environmental, and social climates

Again the key success of this concept is branding. Because the farm attractions will be scattered across the two counties, it will be necessary to develop a brand/logo and signage system that unifies the sites as part of a large accessible interconnected system. The brand can be used for

publication via radio, television, and internet advertisements, as well as way-finding from Interstates 81 and 77, and the Blue Ridge Parkway.

Miller's Way Agricultural Visitor Center and Trail will provide an overview of county agritourism resources for those visitors who are not interested in wandering far off the Blue Ridge Parkway. However, the center will also encourage visitors to explore beyond the site to the wide ranging agritourism attractions along trails that meander throughout the counties.

Topical themes highlighted at Miller's Way Agricultural Visitor Center and Trail include:

- Local foods
- Changes in mountain/rural life over the last 100 years
- Local products
- Organic farming and sustainable living
- Local artistry or crafts
- Agriculture and farming

Program features of Miller's Way Agricultural Visitor Center and Trail include:

- A store that sells local agricultural products, such as fresh fruits and vegetables
- Educational exhibits on the natural and cultural history of the area incorporating interactive technologies
- A restaurant that serves local foods
- An indoor theater with occasional dance performances
- On-site demonstration gardens of locally grown fruits and vegetables
- Audio tours of the region, potentially with GPS self-guided interactive tours
- Local cultural/history field guides
- Customized activity maps
- Tickets for local tours, attractions, and events
- Opportunities for participatory experiences, such as workshops that provide hands-on experiences and result in a product (at an attraction within Floyd or Patrick counties)

Miller's Way Agricultural Visitor Center and Trail will act as the central hub for the agritourism trail network, and it will showcase local products found throughout the two counties in its store and restaurant. The intent is to offer a concentrated educational experience to visitors, exposing them to farm processes, walking trails, farm animals, crops, a historic farmstead and agriculture museum, access to local products, and a dining opportunity. The intent of this center is to expose visitor to a preview of what they will see along various agritourism trails throughout the counties, and to encourage visitors to go to and further experience the sites that make up these trails.

A potential vision of this center would begin with visitors arriving and parking in a sustainable material parking area where the parking spaces are defined by low shrubs. Leaving their car, visitors walk through an orchard surrounded by agricultural plots transitioning into the heart of the farm. This 'heart' is an interactive farming plot where visitors can participate in physically planting or harvesting crops, gaining instruction on various farming techniques, and other hands-on experiences. From the interactive farm plot, visitors venture through other orchards to a restaurant with attached market, both featuring local foods. This would be located in a rehabilitated barn. Surrounding the restaurant are various agricultural plots including an organic

garden, a heirloom vegetable garden, and a series of berry patches. Extending from the restaurant is a central walkway leading to an area where visitor will find various types of farm animals (e.g., ponies, dairy cattle and goats). Visitors will interact with animals by petting, feeding, and in cases (such as ponies) riding them. A cow pasture and dairy cattle barn will be present for milking demonstrations. Also, a small area will be used to demonstrate production of some foods, like cheese. A series of areas will be dedicated as a concentrated educational section of Miller's Way Agricultural Visitor Center and Trail farm. These areas include an agricultural history garden showing the evolution of farming equipment and techniques, a model barn with information about historic building techniques, and a seasonal activities plot for a corn maze or Christmas tree harvesting. An 18th century historic farmstead will serve as a final attraction. Separated from the main farm, this site will provide the ambience of a historic farmstead and tells the story of individual local farmers.

The agritourism trail network may consist of three trails evenly distributed between the two counties. The "Farms and Produce Trail" highlights individual farms and establishments that produce food or organic products and sell them for a profit. Travelers will visit various farms and see what goes into the production of their favorite foods. The "Animal Trail," has farms or establishments that primarily focus on producing animal products. There will be hands-on educational opportunities at these sites that allow visitors to gain a personal experience with the animals and learn about the large role that agricultural animals play in people's lives. The "Seasonal Activities Trail" will link farms and businesses that offer seasonal recreational activities (e.g., pumpkin picking, Christmas tree harvesting). Only a portion of this trail will be in operation at any given time throughout the year, calling more attention to the specific seasonal locations along this trail. A typical experience along any of these three trails will include views of open farmland, pastures and mountain scenery; sites and attractions directly related to the agriculture trails; hotels, restaurants, and art centers also dispersed along the trails; and information kiosks at farm stands scattered throughout the network.

Miller's Way Agricultural Visitor Center and Trail is expected to attract various tourism groups including art tourists, wine tourists, heritage tourists, and day trippers. The center may generate considerable economic benefits for the local economy. Results of the scenario based economic impact analyses reveal that the annual incremental impact associated with an increase in visitation to Miller's Way Farm Life Visitor Center and Trail ranges from \$967,888 to \$8,996,721 per year depending on how many additional day trippers, art, wine and heritage tourists visit the centerpiece and how successful the facility is in extending visitors' length of stay. The projected number of jobs associated with Miller's Way is estimated between approximately 20 and 176 jobs, depending on visitation and length of stay variables.

Site Acreage and Rough Budget

Location of site: near Route 8 between Route 221 and the Blue Ridge Parkway on an existing farm

Acreage of site: 30-60 acres

Cost per acre: \$15,000-18,000 (based on current real estate values in the area)

Land cost: \$450,000-1,080,000

Total square footage of visitor center and retrofitted existing farm structures: 20-25,000 square feet, 5,000-10,000 sq ft for new restaurant and market, 15,000-20,000 retrofitted farm structures

Cost per square foot: \$300 (based on current new construction costs for LEEDS certified building in the Floyd-Patrick County area; this is for the basic shell of the building only); \$100 for retrofitting existing farm structures

Building cost: \$3,000,000-4,500,000

Building enhancements: This includes, but is not limited to, architectural drawings, information kiosks, furnishings, etc. \$3,000,000-4,500,000 (based on a 1:1 match with the shell construction and retrofitted structures as reported by other similar centers)

Site enhancement cost: Parking, trail development, etc. \$3,000,000-4,000,000 (will depend on the length of the trail, the terrain, size/number of demonstration areas, etc.).

Environmental Impact Analysis and Statement: \$250,000

Total **estimated** cost for “Miller’s Way Agricultural Visitor Center and Trail”:
\$11,640,000-18,060,000

Land costs:	450,000	1,800,000
Building costs:	3,000,000	4,500,000
Building enhancements:	3,000,000	4,500,000
Environmental assessment	250,000	250,000
Site Enhancement cost	3,000,000	4,000,000
20% “uncertainty” costs	<u>1,940,000</u>	<u>4,030,000</u>
Total ESTIMATED cost	11,640,000	18,060,000

Challenges and Limitations

Regardless of the level of analysis and preparation, any development proposal for a centerpiece project in the Rocky Knob region will come with potential challenges and limitations. The following are some of the key issues that will need to be recognized and faced as this project progresses.

Water. A primary concern for this region will surround the issue of water resources. As a watershed region with no inflowing sources of water, any truly sustainable centerpiece will need to rely heavily on the use of cisterns and gray water as well as other green technologies. For example, if the development site is located on the ridge line, there will be little opportunity to take advantage of gravity, making hydrologic and water flow critical to the long term success of the facility.

Political and cultural sensitivities. An additional concern that is true for any project of this scale located anywhere in the United States, surrounds the possible political and cultural issues associated with development in rural, non-zoned counties. Community concerns must be taken into consideration; community participation is a standard practice in any development process. A concern unique to the land surrounding the Blue Ridge Parkway comes from the residual (and understandable) hard feelings that still exist within families who lost part or all of their farms

when the Parkway was initially developed. Regardless of which development scenario is selected, it is the belief of the research team that the sacrifice of these families must be honored in some way as a part of the project. Further, private property rights, a lack of zoning, and competing land uses could have an impact if abutting parcels are privately owned.

Staffing. In the process of conducting research for this project, one of the current issues discovered in the region surrounds the lack of available funding for staff on the Blue Ridge Parkway. Is it important to recognize that gaining the financial resources for the physical facility is one issue, but staffing it will be an equally (if not more) crucial issue. As was found in the results of the potential visitor survey, travelers want to be able to talk to knowledgeable staff and feel confident in the information they have gained. This level of competence does not come cheaply, nor should it be short-changed when the time comes to staff any centerpiece facility.

Long-term facility maintenance and improvements. In the same vein as staffing, funding cyclic maintenance as well as improvements to the physical structure and interpretive media and exhibits must be taken into fiscal consideration.

Appropriateness of scale. In addition to the realities of finding funding for staffing a centerpiece project and maintaining it over time in the Rocky Knob region, any project of this type must recognize the appropriateness of scale and “fit” with other tourism resources in the broader region of Southwest Virginia. This facility has been envisioned by the research team as a small-to medium-sized facility that will complement existing facilities such as the Jacksonville Center for the Arts, The Crooked Road, and the Blue Ridge Music Center, without competing with them.

Risk management/litigation. Potential lawsuits are a reality for any facility that is open to the public. This may be especially important should the Farm Life Visitor Center be selected as the appropriate scenario. There is a certain risk assumed with farm implements, animals, and the consumption of farm products that will need to be included in any insurance package for a facility such as this.

Potential Funding Sources

A major challenge for any facility in the Rocky Knob region will be in finding funding sources for the building, staffing, and maintenance. The following are a few potential sources for funding:

- The Virginia Tobacco Indemnification and Community Revitalization Commission <http://www.tic.virginia.gov/> grant program, which is particularly interested in economic development and agribusiness.
- The Appalachian Regional Commission Area Development Program, particularly the Asset-Based Development Initiative, Entrepreneurship Initiative and the Business development Revolving Loan Fund Grants.
- The American Recovery and Reinvestment Act (recovery.gov). Accessing this source of funding will be especially plausible should a centerpiece project be selected that focuses

on a green building and/or job creation with a “buy America” focus. There are also some programs available to assist with any green retrofitting that may be necessary, should a facility be chosen that includes existing structures. Specifically, the Pathways Out of Poverty program, the Department of Labor Recovery Act Competitive Grant Opportunities, and the Rural Business Enterprise Grant programs offer potential sources of funding, but do note that these programs have a small window of opportunity with upcoming deadlines.

- Private Investment and Donations. Ultimately, some form of private investment or donations will need to occur for this venture to be feasible – and successful in the long-term. Potential corporate stakeholders such as GPS manufacturers, farm equipment manufacturers, large agri-business, and non-profit groups with ties to the National Parks (e.g., Friends of the Blue Ridge Parkway, National Parks Conservation Association) may be potential sponsors. Once definitive plans for a site and a center are made, BRHI will need to embark on an intense capital campaign to explore and secure private investments and donations.

As grants and private investment opportunities are highly fluid, and as there is no clear timeline for this project, specific funding sources will be few and far between. However, utilizing online resources such as www.grants.gov should provide continuing grant funding opportunities as the project and its timeline become better defined. Also, maintaining an awareness of current trends in grants funding (e.g., providing funding for efforts such as enhancing sustainability, utilizing green building techniques, offering job training, and the reduction of rural poverty) will aid in identifying funding opportunities in the future.

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Rocky Knob Sustainable Tourism Centerpiece Project



Final Report Appendices



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