



# SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY

*"Spearhead Trails -  
Adventure Playground of the East"*



## SPEARHEAD TRAILS IMPLEMENTATION PLAN

### VOLUME I: TRAIL DEVELOPMENT PLAN

PREPARED BY:

THE LANE GROUP, INC.  
MANAGED ADVENTURE SYSTEMS  
WMTH CORPORATION  
SUSTAINABLE DEVELOPMENT CONSULTING INTERNATIONAL

JANUARY 2012



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**PRINCIPAL AUTHOR:**



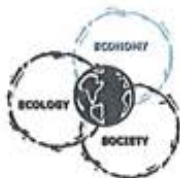
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## ACKNOWLEDGEMENTS

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**Shayne Fields**, Lonesome Pine Cycling for development of the Mountain Biking conceptual design.

### Local Participation

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- Samantha Lanningham, Heart of Appalachia
- Reggie Childress, YMCA of Russell County
- David Leonard, Leonard Companies
- Sarah Leonard Wilson, Leonard Companies
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- Staunton Creek Equestrian Trail – Scott County



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- Clinch River Watershed – Tazewell, Russell, Wise & Scott Counties
- Russell Prater Creek Blueway – Dickenson & Buchanan Counties
- North Fork Holston River Watershed Blueway – Scott County

## SPEARHEAD TRAILS TRAILS DEVELOPMENT PLAN



### EXECUTIVE SUMMARY

In late 2006/early 2007, a number of local government officials and interested citizens engaged Virginia Tourism Corporation (VTC) staff requesting assistance in determining the level of interest in and, feasibility of, a multi-use trail system within the coalfields, the “Heart of Appalachia Region” of Virginia, aka “far Southwest Virginia (FSWVA).” Per those initial meetings and VTC research, the Hatfield-McCoy Trails System (HM), an off-highway vehicle (OHV) trails venue in neighboring West Virginia, was selected as the base model due to its similar terrain, land ownership patterns and local economy.

Work continued on the initiative through 2007. On March 13, 2008, the Virginia General Assembly passed legislation creating the Southwest Regional Recreation Authority (SRRA), a public corporation and governmental instrumentality with the ability to exercise the public powers of the State. It’s mandate is to establish and maintain “...a system of recreational trails and appurtenant facilities, including trail-head centers, parking areas, camping facilities, picnic areas, recreational areas, historic or cultural interpretive sites, and other facilities...” in the Southwest Regional Recreation Area. To achieve its mandate, SRRA’s stated Mission is to “...create and manage multi-use trails in the Southwest Regional Recreation Area to facilitate, enhance and sustain economic development and job creation in Southwest Virginia.” The initiative is known as *Spearhead Trails – Adventure Playground of the East*.

The Southwest Regional Recreation Area encompasses all jurisdictions within the LENOWISCO and Cumberland Plateau Planning Districts, including Tazewell, Buchanan, Russell, Dickenson, Wise, Scott and Lee Counties, and the City of Norton. This far southwest region of Virginia is most often referred to as “the coalfields.” It is logically defined by its physical features and economic/social factors. A very unique aspect of FSWVA is the large tracts owned by coal, natural gas, timber industries and holding companies. Coupled with state/federal public lands they are the Southwest Regional Recreations Area’s greatest asset. Many of these lands are not currently accessible or available to the public, an under-utilized asset. SRRA’s partnering with the owners of these large tracts provides a unique opportunity to logically define FSWVA as a multi-venue center for adventure tourism – Spearhead Trails.

In 2010, SRRA received funding from the Virginia Tobacco Indemnification and Community Revitalization Commission (TICRC) to prepare an Implementation Plan for Spearhead Trails. It is composed of three (3) documents:

- Volume I: Trails Development Plan (this document)
- Volume II: Economic Impact Assessment
- Volume III: Business Plan

Five (5) tourism venues are addressed by the Implementation Plan:

- Off-highway Vehicles (OHV) – dirt bikes (motorcycles), all-terrain vehicles (ATV) and side-by-sides (ROV), collectively referred to as “OHV.”
- Equestrian
- Hiking
- Mountain Biking

- Blueways – a “water trail” within a river or stream, where the water surfaces are considered “waters of the Commonwealth.” Access points are established along the route to allow for canoeists, kayakers and other non-motorized watercraft to put-in or take-out.

Virtually any trail may be considered a multi-use trail. However, joint use will vary. The proposed multi-use designation for Spearhead Trails venues are as follows:

- OHV – OHV only is preferred. OHV may be used as multi-use with Equine or Mountain Biking; however, it cannot be both.
- Equestrian/Hiking – Equestrian only is preferred. However, Equestrian and Hiking are considered compatible. Although there are Equestrian trails coexisting with Mountain Biking, horse riders are especially concerned with joint use with bikers. Mountain bikers come up fast with little warning, startling the horse and creating a hazard for both the horse and rider. Hikers do not pose a similar threat. To avoid this situation, Mountain Biking is not deemed compatible with Equestrian within the Spearhead Trails system.
- Hiking/Mountain Biking – Both are equally compatible.
- Blueways – Blueways, by their nature tend to be a single use venue.

Each venue of the above venues has unique characteristics that attract specific adventure tourists. Regardless of venue (excluding blueways), there are physical impediments that can negate viability. No trail is planned that must cross a:

- 4-lane Highway
- Railroad, except designated railroad crossings
- Major Waterbody (rivers, lakes, wetlands, etc.)

SRRA’s primary revenue stream will be through the sale of trail use permits. Only the OHV and Equestrian venues provide such an opportunity. Hiking, Mountain Biking and Blueways are in many ways either existing or on public land. As such, they do not provide an opportunity for SRRA to charge a “pay-to-play” fee, necessary to provide for its operation and maintenance (O&M) cost. However, Hiking, Mountain Biking and Blueways will be marketed as a part of *Spearhead Trails – Adventure Playground of the East* through SRRA’s future website. The annual fee for OHV and Equestrian (“bridle tags”) permits are as follows:

<u>OHV</u>		<u>Equestrian</u>	
• Out-of-state	\$50.00	• Out-of-state	\$35.00
• In-state	\$35.00	• In-state	\$35.00

Large tract owners willing to partner with SRRA are the key to trail development. Land owners, acreage and contact information were identified by tax parcel, secured through the Geographic Information Systems (GIS) in each jurisdiction, with the exception of Dickenson and Lee Counties. Lee County does not currently have its GIS established. Ownership information for Lee County was secured through a review of tax records and an adjusted overlay of .pdf tax maps. Dickenson County is in the process of developing accurate tax map data. Data for OHV and Equestrian Trails in Dickenson County was provided by The Forestland Group, LLC, the largest land holder in the County.

In addition to willing landowners, environmental compliance is a key approval for any development, including trails and trailheads. A trail and trailhead specific database review was

performed for each trail system to identify potential areas of environmental compliance. Data for compliance review was secured from relevant online databases of the Virginia Department of Conservation and Recreation (VDCR), United States Fish and Wildlife Service (USFWS), and the Virginia Department of Game and Inland Fisheries. Compliance is for listed federal and state threatened and endangered species only. Species of Concern or Candidate Species do not typically require compliance and were not addressed. Both USFWS and VDGIF do not provide comments on initial requests due to insufficient staffing; all such requests are addressed during the construction plan approval process. Wetlands are under the jurisdiction of the US Army Corps of Engineers and the Virginia Department of Environmental Quality.

The Virginia Department of Historic Resources has primacy for administering Sections 106 and 110 of the National Historic Preservation Act in Virginia. Its mandate is to support the identification, stewardship, and use of Virginia's significant archaeological and historic resources for maximum educational and cultural benefits. River and stream bottoms, caves and potential rock shelters will be the primary area of focus relative to trails and trailheads.

Public sector funders have environmental compliance requirements relative to use of funds. TICRC and the Virginia Coalfield Economic Development Authority (VCEDA) requirements are similar. They have no standard guidelines for the preparation of a standalone Environmental Report or Assessment, as do other state and federal funders. However, capital projects funded by TICRC and VCEDA must comply with applicable Commonwealth of Virginia environmental laws and regulations. Funders such as the Appalachia Regional Commission and VDCR have strict compliance guidelines. Environmental compliance can be addressed after receipt of the grant award from funders, except for VDCR's Recreation Trails Program. Its funds are sourced through the Federal Highway Administration whose requirements take precedence.

Capital project costs provided herein are based on conventional design/bid/build procurement. Actual costs depend on the venue and trail specifics such as soil type, amount and type of rock, difficulty rating, ease of trailhead access, number of bridges and/or culverts, amount of trail hardening, number of signs, and, other related factors. The unit costs applied in generating the opinion of probable cost are generally consistent with construction in the Southwest Regional Recreation Area. They are projected for revenue generating trails only. Volume III: Business Plan utilizes the capital project costs generated in Volume II: Trails Development Plan for trails and trailheads as its cost basis.

OHV and Equestrian trail and trailhead O&M costs will vary. They depend on the venue and the trail specifics as previously cited for construction. The Business Plan utilizes average cost per mile for trails and specific costs for trailheads based on available infrastructure and amenities for OHV and Equestrian only. O&M for non-revenue generating trails are not considered a SRRA obligation. Trail O&M costs have been derived utilizing the 2012 HM budget as the basis. By utilizing a private contractor, SRRA will not incur the full cost of HM. As such, the maintenance of the SRRA OHV and Equestrian trails is projected to be \$475 per mile, approximately 50 percent of the \$950 average HM cost per mile.

After receipt of funding and prior to construction, all Land Use Agreement and required construction and environmental permits must be in-place. These are the next steps in the evolution of *Spearhead Trails – Adventure Playground of the East*. Refer to *Spearhead Trails Implementation Plan Volume III: Business Plan* for proposed funding sources and an implementation schedule for Spearhead Trails. The Trails Development Plan Summary follows.

### Spearhead Trails Summary

Trail Name	Miles	Capital Cost		Annual O&M Cost			
		Trail Cost	TH Cost	Trail Cost	TH Cost	Total Cost	
<b>Off-highway Vehicles</b>							
Haysi-Breaks Interstate Park-Poplar Gap OHV Trail	100	\$ 530,654	\$ 110,916	\$ 641,570	\$ 47,500	\$ 4,200	\$ 51,700
Stone Mountain OHV Trail Phases I & II - Funded	50	\$ 783,830	\$ -	\$ 783,830	\$ 23,750	\$ -	\$ 23,750
Pocahontas OHV Trail Phases I & II - Funded	50	\$ 470,430	\$ -	\$ 470,430	\$ 23,750	\$ 5,500	\$ 29,250
Mountainview/Dante OHV: Ex. Mountainview Rehabilitation	90	\$ 244,663	\$ 58,655	\$ 303,318	\$ 42,750	\$ 4,200	\$ 46,950
Mountainview/Dante OHV: New Dante Trail	40	\$ 222,706	\$ -	\$ 222,706	\$ 19,000	\$ -	\$ 19,000
Stone Mountain OHV Trail Phases III	30	\$ 172,135	\$ 100,115	\$ 272,250	\$ 14,250	\$ 5,700	\$ 19,950
Pocahontas OHV Trail Phases III	40	TBD	\$ 230,430	\$ 230,430	TBD	TBD	\$ -
<b>Totals</b>	<b>400</b>	<b>\$2,424,418</b>	<b>\$ 500,116</b>	<b>\$2,924,534</b>	<b>\$ 171,000</b>	<b>\$ 19,600</b>	<b>\$ 190,600</b>
<b>Equestrian</b>							
Breaks Interstate Park Equestrian Trail	25	\$ 170,361	\$ -	\$ 170,361	\$ 11,875	\$ -	\$ 11,875
High Knob Equestrian Trail	28	\$ 212,459	\$ -	\$ 212,459	\$ 1,330	\$ -	\$ 1,330
Dante Equestrian Trail	25	\$ 171,798	\$ 128,750	\$ 300,548	\$ 11,875	\$ 4,200	\$ 16,075
Scott Co. Horse Assoc. Equestrian Long Distance Trail	1.6	\$ 16,589	\$ -	\$ 16,589	\$ -	\$ -	\$ -
Cavitt's Creek Equestrian Trail	25	\$ 169,269	\$ 381,474	\$ 550,743	\$ 11,875	\$ 5,500	\$ 17,375
Scott Co. Horse Assoc. Gentle Ride Equestrian Trail	8	\$ 40,885	\$ -	\$ 40,885	\$ -	\$ -	\$ -
Stanton Creek Equestrian Trail	25	\$ 156,371	\$ 124,704	\$ 281,075	\$ 11,875	\$ 4,200	\$ 16,075
Keene Mountain Equestrian Trail	25	\$ 158,728	\$ 133,300	\$ 292,028	\$ 11,875	\$ 4,200	\$ 16,075
Deep Springs Equestrian Trail	28	\$ 208,959	\$ 121,850	\$ 330,809	\$ 13,300	\$ 4,200	\$ 17,500
<b>Totals</b>	<b>191</b>	<b>\$1,305,419</b>	<b>\$ 890,078</b>	<b>\$2,195,497</b>	<b>\$ 74,005</b>	<b>\$ 22,300</b>	<b>\$ 96,305</b>
<b>Hiking</b>							
Crane's Nest Hiking, Biking & Equestrian Trail - Funded	26	\$1,146,031	NA	\$1,146,031	NA	NA	\$ -
Haysi to Breaks Interstate Park Hiking Trail - Funded	12	\$ 933,600	NA	\$ 933,600	NA	NA	\$ -
Dante Loop Hiking Trail	8	NA	NA	\$ -	NA	NA	\$ -
Haysi to Vacey Hiking Trail	8	NA	NA	\$ -	NA	NA	\$ -
<b>Totals</b>	<b>54</b>	<b>\$2,079,631</b>	<b>\$ -</b>	<b>\$2,079,631</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Mountain Biking</b>							
High Knob Mountain Biking Trail	20	NA	NA	\$ -	NA	NA	\$ -
Coeburn Mountain Biking Trail	30	NA	NA	\$ -	NA	NA	\$ -
Ratliff Property Mountain Biking Trail	20	NA	NA	\$ -	NA	NA	\$ -
Keene Mountain Mountain Biking Trail	41	NA	NA	\$ -	NA	NA	\$ -
<b>Totals</b>	<b>111</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Blueways</b>							
John Flannagan-Russell Fork Blueway	5	NA	NA	\$ -	NA	NA	\$ -
Pound River Blueway	8	NA	NA	\$ -	NA	NA	\$ -
Powell River Blueway	48	NA	NA	\$ -	NA	NA	\$ -
Clinch River Blueway System	128	NA	NA	\$ -	NA	NA	\$ -
Russell Prater Creek Blueway	8	NA	NA	\$ -	NA	NA	\$ -
North Fork Holston River Blueway System	40	NA	NA	\$ -	NA	NA	\$ -
<b>Totals</b>	<b>224</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

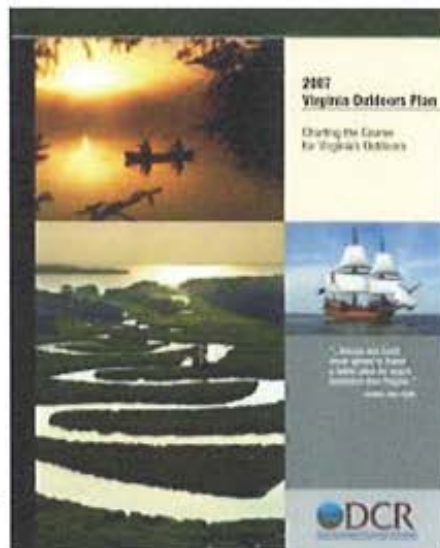
## 1.0 Introduction

### 1.1 History & Background

In late 2006/early 2007, a number of local government officials and interested citizens engaged Virginia Tourism Corporation (VTC) staff requesting assistance in determining the level of interest in and, feasibility of, a multi-use trail system within the coalfields/Heart of Appalachia Region of Virginia, aka “far Southwest Virginia (FSWVA).” Per those initial meetings and VTC research, the Hatfield-McCoy Trails System (HM), an off-highway vehicle (OHV) trails venue in neighboring West Virginia, was selected as the base model due to its similar terrain, land ownership patterns and local economy.

Also, in 2007, the *Virginia Outdoors Plan* was developed by Virginia Department of Conservation and Recreation (VDCR). It is the Commonwealth’s official comprehensive planning document regarding land conservation, outdoor recreation and open space planning. The *Virginia Outdoors Plan* strongly supports the Spearhead Trails concept:

*“...Motorized trails for All Terrain Vehicles (ATV’s) and dirt bikes are popular recreational resources. In West Virginia, proponents have developed the Hatfield and McCoy Trail by linking abandoned railroads, management roads on private timber and mineral lands, and other trails into a comprehensive system of ATV trails. Visitors from throughout the region are attracted to the hundreds of miles of the Hatfield and McCoy trails system, bringing much needed tourism to areas of the state that have few other revenue sources. Consideration should be given to identifying lands suitable for a similar trail system in Virginia...”*



On September 5, 2007, VTC arranged a stakeholder meeting to assess interest in the concept and discuss economic growth opportunities similar to those realized by HM communities. The first meeting with key regional representatives confirmed strong interest in the concept. VTC Partnership Alliance Marketing personnel worked with local government throughout the LENOWISCO and Cumberland Plateau Planning Districts (PDC), facilitating numerous regional public meetings. The meetings further confirmed strong interest and support for developing a regional multi-use

trail system for adventure tourists in the coal-bearing counties of FSWVA. The outgrowth of the meetings was the creation of a multi-use trail system steering committee and soliciting the support of Virginia legislators representing FSWVA.

The Southwest Regional Recreation Area was identified by local stakeholders and VTC as the counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, Wise and the City of Norton is based on an effective utilization of existing natural assets, land ownership patterns, similar economic and social needs, and a strong desire to better the region by creating a new economic model of sustainable diversification. VTC and the PDCs were actively involved and supportive of the initial efforts of the Spearhead Trails concept. Public meetings, often including county administrators and board of supervisor members were lead by these agencies staff. They also assisted in identifying related opportunities; assessing interest levels/commitment; identifying assets available within each County; and, how each compliment regional synergy. The volunteer, grassroots investment and commitment of local leaders resulted in the Virginia General Assembly creating the Southwest Regional Recreation Authority (SRRA) in March 2008 and formally defining Virginia's far Southwest as the Southwest Regional Recreation Area.

## 1.2 Southwest Regional Recreation Authority

On March 13, 2008, the Virginia General Assembly passed legislation creating the Southwest Regional Recreation Authority (SRRA), a public corporation and governmental instrumentality with the ability to exercise the public powers of the State. Its mandate is to establish and maintain *"...a system of recreational trails and appurtenant facilities, including trail-head centers, parking areas, camping facilities, picnic areas, recreational areas, historic or cultural interpretive sites, and other facilities..."* in the Southwest Regional Recreation Area. SRRA serves and supports all

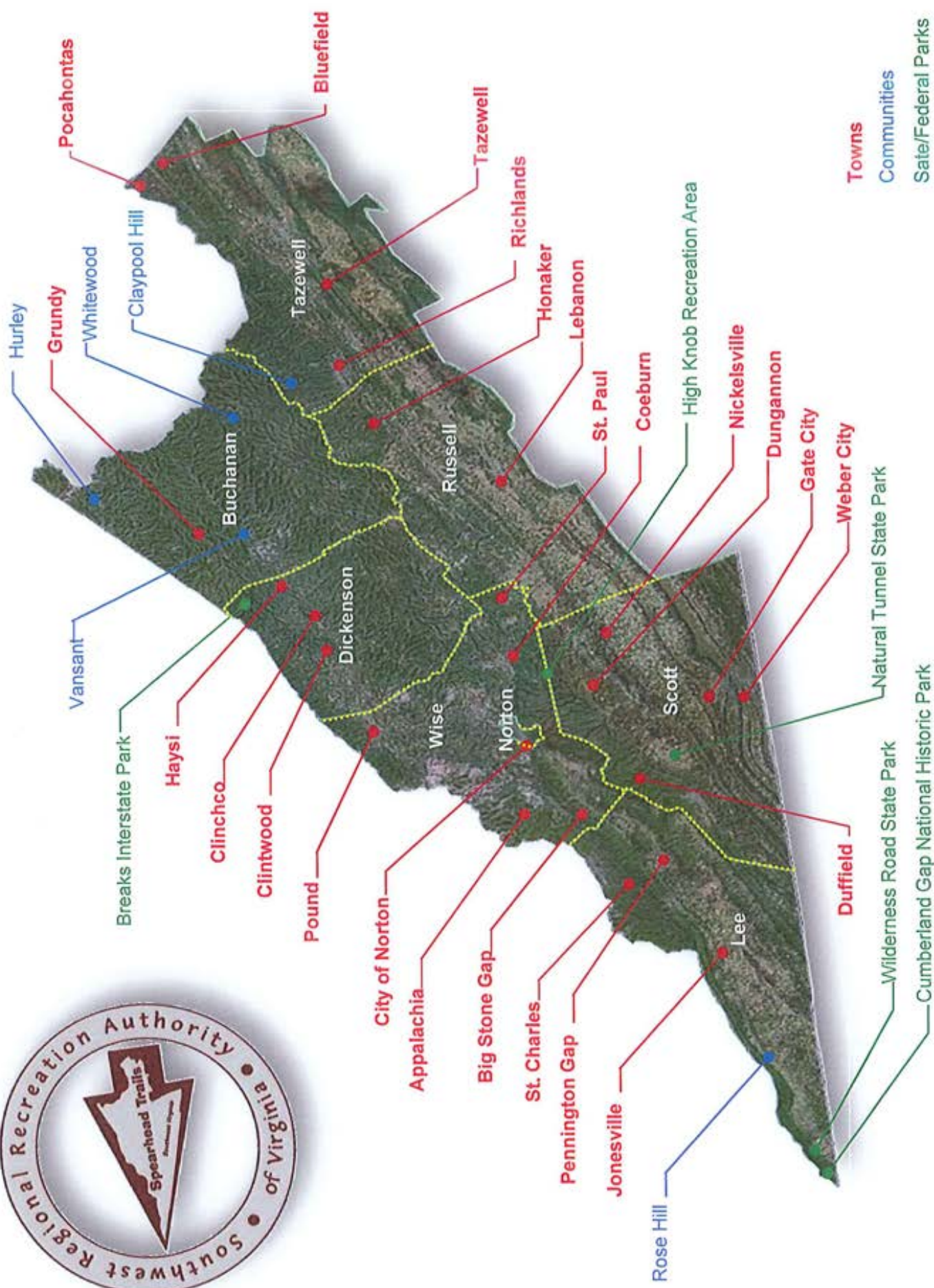


jurisdictions within the LENOWISCO and Cumberland Plateau PDCs, encompassing the counties of Tazewell, Buchanan, Russell, Dickenson, Wise, Scott and Lee and the City of Norton. Refer to Appendix A: SRRA Charter for the enabling legislation.

SRRA's stated Mission is to *"...create and manage multi-use trails in the Southwest Regional Recreation Area to facilitate, enhance and sustain economic development and job creation in Southwest Virginia."* The initiative is known as Spearhead Trails. Achieving the intent of its Charter and implementing its Mission will be accomplished through the development of an international recreational multi-use trail destination serving adventure tourists throughout the Eastern United States and beyond. The vision of SRRA for Spearhead Trails is to:

- Utilize and protect Virginia's natural assets, mountains, rivers, forests, vistas and local culture to create safe outdoor adventure opportunities, enhancing visitor experience;
- Develop a mutually beneficial relationship with all partners (including governments, landowners, local entrepreneurs, and other stakeholders);
- Serve as a catalyst to create an environment for diversified and sustainable local jobs;
- Raise the quality of life for all citizens in FSWVA; and,
- Generate additional revenues and taxes to support local and State government.

Spearhead Trails will be a major economic resource for FSWVA and the Commonwealth.



**Towns**  
**Communities**  
**State/Federal Parks**



### 1.3 Natural & Infrastructure Assets

The far southwest region of Virginia, the SRRA area of responsibility, is most often referred to as “the coalfields.” This corner of Virginia is logically defined by various physical features and economic/social factors. They include, however are not limited to, its:

- Demonstrated strength of regional partnerships and, on a state level, VTC state recognition of the region as “Heart of Appalachia.”
- Physiographic Provinces, the basis of its abundant natural beauty and natural resources, the underpinning for economic diversification;
- Large tract landowner patterns, coal, natural gas, forest landowners, state/federal public lands and others;
- System of 4-lane highways linking all SWVA jurisdictions to the East Coast market of the United States, where over one-half of the nation’s population resides.
- Contiguous to the states of WV, KY and TN with existing trail systems; and,
- Related infrastructure and socioeconomic patterns and metrics.



A very unique aspect of the Spearhead Trails initiative is the large tracts owned by coal, natural gas, timber industries and holding companies. At times considered an impediment, they are the Southwest Regional Recreations Area’s greatest asset. Many of these private lands are not currently accessible or available to the public, an under-utilized asset. However, partnering with the owners of these large tracts provides a unique opportunity to logically define FSWVA as a multi-venue center for adventure tourism.

### 2.0 SRRA Trail Use Permits

SRRA’s primary revenue stream will be through the sale of trail use permits. Only the OHV and Equestrian venues provide such an opportunity. As Hiking, Mountain Biking and Blueways are in many ways either existing or on public lands and do not provide an opportunity charge a “pay-to-play” fee.

The Commonwealth of Virginia, under Virginia Code § 29.1-509. (Effective January 1, 2008), provides landowner protection from duty of care and liability for damages to hunters, fishermen, sightseers, etc. The following language is excerpted from Code §29.1-509:

*"Fee" means any payment or payments of money to a landowner for use of the premises or in order to engage in any activity described in subsections B and C of this section, but does not include rentals or similar fees received by a landowner from governmental sources or payments received by a landowner from incidental sales of forest products to an individual for his personal use, or any action taken by another to improve the land or access to the land for the purposes set forth in subsections B and C of this section or remedying damage caused by such uses. "Land" or "premises" means real property, whether rural or urban, waters, boats, private ways, natural growth, trees and any building or structure which might be located on such real property,*

*waters, boats, private ways and natural growth.* Refer to Appendix B: Landowner Protection Legislation Excerpts for additional information and Section 5.1 relative to SRRA's liability insurance.

## **2.1 OHV Permits**

Active trail riding generally occurs from early March through the end of November, with limited use during the winter months. OHV trail use permits are to be purchased annually allowing the rider to utilize any OHV trail within the Spearhead Trails system. Permits are adhered to the rider's helmet and are not transferable for use on Equestrian trails. SRRA will permit the rider, not the machine, similar to a hunting or fishing license in Virginia.

The annual cost for an OHV permit is:

- Out-of-state \$50.00
- In-state \$35.00

SRRA is in the process of establishing its Policies & Procedures for OHV trail riders, utilizing HM as its initial basis. The HM Policies & Procedures require:

- The rider must have a SRRA OHV trails permit.
- A rider of reasonable age is allowed on the HM system. Riders who are too young to have a driver's license must be accompanied by an adult, riding machines that are size/age appropriate based on manufacturers recommendations.
- All riders shall wear DOT approved helmets.
- All OHV vehicles shall have spark arrestors.
- All riders shall wear a minimum of ankle-high boots, gloves and eye protection.

As the Spearhead Trails OHV Policies & Procedures are developed, additional requirements may be added. It is recommended SRRA follow manufacturers' safety guidelines as stated in their manuals or on the vehicle as the initial basis of its OHV Policies & Procedures development.

## **2.2 Equestrian Bridle Permits**

Active Equestrian trail riding generally follows that of OHV, from early March through the end of November, with limited riding in the winter months. Equestrian riders will use a "bridle tag" permit. It will be purchased annually allowing the rider to utilize any Equestrian trail within the Spearhead Trails system. As the name suggests, bridle tags are attached to the horse's bridle, permitting the rider, not the horse. Equestrian bridle tag permits are not transferable for use on OHV trails.

The annual cost for an Equestrian bridle tag permit is:

- Out-of-state \$35.00
- In-state \$35.00

These fees only apply to riders on SRRA operated and maintained trails. Riders on other private or public lands will have to follow applicable requirements of the landowner.

SRRA has not yet initiated its Policies & Procedures process for Equestrian. However, the following are suggestions and/or considerations when developing such for Equestrian riders:

- Federal and state law requires each rider have on their person or reasonably at-hand a current copy of the animal's Negative Coggins Test, and a current State Health Certificate.
- The rider must have a SRRA Equestrian trails permit and display the permit on the horse they are riding.
- Requiring riders to wear a helmet. In general, helmets are recommended for any rider under the age of 18. However, this should not be considered a requirement as it is not state law nor known to be a requirement at other public Equestrian trail systems.
- Ride at own risk on marked trails only.
- Practice "Leave no Trace" ethics
- Never tie horses to trees.
- No alcohol or drugs.

### **3.0 Venue Primer**

#### **3.1 Introduction**

For a trail use area to become a trail system, there are several essential attributes to ready it for commercial use. Trail riders in general, whether OHV, Equestrian or Mountain Bike riders, are not looking for a single route that goes to a destination only to turn around and travel that same route back. Trails are unlike highway systems with the purpose of getting from point A to point B. The allure of a trail system is the adventure between point A and point B. Furthermore, there does not necessarily have to be a point B.

Trail users will be from FSWVA and outside of the region. FSWVA trail users, especially OHV and Equestrian, tend to be comfortable on linear trails, as that is the type of trail they are used to riding, as they may live nearby and are familiar with the area. Those from outside the region tend to use the trailhead as a "base camp," parking their vehicles, enjoying the trail and returning to a safe and secure location. SRRA venues are planned to meet the needs and desires of riders, hikers, mountain bikers and watercraft users from outside the Southwest Regional Recreation Area. These tourists are the basis of the new economies to be generated by Spearhead Trails.

As trail users prefer not to travel the same routes, it is essential to provide several different trail options within a system. (Each trail is considered a "system" in and of itself.) The preferred method is to create trail loops with varying degrees of difficulty to provide all users and skill levels the adventure they seek.

OHV, Equestrian and Mountain Biking enthusiasts are often the best stewards of their trail respective systems. Basic maintenance of these trails may rely heavily on the participation of these groups in removing fallen branches and debris that may temporarily block a trail. Training courses should be provided to all who maintain the trail to learn the proper methods and safety procedures to trim vegetation and dispose of organic material in a manner acceptable to the landowner and SRRA.

Each venue has unique characteristics that attract specific adventure tourists. However, regardless of venue (excluding blueways), there are physical impediments that can negate viability.

No trail is planned that must cross any of the following:

- 4-lane Highway
- Railroad, except designated railroad crossings
- Major Waterbody (rivers, lakes, wetlands, etc.)

### 3.2 Public Access & OHV-friendly Towns

#### 3.2.1 Virginia General Assembly Legislation

During its 2009 Session, the Virginia General Assembly passed legislation for the operation of Off-road Recreational Vehicles (OHV's) in localities within the SRRA operations area for those localities that chose to adopt a local ordinance. The salient provisions of the legislation are as follows:

- A maximum speed limit of 25 miles per hour.
- Travel a distance of not more than 5 miles from its boundaries.
- Virginia Department of Transportation (VDOT) approved signage shall be prominently displayed warning motorists of OHV's operating on the highway.
- Riders may only be on the right-of-way during daylight hours.
- Riders must obey the same rules of the road as other motorists.
- Riders shall wear helmets approved by the Virginia State Police Superintendent.
- Riders shall be licensed or accompanied by a licensed driver who is riding within a prudent distance.
- Operating Off-road Recreational Vehicles shall be subject to the issuance of a permit by SRRA.

Refer to Appendix C: Recreational Off-road Vehicle Legislation for additional information.

VDOT's interpretation of the legislation is as follows:

*"§ 46.2-800.2 stipulates that the governing body of any county, city, or town embraced by the Southwest Regional Recreation Authority may by ordinance authorize the operation of any off-road recreational vehicles on highways within its boundaries that have a maximum speed limit of no more than 25 miles per hour and for a distance of no more than five miles on any highway within its boundaries that has a maximum speed limit of more than 25 miles per hour. In addition it requires any such ordinance to define "off-road recreational vehicle." The speed limit restrictions minimize the number of affected state maintained highways since most speed limits on rural secondary roads are not posted and therefore exceed the 25 mph maximum posted speed limit to allow the operation of "off-road recreational vehicles".*" In addition, signage must be designed by VDOT Traffic and Safety.

#### 3.2.2 OHV-friendly Towns

To date, three (3) towns within the Spearhead Trails operations area have passed OHV-friendly ordinances: Pocahontas, Appalachia and St. Paul. The Towns of Haysi and Pennington Gap have held discussions relative to enacting similar ordinances. Ordinances vary from town to town. Some allow access on all Town streets and others restrict access to certain streets or areas.

Towns with ordinances that are connected to the trail system do not require a trailhead within town limits. Access is provided via a “community connector” from the trail. It affords riders access to lodging, food, fuel and other amenities in the town from the trail. It also allows riders that are lodging in other areas or parked at the main trailhead to access the town.

Note: Although none are currently proposed, there are towns elsewhere that choose to be equine-friendly.

### 3.2.3 Buchanan County Roads

The Buchanan Board of Supervisors recently passed an ordinance allowing all County-owned/maintained roads to be used by OHV riders. Where County roads intersect VDOT right-of-way, the General Assembly legislation takes precedence.

### 3.3 **Off-highway Vehicle Trails**

A true world-class multi-use trail system has elements built in for every user group and experience level. The OHV’s considered for the Trails Development Plan are dirt bikes (motorcycles), all-terrain vehicles (ATV) and side-by-sides (ROV), collectively referred to as “OHV.” OHV trail planning takes into consideration that the trail will be used by every age, skill level of recreationalist, and varied interests. To meet diverse adventure needs and skill levels, a loop system is required.

There should be three (3) primary difficulty levels of trail incorporated in an OHV trail system, “easiest,” “more difficult” and “most difficult.” Note: These levels are all relative to the terrain and the classification is trail-specific. A trail is termed “easiest” for that particular trail system. However, a similar trail on a system with gentler terrain may be designated “more difficult.”



OHV systems are designed so that the rider can leave the trailhead area on an easiest trail and graduate to the rider’s skill level or desired level of difficulty. Every Green (easiest) trail connects to another Green trail. Every Blue (more difficult trail) connects to a Green trail. Every Black (most difficult trail) connects to a Blue or Green trail. An Orange (dirt bike/single track trail) can connect to any other type of trail.

General OHV loop trail design guidelines are:

- Trail Miles – 75 to 125 miles to attract riders from outside of the region to Spearhead Trails and create an OHV destination. Approximately 4,000 acres of land with suitable mass, configuration and topography is generally required.

A component of OHV trail miles is the Community Connector. A Community Connector is a segment of trail, with or without loops, allowing the rider to access another trail, an OHV-friendly town or other destination from a remote trailhead or other destination.

- Green Trails – The Green trails are the easiest trails and may be ridden by every skill level from beginner to expert. They are generally 8 feet wide, with longer sight lines and a lesser grade.
- Blue Trails – Blue trails are for the more experienced rider. They are generally narrower than Green trails, 4 to 8 feet wide. The sight lines are shorter and there are occasional steeper elevation changes.
- Black Trails – Black trails are designed for very experienced riders. Black trails have short sight lines and steeper elevation changes. Much of the natural terrain and obstacles are left intact. They are very narrow, even for an ATV. Since these trails are so narrow, with limited sight lines, it is recommended ROV's be restricted from using Black trails.
- Orange Trails – Orange trails are restricted to dirt bike use only. They are single track trails, 24 to 36 inches wide using natural benches along the mountain sides. Virtually all existing natural terrain and obstacles are left intact.

For an OHV trail system to yield its highest potential, OHV trails, existing or constructed, need be planned with guideline percentages of the total miles of the particular trail. The target OHV mileage percentages for Spearhead Trails are:

- Easiest: Green Trails – 50 percent;
- More Difficult: Blue Trails – 30 percent;
- Most Difficult: Black Trails – 10 percent; and,
- Limited Access: Orange Trails – 10 percent.

Developing trails using these guidelines will result in the highest potential for continued use by attracting OHV riders from outside of FSWVA.

### 3.4 Equestrian Trails

Principles similar to OHV are used in the construction of Equestrian trail systems. The major difference between OHV trails and Equestrian is the width of the Equestrian trail is narrower. To meet the varying adventure needs and skill levels, a loop system is required to attract Equestrian riders from outside of the region.

Horses and their riders prefer natural surfaces over hard, paved or loose trail surfaces for stability and hoof protection. Stabilized dirt is the ideal substrate. A 5 foot wide tread with a 10-foot vertical clearance provides suitable conditions for trail riding. Consideration may be made to have some trails wider to accommodate wagons, a venue variant gaining in popularity. Stumps, branches and other debris should be cleared from the trail to prevent injuries to horses and riders.



Transporting horses is costly and time-consuming. Riders tend not to drive distances to ride if only a few miles of Equestrian trail exist. Horse enthusiasts often come to an area and plan to stay two (2) or three (3) days. As such, a variety of trail systems with 25 miles or more per system having 75 miles or more within the Spearhead Trails Equestrian trail offerings is recommended at the outset.

General Equestrian trail loop design guidelines are:

- Trail Miles – 25 to 45 miles to attract riders from outside of the region to Spearhead Trails and create an Equestrian destination. Approximately 1,000 acres of land with suitable mass, configuration and topography is generally required.
- Green Trails – The Green trails are the easiest trails available. They are generally over 8 feet wide, with longer sight lines and a lesser grade. These trails may be ridden by every skill level from beginner to expert.
- Blue Trails – Blue trails are for the more experienced rider. They are generally narrower than Green trails, 4 to 8 feet wide. The sight lines are shorter and there are occasional steeper elevation changes.
- Black Trails – Black trails are designed for very experienced riders. They have short sight lines and steeper elevation changes. Some of the natural terrain and obstacles are left intact. Trails are very narrow.

For an Equestrian trail system to yield its highest potential, OHV existing and/or constructed trails need be planned with guideline percentages of the total miles of the particular trail. The target Equestrian percentages for Spearhead Trails are:

- Easiest: Green Trails – 50 percent;
- More Difficult: Blue Trails – 30 percent; and,
- Most Difficult: Black Trails – 20 percent;

Developing trails using these guidelines will result in the highest potential for continued use by attracting Equestrian riders from out of FSWVA.

#### 3.4.1 Endurance Rides

Endurance rides are events, not normal day-to-day activities. They are typically 25 to 100 miles per ride, with trail loops back to required check areas or access to away checks. Looped systems, depending on mileage of the event, are between 10 and 25 miles long. Each rig will set up their own portable corrals, approximately 20 feet by 20 feet, per horse. As such, endurance riders need a large field for camping and staging, with most endurance events requiring 10 or more acres. Additional required services include water and portable toilets.

#### 3.4.2 Pleasure Riding

Pleasure riding, local and/or long distance can challenge both the rider and horse over several trail types and miles. Within the Spearhead Trail System there are limited trails identified for the long distant enthusiast. Per Section 3.0, SRRA's focus will be looped trails, as opposed to these trails.

Long distance trails will be on National Forest or other public lands and not a SRRA system. Most trails on public lands tend not to be looped trails, requiring the rider to travel back the way they came which is not the preference of most riders. The majority are also multi-use trails that are very short in length. However, the Spearhead Trails venues may access these trails as a part of a larger offering of Equestrian trails. Refer to Section 11.9 for those identified in the 2009 Comprehensive Plan.

Non-competitive distance trails require “rest” stations every 10 to 20 miles. Riders should have access to return trails along each route so a ride may be varied from a few hours to a day depending on the rider’s preference. (Note: A day’s ride is generally considered 6 to 8 hours or approximately 15 miles.) Trailheads should be provided at either end of the trail to accommodate horse trailers. These trail systems may also be accessed by private livery and guide services which could include the purchase price of a bridle permit in their fees, creating economic opportunities for entrepreneurs to access the casual rider market.

### **3.5 Hiking Trails**

#### **3.5.1 Greenways**

Greenways and shared-use trails are typically 10 feet wide with two (2 foot gravel shoulders on either side of the trail. These trails may be constructed of concrete, asphalt, cinder, mulch or similar material. (Design guidelines can be found in the Federal Highway Administration manual *Designing Sidewalks and Trails for Access* and other similar documents.) Ten percent over short distances is typically the maximum grade, up to a 5 percent grade the maximum grade to achieve Americans with Disability Act (ADA) compliance; grades in excess of 5 percent require landings at pre-determined spacings. Many Greenways are located within towns and local communities and are not to be considered as a trail for SRRA to operate and maintain. However, they do compliment the Spearhead Trails initiative.

#### **3.5.2 Hiking & Multi-use Trails**

There are over 250 miles of hiking trails in the seven (7) county Southwest Regional Recreation Area. They are located primarily in the George Washington and Jefferson National Forests, Cumberland Gap National Historical Park, the Breaks Interstate Park, and Virginia’s Natural Tunnel and Wilderness Road State Parks. By combining all hiking, mountain biking and other multi-use non-motorized trails within the Southwest Regional Recreational Area, existing trail miles approach 400. Refer to Section 11.9 for additional information.



### **3.6 Mountain Biking Trails**

Principles similar to OHV may be applied to the design and construction of Mountain Biking trail systems. The primary difference between OHV and Mountain Biking is the width of the trail for mountain bikes is narrower.



Preferred Mountain Bike trails are unsurfaced, one-way loop systems on natural soil with a maximum grade of up to 25 percent, offering a variety of trail difficulty. General Mountain Biking trail design guidelines are:

- **Trail Miles** – 15 to 40 miles to attract riders from outside of the region to Spearhead Trails and create a Mountain Biking destination. Land with suitable mass, configuration and topography of encompassing 800 to 1,200 contiguous acres is generally required.
- **Green Trails** – Green trails (easiest) tend to have an average tread width of 2 to 3 feet with a 4 to 5 foot clearing width. A minimum 8 foot vertical clearance with a 10 percent grade over a 100 foot run allows novice riders to feel comfortable on these trails.
- **Blue Trails** – The distance of the route for Blue trails (more difficult) tends to be longer with greater slopes of up to 22 percent for 50 feet or more and a 6 foot curve radius. Obstacles should be no taller than 4 inches (maximum).
- **Black Trails** – Black trails (most difficult) tend to have tighter trail tread width of 12 to 18 inch tread, a maximum grade of 25 percent over a 300 foot run and a maximum sustained grade of up to 15 percent. Curve radii are generally 4 feet curve radius and trail obstacles up to 12 inches tall results in a much more challenging trail.



These guidelines may vary significantly depending on the terrain to be developed for Mountain Bike trails; however, provide a fairly simple “rule-of-thumb” in differentiating between the three (3) levels of trails.

### 3.7 Blueways

A blueway is a “water trail” within a river or stream that has been evaluated and found to be navigable. The water surfaces are considered “waters of the Commonwealth.” As such, there is no “trail” development *per se*. Access points are established along the route to allow for boaters (canoeist, kayakers and other non-motorized watercraft) to put-in or take-out their watercraft at designated locations. A formal or official public access tends to have a designated parking area and a ramp into the water. An informal or unofficial public access is often found below bridges in the public domain of VDOT. There are also private accesses which require the boater to obtain permission from the landowner to put-in or take out one’s watercraft.



Under normal flow conditions, the non-motorized boater travels approximately one (1) mile every two (2) hours. In times of high water, when rivers and streams are moving faster and most obstacles are beneath the surface, trips may take much less time. During periods of low water levels, blueway enthusiasts may be required to portage sections of a river or stream. Four (4) to six (6) hours on the water is a typical day trip; however, enthusiasts enjoy varying travel times. Providing take-outs with camping facilities at strategic locations along the route will encourage boaters to stay two (2) or more days on the river.

Rivers and streams are classified according to the difficulty of a stream to navigate.

- Class I: Easy – Characterized by flat water, slow current and few, if any, obstacles to navigate around.
- Class II: Moderate – Characterized by moving water, low waves, and small rapids. Basic training is recommended to navigate this river classification, as it is characterized by faster currents and a few minor rapids and obstacles to be maneuvered through.
- Class III: Moderately Difficult – Characterized by whitewater. Rapids in this classification change continually with greater current which requires skilled maneuvering and more experienced paddling skills.
- Class IV: Difficult – Characterized by violent whitewater which requires a definite route be navigated and crafts specifically designed for whitewater. Aside from experienced paddling skills, boating maneuvers are also essential when navigating this river classification. Violent currents and large rapids can make for dangerous swims in the event a paddler ends up in the river.
- Class V: Extremely Difficult – Characterized by intense, violent rapids that require a definite route be navigated. Suitable for highly skilled paddlers with watercraft that is specially designed for whitewater.
- Class VI: Extraordinarily Difficult – Characterized by intense, violent, high volume whitewater that is a definite threat to life. Few people attempt to paddle this water classification since this poses extreme threat to life. If one decides to attempt Class VI rapids, perfect conditions are mandatory.

There are a numbers of established blueways in the Southwest Regional Recreation Area. The Clinch River begins in Tazewell County, flowing through Russell, Wise and Scott Counties. It is primarily classified as Class I or Class II, ideal for families and novice boaters. However, there are some Class III levels in sections or on connecting rivers for the more skilled canoeist or kayaker. Russell Prater Creek is Class II – III. The Pound River and the lower section of the Powell are generally considered Class I – II. During high flow from heavier rainfall events, sections of these streams can become Class III or higher due to the volume of the water. Sections of the Russell Fork River are only navigable when the US Army Corps of Engineers (USACE) has planned water releases which create Class III, IV, and V level rapids. The Russell Fork River is known as a world class whitewater river run four (4) weekends out of the year when the water is released from the John Flanagan Reservoir.

### 3.8 Trailheads & Horse Camps

#### 3.8.1 Trailheads

There are a number of possible trailhead types, depending on services offered. The following identifies those available for consideration in the Trails Development Plan.

- Trailhead Only – Provides basic parking. For OHV and Equestrian, approximately two (2) acres is proposed. For Hiking, Mountain Biking and Blueways, approximately one (1) acre sites are considered suitable. VDOT No. 21 stone will serve as the base for the parking areas and access roads (if needed). There are minimal amenities, a kiosk, message board, signage, and trash receptacles for OHV and Equestrian. Hiking, Mountain Biking and Blueways may have added amenities, benches and picnic tables.
- Trailhead with Restrooms – The Trailhead with Restrooms encompasses the same areas and amenities as noted in Trailhead Only, with the addition of sanitary facilities. A marginal distance is provided to construct potable water service and sewer discharge to a public system. However, should water or sanitary sewer not be available within a reasonable distance, no potable water will be provided and wastewater will be collected and disposed via a portable toilets service provider. For those trailheads with available potable water and sanitary sewer, facilities for both women and men, with two (2) lavatories and two (2) sinks are proposed. In addition, power may be provided to light the restroom.
- Trailhead with Permit Booth and Restrooms – The facilities provided are the same as Trailhead with Restrooms, with the addition of a 10 foot x 12 foot permit booth with limited casework.
- Trailhead with Office/Retail and Restrooms – The facilities provided are the same as Trailhead with Restrooms, with the addition of a 10 foot x 12 foot area for permits with 10 foot x 12 foot storage and 20 foot by 25 foot retail area.

Trailhead and blueway put-in/take-outs may generally be planned as follows:

Type	OHV	Equestrian	Hiking	Mt. Biking	Blueway PI/TO
Trailhead Only	•	•	•	•	•
w/ Restrooms	•	•	•	•	•
w/ Restrooms & Permit Booth	•	---	---	---	---
w/ Office/Retail & Restrooms	•	---	---	---	---

At this time, there are no trailheads or blueway put-in/take-outs planned for the non-revenue generating trails, Hiking, Mountain Biking and Blueways. Trailheads Only and Trailheads with Restrooms are the only types considered in *Volume I: Trails Development Plan* for SRRA's revenue generating venues, OHV and Equestrian. The Project Sheet developed for each trail (Tabs 2 through 7) specifies the trailhead type considered.

#### 3.8.2 Horse Camps

SRRA is not currently planning to develop Horse Camps. This is an opportunity for local entrepreneurs and organizations, i.e. the Scott County Horse Association (refer to Tab 3) to develop the infrastructure and garner the economic benefit.

### 3.9 Multi-venue Trails

Virtually any trail may be considered a multi-use trail. However, joint use will vary. The proposed multi-use designation for Spearhead Trails venues are as follows:

- OHV – OHV only is preferred. OHV may be used as multi-use with Equine or Mountain Biking. However, it cannot be both.
- Equestrian/Hiking – Equestrian only is preferred. However, Equestrian and Hiking are considered compatible. Although there are Equestrian trails coexisting with Mountain Biking, horse riders are especially concerned with joint use with bikers. Mountain bikers come up fast with little warning, startling the horse and creating a hazard for both the horse and rider. To avoid this situation, Mountain Biking is not deemed compatible with Equestrian within the Spearhead Trails system. Hikers do not pose a similar threat.
- Hiking/Mountain Biking – Both are equally compatible.
- Blueways – Blueways, by their nature tend to be a single use venue. However, fishing can take full advantage of this natural resource to expand its use (refer to Section 3.10.4).

### 3.10 Other Outdoor Enthusiast Destinations

The following venues may be considered value-added destinations within the Spearhead Trails system. As with Hiking, Mountain Biking and Blueways, they do not generate direct revenue for SRRA. However, they bring an awareness of FSWVA and the attendant benefit to local economies. In addition, they may create the desire to participate in those venues that do generate SRRA income.

#### 3.10.1 Birding & Wildlife Trails

Numerous bird and wildlife observation trails exist in the Spearhead Trails region. Refer to Section 11.9 for a partial listing of existing Hiking, Mountain Biking and other Multi-use Trails, including Birding and Wildlife Trails.

#### 3.10.2 Rock Climbing

Rock climbing is termed “free” climbing, climbing only on the rock, itself, and not pulling up on “gear.” “Gear,” also known as “protection,” is designed to arrest a fall, should the leader slip.

The primary categories for rock climbing enthusiasts are as follows:

- Traditional Rock Climbing – Modern Traditional climbing typically employs the ethic of “clean” climbing, which uses reusable gear, instead of the hammered-in pitons and the like, used almost exclusively, in the past. The lead climber places gear in cracks, pockets, and other weaknesses in a rock face. In clean climbing practice, once the leader reaches the cliff-top, or a suitable belay point along his/her route, they anchor themselves belay the “second”, who removes the gear, on the way up to the leader’s position. This practice allows the team to climb many “pitches” (rope-lengths), without carrying extra gear. In addition, it “leaves not trace” of the vertical travel. Traditional rock climbs or, “routes,” may be any length, from very short to thousands of vertical feet. In FSWVA, this category typically requires a 20 to 200 foot vertical face, offering numerous difficulty opportunities to test skill levels.

- Sport Climbing – Sport Climbers follow specific routes with permanently affixed gear (“hangers”) for the ascent. Holes are drilled into the rock and anchors permanently attached. Spacings may be 4 or 5 feet apart or greater, allowing the climber to “clip-in” to each hanger during the ascent. Routes are generally 100 feet vertical or less.
- Top-roping – Top-roping is as the name implies. The rope is fixed to an anchor point (rock, tree, or gear anchor) at the top of the rock face or cliff. Top-ropers then belay to be base below. Generally not exceeding 100 vertical feet.
- Bouldering – Over the last few years, Bouldering may have become the most popular discipline in climbing. It is much less expensive, as it does not require the purchase of a rope and a large selection of gear. All that is required are climbing shoes, chalk and a bouldering pad, or “crash pad”. Bouldering is the practice of climbing short “problems”, relatively close to the ground, using the padded landing zone as the protection from injury. It is the most power intensive type of climbing and has become a very popular way for climbers of all disciplines to build power. The vertical requirement is a boulder or rock with a 10 to 15 foot high.



The limestone and sandstone geology and relief of FSWVA offers many miles of cliff-line, well suited for rock climbing and an opportunity for multiple rock climbing destination. It is an underutilized resource. The rock quality runs from compact, extremely hard limestone and sandstone, to very friable sandstone. Although some soft rock is found, higher quality rock is plentiful. Several areas have existing, developed routes, with many opportunities for first ascentionists. Tazewell, Russell and Lee Counties offer excellent opportunities for Traditional, Sport and Top-roping. In addition, there are identified Traditional routes and Bouldering problems in the City of Norton (near the High Knob Mountain Biking Trail) and Wise and Scott Counties. Willing landowners will dictate the location.

### 3.10.3 Karst Trails (Caves)



FSWVA is home to numerous significant karst areas that have the potential to boost eco-tourism in the region. Karsts are landscapes characterized by underground streams, caves, seeps and large flow springs. They provide important habitat for many rare species, including bats.

Segments of the Virginia Karst Trail will extend to Southwest Regional Recreation Area to educate the public about these important places. It is a thematic trail promoting above-ground features and tourist caves, such as those found at Natural Tunnel State Park in Scott County and

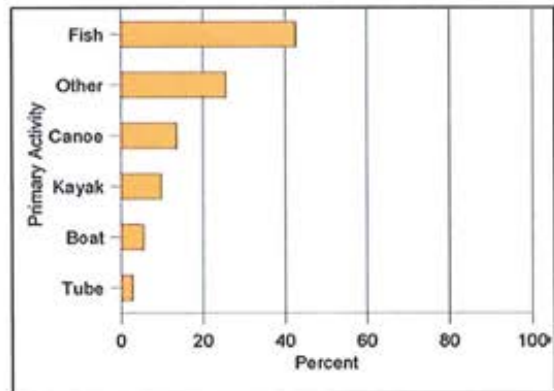
The Cedars Natural Area Preserve in Lee County. A website, driving tour and interpretive signage will enhance the visitor experience and create commercial opportunities in the region.

The Virginia Cave Board (through VDCR) is working to develop the Virginia Karst Trail, in partnership with tourist caves, government groups and other partners. The concept has been endorsed by the Virginia Region of the National Speleological Society. For additional information, visit:

- [http://www.dcr.virginia.gov/natural\\_heritage/karsthome.shtml](http://www.dcr.virginia.gov/natural_heritage/karsthome.shtml) or
- <http://www.varegion.org/var/var.shtml>.

### 3.10.4 Fishing

Per *Spearhead Trail Implementation Plan Volume II: Economic Impact Assessment*, the New River along the New River State Park (Grayson and Pulaski Counties, Virginia), had over 16,700 visitors, with approximately 45 percent using the venue for fishing (per graphic).



There are a number of US Forest Service lakes, local water supplies and the USACE’s John Flanagan Reservoir, offering opportunities for good to excellent fishing. The Clinch, North Fork of the Holston, Powell and other river and streams are also well established fisheries.

Opportunities for catching largemouth and smallmouth bass, trout, crappie, walleye, muskellunge, catfish, bream and other species exist through the Southwest Regional Recreation Area. Most fishermen (persons) employ a policy of “catch and release,” assuring the resource remains viable. *Fish Virginia First* ([www.fishvirginiafirst.com](http://www.fishvirginiafirst.com)) is a valuable reference identifying local, species-specific opportunities for the fisherman (person). Per Section 3.9, Fishing also diversifies Blueways to a multi-use venue.

### 3.10.5 Geocaching

Geocaching is a real-world outdoor treasure hunting game. With over 4 million participants, it utilizes GPS-enabled devices (GPS units, mobile phones and others) to navigate to a specific coordinate to find the geocache (container) hidden at that location. It is a sport oriented towards tech-savvy persons and families. “Geocachers” hide caches in locations throughout the world. Each cache reflects that special interest and/or skill of the cache owner. Locations are diverse, in a local park, along a trail, at a historic marker, a unique viewscape, in a town street, virtually anywhere. Participation



requires a GPS-enabled device, a Geocaching.com membership and the interest to search and document one's experience at the site and on the internet.

Numerous geocache sites already exist in Spearhead Trails operation area:

- Tazewell County 800 sites
- Buchanan County 400 sites
- Dickenson County 400 sites
- Russell County 500 sites
- Scott County 900 sites
- Wise County 800 sites
- Lee County 400 sites
- Total 4,200 sites

Thirty to 35 percent of these sites are associated with trails.

#### **4.0 Mapping & Landowner Identification**

##### **4.1 Base Mapping**

Base mapping is compiled in two (2) forms:

- Scalable USGS 7.5 minute Quadrangle maps at a base scale of 1 inch = 2,000 feet, with variable contour intervals based on local topography.
- Scalable 2007 Virginia Geographic Information Network (VGIN) aerial photos with terrain model for 5-foot contours.

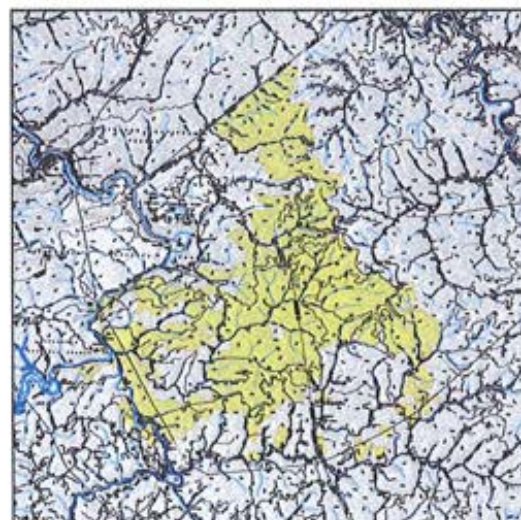
Note: The mapping used as the base for the Plan does not reflect surface mining activities since 2007. In 2009, VGIN conducted aerial surveys of the SRRA operations area. However, the revised aerial photos/maps were not available at the time of Plan preparation.

##### **4.2 Land Ownership**

###### **4.2.1 Landowner Classifications**

The key to trail development is large tract landowners willing to partner with SRRA. For purposes of Plan development, four (4) types of landowners were identified, in descending order of importance to trail development:

- Large Multi-jurisdictional Owners ("Industrial") - These are typically coal companies and forest product companies. Many have tracts are in more than one jurisdiction and will be the primary focus for trail planning and securing Land Use Agreements. As they are large companies, each may have its own unique criteria/stipulations relative to land use when securing Land Use Agreements.



- Large Individual Owners (“Private”) – These lands may be held by an individual, family or large business not involved in natural resource development. They can complement the Industrial type landowner, depending on location, when amassing sufficient area to meet the area requirements of a venue.
- Public Lands: This includes the US Forest Service, National Park Service, State Parks and other similar properties owned/managed by federal, state and local government. Due to requirements/restrictions typically imposed by government, trails development opportunities may fall within narrow possibilities.
- Individual Landowners: These are relatively small parcels located along roads, where there may be a single family residence, small farm or other use. To minimize the need for Land Use Agreements, trail planning needs to minimize the number of these properties within the Spearhead Trails system.

#### 4.2.2 Landowner Identification

Land owners, acreage and contact information were identified by tax parcel. Data was secured through the Geographic Information Systems (GIS) in each jurisdiction, with the exception of Dickenson and Lee Counties. Lee County does not currently have its GIS established. Ownership information for Lee County was secured through a review of tax records and an adjusted overlay of .pdf tax maps. Dickenson County is in the process of developing accurate tax map data. Property information for the OHV and Equestrian trails was provided by The Forestland Group, LLC and Breaks Interstate Park boundaries shown on USGS quadrangle mapping. Note: Prior to contacting landowners relative to a Land Use Agreement, database information or other sources should be reviewed to verify owners, as ownership may have changed since the last update.

### 5.0 Landowner Considerations

#### 5.1 **Insurance**

As previously noted, the Commonwealth of Virginia, under Virginia Code § 29.1-509. (effective January 1, 2008), provides landowner protections for duty of care and liability for damages of landowners to hunters, fishermen, sightseers, etc.

The Code of Virginia states that the SRRA may “*enter into contracts with landowners and other persons holding an interest in the land being used for its recreational facilities to hold those landowners and other persons harmless with respect to any claim in tort growing out of the use of the land for public recreation or growing out of the recreational activities operated or managed by the Authority from any claim except a claim for damages proximately caused by the willful or malicious conduct of the landowner or other person or any of his or her agents or employees.*” A distinct advantage to landowners is the fact SRRA is a governmental entity and carries \$11.0M in liability insurance through the Virginia Municipal League, indemnifying landowners with trails on their property for trail use. Refer to Appendix B: Landowner Protection Legislation Excerpts for additional information.



## **5.2 Policing**

Large tract landowners know people are riding and creating trails on their properties, i.e. “outlaw trails.” However, they have limited resources to guard against trespassers. As an inducement to sign a Land Use Agreement with SRRA, they are requiring the trails be policed.

HM utilizes Rangers with police powers to patrol its trails. In 2010, SRRA reached an agreement with the Virginia Sheriff’s Association whereby SRRA personnel would not have police powers, with such enforcement power resting with the local Sheriff’s Office. SRRA trail employees can have a Constable status and interface with the local Sheriff’s Office for enforcement support. In this capacity, SRRA trail personnel can provide for safety and emergency response, acting more as an ombudsman for Spearhead Trails, as opposed to enforcement. SRRA will patrol its revenue generating trails, relying on the support of the local Sheriff Office for enforcement. The experience at HM is that most instances requiring a police presence occur at the trailhead within the jurisdiction of the local Sheriff.

## **5.3 Hunting Leases**

Many large tract owners sell revenue generating hunting leases. SRRA will secure Land Use Agreements without fee, allowing its insurance, trails management and on-site presence to serve this purpose. SRRA will have to coordinate with landowners in those areas with hunting leases to address its needs and those of the landowner.

## **5.4 Trail Relocation**

Large tracts of land are typically held for economic gain, with use subject to change. Should a land owner wish to extract resources or have another development purpose, SRRA will need to be flexible and work with the landowner to relocate the trail. Early planning with landowners will reduce possible trail relocation. Provisions for such will be in the formal Land Use Agreement.

## **5.5 Trailhead Long-term Lease**

The standard practice for multi-use venues is not to purchase property. The use of license agreements, as opposed to financial leasing of property, is recommended.

## **6.0 Environmental and Cultural & Historic Resource Compliance**

### **6.1 Environmental Data**

#### **6.1.1 Environmental Resources**

A trail/trailhead specific database review was performed for each trail to identify areas of possible environmental compliance. The data for compliance review was secured from the relevant online databases of the VDCR, United States Fish and Wildlife Service (USFWS), and the Virginia Department of Game and Inland Fisheries (VDGIF). It is important to note, both USFWS and VDGIF do not provide comments on initial requests due to insufficient staffing. All such requests are addressed during the construction plan approval process (refer to Section 7.2). The results of the review are provided on each trail Project Sheet (refer to Tabs 2 through 6).

### 6.1.2 Threatened & Endangered Species

Compliance is for listed federal and state threatened and endangered species only. Species of Concern or Candidate Species do not typically require compliance and were not addressed.

The USFWS database was used for the initial screening to identify threatened and endangers species as federal listings take precedence over state. Research was then conducted within the VDGIF for fauna. (Note: VDGIF which does not provide for non-plant and non-insect species.) The VDGIF review was followed by the VDCR database, as it provides for plant and insects. Both the VDGIF and VDCR databases contain species that are state listed and are not within the USFWS mandates. The information from all three (3) were combined to develop the identified project-specific flora and fauna species.

### 6.1.3 Wetlands

Wetlands are under the jurisdiction of USACE and the Virginia Department of Environmental Quality (VDEQ). If over 10,000 square feet of wetland is adversely impacted, it must be replaced in-kind. USACE will have primacy over virtually all wetlands in the Southwest Regional Recreation Area. Replacement typically requires new wetlands with a higher function than the existing. Most often the replacement ratio is 3:1 (replacement acreage : existing acreage). Rather than incur the initial cost and long-term maintenance responsibilities, wetlands replacement construction is not viewed as a viable option. Refer to Sections 6.3.2 and 6.3.3 for additional information relative to Spearhead Trails wetlands mitigation. Note: Wetlands exist at the water's edge for every blueway put-in/take-out. The area of disturbance will likely be less than the 10,000 square foot threshold. However, it must be addressed as part of the compliance process.

## 6.2 **Cultural & Historic Resources**

The Virginia Department of Historic Resources (VDHR) is solely responsible for administering Sections 106 and 110 of the National Historic Preservation Act in the Commonwealth of Virginia. Its mandate is to support the identification, stewardship, and use of Virginia's significant archaeological and historic resources for maximum educational and cultural benefits.

River and stream bottoms, caves and potential rock shelters will be the primary area of focus relative to trails and trailheads. In addition, Historic Districts (i.e., Town of Pocahontas), proximity to historic structures (designated or due to age) and areas of historical significance may have to be addressed in the development of venues. Issues most typically associated with Spearhead Trails will be archaeological artifacts or finds. Cultural and/or historic resources involving artifacts or the potential thereof are considered confidential and the locations will not be released to the public. The VDHR's database was reviewed for potential cultural and historic resources in a project area.

## 6.3 **Mitigation**

### 6.3.1 Aquatic & Terrestrial Species Studies

USFWS, VDGIF or VDCR can require species specific studies be conducted to determine if there is a presence of, or habitat conducive to, a species. In-field studies must be conducted by scientists with specialized expertise for the species. VDCR has a published list of approved scientists for each

species. It is important to note, most studies require field investigations during specific periods of the year. Therefore, this must be addressed early in the planning/design phase.

For most species, except mussels and some aquatic species, the requirement of field investigations can be avoided through agency consultation and coordination. Agency approval, with requirements and/or environmental studies, if required, will be used as the basis for construction permitting. Refer to Section 7.2.



### 6.3.2 Avoidance

The primary mitigation for Spearhead Trails, when required, will be to avoid the resource altogether, whether it is an aquatic or terrestrial species or site of cultural or historic significances. Each trail location and venue requirement will have to be addressed on a per project basis. Avoidance may take different forms:

- Location/Relocation – Relocation of a trail or trailhead away from an identified environmental, natural heritage or historic/cultural resource will be the most widely employed avoidance method for Spearhead Trails. The relocation will be coordinated with the appropriate agency to assure compliance.
- Habitat and/or Time of Year Restrictions – Habitat may be restricted at all times or depend on the time of year. For flora, access is anticipated to be restricted at all times, as they are most likely present during the high use months of March through November. The specific habitat is readily identifiable in the literature and can often be avoided during trail design. However, species-specific studies may be required to verify the presence of a unique species or habitat. For certain species, there may be opportunities for relocation. Refer to Section 6.3.4.

Terrestrial fauna, especially during mating, incubation and nursery periods, may only be impacted by construction. During these periods, the habitat must be avoided. However, it may be compatible with trail use after construction. Conversely, certain terrestrial fauna habitat may have to be avoided at all times, with a sufficient buffer to assure there are not adverse impacts.

Aquatic species tend to require avoidance during construction, as long as there is sufficient habitat to support life and propagation after. There are species, depending on their specific habitat requirements, that may be a permanent avoidance. Refer to Section 6.3.4 for other options.

- Construction Methods – Utilizing bridges instead of in-stream culverts may avoid environmental resource restrictions created by the presence of aquatic resources. In addition, preventing siltation and erosion is another common remedy to avoiding compliance issues (refer to Section 7.5). Other methods may not to remove trees above or below a certain caliber.
- Barricading – This is most applicable to caves and historic landmarks. Coupled with locating trails away from caves, VDCR Division of Natural Heritage can work with SRRA to physically restrict access to sensitive caves. VDHR will be involved with restricting access to cultural and historic resources that already have access or the potential thereof.

### 6.3.3 “Fee In-lieu” Mitigation

“Fee In-lieu” of mitigation is applicable to filling in streams to install a culvert or adversely impacting over 10,000 square feet of wetlands. In the SRRA service area, the fee for filling over a stream is \$475 per linear foot. For wetlands it is \$75,000 per acre, prorated to the total number of acres required for the mitigation. Refer to Section 6.1.3 for background information. As a general rule, bridges will be used for crossing USGS Quadrangle “blue line” streams (perennial or intermittent) as opposed to in-stream culverts to avoid stream mitigation for Spearhead Trails venues.

### 6.3.4 Species Relocation & Repopulation

Species relocation may be either temporary or permanent. Repopulation may be required if the species cannot be relocated or is adversely impacted by the project. In all cases, species-specific field studies are required by scientists with expertise with the particular species (refer to Section 6.3.1) approved and coordinated with the appropriated agency(ies).

- Temporary Relocation – Temporary relocation is most often applicable to aquatic species. However, there may be applicability for flora. It is provided during construction, relocating the species to a suitable habitat during the time of disturbance, returning the species to the previous location at the completion.
- Permanent Relocation – Permanent relocation requires species-specific field studies to determine presence. If present, suitable alternative habitat, typically in the same stream, watershed or other related physiographic location must be identified. Relocation must be performed by professionals with expertise for that species.
- Repopulation – Live species from thriving habitat are relocated to the impacted site by qualified scientists. Post-relocation monitoring will be required to assure the species thrive.

Spearhead Trails projects will not be proposed that require species relocation or repopulation.

### 6.3.5 Long-term Species Monitoring

Spearhead Trails projects will not be proposed that require long-term species monitoring.

### 6.3.6 Other Mitigation

Other unique forms of mitigation may be possible. However, due to their nature, they cannot be identified until the environmental review process is initiated and compliance requirements are identified. It may be an offsetting cost (payment) for a separate, related project in the watershed or area or, other form of mitigation.

## 6.4 **Funding Agency Environmental Compliance**

### 6.4.1 Tobacco Indemnification and Community Revitalization Commission

Funding from the Tobacco Indemnification and Community Revitalization Commission (TICRC) has no specific requirements for the preparation of a standalone Environmental Report or Assessment (ER or EA, or other similar nomenclature), as do other state and federal funders. (Refer to Sections 6.4.3 and 6.4.4 for general state and federal agencies requiring such.) However, per its mandate, capital projects funded by TICRC must comply with applicable Commonwealth of

Virginia environmental laws and regulations. Compliance can be addressed after receipt of the grant award.

#### 6.4.2 Virginia Coalfield Economic Development Authority

Funding sourced through the Virginia Coalfield Economic Development Authority (VCEDA) have similar mandates to those of TICRC. There are no specific requirements for the preparation of a standalone ER, EA or other similar document. However, per its charter, capital projects funded through VCEDA must comply with applicable Commonwealth of Virginia environmental laws and regulations. Compliance can be addressed after receipt of the grant award.

#### 6.4.3 Appalachia Regional Commission

Funding sourced through the Appalachia Regional Commission (ARC) are federal funds, administered in Virginia through the Virginia Department of Housing and Community Development (VDHCD). VDHCD requires preparation of a formal Environmental Assessment, based on information, reviews and approvals from agencies cited in Sections 6.1 and 6.2, as well as other state and federal agencies. It has a rigorous process and timeline for initial public notification, newspaper advertisements and a public hearing; publication of a Finding of No Significant Impact (FONSI); notice of Intent to Request Release of Funds (RROF); submission of the Environmental Review Record (ERR); publishing of the RROF; and, final submission of all such documentation to VDHCD with a summary. Preparation and acceptance of an ARC EA can be performed after receipt of the grant award.

#### 6.4.4 Virginia Department of Conservation and Recreation

The Virginia Department of Conservation and Recreation (VDCR) has Federal Highway Administration (FHWA) funds available for motorized and non-motorized trails, and trailheads, through FHWA's Recreational Trails Program (RTP). VDCR's RTP program is different from that of most funders, in that grant funds will not be approved until environmental compliance is accepted. Most funders allow for compliance documentation after award of funds.

Submission of a successful grant application is a two (2) phase process. It consists of a RTP Preliminary Application requiring documentation similar to that of an ARC EA. The Final Application (entitled Project Description and Environmental Screening Application) is similar to the National Environmental Policy Act (NEPA). A matrix must be completed, with supporting documentation, confirming all Environmental Resources are either "Not Applicable" or "No/Negligible Impacts." For those resources identified within a project area, additional documentation and/or species-specific studies are required substantiating there are no adverse impacts prior to VDCR forwarding the request for funds to FHWA for approval. The VDCR funding approval process can be both costly and time consuming.

#### 6.4.5 Other Potential Public Agency Funders

Other potential public agency funders generally have similar requirements in terms of preparing a standalone environmental document prior to receipt of approval to construct. The basis, in terms of documentation secured and mitigation required, is essentially the same for all (refer to Section 6.1). The difference is the process of review, advertisement, public hearings, public comment and other compliance requirements unique for the specific funder and the source of its funds. Some agencies

accept those prepared using the guidelines of others where multiple funders are involved. However, this is not necessarily a standard and must be coordinated on a project-by-project basis.

## **7.0 Trail & Trailhead Construction Permitting**

Prior to commencing construction, all required construction and environmental permits must be in-place to proceed.

### **7.1 Environmental Compliance**

Should the USFWS, VDGIF, VDCR and/or USACE impose requirements for avoidance or mitigation, all such approvals must be secured prior to construction. Time of year, monitoring, reporting or other requirements will be addressed in a project-specific permit from the agency having primacy.

### **7.2 VMRC Joint Permit Application – Stream Crossings**

The Virginia Marine Resources Commission (VMRC) serves as a clearinghouse for permits required for stream crossing. In addition to VMRC, the Joint Permit Application (JPA) facilitates permitting with USACE, VDEQ and VDGIF. It establishes compliance requirements and fees associated with stream crossings. This may include species studies, mitigation and time of year requirements. Depending on the species and conditions of construction or O&M, different agencies have primacy.

### **7.3 USACE Nationwide-wide No. 18 – Drainage Structures**

Nation-wide Permit (NWP) No. 18 addresses minor filling (or excavation) in all waters of the US. It applies to the excavation or filling of 25 cubic yards or less, or the loss of more than 4,356 square feet of special aquatic sites or wetlands due to the placement of material in a storm water conveyance channel (as opposed to perennial or intermittent streams – refer to Section 6.3.3) below the plane of the ordinary high water mark. It will be required for conveyance crossings with culverts. The process for up to 10 cubic yards is simple notification to USACE. Ten (10) to 25 cubic yards requires Notification to the District Engineer, delineating special aquatic sites and wetlands. All such crossings for Spearhead Trails are anticipated to allow use of NWP No. 18. Filling or excavation above the 25 cubic yard threshold requires approval of USACE's NWP No. 26, a much more intensive permitting process.

## **7.4 Virginia Department of Transportation**

### **7.4.1 Chapter 527 Traffic Impact Analysis**

In 2006, the Virginia General Assembly passed legislation requiring localities to submit for VDOT review and approval Traffic Impact Analysis for developments that would significantly impact the State transportation system. The objective is to improve coordination between land-use and transportation planning state-wide for decision makers and local citizens. Effective January 01, 2012, non-residential entrances onto VDOT right-of-way, even existing, will likely be required to have a Traffic Impact Analysis performed. This may impact trailhead entrances. A determination as to requiring a Traffic Impact Analysis for existing entrances will have to be made by in consultation with VDOT's Bristol District Office staff. Additional costs, if any, for

VDOT-required entrance configurations are not included in the Opinions of Probable Cost associated with OHV and Equestrian projects.

#### 7.4.2 Trailhead Entrance Permit

A VDOT Entrance Permit will be required for all trailheads accessing the VDOT right-of-way. The design and Permit must comply with the current edition of VDOT's *Minimum Standards of Entrances to State Highways*. In addition, prior to construction, the owner and contractor must complete the forms and comply with the requirements of a site-specific VDOT Land Use Permit.

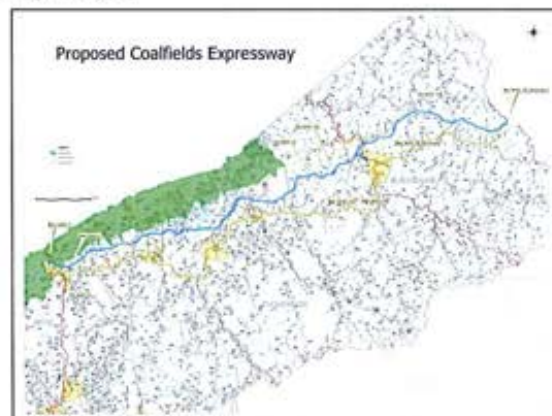
#### 7.4.3 Right-of-way Access Permit

At this time, VDOT has not determined the requirements for signage and access configurations.

#### 7.4.4 Coalfield Expressway

The Coalfields Expressway (US Route 121) is a proposed 51 mile four-lane highway from Pound in Wise County through Dickenson and Buchanan Counties to the West Virginia line. Through its construction, the entire multi-state Appalachian region of Virginia, West Virginia, Kentucky and Tennessee will be linked by a system of 4-lane highways.

The Expressway in Virginia is to provide a modern, safe and efficient highway through the coalfields region, with FSWVA realizing an increase in commerce and tourism as a direct result of its construction. Furthermore, it *"...is expected to be an economic lifeline for a region experiencing high unemployment and a declining population."* Designated as part of the national highway system, the new road will link Interstates 64 and 77 in West Virginia with Route 23 in Virginia, facilitating links to interstates in Kentucky and Tennessee.



Built through conventional means, the project's anticipated cost is \$4.2B. However, VDOT is partnering with Pioneer Group Inc. and Alpha Natural Resources LLC (a subsidiary of Alpha Natural Resource Inc.), employing a technique termed "coal synergy." Coal synergy uses the large-scale earth moving techniques allowing for mineral extraction along the route to significantly reduce the cost. VDOT's 2011 projected construction cost is \$2.1B.

The Coalfield Expressway crosses SRRA's Haysi-Beaks Interstate Park-Poplar Gap OHV Trail. In addition, it crosses the Crane's Nest Hiking, Biking & Equestrian and Haysi to Breaks Interstate Park Hiking & Biking Trails in Dickenson County. As the alignment of the Coalfield Expressway right-of-way is subject to change, coordination with VDOT is necessary to develop OHV crossings (tunnels) as part of the final VDOT construction plans. It is recommended this process begin as soon as possible.

## 7.5 Erosion & Sediment Control Plan

Approval of an Erosion & Sediment (E&S) Control Plan, prepared in accordance with the most recent edition of *Virginia Erosion and Sediment Control Handbook* (VDCR), will be required for each project. E&S Permit approvals for each jurisdiction are secured through the following agencies:

- Tazewell County – County Engineer’s Office
- Buchanan County – Big Sandy Soil and Water Conservation District
- Dickenson County – Building Inspector’s Office
- Russell County – Clinch Mountain Soil and Water Conservation District
- Wise County – Building Inspector’s Office
- Scott County – Daniel Boone Soil and Water Conservation District
- Lee County – Building Inspector’s Office
- City of Norton – Building Inspector’s Office
- VDCR – a private sector consultant

## 8.0 Cost Analysis

### 8.1 Project Development Capital Cost

Capital project costs are based on conventional design/bid/build procurement. Actual costs depend on the venue and trail specifics such as soil type, amount and type of rock, difficulty rating, ease of trailhead access, number of bridges and/or culverts, amount of trail hardening, number of signs, and, other related factors. The unit costs applied are generally consistent with construction in the Southwest Regional Recreation Area. The Business Plan utilizes the project specific costs generated through the Trails Development Plan for trails and trailheads as its capital cost basis.

Note: All costs are at the conceptual planning level. Without actual in-field mapping, it is not possible to more definitively project the individual project costs.

#### 8.1.1 OHV and Equestrian Trails & Trailheads

OHV and Equestrian trail and trailhead capital costs will vary from project to project. Trail and trailhead development costs are based on a planning level analysis. Prior to requests for funding, the quantities and costs need to be reviewed and revised as new data and development information is available. Should detailed trail mapping be completed prior to the request, additional project-specific data will revise the opinion of probable cost.





### 8.1.2 Equestrian Camps

As noted in Section 3.8.2, horse camps will be developed by local entrepreneurs, clubs or other organizations. SRRA will not incur a cost for development.

### 8.1.3 Hiking, Mountain Biking & Blueways

Hiking, Mountain Biking and Blueways are non-revenue generating Spearhead Trails venues. As such, SRRA is not proposing to construct these trails and trailheads, nor blueway put-in/take-outs. It will provide non-financial support to local government, local interest groups, such as the Spearhead Trailblazers, Clinch River Coalition, Boy Scouts, Lonesome Pine Cycling, and others to develop these venues. Funding for construction of venues and support facilities for hiking and blueways may also be prioritized and sourced from federal and state agencies having funds available for these venues.

## 8.2 **Programmatic Operation & Maintenance Costs**

### 8.2.1 OHV & Equestrian Trails

OHV and Equestrian trail and trailhead O&M costs will vary. O&M costs depend on the venue and trail specifics such as soil type, amount and type of rock, difficulty rating, ease of trailhead access, number of bridges and/or culverts, amount of trail hardening; number of signs, and other related factors. The Business Plan utilizes average cost per mile for trails and specific costs for trailheads based on available infrastructure and amenities for OHV and Equestrian only. The trail O&M costs have been derived utilizing the 2012 HM budget as the basis.

HM utilizes full-time and part-time personnel and its own equipment to maintain its trails. The approximate cost in the 2012 HM budget is \$964 per mile. As noted in Section 2.1, active trail use occurs from early March through the end of November, with limited use during the winter months. As such, there is a period of approximately three (3) months where HM is paying overhead costs. By utilizing a private contractor, SRRA will not incur these costs. In addition, as HM full-time personnel costs are fully burdened, there is additional cost over and above that paid by many private contractors. Due to these factors, the maintenance of the SRRA OHV trails is projected to be \$475 per mile, approximately 50 percent of the \$950 average HM cost per mile.

The intensity of impact for the small area of a horse hoof in a single track is roughly equivalent to that of the torque of a dual track OHV's air-filled tire. Therefore, Equestrian trail maintenance cost is projected to be the same as OHV, \$475 per mile.

### 8.2.2 OHV Trailheads

OHV trailheads have trailhead-specific costs based on available services and amenities. Refer to specific trail Project Sheet for trailhead O&M cost.

### 8.2.3 Equestrian Trailheads & Horse Camps

Equestrian trailheads have trailhead-specific costs based on available services and amenities. Refer to specific trail Project Sheet for trailhead O&M cost. Horse camps will be operated by local equestrian organizations or clubs, 501(c)3 not-for-profit entities, and/or private

entrepreneurs. As such, there is no SRRA O&M cost planned for horse camps serving as trailheads at this time.

#### 8.2.4 Hiking, Mountain Biking & Blueways

Hiking, Mountain Biking and Blueways are non-revenue generating Spearhead Trails venues. As such, SRRA is not proposing to operate or maintain the trails, trailheads and blueway put-in/take-outs. There is no SRRA O&M cost.

### 9.0 Prioritization

#### 9.1 Scoring Criteria

The Prioritization System and its Ranking is a decision-making tool for SRRA, not an absolute. It allows the SRRA Board to objectively compare one Spearhead Trails project to another across the spectrum of venues, assisting in the decision to move forward at what time, considering construction funding, operations and maintenance costs, available staff and other programmatic needs of Spearhead Trails in-total.

Three (3) Functional Areas (not to be confused with Prioritization “Factors”) were determined to be representative in assessing the priority of one project to another. The Functional Areas are further defined through the five (5) Factors used to rank projects. The Functional Areas and associated Factors are as follows:

- Landowners & Land Use Agreements – Without willing landowners, there is no trail project. The Factor used to quantify is Landowners & Land Use Agreements. It is deemed most critical and assigned 75 points.
- Economic Viability – There must be adequate tourism infrastructure, lodging, food, services and amenities to support a tourism lifestyle. Without it, adventure tourists will not utilize the venue and SRRA will generate less revenue for operations. When a trail system becomes a recognized destination, there will be increased demand for additional lodging, food and services. Trail development is the incentive for local entrepreneurs to provide the necessary services. However, the venue has to be in-place for there to be a demand/need to support establishing new businesses.

Without capital funding for construction, regardless of the other inputs, there is no project. Conversely, infrastructure is critical criterion in securing construction funding from state and federal agencies relative to the economic output potential. Both are intertwined. As venue construction leads to infrastructure development, Funding is given a slightly higher value at 30 Points and Existing Tourism Infrastructure 20 Points.

Both Factors addressing the Functional Area of Economic Viability have a combined value of 50 points.

- SRRA Revenue Generation – SRRA cannot survive without revenue generation and is vital to the success of Spearhead Trails. In some respects, it is related to Economic Viability. However, as it is a direct measure of permit sales, it is considered a separate Functional Area, assessed through a single Factor. It is considered equally important as Economic Viability and assigned 50 points.

In addition willing landowners and economic viability, there may be environmental and other impediments to project implementation, adding time and cost. Impediments is the fifth Factor. It has no assigned value; rather, negative points are assigned based on the environmental and other non-trail costs incurred to permit the development of a project. The negative points are derived through a cost comparison of the total capital cost. An excessive number of Land Use Agreements may also be considered an impediment. However, this is addressed in the Prioritization Ranking through Landowners & Land Use Agreements.

The points assigned to a scoring Factor were derived through an assessment of potential trail development issues, available funding and SRRA economic benefit. Numerous Factors and modifiers were identified. The outgrowth of the assessment resulted in five (5) Factors, with total available Points are 175. If a project is 100% ready to go to construction, it will receive the full 175 Point value. The Factors and Point scoring are as follows:

- Landowners & Land Use Agreements      75
- Existing Tourism Infrastructure              20
- Funding    30
- Impediments (negative points only)      TBD
- SRRA Revenue Generation                  50
- Total      175

SRRA Project Name										
Prioritization Analysis										
Location:	County 1									
State:	CA 11									
Trail Miles:	100									
	Landowner Agreements	Ex-Tourism Infrastructure	Funding	Impediments	Revenue Generation	Total Trail Points				
Total Available Points x 1%	175	20	30	0	50	175				
LANDOWNERS & LAND USE AGREEMENTS - 75 Points										
Agreement Status	No. Agreements	% of Properties	% of Trail	Weighted Points	Adjusted Points	Subtotal Points				
Industrial - Large	1	1%	1%	75	0.75					
Private - Large	1	1%	1%	75	0.75					
Public Lands	1	1%	1%	75	0.75					
Individual	1	1%	1%	75	0.75					
Total	4	4%	4%	300	3.00	3.00				
EXISTING TOURISM INFRASTRUCTURE - 20 Points										
Existing Tourism Infrastructure Factor	100%	100%	100%	100%	100%	100%				
• Major Routes	100%	100%	100%	100%	100%					
• Culture	100%	100%	100%	100%	100%					
• Community Assets	100%	100%	100%	100%	100%					
Available Lodging	100%	100%	100%	100%	100%	100%				
• Available Motor Rooms	10	10%	10	10	10					
• Available Campground Spaces	10	10%	10	10	10					
Relative Distance Adjustment	100%	100%	100%	100%	100%	100%				
• Adjusted Motor Rooms	10	10%	10	10	10					
• Adjusted Campground Spaces	10	10%	10	10	10					
Total	20	20%	20	20	20	20				
FUNDING - 30 Points										
Federal Government	1	100%	100%	100%	100%	100%				
• State Government	1	100%	100%	100%	100%					
• Local Government	1	100%	100%	100%	100%					
• Private Sector	1	100%	100%	100%	100%					
Total Government Funding	4	400%	400%	400%	400%	400%				
Relative Distance Adjustment	100%	100%	100%	100%	100%	100%				
Total	4	400%	400%	400%	400%	400%				
IMPEDIMENTS - Negative Points										
• Available Potential Open Space Studies	1	-100%	-100%	-100%	-100%	-100%				
• USACE/State and/or Migration	1	-100%	-100%	-100%	-100%	-100%				
• Species Residency	1	-100%	-100%	-100%	-100%	-100%				
• Species Residency	1	-100%	-100%	-100%	-100%	-100%				
• Other Migration Requirements	1	-100%	-100%	-100%	-100%	-100%				
Total	5	-500%	-500%	-500%	-500%	-500%				
SRRA REVENUE GENERATION - 50 Points										
Revenue - Trail	50	100%	100%	100%	100%	100%				
• Revenue - Equipment	20	40%	40%	40%	40%	40%				
• Non-revenue Generating (being Market Background/Research Expense)	10	20%	20%	20%	20%	20%				
Total	80	160%	160%	160%	160%	160%				

**9.2 Factor – Landowners & Land Use Agreements (75 points)**

Having property available to support the miles needed per venue is the single most important Factor in determining trail viability. This Factor is based on the premise that if only one (1) property owner refuses to sign a Land Use Agreement, the project cannot move forward. It does not differentiate between the large tract owners and the small individual “homeowners.” Those venues requiring larger areas to be functional have logically been planned utilizing tax parcel information to identify the large tracts. By default, the potential impact of the individual property owner is essentially made equal.

The analysis tabulates the number of property owners by four (4) categories, Industrial – Large, Private – Large, Public Lands, and Individual (refer to Section 4.2.1). The number of agreements required is identified on the Trails Development Plan Project Sheet for each trail (Tabs 2 through 6). Based on the status of the Land Use Agreement, a percent value is assigned to the number of properties in each category. Multiplying the number of agreements by the percentage cited for each status level, then summing the various parameters provides a value of the “Adjusted Agreements.” The percentage of Adjusted Agreements to total agreements required is multiplied by the 75 Points available for this Factor render the project-specific Point value for Landowners & Land Use Agreements.

### **9.3 Factor – Existing Tourism Infrastructure (20 points)**

If there are no overnight accommodations, adventure tourists will not come to stay the projected 3+ days, generating revenue for the local economy. Lodging was selected as the sole parameter, as with lodging established, food, fuel, services and other tourism amenities are also locally available. Motel rooms, cabins and camping spaces are the key metrics. Data for motel rooms was provided by the VTC (December 2010 data). Cabins and campsites data was secured through internet searches, *Virginia Campground Directory* (2012 Virginia Campground Association), and verification with local tourism directors. (Note: “Campsites” does not differentiate between primitive, tent platforms or RV’s.) The percentage distribution used for “Venue Lodging Preference Factor” is based on Team knowledge and experience with various venue lodging preferences. The “Relative Distance Adjustment” is similarly based. It is consistent among the trail venues.

To compute the “Venue Adjusted Points,” the “Venue Lodging Preference Factor” and “Relative Distance Adjustment” are multiplied times the available motel rooms, cabins and campsites at the various radii. Analysis is venue-specific. To normalize the specific project within the entire range of venues within the SRRA operations area, “Venue Adjusted Points” are divided by the highest points compiled for “Lodging” among all of the trails tabulated to create a percentage. This percentage is multiplied against the total available points to yield the Existing Infrastructure Tourism Points for the specific trail.

### **9.4 Factor – Funding (30 points)**

Funding is linked to Existing Tourism Infrastructure. Without an ability to provide economic benefit, funding is less likely. Funding Points are derived through a simple computation, the percentage of committed funding to the total capital cost of the project, multiplied against the total available points. Having some level of committed funding prior to making application to funders raises the probability of funding application success. Note: Some funders require a match prior to applying.

### **9.5 Factor – Impediments (negative points only)**

As noted in Section 3.1, a trail cannot cross a 4-lane highway, major water body or railroad. Utilizing these criteria, certain requirements of a given project may have negative consequences. These are primarily associated with environmental and cultural resources and other permit requirements. Methods to avoid or reduce impacts, where possible, are also identified. However, there may be circumstances where impacts or regulatory compliance are unavoidable. These have a negative impact on a project. The trail Project Sheet (Tabs 2 through 6) identifies permit compliance requirements of trail construction and operation.

Points are derived as a percentage of associated permitting/compliance costs relative to the total construction cost. If a project has a relatively low cost and high mitigation cost, the negative impact (return on investment) is high. The converse is also true. However, solely using a percentage yields a Point value that is inconsequential. Therefore, the percentage is multiplied by a “Relative Adjustment Factor” to generate the negative points. The “Relative Adjustment Factor” value of 50, normalizing Impediments across all venue types.

Other impediments such as hunting leases, relocation of trails, and similar impediments were also discussed during the brainstorming sessions. They are unknown until landowner

negotiations are initiated. Therefore, they are not considered an impediment for the Prioritization analysis. They are items of negotiation during the Land Use Agreement process and are considered a decision node at that time.

#### **9.6 Factor – SRRA Revenue Generation (50 points)**

Trails that generate SRRA revenue are the primary source of income for SRRA operations. Only OHV and Equestrian trails have the ability to generate significant revenue through the sale of OHV permits and Equestrian bridle tags. (Sponsorships, sale of Spearhead Trails products and revenue from events are additional sources of revenue; however, not quantifiable as a direct measure venue-specific parameters.) Hiking, Mountain Biking and Blueways, although viable venues bringing adventure tourists to FSWVA and adding to the local economic benefit, do not by their nature provide a direct opportunity for SRRA to generate revenue.

The metric used is SRRA permit revenues per mile of OHV and Equestrian trail. The Business Model anticipates 18,000 OHV permits to be sold in 2017 (baseline), with 80 percent to out-of-state riders and 20 percent to in-state OHV riders. The permit fees are \$50.00 and \$35.00, respectively. Equestrian trails are projected to generate 2,800 bridle permits in 2017, with 50 percent to out-of-state equestrian riders and 50 percent to in-state riders. Bridle tag fees are \$35.00 for both in-state and out of state riders. As OHV has the greater return, OHV revenue per mile sets the standard (100%). The value for Equestrian is the percentage of its revenue generation per mile relative to OHV revenue per mile. The Equestrian percentage is multiplied times the total available points, yielding the Equestrian SRRA Revenue Generation points. As previously noted, Hiking, Mountain Biking and Blueways do not generate revenue. Therefore, they receive zero points.

#### **9.7 Priority Ranking**

The Priority Ranking is a SRRA tool only. It does not dictate project implementation. Rather, it serves as a guide for the allocation of SRRA's limited resources. The following tabulation is the Priority Ranking of all venues compared one to the other. It is a "snapshot" of current project standings across all venues as of January 23, 2012. The Priority Ranking metrics can and will change as the Spearhead Trails initiative advances.

The Ranking is based on project-specific quantifiable numeric Factors. Existing Tourism Infrastructure is based on current lodging serving the Southwest Regional Recreation Area. It is essentially fixed by venue location. Similarly, Income Generation is fixed, based on revenue generation, or lack thereof, across all venues. The remaining Factors, Landowner Agreements Funding and Impediments are project-specific, with Landowner Agreements and Funding directly impacted by current project status.

Landowner Agreements, at 75 points is the true deciding Factor. At this time, SRRA has had little contact with landowners. Only The Forestland Group, LLC has provided mapping of the tracts in Buchanan, Dickenson, Russell and Wise Counties it will consider for the development of Spearhead Trails venues at this time. Projects that have existing infrastructure, i.e. Blueways or are already funded currently have a higher Landowners & Land Use Agreements value by nature of the project requirements to secure the funding. Initiating and securing agreements with landowners can significantly raise a project's Ranking. Landowner Agreements for project implementation is primary Factor under SRRA's control relative to prioritization.

Funding, at 30 points, is driven in part by Landowner Agreements and existing tourism infrastructure. They provide a strong basis to seek and secure the funding necessary to create trails and trailheads. Although, seeking/securing funding is dependent on sources, proper documentation aligned with agency-specific outcomes will better position SRRA in securing the necessary capital funds to implement a project and maximize total Prioritization Ranking points.

Impediments (negative points only) is a measure of the complexity of a project relative to meeting environmental and VDOT trailhead entrance compliance mandates. Environmental is measured by the number of blueline stream crossings for a trail. VDOT entrance requirements are measured by the potential need for a Chapter 527 Traffic Impact Analysis. In general, Impediments has limited impact on the overall Ranking. It is more of a modifier.

Spearhead Trails multi-venue Prioritization Ranking follows.



## **10.0 Implementation**

Refer to *Spearhead Trails Implementation Plan Volume III – Business Plan* for the proposed implementation of the Spearhead Trails initiative.

## **11.0 Trails Development Plan Summary**

The following are excerpts from the individual Project Sheets found in:

- Tab 2 – OHV
- Tab 3 – Equestrian
- Tab 4 – Hiking
- Tab 5 – Mountain Biking
- Tab 6 – Blueways

For additional information and supporting documentation, refer to the individual Project Sheet.

### **11.1 Tazewell County**

#### **11.1.2 Pocahontas OHV Phases I, II & III**

The Pocahontas OHV Trail is located west and north of the Town of Pocahontas in Tazewell County, Virginia, accessible from both the Town and Boissevain Park. It abuts the West Virginia state line and is to have access to HM pending completion of the Bramwell trail near Peeled Chestnut Gap. Access to both sites is provided via State Route 644 out of Bluefield.

Phase I is currently funded and Phase II has tentative funding approval. Combined, both Phases will encompass approximately 50 miles of OHV trail. Phase I begins in the Town of Pocahontas Historic District with trail miles along the ridges and valleys of Reedsville Hollow. The future connection to the HM Bramwell Trail will be in Phase I. Phase II is accessed from Phase I via a linear trail across the Virginia Department of Corrections (VDOC) property. In addition, Phase II is accessible from Boissevain Park. It parallels Haynes Branch and the ridge above. Phase III anticipates adding an additional 50 miles to the west of Phase II. However, it has not been planned, waiting on the timing of the HM Bramwell Trail.

Phase III of the Pocahontas OHV Trail system is in the preliminary planning stages. The geographic boundary locations for Phase III is along the Virginia/West Virginia state line from the Town southwest to Big Branch, then south east along Big Branch to the vicinity of State Route 728. At this juncture, the boundary extends through Boissevain to State Route 644, following State Route 644 back in to the Town of Pocahontas. This area is projected to yield an additional 25 to 40 miles of OHV trail. Land owners have been identified, with the implementation of this phase contingent on land owner cooperation and signing Land Use Agreements.

The Town of Pocahontas has passed OHV-friendly legislation. As such, sections of the Town are accessible to OHV riders. Boissevain Park is owned and operated by the Tazewell County Recreation and Park Authority, with suitable area for parking and other amenities. However, improvements are needed to provide for vehicle staging and sewer service.

As Phases I and II have been funded, only improvements to the existing Boissevain Trailhead are necessary to accommodate the additional use. The projected trailhead cost is \$230,430.



Annual OHV trail O&M cost is projected to be \$23,750 and trailhead O&M is anticipated to be \$5,500, without adjusting annually for inflation.

#### 11.1.2 Cavitt's Creek Equestrian Trail

The Cavitt's Creek Equestrian Trail is located in north central Tazewell County just east of the Cavitt's Creek Park near the Town of Tazewell. State Route 645 provides access to the trail from US Routes 460 and 19.

The proposed 25 miles of Equestrian trail is a loop system with two (2) distinct riding areas paralleling unnamed tributaries of Cavitt's Creek, east of Cavitt's Creek Lake and Park. The northern loop begins along the Lincolnshire Branch the stream valley, ascending to the ridge north of the trailhead. The southern and eastern loops similarly ascend the ridge from the stream bottoms. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings.

A trailhead, accessed via State Route 643, is proposed at the far north end of Lake Witten within the Cavitt's Creek Park. The Park encompasses 165 acres including a 54 acre lake. The existing Park services provided include handicap accessible restrooms and showers; primitive tent and RV camping; RV spaces with full hook-up; picnic shelters; and, other related recreation amenities.

The projected trail cost is \$169,269. A trailhead with restrooms is proposed with a projected cost of \$381,474.

The annual Equestrian trail O&M cost is projected to be \$11,875, with a trailhead O&M cost of approximately \$5,500, without adjusting annually for inflation.

#### 11.2.3 Clinch River Watershed

Refer to Section 11.5.4 in Scott County

### **11.2 Buchanan County**

#### 11.2.1 Haysi - Breaks Interstate Park - Poplar Gap OHV Trail

The Haysi-Breaks-Poplar Gap OHV trail is located across Dickenson and Buchanan County at their northern border with Kentucky. Access to Haysi is provided via State Route 63; to Breaks Interstate Park via State Route 80; and to Poplar Gap (Buchanan County) via State Route 614.

The proposed project addresses all OHV skill levels through approximately 100 miles of trail. From the Splashdam Trailhead in Haysi, the trail generally parallels the proposed alignment of the Coalfield Expressway to the northeast. The connector trail from the Poplar Gap Mini Park extends from Stewart Gap to the main body of the trail. At Stewart Gap, it travels along the ridges and stream valleys of Gindy Fork, Lick Creek, and unnamed tributaries of Barts Lick Creek. A "community connector" is provided to Breaks Interstate Park at Meadow Gap, the intersection of the Dickenson and Buchanan segments of the trail. As the location of the Coalfield Expressway right-of-way is subject to change, coordination with VDOT is necessary to develop OHV crossings (tunnels) as part of the final VDOT construction plans. It is recommended this process begin as soon as possible.

A trailhead is proposed at Splashdam in Dickenson County on property owned by the Town of Haysi. The Buchanan County trailhead will utilize the existing Poplar Gap Mini Park, owned and operated by the County. Poplar Gap Mini Park has existing parking, restrooms, a horse ring and picnic shelters. The connector to the Breaks Interstate Park will utilize existing facilities within the Park.

The projected trail cost is \$530,654, with the projected Splashdam trailhead costing \$110,916.

Annual OHV trail O&M cost is projected to be \$47,500. The projected annual O&M cost for the Haysi Trailhead at Splashdam, providing for parking with portable toilets only, is approximately \$4,200, without adjusting annually for inflation. A “community connector” to the Town of Haysi will provide riders access to other facilities and amenities. No O&M costs are projected for the Poplar Gap Mini Park or Breaks Interstate Park.

#### 11.2.2 Keen Mountain Equestrian Trail

The Keen Mountain Equestrian Trail is located just north of Keen Mountain and east of the Oakwood Community in Buchanan County. The trailhead is located near the Appalachian College of Pharmacy on US Route 460.

The proposed project will develop approximately 25 miles of Equestrian trail in the Keen Mountain area of Buchanan County. It provides for a looped trail system along Bridge Branch and Rocklick Branch of the Levisa Fork, ascending to Fork Ridge. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. The Keen Mountain Equestrian Trail is located west of the Keen Mountain Mountain Biking Trail. There will be no interconnect between the trails, avoiding incompatible uses. A trailhead is proposed near Bridge Branch, with direct access to US Route 460.

The projected trail cost is \$158,728, with a projected trailhead cost of \$133,300. The design and construction of a VDOT commercial entrance may require a Chapter 527 Traffic Study, both an increase in overall cost and time required to secure the permit.

The annual OHV trail O&M cost is projected to be \$11,875, unadjusted for future inflation. A trailhead with no amenities other than portable toilets is proposed. The projected annual O&M trailhead cost is approximately \$4,200.

#### 11.2.3 Haysi to Vicey Hiking Trail

Refer to Section 11.3.4 in Dickenson County.

#### 11.2.4 Keen Mountain Mountain Biking Trail

The Keen Mountain Mountain Biking Trail is located just north of Keen Mountain and east of the Oakwood Community in Buchanan County off of US Route 460. There are 17 blueline stream crossings proposed.

The proposed project will develop approximately 41 miles of Mountain Biking trail in the Keen Mountain area of Buchanan County. The Keen Mountain Biking Trail provides for loop trails along the east of Rocklick Branch of the Levisa Fork and Big Hollow, ascending to Ratliff Ridge. It is located east of the Keen Mountain Equestrian Trail. There will be no interconnect

between the trails, avoiding incompatible uses. There are two (2) possible trailhead locations, one on US Route 460 and a second off of State Route 629.

As Mountain Biking trails or trailheads will not be a source of revenue for SRRA, there is no SRRA capital or O&M cost planned at this time. These costs will be borne by local or state government, or a special interest group.

#### 11.2.5 Russell Prater Creek Blueway

The Russell Prater Creek Blueway begins in the Prater Community in Buchanan County flowing through the Vacey Community to the Town of Haysi in Dickenson County. It may be accessed via State Routes 83 and 604. The blueway is 8 miles in length and classified as Class II - III (refer to Section 3.7), paralleling State Route 83 throughout its length.

Two (2) existing informal access points exists, one (1) in the Prater Community accessed via State Route 604 and one (1) in the Town of Haysi accessed via State Routes 83 and 63.

Blueways are considered waters of the Commonwealth. Therefore, there is no “trail” development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

### 11.3 **Dickenson County**

#### 11.3.1 Haysi - Breaks Interstate Park - Poplar Gap OHV Trail

The Haysi-Breaks-Poplar Gap OHV trail is located across Dickenson and Buchanan County at their northern border with Kentucky. Access to Haysi is provided via State Route 63; to Breaks Interstate Park via State Route 80; and to Poplar Gap (Buchanan County) via State Route 614.

The proposed project addresses all OHV skill levels through approximately 100 miles of trail. From the Splashdam Trailhead in Haysi, the trail generally parallels the proposed alignment of the Coalfield Expressway to the northeast. The connector trail from the Poplar Gap Mini Park extends from Stewart Gap to the main body of the trail. At Stewart Gap, it travels along the ridges and stream valleys of Gindy Fork, Lick Creek, and unnamed tributaries of Barts Lick Creek. A “community connector” is provided to Breaks Interstate Park at Meadow Gap, the intersection of the Dickenson and Buchanan segments of the trail. As the location of the Coalfield Expressway right-of-way is subject to change, coordination with VDOT is necessary to develop OHV crossings (tunnels) as part of the final VDOT construction plans. It is recommended this process begin as soon as possible.

A trailhead is proposed at Splashdam in Dickenson County on property owned by the Town of Haysi. The Buchanan County trailhead will utilize the existing Poplar Gap Mini Park, owned and operated by the County. Poplar Gap Mini Park has existing parking, restrooms, a horse ring and picnic shelters. The connector to the Breaks Interstate Park will utilize existing facilities within the Park.

The projected trail cost is \$530,654, with the projected Splashdam trailhead costing \$110,916.

Annual OHV trail O&M cost is projected to be \$47,500. The projected annual O&M cost the Haysi Trailhead at Splashdam, providing for parking with portable toilets only, is approximately \$4,200, without adjusting annually for inflation. A “community connector” to the Town will

provide riders access to other facilities and amenities. No O&M costs are projected for the Poplar Gap Mini Park or Breaks Interstate Park.

### 11.3.2 Mountainview - Dante OHV Trail

There are only limited miles within Dickenson County. Refer to Section 11.6.1 in Wise County for the Existing Mountainview Trail Rehabilitation and Section 11.4.2 in Russell County for the New Dante Trail.

### 11.3.3 Breaks Interstate Park Equestrian Trail

The Breaks Interstate Park Equestrian Trail is located within Breaks Interstate Park in the northern area of Dickenson County overlapping the Virginia/Kentucky line. The Park is located in both States and owned/operated by VDCR in Virginia. State Route 80 provides access from the Town of Haysi and Elkhorn City in Kentucky.

The project provides approximately 25 miles of Equestrian trail on relatively flat land throughout the Park. It will be located in the southwest and northern quadrants of the Park, separate from the existing Hiking and Mountain Biking trails. The trail will cross Laurel Branch and an unnamed tributary to Hunts Creek in the northeast quadrant of the Park, with an extensive series of parallel trail along various contour elevations above Grassy Creek. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings.

No trailhead is proposed. VDCR is considering constructing a horse camp to serve Equestrian riders and has numerous other amenities throughout the Park.

The projected trail cost is \$170,361. Trailhead facilities are to be provided by VDCR at no cost to SRRA.

SRRA will provide for trail O&M on the VDCR property, the basis for securing permit fees from the venue. The annual OHV trail O&M cost is projected to be \$475 per mile, or \$11,875 annually, unadjusted for future inflation. VDCR will provide for the O&M of the trailhead and related facilities. There is no cost to SRRA.

### 11.3.4 Haysi to Vicey Hiking Trail

The Haysi to Vicey Hiking Trail begins within the Haysi corporate limits traveling upstream and parallel to the Russell Fork along the southern bank to the Vicey Community. State Route 83 generally parallels the north bank of Russell Prater Fork. At Vicey, the trail travels overland, trending northeast approximately 3 miles to the headwaters of Russell Prater Fork along State Route 604.

The proposed trail provides for approximately 8 miles for hikers, crossing the Russell Prater Fork five (5) times. As this is a Hiking trail, hikers will ford the stream using natural materials for footing. Existing and planned future parking in the Town of Haysi will serve as the western trailhead. A trailhead may be constructed near its eastern terminus along State Route 604.

As Hiking and Biking trails will not be a source of revenue for SRRA, there is be no planned SRRA capital investment or O&M cost. Trail and/or trailhead costs will be provided by a local or state government, a special interest group or other similar entity.

### 11.3.5 Crane's Nest Hiking, Biking & Equestrian Trail

The Crane's Nest Hiking, Biking and Equestrian Trail is currently under development by the Dickenson County Engineer's Office. It begins on John Flannagan Reservoir property just east of the Town of Clintwood off of State Route 83. Once completed, the trail will encompass approximately 26 miles. A future direct link to the Town of Clintwood is planned.

The trail currently begins near the State Route 83 bridge over the Crane's Nest River, trending northeast along the north bank of the river, crossing the river at Big Branch via an existing low water bridge. It continues along the south side of the river ascending to the ridge in Persimmon Branch to an existing trailhead along the lake. As this is a Hiking, Biking and Equestrian trail, trail users will ford the stream using natural materials for footing where possible.

The Coalfield Expressway crosses the southern portion of the proposed trail; the location of the right-of-way is subject to change. Dickenson County is coordinating with VDOT to include the necessary Expressway crossings.

The trail will have two (2) trailheads. One in an existing parking area near the State Route 83 bridge. The second will be at the John Flannagan Reservoir.

Dickenson County has secured funding for a segment of the trail and trailhead. As these are predominantly Hiking and Biking trails, they are non-revenue generating. As such, SRRA is not planning to develop additional segments of the trail and trailheads at this time.

Dickenson County will also provide for the trail and trailhead O&M cost, as there is no SRRA revenue generation anticipated at this time.

### 11.3.6 Haysi to Breaks Interstate Park Hiking & Biking Trail

The Haysi to Breaks Interstate Park Hiking and Biking Trail begins in the Town of Haysi. It can be accessed via State Route 63 in Haysi or State Route 80 which surrounds Breaks Interstate Park. The trail is approximately 12 miles along the main trail, plus the 1.1 mile side trail. The main trail trends from the Town of Haysi to Breaks Interstate Park north along and above Russell Fork to the Breaks Interstate Park. The 1.1 mile side trail travels upstream to the foot of the John Flannagan Reservoir Dam. As this is a Hiking and Biking trail, trail users will ford the stream using natural materials for footing where possible.

Existing and planned future parking in the Town of Haysi will serve as the southern trailhead and facilities within the Breaks Interstate Park as the northern trailhead.

Dickenson County has secured funding for a segment of the trail. As these are predominantly Hiking and Biking trails, they are non-revenue generating. As such, SRRA is not planning to develop additional segments of the trail and trailheads at this time. In addition, Dickenson County will provide for the trail and trailhead O&M cost, therefore there is no SRRA revenue generation anticipated at this time.

### 11.3.7 John Flanagan – Russell Fork Blueway

The John Flannagan Reservoir is a USACE flood control reservoir encompassing approximately 1,145 acres at full pool. Discharges from the dam provide the waters of the Russell Fork. Access to the Reservoir is provided via State Route 80 from the Town of Haysi.

John Flannagan Reservoir offers opportunities for paddling and fishing through numerous access points around the lake. The Russell Fork blueway begins below the dam, meandering through the Bartlick Community with a take-out at Garden Hole. It is approximately 5 miles, with stretches only navigable when the USACE has planned water releases which create Class III, IV, and V level rapids (refer to Section 3.7). It has three (3) existing access points, one (1) on USACE property and two (2) informal.

Blueways are considered waters of the Commonwealth. Therefore, there is no “trail” development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

#### 11.3.8 Pound River Blueway

The Pound River Blueway is located north of the Town of Clintwood in Dickenson County, with a put-in in the Norland Community. Access to the Norland Community is at the intersection of State Routes 624 and 625, with State Route 625 paralleling the river over much of its course. It is approximately 8 miles and is classified as Class I to II (refer to Section 3.7), meandering east to the John Flannagan Reservoir, with a take-out at a fishing access in the backwaters of the Reservoir.

The blueway has two (2) existing access points, one (1) an informal access at the State Route 624 bridge. The second is the Pound Fishing Access in the backwaters of the John Flannagan Reservoir.

Blueways are considered waters of the Commonwealth. Therefore, there is no “trail” development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

#### 11.3.9 Russell Prater Creek Blueway

Refer to Section 11.2.5 in Buchanan County.

### 11.4 **Russell County**

#### 11.4.1 Mountainview - Dante OHV Trail: Existing Mountainview Trail Rehabilitation

Virtually all trail miles are within Wise County; refer to Section 11.6.1.

#### 11.4.2 Mountainview - Dante OHV Trail: New Dante Trail

State Route 63 provides access to the Dante Community. The New Dante Trail proposes to develop approximately 40 miles of trail generally following the ridge between Honeycomb Branch and Lick Creek, both tributary to the Clinch River. It will also provide access along the stream valleys of Squirrel Hollow, Goose Hollow and other unnamed tributaries. The proposed new Dante Trail will tie to the existing Mountainview trails to the west, with its connector near the Dickenson County line. The new trail is south of the Dante Community towards the Town of St. Paul, with a community connector by way of Squirrel Hollow. The community connector to St. Paul is provided through the Mountainview portion of the trail.

The Mountainview-Dante OHV Trail trailhead will be the existing Mountainview Trailhead on Old Dominion Power property at Virginia City. In addition, the Town of St. Paul has passed an OHV-friendly ordinance and is planning to provide additional areas within the Town that may be used as staging areas for OHV riders.

Proximity to the Clinch River, the most unique and diverse ecosystem in the United States, may require more intensive investigations relative to aquatic species.

The projected trail cost is \$222,706, with the existing Mountainview trailhead serving this portion of the trail. Annual O&M cost for the New Dante Trail is projected to be \$19,000. There is no trailhead O&M cost associated with the new Dante segments of the Mountainview-Dante OHV Trail.

#### 11.4.3 Dante Equestrian Trail

The Dante Equestrian Trail is located in the northwestern section of Russell County east of the Dante Community and north of the Town of St. Paul on State Route 63. The trail will provide approximately 25 miles for Equestrian riders. The majority will parallel Straight Hollow, with loops to the south, ascending to Sandy Ridge. The trail will be interlaced with the Dante Loop Hiking Trail. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Proximity to the Clinch River may require more intensive investigations relative to aquatic species. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. A trailhead is proposed east of the Dante Community on Sandy Ridge near the Russell and Dickenson County line.

The projected trail cost is \$171,798. The projected cost for a trailhead, providing portable toilets only is \$128,750.

The annual Equestrian trail O&M cost is projected to be \$11,875 annually. The O&M cost for a trailhead with no amenities other than portable toilets is approximately \$4,200, without adjusting annually for inflation.

#### 11.4.4 Dante Loop Hiking Trail

The Dante Loop Hiking Trail is located in the northwestern section of Russell County east of the Dante Community north of the Town of St. Paul on State Route 63 and being developed by the Dante Lives On Corporation. It consists of approximately 8 miles of hiking trail interlaced with the 25 mile Dante Equestrian Trail, east of the Dante Community. The majority of the trail parallels Straight Hollow, trending northeast, ascending to Sandy Ridge via a short side trail. As this is a Hiking trail, hikers will ford the stream using natural materials for footing. A trailhead located relatively close to the former school is proposed.

As Hiking trails and/or trailheads will not be a source of revenue for SRRA, there will be no SRRA capital or O&M cost planned at this time. These costs will be borne by local or state government, a special interest group such as the Dante Lives On Corporation. Note: Russell County is considering using the Dante Depot in Dante Virginia as a potential trailhead for multiple venues.

#### 11.4.5 Ratliff Property Mountain Biking Trail

The Ratliff Property Mountain Biking Trail is located approximately five (5) miles east of the Town of Lebanon in the southern section of Russell County near Elk Garden. Access to the trail is via US Route 19 and State Routes 656 and 80. The proposed project will develop approximately 20 miles of Mountain Biking trail in two (2) distinct riding areas. The trail begins in the valley and ascends along Ramp Cove Branch of Loop Creek to the Clinch Mountain Ridge bordering Washington County, Virginia and the Jefferson National Forest. North of Loop Creek the trail loops through numerous low hills in the valley. South of Loop Creek, it provides various looped trails on the way to Potato Hill Knob near the ridge. Bridges are proposed at all stream crossings to avoid potential impacts. Note: Stream crossings may be changed to hardened stream bottoms, pending environmental review and approval. There is the potential for a trailhead located near Loop Creek just off of State Route 80.

As Mountain Biking trails or trailheads will not be a source of revenue for SRRRA, there is no SRRRA capital or O&M cost planned at this time. These costs will be borne by local or state government, or a special interest group.

#### 11.4.6 Clinch River Watershed

Refer to Section 11.5.4 in Scott County.

### 11.5 **Scott County**

#### 11.5.1 Staunton Creek Equestrian Trail

The Staunton Creek Equestrian Trail just west of the Scott County Horse Park and can access from the Long Distance Historic Trail originating in the Park. Access to the Horse Park is provided via State Route 65, two (2) miles west of the Town of Dungannon.

The proposed project area will develop approximately 25 miles of Equestrian through river bluffs and along unnamed tributaries with direct discharge into the Clinch River. The Staunton Creek Equestrian Trail is situated such that it can connect to the existing trails in the National Park Service's Clinch Ranger District. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. Proximity to the Clinch River, the most unique and diverse ecosystem in the United States, may require more intensive investigations relative to aquatic species.

Due to the venue differences between the Staunton Creek Equestrian Trails and those at the Scott County Horse Association Horse Park (refer to Tab 1, Section 3.1), a separate trailhead is proposed off of State Route 65.

The projected trail cost is \$156,371. The annual Equestrian trail O&M cost is projected to be \$11,875. The trailhead O&M with parking and no amenities other than portable toilets is projected to approximately \$4,200, without adjusting annually for inflation.



### 11.5.2 Scott County Horse Association Equestrian Long Distance Historic Trail

The Scott County Horse Association (SCHA) Long Distance Historic Trail conceptual layout has been planned by SCHA. It begins at the Scott County Horse Park two (2) miles west of the Town of Dungannon on State Route 65. Elevations for access from the Scott County Horse Park vary from 1300 to over 4100 feet above mean sea level in the proposed long distance riding area.

The trail is referred to as the Long Distance Historic Trail due to the Horse Association's desire to provide access to the Chief Benges Scout Trail through in the National Park Services (NPS) Clinch Ranger District. The goal is to access over 80 miles of NPS trails within the District (Scott and Wise Counties) for long distance riders. The proposed project will require the construction of 1.6 miles of Equestrian trail through private property. Only a small segment of trail is required to access State Route 653 and then the trail will use other rights-of-way to access the NPS trails. Proximity to the Clinch River, the most unique and diverse ecosystem in the United States, may require more intensive investigations relative to aquatic species.

The existing Scott County Horse Association Horse Park will serve as the trailhead. The Horse Association Park is a well established equestrian destination, with two (2) horse rings; restrooms with potable water, sewer and power; ten (10) camping spaces; and telephone. The Association is in the planning stages to develop an additional 10 to 15 camping spaces, showers, dump station, stable with up to 40 stalls and bringing high speed internet to the site via wi-fi. The Clinch River Health Services Clinic is located on the adjacent lot east of the Horse Park. In addition to the existing park, the Scott County Economic Development Authority owns property just east of the Clinic and may provide for additional camping and Equestrian staging areas.

The projected trail cost is \$16,589.

Equestrian trail O&M cost for the 1.6 miles is projected to be \$760 annually, unadjusted for future inflation. However, as this venue has limited opportunity for Equestrian permit sales, it is assumed the trail be maintained by the Scott County Horse Association at no cost to SRRA. Furthermore, it is assumed the Horse Association will continue to provide for the operation and maintenance of the trailhead and related facilities. There is no cost proposed for SRRA at this time.

### 11.5.3 Scott County Horse Association Gentle Ride Equestrian Trail

The Scott County Horse Association Gentle Ride Trail is located at the Scott County Horse Park two (2) miles west of the Town of Dungannon on State Route 65.

The conceptual layout has been planned by SCHA. The proposed project will include approximately 8 miles of Equestrian trail located on farm land, with approximately 1.6 miles parallel to the Clinch River. The Gentle Ride Trail is planned for riders who want a short pleasure ride. It begins at the Horse Park, must cross State Route 65 where it travels along a gravel farm road to farm lands along the Clinch River. There is an existing at-grade crossing of the Norfolk-Southern Railroad that will be used to access the main part of the trail. Proximity to the Clinch River may require more intensive investigations relative to aquatic species. As such, bridge crossing of streams is proposed. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. Refer to Section 11.5.2 relative to the trailhead.

The projected trail cost is \$40,885. Equestrian trail O&M cost is projected to be \$3,800 annually, unadjusted for future inflation. However, as this venue has limited opportunity for Equestrian permit sales, it is assumed the trail be maintained by the Scott County Horse Association at no cost to SRRA. Furthermore, it is assumed the Horse Association will continue to provide for the operation and maintenance of the trailhead and related facilities. There is no cost proposed for SRRA at this time.

#### 11.5.4 Clinch River Watershed

The Clinch River Blueway System meanders across three (3) Counties in far Southwest Virginia, beginning at Taylor's Mill in Tazewell County and flowing in a southwesterly direction through Russell and Scott Counties to a take-out near the Virginia/Tennessee State line outside of Weber City, Virginia. It is termed a "watershed," as it includes not only the Clinch River, it also encompasses the water of the Guest River, Big Cedar Creek, Big Stony Creek, Little Stony Creek, and Straight Fork. The system intersects U.S. Route 23, U.S. Alt 58, State Route 72, and other state highways along its course. Elevations vary from 1191 to 1771 feet above mean sea level.

The Clinch River Watershed is a well-established fishery, encompassing 181 miles of river and streams through farm and woodlands. Throughout the System, it offers the enthusiast 141 miles of Class I through IV waters; eight (8) miles of Class IV through V water; nine (9) miles of Class I through III water; 12 miles of Class III through V+ water; eight (8) miles of Class V+ water; and, three (3) miles of Class of III+ water. In addition, two (2) sections of the Clinch River and 5.8 miles of Big Cedar Creek as designated as *Virginia Scenic River*. Refer to Section 3.7 for a discussion of Classification.

There are 20 existing and four (4) proposed points of access throughout. A majority of the put-in/take-outs are owned/operated by Russell and Scott Counties, VDGIF or the Tennessee Valley Authority.

Blueways are considered waters of the Commonwealth. Therefore, there is no "trail" development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

#### 11.5.5 North Fork Holston River & Big Moccasin Creek Blueways

Two (2) water bodies are identified within the North Fork of the Holston River watershed for blueway, the North Fork and Big Moccasin Creek, tributary to the North Fork of the Holston River. Both are located in the south-central area of Scott County, Virginia. The North Fork of the Holston River segment of the blueway begins in the Hiltons Community, flowing westerly to its terminus in the Yuma Community, just downstream of the Town of Weber City, Virginia, approximately 1.5 miles above the Virginia/Tennessee State line. It follows a very remote and scenic path through gentle water. In addition to canoeing/kayaking, the North Fork is a well-established fishery, especially for smallmouth bass.

Big Moccasin Creek is tributary to the North Fork, with their confluence between Wadlow Gap and the Town of Weber City. It flows from the north southwesterly then south to the confluence. The Big Moccasin Creek currently offers 6 miles of blueway from Snowflake to Antioch Church.

The blueways are accessible via US Routes 23 and 58/421, State Routes 701 and other local roads. Elevations vary from 1194 to 1684 feet above mean sea level (msl).

The North Fork Holston River & Big Moccasin Creek Blueways encompasses 40 miles of river and streams through farm and woodlands. Throughout the System, it offers the enthusiast 15 miles of Class I through III waters in the North Fork and 25 miles of Class I through III, up to IV at times in Big Moccasin Creek. Refer to Section 3.7 for a discussion of Classification. It has five (5) existing owned/operated by Scott County or VDGIF and three (3) proposed points of access throughout.

Blueways are considered waters of the Commonwealth. Therefore, there is no "trail" development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

## **11.6 Wise County**

### **11.6.1 Mountainview - Dante OHV Trail: Existing Mountainview Trail Rehabilitation**

The Mountainview-Dante OHV Trail is located across three (3) counties, north and northwest of the Town of St. Paul at the junction of the Wise, Dickenson and Russell Counties borders. Alternate US Route 58 provides access to both the trailhead and the Town of St. Paul. Virtually all trail miles are within Wise County.

The trail generally straddles Sandy Ridge, Honey Branch and Meade Creek. The rehabilitation of the 84 miles of existing trail will bring it up to SRRA standards. The 6 miles of new trail provides for additional connectors within the existing system and community connector to the Town of St. Paul over Whetstone Ridge. The existing and proposed trails provide access along the stream valleys of Meade Creek, Maize Hollow, Caledonia Hollow, Meadows Branch, Honeycomb Branch and other unnamed tributaries, all tributary to the Clinch River.

The Mountainview segments of the trail will tie to the proposed New Dante Trail to the northeast, near the Dickenson County line. The combined trails will result in approximately 130 miles of connected OHV trails. The existing trail is west and north of the Town of St. Paul, crossing the Wise County boundary into Dickenson County in the vicinity of Sandy Ridge. A community connector to St. Paul is provided through the Mountainview portion of the trail. Proximity to the Clinch River may require more intensive investigations relative to aquatic species.

The trailhead for the Mountainview-Dante OHV Trail will be the existing Mountainview Trailhead on Old Dominion Power property at Virginia City. In addition, the Town of St. Paul has passed an OHV-friendly ordinance and is planning to provide additional areas within the Town that may be used as staging areas for OHV riders.

The projected trail project cost is \$244,663. Improvements to the existing Mountainview Trailhead will be made, providing for portable toilets only. The projected trailhead project cost is \$58,655.

Annual OHV trail O&M is projected to be \$42,750. There are no new facilities at the trailhead, only improvements to the existing trailhead are proposed, with sanitary services provided

through portable toilets. The projected annual trailhead O&M cost is approximately \$4,200, without adjusting annually for inflation.

#### 11.6.2 High Knob Equestrian Trail

Refer to Section 11.8.1 in the City of Norton.

#### 11.6.3 High Knob Mountain Biking Trail

Refer to Section 11.8.2 in the City of Norton.

#### 11.6.4 Coeburn Mountain Biking Trail

The Coeburn Mountain Biking Trail is located just outside the Town of Coeburn in Wise County, accessible from State Routes 72 and 652. The proposed trail offers over 30 miles of Mountain Biking in the Coeburn and Sandy Ridge areas of the County. The western segments of the trail will run parallel to Tom's Creek. The central portion of the trail will ascend to the ridge to the south into the Banner Community. The easternmost portion of the trail follows the ridge to Sandy Ridge above the Mountainview OHV Trail. It does not intersect the Mountainview-Dante OHV Trail. Bridges are proposed at all stream crossings to avoid potential impacts. Note: Stream crossings may be changed to hardened stream bottoms, pending environmental review and approval.

There are two (2) potential trailhead locations, one just off State Route 652 on Tom's Creek, 1.7 miles northeast of the Town. The second is in the Banner Community just off of US Route 58 Business.

As Mountain Biking trails or trailheads will not be a source of revenue for SRRA, there is no SRRA capital or O&M cost planned at this time. These costs will be borne by local or state government, or a special interest group.

#### 11.6.5 Clinch River Watershed

Refer to Section 11.5.4 in Scott County.

### 11.7 **Lee County**

#### 11.7.1 Stone Mountain OHV Trail Phases I, II & III

The Stone Mountain OHV Trail is located north of the Town of Pennington Gap in Lee County, Virginia, with its trailhead at Leeman Field. Access is provided in Pennington Gap via State Route 621 off U.S. Route 421. Three (3) phases are proposed, with Phases I and II currently funded:

- Phase I – Approximately 10 miles, beginning at the trailhead, ascending Stone Mountain along the ridge to the Jefferson National Forest boundary, then down to the North Fork of the Powell River.
- Phase II – Crosses the North Fork of the Powell River and ascends, traveling along Black Mountain. The phase encompasses approximately 40 miles, utilizing available funds.
- Phase III – Completes the trail system along Black Mountain; approximately 30 miles are envisioned.

It is recommended both Phases I and II be complete prior to opening the trails for public use.

Once completed, the entire trail system will be comprised of approximately 80 miles along the ridges and hollows of Stone and Black Mountains, parallel to the Virginia/Kentucky state line. Numerous streams will require crossing, including Bundy, Cox, Right Fork Mud and Reeds Creeks draining Black Mountain. In addition, the Stone Mountain OHV Trail requires the crossing of a Norfolk-Southern Railroad tunnel and the North Fork of the Powell River. A low water crossing is proposed for the river. Both railroad and river crossings will require detailed analysis and permitting over and above that for others in the Spearhead Trails system, as funding was secured prior to SRRA formation.

The trail system will utilize areas at Leeman Field, owned by the Town of Pennington Gap, as the trailhead. Leeman Field offers ball fields, restrooms, concession stands, walking track, horse ring and stables, tractor pull area, pool, picnic shelters, stage, and other recreation amenities. Recent funding provides for limited site development in the OHV staging area. Additional funds will be required to provide restrooms, as water, sewer and power, currently accessible, at the OHV site.

Phases I and II have been funded, with a projected cost for Phase III of \$172,135. In addition, a portion of the cost for trailhead development is currently funded. Water, sewer and power are available on the site. A cost to construct restrooms and a permit booth is projected to \$100,115.

Crossing of the Norfolk-Southern Railroad tunnel and North Fork of the Powell River in Phase II are potential constraints. In addition, the numerous stream crossings associated with Phases II and III may impose environmental compliance requirements for and during construction. Furthermore, the number of Land Use Agreements to provide for a continuous trail may impact its development. Prior to construction, all Land Use Agreements and permits must be secured.

Annual OHV trail O&M costs are the anticipated to be \$23,750 for Phases I and II, unadjusted for inflation. The projected annual trailhead O&M based cost is \$5,700.

#### 11.7.2 Deep Springs Equestrian Trail

The Deep Springs Equestrian Trail is located east of the Dryden Community in the northeastern section of Lee County. The trail will be situated near Alternate US Route 58 and State Route 620.

The proposed project will provide for approximately 28 miles of Equestrian trail, crossing a number of small direct feeder tributaries to the Powell River. A relatively significant segment of the trail is along the Powell River, with various parallel loops ascending to Stocker Knob. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. Two (2) potential trailhead locations have been identified. One is located near Alternate US Route 58 Alt and a second possible site is adjacent to State Route 620.

The projected trail cost is \$208,989 and the projected cost for a single trailhead is \$121,850.

The number of Land Use Agreements may delay this project and close proximity to the Powell River may require specialized aquatic species studies. In addition, VDOT entrance compliance

may add both cost and time to the trailhead development. Prior to construction, all Land Use Agreements and permits must be secured.

The annual Equestrian trail O&M cost is projected to be \$13,300, unadjusted for future inflation. The annual O&M cost for a trailhead with parking and no amenities other than portable toilets is approximately \$4,200.

### 11.7.3 Powell River Blueway

The Powell River Blueway is located in Lee County beginning in the Dryden Community, flowing southwest to the Virginia/Tennessee state line. It encompasses approximately 48 miles and is classified as Class II to IV (refer to Section 3.7). Beginning at the existing VDGIF put-in in Dryden at the US Route 58 bridge, it meanders throughout its length passing near the Woodway Community, close to the Town of Pennington Gap. Otherwise, the river passes through farm and woodlands. There is one (1) existing and six (6) proposed points of access.

Blueways are considered waters of the Commonwealth. Therefore, there is no "trail" development cost. As Blueways will not be a source of revenue for SRRA, there is no SRRA put-in/take-out O&M cost considered at this time. O&M will be provided by local or state government, a special interest group or other similar entity.

## 11.8 **City of Norton**

### 11.8.1 High Knob Equestrian Trail

The High Knob Equestrian Trail is located in Wise County, approximately 1.1 miles south of the City of Norton on State Route 619 towards Scott County, just west the High Knob Recreation Area. Elevations for the High Knob Equestrian Trail vary from 3200 to 4100 feet above mean sea level (msl).

The proposed trail provides for approximately 28 miles of Equestrian trail, clustered along the Grindstone Ridge of Powell Mountain at the headwaters of the South Fork of the Powell River. It is ideally situated to access over 80 miles of National Park Service (NPS) trails within the Clinch Ranger District (Scott and Wise Counties) and the Chief Benges Scout Trail (historic) for long distance riders. Unlike OHV bridge crossings, Equestrian crossings are proposed to be hardened bottoms to allow horses to have access to water. Coordination with applicable regulatory agencies is necessary on a project-specific basis relative to stream crossings. The High Equestrian Trail is located south of the High Knob Mountain Biking Trail. There will be no interconnect between the trails, avoiding incompatible uses.

A private entrepreneur is proposing to construct a horse camp and trailhead in the project area. There will be no SRRA trailhead required.

The projected trail cost is \$212,459. As the trailhead facilities are planned to be provided at the horse camp by its owner, there will be no SRRA cost to construct.

The annual Equestrian trail O&M cost is projected to be \$13,300, unadjusted for future inflation. The horse camp owner will provide for the operation and maintenance of the trailhead and related facilities. There is no trailhead O&M cost planned for SRRA at this time.

### 11.8.2 High Knob Mountain Biking Trail

The High Knob Mountain Biking Trail is located within the City of Norton, south of the City of the downtown on State Route 619, north of the High Knob Recreation. Lonesome Pine Cycling is working with the City of Norton to develop the trail. Upon completion, the project will provide for approximately 20 miles of Mountain Biking trail. At this time, 4.5 miles of trail exist and 10 are in the field reconnaissance planning phase. The proposed trail is looped around the two (2) Norton water reservoirs in the Benges Branch watershed. Bridges are proposed at all stream crossings to avoid potential impacts. Note: Stream crossings may be changed to hardened stream bottoms, pending environmental review and approval. The High Knob Mountain Biking Trail is located north of the High Knob Equestrian Trail. There will be no interconnect between the trails, avoiding incompatible uses.

No formal trailhead is planned. Mountain Bike riders use existing parking facilities at the reservoirs and the Flag Rock and High Knob Recreation Areas. The Flag Rock Recreation Area trailhead, approximately 0.25 miles north on State Route 619 (downhill), offers camping, restrooms, showers, picnic shelters and other recreation amenities.

As Mountain Biking trails or trailheads will not be a source of revenue for SRRA, there is no SRRA capital or O&M cost planned at this time. These costs will be borne by local or state government, or a special interest group such as Lonesome Pine Cycling.

### **11.9 Existing Hiking, Mountain Biking & Multi-use Trails**

Numerous hiking, mountain biking and multi-use trails exist in the Southwest Virginia Recreation Area. Many were identified in the *Southwest Virginia Spearhead Trails Comprehensive Plan*, prepared by WMTH Corporation, 2009. A tabulation of the Existing Hiking, Mountain Biking & Multi-use Trails follows. Their condition and accessibility have not been determined at this time.

EXISTING TRAILS ON PUBLIC LANDS

Trail Name	Location (County)	Public Agency	Recreation Area or Property Owner	Status	Venue(s)	Miles
Roaring Fork Trail	Tazewell	USFS	Jefferson National Forest	Existing	HK	2.3
VA Birding & Wildlife Trail: Mountain Heritag	Tazewell	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
Witten Lake Nature Trail	Tazewell	Tazewell County	J. C. Witten Recreation Area	Existing	HK	5
Beaver Pond Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	0.42
Cardiac Hill Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	0.39
Chestnut Ridge Nature Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	1.59
Clinchfield Overlook	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.14
Cold Spring Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.21
Deer Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	0.22
Geological Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.42
Grassy Creek	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	1.38
Grassy Overlook	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.14
Ladies Loop	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	0.7
Lake Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.49
Laurel Branch Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.49
Main Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	1.44
Overlook Loop Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	1.23
Prospector's Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.38
Rattlesnake Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	MB	3.18
Ridge Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.68
River Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.48
Towers Overlook Trail	Buchanan / Dickenson	VDCR - State Park	Breaks Interstate Park	Existing	HK	0.3
VA Birding & Wildlife Trail: Compton Mounta	Buchanan	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
Bob's Gap Trail	Dickenson	USFS	Jefferson National Forest	Existing	HK/MB	1.83
Count's Cabin Trail	Dickenson	USFS	Jefferson National Forest	Existing	HK/MB	1.8
Pine Mountain Trail	Dickenson	USFS	Jefferson National Forest	Existing	HK / MB / EQ	18.75
Clinch Mountain Trail	Russell / Tazewell	Public / Private	Various State & Private	Existing	HK / EQ	30
Sugar Loop Hiking & Biking Trail	Russell	Town of St. Paul	Frank Kilgore Property / Town of St. Paul	Existing	HK / MB	5
VA Birding & Wildlife Trail: Clinch Mountain	Russell / Tazewell	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
Back Valley Loop Trail	Scott	USFS	Jefferson National Forest	Existing	HK	26.7
Bark Camp Lake Loop Trail	Scott	USFS	Jefferson National Forest	Existing	HK / MB	3.5
Bear Rock Trail	Scott	USFS	Jefferson National Forest	Existing	HK	0.5
Carter Cabin Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK	0.9
Center Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK / MB	0.2



**EXISTING TRAILS ON PUBLIC LANDS**

Trail Name	Location (County)	Public Agency	Recreation Area or Property Owner	Status	Venue(s)	Miles
Devils Fork Loop Trail	Scott	USFS	Jefferson National Forest	Existing	HK / MB / EQ	7.2
Gorge Ridge Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK / MB	0.31
High Knob Lake Shore Trail	Scott	USFS	Jefferson National Forest	Existing	HK	1.3
Keith Park Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK	1
Kitchen Rock Trail	Scott / Wise	USFS	George Washington / Jefferson National Forest	Existing	HK / MB	0.6
Little Stony National Recreation Trail	Scott	USFS	Jefferson National Forest	Existing	HK	3
Lover's Leap Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK	0.4
Osbourne Ridge Loop Trail	Scott	USFS	Jefferson National Forest	Existing	HK	10.75
Purchase Ridge Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK / MB	2.2
Scott County Park Trail	Scott	Scott County	Scott County Park System	Existing	HK	1.5
Spring Hollow Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK	0.5
Straight Fork Ridge Trail	Scott	USFS	Jefferson National Forest	Existing	HK / MB / EQ	1.8
Tunnel Hill Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK / MB	0.3
Tunnel Trail	Scott	VDCR - State Park	Natural Tunnel State Park	Existing	HK / MB	0.7
Appalachia Trail	Wise	USFS	Jefferson National Forest	Existing	HK	1.3
Austin Gap Trail	Wise	USFS	Jefferson National Forest	Existing	HK	4
Cumberland & Pine Mountain Horse Trail	Wise / Dickenson	USFS	Jefferson National Forest	Proposed	EQ	26
Cumberland Mountain Trail	Wise	USFS	Jefferson National Forest	Existing	HK	25.7
Devils Fork Trail System (Devils Bathtub Tra	Wise	USFS	Jefferson National Forest	Existing	HK	1.5
Guest River Gorge	Wise	USFS	Jefferson National Forest	Existing	HK/MB	5.59
Guest River Scenic River Trail	Wise	USFS	Jefferson National Forest	Existing	HK	5.8
High Knob Hiking Trails	Wise	USFS	Jefferson National Forest	Existing	HK	20.5
Lake Shore Trail at Bark Camp Lake	Wise	USFS	Jefferson National Forest	Existing	HK	3.7
Laurel Fork Trail	Wise	USFS	Jefferson National Forest	Existing	HK	1.5
Oxbow Lake Trail	Wise	Town of St. Paul	Town of St. Paul	Existing	HK	0.53
Phillips Creek Area	Wise	USFS	Jefferson National Forest	Existing	HK/MB	1.29
Phillips Creek Loop Trail	Wise	USFS	Jefferson National Forest	Existing	HK	1.3
Red Fox Trail	Wise	USFS	Jefferson National Forest	Existing	HK	2
VA Birding & Wildlife Trail: Appalachian Wo	Wise / Scott / City of Norton	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
VA Birding & Wildlife Trail: Big Stone Gap L	Wise / Lee	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
VA Birding & Wildlife Trail: Lonesome Pine	Wise / Dickenson / Buchanan	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
VA Birding & Wildlife Trail: St. Paul Loop VE	Wise / Russell	VDGIF	Town of St. Paul	Existing	Driving	Varied
Boone Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / MB	1.9
Cave Springs Loop Trail	Lee	USFS	Jefferson National Forest	Existing	HK	1

**EXISTING TRAILS ON PUBLIC LANDS**

Trail Name	Location (County)	Public Agency	Recreation Area or Property Owner	Status	Venue(s)	Miles
Cave Springs to Lake Keokee	Lee	Private	Cumberland Horse Association	Existing	EQ	20
Cave's Spring Hiking Trails	Lee	USFS	Jefferson National Forest	Existing	HK	14.3
Colson Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / MB	0.5
Cumberland Gap Hiking Trails	Lee	NPS	Cumberland Gap National Historical Park	Existing	HK	70
Ewing Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / EQ	4.3
Fort McCook Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	0.8
Gibson Gap Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / EQ	4.8
Greenleaf Nature Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	0.7
Honey Tree Spur Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	1
Indian Ridge Trail	Lee	VDCR - State Park	Wilderness Road State Park	Existing	HK	1
Indian Rock Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / EQ	0.6
Lake Keokee Loop	Lee	USFS	Jefferson National Forest	Existing	HK / MB	3.7
Lewis Hollow Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	1.7
Olinger Gap Trail	Lee	USFS	Jefferson National Forest	Existing	HK / MB / EQ	1.1
Payne Branch Trail	Lee	USFS	Jefferson National Forest	Existing	HK / MB / EQ	2.3
Ridge Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK / EQ	16.5
Stone Mountain Trail	Lee / Wise	USFS	Jefferson National Forest	Existing	HK / MB / EQ	14.3
Tennessee Road Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	0.2
Tri-State Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	0.9
VA Birding & Wildlife Trail: Daniel Boone Lo	Lee / Scott	VDGIF	Multiple Trails - Towns, County & VDOT	Existing	Driving	Varied
Wagon Tunnel Trail	Lee	Unknown	Cranks Creek Wildlife Management Area (KY)	Existing	HK	4
Wallen Ridge Trail	Lee / Wise	USFS	Jefferson National Forest	Existing	HK / MB / EQ	6.9
White Rock Foot Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	0.6
Wilderness Road State Park Trail	Lee	VDCR - State Park	Wilderness Road State Park	Existing	HK / MB / EQ	10
Wilderness Road Trail	Lee	NPS	Cumberland Gap National Forest	Existing	HK	1.4
Chief Benges Scout Trail	City of Norton / Wise / Scott	USFS	Jefferson National Forest	Existing	HK / MB / EQ	15.7

VDCR – Virginia Department of Conservation and Recreation; VDGIF – Virginia Department of Game and Inland Fisheries; NPS – National Park Service; USFS – US Forest Service; Others, as identified  
 OHV – Off-highway Vehicle; EQ – Equestrian; HK – Hiking; MB – Mountain Biking; BW - Blueway

**APPENDIX A:**  
**Southwest Regional Recreation Authority Charter**

## CHAPTER 645

*An Act to amend the Code of Virginia by adding in Title 15.2 a chapter numbered 60.1, consisting of sections numbered [15.2-6016](#) through [15.2-6024](#), relating to the Southwest Regional Recreation Authority.*

[H 1496]

Approved March 13, 2008

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Title 15.2 a chapter numbered 60.1, consisting of sections numbered [15.2-6016](#) through [15.2-6024](#), as follows:

§ [15.2-6016](#). *Southwest Regional Recreation Authority established.*

*There is hereby established a Southwest Regional Recreation Authority for the LENOWISCO and Cumberland Plateau Planning District Commissions for the purpose of establishing and maintaining a Southwest Regional Recreation Area.*

§ [15.2-6017](#). *Definitions.*

*As used in this chapter, unless the context requires a different meaning:*

*"Authority" means the Southwest Regional Recreation Authority, a body politic and corporate, created, organized, and operated pursuant to the provisions of this chapter or, if such Authority is abolished, the board, body, authority, department, or officer succeeding to the principal functions thereof or to whom the powers given by this chapter are given by law.*

*"Board" means the board of the Southwest Regional Recreation Authority established pursuant to § [15.2-6018](#).*

*"Land" includes roads, water, watercourses, private ways and buildings, structures, and machinery or equipment thereon when attached to the realty.*

*"Owner" includes tenant, lessee, occupant, or person in control of the premises.*

*"Recreational purposes" includes any one or any combination of the following recreational activities: hunting, fishing, swimming, boating, camping, picnicking, hiking, pleasure driving, motorcycle or all-terrain vehicle riding, bicycling, horseback riding, nature study, water skiing, winter sports, and visiting, viewing or enjoying historical, archaeological, scenic, or scientific sites or otherwise using land for purposes of the user.*

*"Southwest Regional Recreation Area" means a system of recreational trails and appurtenant facilities, including trail-head centers, parking areas, camping facilities, picnic areas,*

*recreational areas, historic or cultural interpretive sites, and other facilities that are a part of the system.*

*§ 15.2-6018. Board of directors; appointments; terms.*

*The Authority shall be governed by a board of directors in which all powers of the Authority shall be vested. The Authority shall consist of members as follows:*

- 1. One representative each from the governing body of the City of Norton and the Counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, and Wise to serve terms of three years;*
- 2. Four additional non-voting members appointed by a majority vote of the members appointed in subdivision 1 to serve terms of two years; and*
- 3. Any additional non-voting members as determined by the board.*

*Appointments to fill vacancies shall be for the unexpired terms. Any member may be reappointed. The directors shall elect from their membership a chairman and a vice-chairman. Each director shall, upon appointment or reappointment, before entering upon his duties take and subscribe the oath prescribed by § 49-1.*

*§ 15.2-6019. Meetings; decisions of Authority; compensation.*

*The board shall meet quarterly, unless a special meeting is called by its chairman. A majority of the Authority shall constitute a quorum. Decisions of the Authority shall require a quorum and shall be in accordance with voting procedures established by the Authority.*

*The board shall prescribe, amend, and repeal bylaws and rules governing the manner in which the business of the Authority is conducted and shall review and approve an annual budget. The board shall appoint an executive director to act as its chief executive officer, to serve at the will and pleasure of the board. The board, acting through its executive director, may employ any other personnel considered necessary and may appoint counsel and legal staff for the Authority and retain such temporary engineering, financial, and other consultants or technicians as may be required for any special study or survey consistent with the provisions of this chapter. The executive director shall carry out plans to implement the provisions of this chapter and to exercise those powers enumerated in the bylaws. The executive director shall prepare annually a budget to be submitted to the board for its review and approval.*

*All costs incidental to the administration of the Authority, including office expenses, personal services expense, and current expense, shall be paid in accordance with guidelines issued by the board from funds accruing to the Authority.*

*All expenses incurred in carrying out the provisions of this chapter shall be payable solely from funds provided under this chapter, and no liability or obligation may be incurred by the*

*Authority under this chapter beyond the extent to which moneys have been provided under the authority of this chapter.*

*§ 15.2-6020. Powers of Authority.*

*The Authority, as a public corporation and governmental instrumentality exercising public powers of the state, may exercise all powers necessary or appropriate to carry out the purposes of this chapter, including the power to:*

- 1. Acquire, own, hold and dispose of property, real and personal, tangible and intangible; provided that, the Authority shall not acquire such property through the exercise of the power of eminent domain;*
- 2. Lease property, whether as lessee or lessor, and acquire or grant through easement, license or other appropriate legal form, the right to develop and use property and open it to the use of the public;*
- 3. Mortgage or otherwise grant security interests in its property;*
- 4. Procure insurance against any losses in connection with its property, license or easements, contracts, including hold-harmless agreements, operations or assets in such amounts and from such insurers as the Authority considers desirable;*
- 5. Maintain such sinking funds and reserves as the board determines appropriate for the purposes of meeting future monetary obligations and needs of the Authority;*
- 6. Sue and be sued, implead and be impleaded, and complain and defend in any court;*
- 7. Adopt, use, and alter at will a corporate seal;*
- 8. Make, amend, repeal, and adopt bylaws for the management and regulation of its affairs;*
- 9. Make contracts of every kind and nature and execute all instruments necessary or convenient for carrying on its business, including contracts with any other governmental agency of this state or of the federal government or with any person, individual, partnership, or corporation to effect any or all of the purposes of this chapter;*
- 10. Accept grants and loans from and enter into contracts and other transactions with any federal agency;*
- 11. Maintain an office at such places within the state as it may designate;*
- 12. Borrow money and issue bonds, security interests, or notes and provide for and secure the payment of the bonds, security interests, or notes and provide for the rights of the holders of the*

*bonds, security interests, or notes and purchase, hold, and dispose of any of its bonds, security interests, or notes;*

*13. Accept gifts or grants of property, funds, security interests, money, materials, labor, supplies, or services from the federal government or from any governmental unit or any person, firm, or corporation and to carry out the terms or provisions of or make agreements with respect to or pledge any gifts or grants and to do any and all things necessary, useful, desirable, or convenient in connection with the procuring, acceptance, or disposition of gifts or grants;*

*14. Enter into contract with landowners and other persons holding an interest in the land being used for its recreational facilities to hold those landowners and other persons harmless with respect to any claim in tort growing out of the use of the land for public recreation or growing out of the recreational activities operated or managed by the Authority from any claim except a claim for damages proximately caused by the willful or malicious conduct of the landowner or other person or any of his or her agents or employees;*

*15. Assess and collect a reasonable fee from those persons who use the trails, parking facilities, visitor centers, or other facilities which are part of the Southwest Regional Recreation Area and to retain and utilize that revenue for any purposes consistent with this chapter;*

*16. Adopt rules to regulate the use and maintenance of the Southwest Regional Recreation Area;*

*17. Cooperate with the states of Kentucky, Tennessee, and West Virginia and appropriate state and local officials and community leaders in those states to connect the trails in Virginia with similar recreation facilities in those states; and*

*18. Exercise all of the powers that a corporation may lawfully exercise under the laws of the Commonwealth.*

*§ 15.2-6021. Southwest Regional Recreation Area rangers.*

*The board may appoint qualified persons as Southwest Regional Recreation Area rangers. The ranger may enforce the rules adopted by the Board and issue civil penalties for violations thereof upon any premises located within the Southwest Regional Recreation Area. The ranger may preserve law and order on any premises that is part of the Southwest Regional Recreation Area, any immediately adjacent property of landowners who are making land available for public use under agreement with the Authority, and on streets, highways, or other public lands utilized by the trails, parking areas, or related recreational facilities and other immediately adjacent public lands. The assignment of rangers to the duties authorized by this section shall not supersede the authority of any law-enforcement officers. The salary of all rangers shall be paid by the board. The board shall furnish each ranger with an official uniform to be worn while on duty and shall furnish and require each ranger while on duty to wear a shield with an appropriate inscription and to carry credentials certifying the person's identity and authority as a ranger.*

§ 15.2-6022. *Bonds not a debt of the Commonwealth.*

*Revenue bonds and revenue refunding bonds of the Authority issued under the provisions of this chapter do not constitute a debt of the Commonwealth or of any political subdivision of the Commonwealth or a pledge of the faith and credit of the Commonwealth or of any political subdivision, but the bonds shall be payable solely from the funds provided for in this chapter from revenues resulting from the issuance of bonds. All bonds shall contain on the face of the bond a statement to the effect that neither the Commonwealth nor any political subdivision of the Commonwealth is obligated to pay the bond or the interest on the bond except from revenues of the recreational project or projects for which they are issued and that neither the faith or credit nor the taxing power of the Commonwealth or any political subdivision of the Commonwealth is pledged to the payment of the principal or the interest on the bonds.*

§ 15.2-6023. *Violation of rules; civil penalties.*

*Any person who violates any of the rules adopted by the board pursuant to this chapter relating to permits or failure to purchase a permit, safety violations, or other civil violations is subject to a civil penalty of \$100.*

§ 15.2-6024. *Limiting liability.*

*A. An owner of land used by or for the stated purposes of the Authority, whether with or without charge, owes no duty of care to keep the premises safe for entry or use by others for recreational purposes or to give any warning of a dangerous or hazardous condition, use, structure, or activity on the premises to persons entering for those purposes.*

*B. The landowner or lessor of the property used for recreational purposes does not: (i) extend any assurance that the premises are safe for any purpose; (ii) confer upon users the legal status of an invitee or licensee to whom a duty of care is owed; or (iii) assume responsibility for or incur liability for any injury to person or property caused by an act or omission of these persons.*

*C. Nothing herein limits in any way any liability which otherwise exists for deliberate, willful, or malicious infliction of injury to persons or property. Nothing herein limits in any way the obligation of a person entering upon or using the land of another for recreational purposes to exercise due care in his or her use of the land and in his or her activities thereon, so as to prevent the creation of hazards or waste.*



**APPENDIX B:**  
**Landowner Protection Legislation Protection Excerpts**

## Appendix B: Landowner Protection Legislation Excerpts

The Commonwealth of Virginia, under Virginia Code § 29.1-509. (Effective January 1, 2008), provides landowner protections for duty of care and liability for damages of landowners to hunters, fishermen, sightseers, etc. The following language is excerpted from Code §29.1-509:

*"Fee" means any payment or payments of money to a landowner for use of the premises or in order to engage in any activity described in subsections B and C of this section, but does not include rentals or similar fees received by a landowner from governmental sources or payments received by a landowner from incidental sales of forest products to an individual for his personal use, or any action taken by another to improve the land or access to the land for the purposes set forth in subsections B and C of this section or remedying damage caused by such uses. "Land" or "premises" means real property, whether rural or urban, waters, boats, private ways, natural growth, trees and any building or structure which might be located on such real property, waters, boats, private ways and natural growth.*

*"Landowner" means the legal title holder, lessee, occupant or any other person in control of land or premises.*

*B. A landowner shall owe no duty of care to keep land or premises safe for entry or use by others for hunting, fishing, trapping, camping, participation in water sports, boating, hiking, rock climbing, sightseeing, hang gliding, skydiving, horseback riding, foxhunting, racing, bicycle riding or collecting, gathering, cutting or removing firewood, for any other recreational use, or for use of an easement granted to the Commonwealth or any agency thereof to permit public passage across such land for access to a public park, historic site, or other public recreational area. No landowner shall be required to give any warning of hazardous conditions or uses of, structures on, or activities on such land or premises to any person entering on the land or premises for such purposes, except as provided in subsection D.*

*C. Any landowner who gives permission, express or implied, to another person to hunt, fish, launch and retrieve boats, swim, ride, foxhunt, trap, camp, hike, rock climb, hang glide, skydive, sightsee, engage in races, to collect, gather, cut or remove forest products upon land or premises for the personal use of such person, or for the use of an easement as set forth in subsection B does not thereby:*

- 1. Impliedly or expressly represent that the premises are safe for such purposes; or*
- 2. Constitute the person to whom such permission has been granted an invitee to whom a duty of care is owed; or*
- 3. Assume responsibility for or incur liability for any intentional or negligent acts of such person or any other person, except as provided in subsection D.*

*D. Nothing contained in this section, except as provided in subsection E, shall limit the liability of a landowner which may otherwise arise or exist by reason of his gross negligence or willful or malicious failure to guard or warn against a dangerous condition, use, structure, or activity. The provisions of this section shall not limit the liability of a landowner which may otherwise arise or exist when the landowner receives a fee for use of the premises or to engage in any activity described in subsections B and C of this section. Nothing contained in this section shall relieve any sponsor or operator of any sporting event or competition including but not limited to a race*

*or triathlon of the duty to exercise ordinary care in such events. Nothing contained in this section shall limit the liability of an owner of a low-head dam who fails to implement safety measures described in subsection F.*

*E. For purposes of this section, whenever any person enters into an agreement with, or grants an easement to, the Commonwealth or any agency thereof, any county, city, or town, or with any local or regional authority created by law for public park, historic site or recreational purposes, concerning the use of, or access over, his land by the public for any of the purposes enumerated in subsections B and C of this section, the government, agency, county, city, town, or authority with which the agreement is made shall hold a person harmless from all liability and be responsible for providing, or for paying the cost of, all reasonable legal services required by any person entitled to the benefit of this section as the result of a claim or suit attempting to impose liability. Any action against the Commonwealth, or any agency, thereof, for negligence arising out of a use of land covered by this section shall be subject to the provisions of the Virginia Tort Claims Act (§ 8.01-195.1 et seq.). Any provisions in a lease or other agreement which purports to waive the benefits of this section shall be invalid, and any action against any county, city, town, or local or regional authority shall be subject to the provisions of § 15.2-1809, where applicable.*

**APPENDIX C:**  
**Recreational Vehicles Off-road Legislation**

## Appendix C: Recreational Vehicles Off-road Legislation

§ 46.2-800.2. *Operation of off-road recreational vehicles in localities embraced by the Southwest Regional Recreation Authority.*

*A. The governing body of any county, city, or town embraced by the Southwest Regional Recreation Authority may by ordinance authorize the operation of any off-road recreational vehicles (i) on highways within its boundaries that have a maximum speed limit of no more than 25 miles per hour and (ii) for a distance of no more than five miles on any highway within its boundaries that has a maximum speed limit of more than 25 miles per hour. Any such ordinance shall define "off-road recreational vehicle." Any such operation shall be subject to the following conditions, and such additional restrictions and limitations as the county, city, or town by ordinance may impose:*

- 1. Signs whose design, number, and location are approved by the Virginia Department of Transportation shall have been posted by the county, city, town, or Southwest Regional Recreation Authority warning motorists that off-road recreational vehicles may be operating on the highway;*
- 2. Such off-road recreational vehicles shall be operated only during daylight hours;*
- 3. Off-road recreational vehicle operators shall, when operating on the highway, obey all rules of the road applicable to other motor vehicles;*
- 4. Riders of such off-road recreational vehicles shall wear helmets of a type approved by the Superintendent of State Police; and*
- 5. Operators shall be licensed drivers or accompanied by a licensed driver who is either occupying the same vehicle or occupying another vehicle within a prudent distance; however, no person shall operate any off-road recreational vehicle as provided in this section if his driver's license, whether issued in the Commonwealth or in another jurisdiction, has been suspended or revoked.*

*B. The governing body of any county, city, or town that enacts any ordinance under subsection A shall notify in writing the Virginia State Police and all law-enforcement agencies within the county, city, or town of its action, together with a copy of such ordinance.*

*C. Operation of any off-road recreational vehicle as provided in the foregoing provisions of this section shall be subject to the issuance of a permit by the Southwest Regional Recreation Authority pursuant to § [15.2-6020](#). Any such permit shall be valid for such period of time and subject to the payment of such fee as the Authority shall provide.*

§ 46.2-801. *Chapter applicable to drivers of all vehicles regardless of ownership.*

*The provisions of this chapter applicable to the drivers of vehicles on the highways shall apply to the drivers of all vehicles regardless of their ownership, subject to such exceptions as are set forth in this chapter.*

(Code 1950, § 46-181; 1958, c. 541, § 46.1-168; 1989, c. 727.)



# SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY

*“Spearhead Trails - Adventure Playground of the East”*



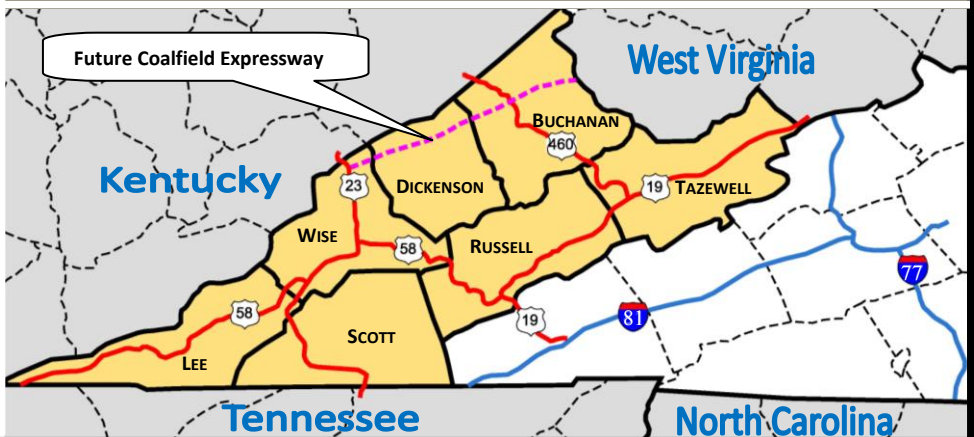
## SPEARHEAD TRAILS IMPLEMENTATION PLAN

### VOLUME II: ECONOMIC IMPACT ASSESSMENT

PREPARED BY:

THE LANE GROUP, INC.  
SUSTAINABLE DEVELOPMENT CONSULTING INTERNATIONAL  
WMTH CORPORATION  
MANAGED ADVENTURE SYSTEMS

FINAL DRAFT MAY 2012



# SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY

*“Spearhead Trails - Adventure Playground of the East”*



## SPEARHEAD TRAILS IMPLEMENTATION PLAN VOLUME II: ECONOMIC IMPACT ASSESSMENT

**FINAL DRAFT MAY 2012**

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## **i. ACKNOWLEDGEMENTS**

This report acknowledges the assistance of The Southwest Virginia Regional Recreational Authority (SRRA) and the Spearhead Trails Organizations. Additional assistance was provided by Lee, Scott, Wise, Russell, Tazewell, Dickenson and Buchanan Counties and the City of Norton. North Mountain Outfitters, the Town of St. Paul, the Hatfield and McCoy Trail System and the New River State Park provided information used in the development of case studies and business models. Additional sources of data have been referenced as appropriate. This Report has been prepared by the Project Team which consists of the Lane Group, We Make Things Happen (WMTH), Managed Adventure Systems (MAS) and Sustainable Development Consulting International (SDCI). Robert R. Jones, Ph.D., of SDCI was the principal author of this document.

## ii. EXECUTIVE SUMMARY

This Economic Impact Assessment (EIA) has estimated the total potential economic impact to be generated from the development of new and expanded trail systems in far Southwest Virginia as part of the Spearhead Trails initiative. This assessment includes the predicted non-local visitors to the region that will result from the implementation of professionally developed and operated Off-highway Vehicles (OHV), equestrian riders, kayakers and canoeing enthusiasts along blueways, and hikers and bikers (including mountain bikers). It did not include other linear trail projects that also attract visitors to the region such as cultural heritage driving trails (for example the Crooked Road and Coal Heritage Trail), other designated vehicle trips such as motorcycle riders, nor did it include outdoor recreationists who participate in hiking birding trails, wildflower trails, fishing, hunting, or other outdoor sports typical to the region. The proposed trail development assumed in this assessment is identified in the Trail Development Plan (Volume I).

Direct economic impact to the local economy resulting from increased visitation and expenditure at the various trail venues and events described in the Trail Development Plan was estimated from a combination of direct spending surveys at targeted venues and by comparative published reports. It is appropriate to apply a multiplier to the direct impacts in order to determine induced economic impacts as well. Multipliers used by the U.S. Bureau of Economic Analysis (BEA) developed as part of the Regional Input-Output Multiplier II (RIMS II) model were utilized. Induced impacts are based on the tax revenue generated by the sales of product and wages paid in the Commonwealth. Job creation, in full-time equivalent (FTE) jobs was estimated as a result of the Spearhead Trails Initiative.

The development of the Spearhead Trails initiative will result in total estimated direct economic impact of almost **\$43 million** over a five year operational period (estimated at 2013 through 2017). The total return to the Commonwealth on wage taxes (at 5 percent) will average over **\$750,000** during this period. Sales tax was calculated for direct expenditures yielding **\$3.4 million** to the Commonwealth (4.0%) and **\$858,176** collectively to the local governments (1.0%). Additionally, the impact of local tax revenue based on accommodation income (also referred to as an Occupancy tax), and food and beverage taxes were not determined as these vary by jurisdiction. Total job creation for this three year period is estimated **390 FTE**.

## 1.0 BACKGROUND TO PROJECT

### 1.1 Purpose of Economic Impact Assessment

The economic impact of tourism is an important consideration in state, regional and community planning and economic development. Additionally, economic impacts are also important factors in marketing and management decisions. Communities therefore need to understand the relative importance of tourism to their region, including tourism's contribution to economic activity.<sup>1</sup> One of the primary objectives of this Economic Impact Assessment (EIA) is to provide current and relevant information to the communities of Far Southwest Virginia (FSWVA) as to the potential economic impact of the Spearhead Trails initiative and also to set a bench mark from which future assessments can be compared to following the development of the trail system. The Spearhead Trails mandate area (service region) is defined as the seven counties and one city located in Far Southwest Virginia (see Figure 1.1).

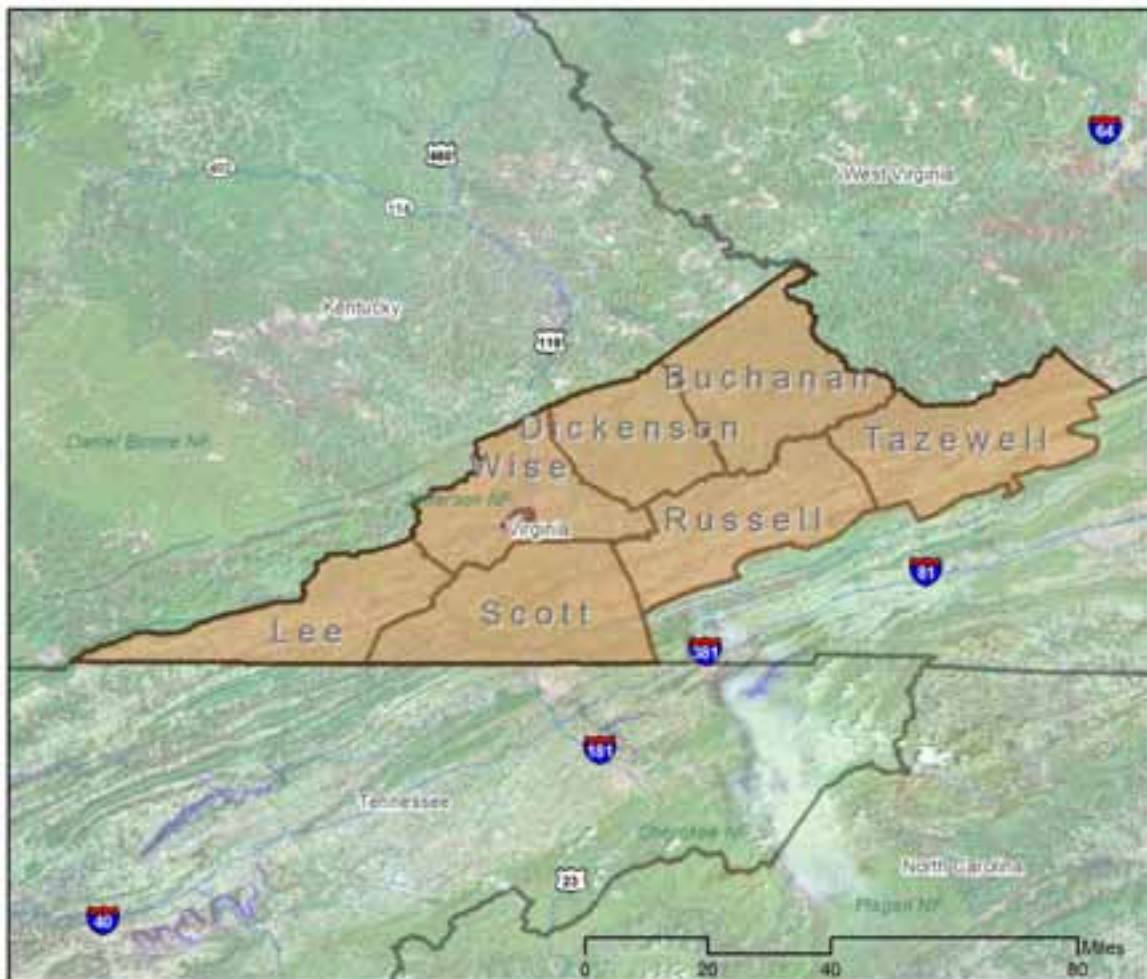


Figure 1.1: SRRA Mandate Area

<sup>1</sup> Stynes, Daniel. Economic Impacts of Tourism Vol. 1 January 1999

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Economic impact analysis is an important tool for predicting the effects of a variety of economic stimuli in a local economy. Development projects, tourism initiatives, tax changes, land use decisions, and other economic decisions impact the flow of income in and out of a community. The specific purpose of this Economic Impact Assessment is to determine the direct and induced economic impacts that can be expected from the implementation of the Spearhead Trails initiative within the regional economy. Economic impact analysis is used to determine the predicted total economic impact and to forecast future economic changes as a result of additional investment into the region. It can be used to set a baseline of data from which to make future assessments of the efficacy of further investment. Additionally, data captured through this assessment can also be used to direct marketing efforts in order to increase efficiency, promote greater conversion rates, and increase the positive impact of local economic output.

This Economic Impact Assessment is one component of the Southwest Regional Recreation Authority's Implementation Plan. The Implementation Plan (funded by the Virginia Tobacco Indemnification and Community Revitalization Commission) consists of this report (Volume II); the Trails Development Plan (Volume I), providing conceptual trail mapping, an opinion of probable cost and relative prioritization within the Spearhead Trails multiple venues; and a Business Plan (Volume III). Volumes I and II serve as the basis of the Business Plan and are incorporated by reference to this report. The EIA may be used as an informational resource and baseline assessment for local governments, current and potential funding agencies, and institutions. It is a follow-up to the previously prepared Comprehensive Plan for Spearhead Trails prepared by WMTH Corporation and Summit Engineering (2009) which provided much of the background for regional assessment of trail related tourism potential.

The Economic Impact Assessment includes:

- A list of trail related business development (food, lodging, retail, services and entertainment venues) in the SRRRA counties was prepared as part of the Comprehensive Plan and is included by reference and updated where necessary.
- Visitor profiles of select similar venues using on-site questionnaires were administered during peak visitation periods. The questionnaires were developed in cooperation with the team and client to solicit relevant data. Venues such as existing OHV trails, blueway systems, and equestrian events were used as reference sites.
- The results of the business assessment and visitor profiles were used to generate a direct and indirect economic impact assessment for the proposed trail development program assuming that the implementation follows the Business Plan. Deviations from the implementation schedule or plan will alter the estimates provided for in this Assessment. Regional Multiplier Model data sets from U.S. Department of Commerce (Regional Input-Output Modeling System II [RIMS II]) were used to assist in determining the appropriate multipliers by industry type for the region.
- A comparative analysis with the Virginia Tourism Corporation (VATC) data and other recent and similar economic impact assessments was completed.

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- The estimated primary and secondary market areas by tourism activity type, using the primary data collected in Task 2 input into a geographic information system (GIS), was used to determine access to markets.

## 1.2 Abbreviations and Definitions

In order to clearly communicate the results of this EIA, the following terms are defined for consistency between the consultant, client and the public.

<i>GDP</i>	Gross Domestic Product
<i>pCPI</i>	per Capita Personal Income
<i>VATC</i>	Virginia Tourism Corporation (VATC)
<i>CPI</i>	Consumer Price Index
<i>RIMS II</i>	Regional Input-Output Model
<i>EIA</i>	Economic Impact Assessment
<i>OHV</i>	Off Highway Vehicle
<i>SRRA</i>	Southwest Regional Recreational Authority
<i>FSWVA</i>	Far Southwest Virginia

### *Direct Economic Impact*

- This is defined as employment created, payroll and other local expenditures of all non-local visitors to the Spearhead Trails Initiative and other locations within the region during their length of stay.
- Gross receipts received as revenue from permit sales at Spearhead Trails locations, sales of merchandise (including internet sales) and related industries.
- Direct job creation at the Spearhead Trails venues and related industries.
- Wages paid to employees

### *Indirect Economic Impact*

- This is defined as the additional expenditures of the venues and other businesses as a result of the increase in non-local tourism expenditures.

### *Induced Economic Impact*

- This is defined as the additional local business generated by the increase in tourism dollars being spent in the region, including new businesses, new jobs in support businesses, additional wages, taxes and other income, along with multipliers from successive circulation in the local economy “multiplier effect.”
- This includes all other changes to the local economy as a result of the Direct Economic Impact.

### *Economic Multiplier*

- A basic assumption of economic theory is that increases or decreases in expenditures are multiplied as they spread throughout the economy. Thus, for every increase of \$1 brought into a local economy from outside the region, an increase in \$1 + X will occur as a result of increased downstream use. For example, a new employee that earns \$1 will in turn spend a portion of it on food, housing and other essentials in the community. The recipient of these purchases will then spend a portion on similar necessities and luxuries. As the dollar is spent and re-spent, portions of it will be saved, and portions will leave the local economy (these losses are referred to as leakages) and thus the local re-

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investment will continually decrease. The extent to which the dollar is re-circulated through the local economy is related to the types of industry present, spending habits, local supply, and other interrelationships. The U.S. Department of Commerce has developed a Regional Multiplier Model (Regional Input-Output Modeling System II (RIMS II), Third Edition, March, 1997) to assist in determining the appropriate multipliers by industry type to use within a given region. These multipliers have been used in this EIA and are more fully described in Section 4.0.

### **1.3 Deliverables**

The Economic Impact Assessment Report for the Southwest Regional Recreation Authority (SRRA) includes the following information:

- Determination and demographics of the market area(s)
- Assessment of market area
- Determination of the predicted total economic impact including:
  - Assessment of direct and induced economic impact
  - Job creation
  - Tax revenue (local, state and federal)
  - New business potential resulting from the Spearhead Trails Initiative economic impact
  - Comparison to other similar economic initiatives
  - Conclusions and recommendations

### **1.4 Limitations of Liability**

To the extent practicable, all data contained in this study reflects accurate and timely information. This study is based on estimates, assumptions and other information developed by SDCI and the Project Team from its independent research efforts, general knowledge of the market and industry and consultations with the client and Team Members. No responsibility is assumed for any inaccuracies in the data obtained or relied upon in the development of this assessment. This report and methodology is based on industry standard practices. No warranty or representation is made by SDCI for any of the projected values or results contained in this study. Achievement of the estimated economic impact may be affected by economic conditions that differ from the assumptions contained in this document. No abstracting, excerpting or summarizing of this document may be made without prior written consent of the principal author (SDCI).



## 2.0 REGIONAL ECONOMIC BACKGROUND

### 2.1 National and Regional Economic Data

Since 2007 the United States has experienced significant economic stagnation as represented by rates of Gross Domestic Product (GDP), unemployment and stagnated wages. National unemployment rates have generally risen from 4.6% at the beginning of 2007 to 9.1% as of August of 2011 (BLS; see Figure 1). The most recent report identified national unemployment rates at 8.5% as of December 2011 (BLS). Gross Domestic Product was at \$14 Trillion in 2007 but remained stagnant or fell through 2009 (indicating recession) and has slowly climbed to \$14.6 Trillion at the end of 2010. Wages have also been depressed during this period. The Real Average Hourly Wage in the U.S. was \$10.30 in 2009 and has fallen to \$10.20 in late 2011 (BLS) and total compensation of U.S. workers contracted by 3.2% in 2009.<sup>2</sup>

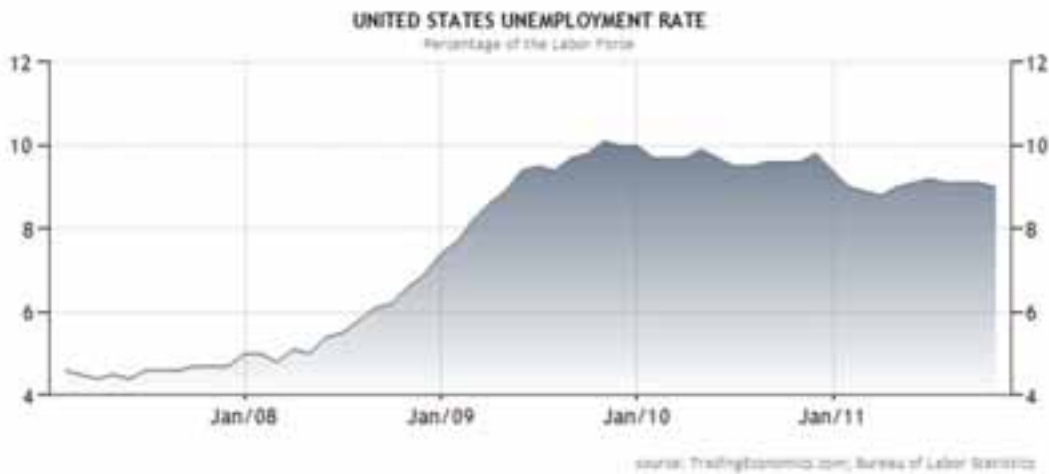


Figure 2.1: National Unemployment Rate Trend

The Commonwealth of Virginia and Far Southwest Virginia have not been immune from these national economic trends. Gross Domestic Product in Virginia increased between 2009 and 2010 but at a much lower rate than its neighbors including Kentucky, Tennessee, North Carolina, Maryland and West Virginia (see Figure 2.2). Also, during this period, the Commonwealth experienced unemployment rates of only 3.0% in 2007 (below the national average) to 6.7% in 2010.

<sup>2</sup> U.S. Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)).

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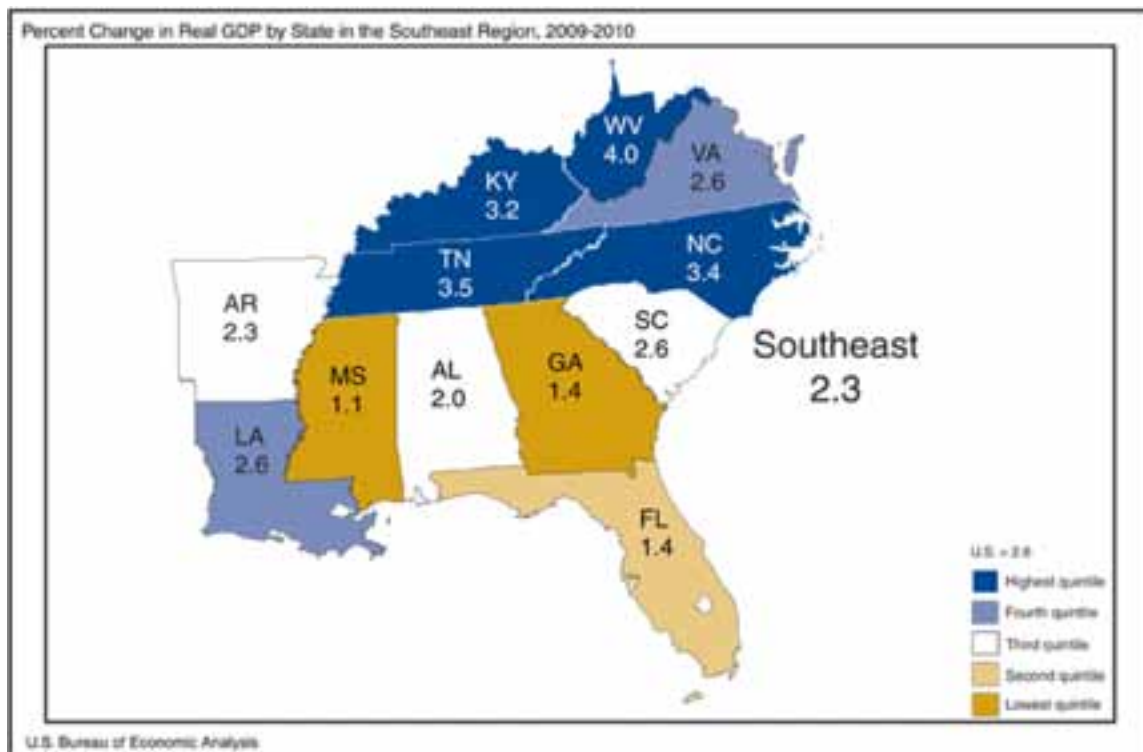


Figure 2.2: GDP for Virginia and Surrounding States (2009-2010)

The counties of FSWVA generally lagged behind the State in economic development both in terms of employment, per capita income, and medium household income and in other important socio-economic indicators such as levels of education and general health. A review of the data published by the U.S. Census Bureau and the Department of Labor’s Bureau of Economic Analysis indicates that unemployment rates in the two Planning Districts (PDs) that make up FSWVA (LENOWISCO and Cumberland Plateau) averaged unemployment rates of 7.8 and 7.7% respectively, more than one full percentage point above the state average. Within these PDs, Russell County has the highest unemployment rate of 9.5% (2010) followed by Scott County at 9.4% and Tazewell County has the lowest percentage unemployment at 6.5%.

In terms of Per Capita Personal Income (pCPI) the counties of FSWVA also lagged behind the State (see Table 2.1), the worst being Lee which averaged 59% (ranked 99<sup>th</sup>) of the State average (\$44,057) and Russell which averaged only 60% (ranked 96<sup>th</sup>) of the State average (see Figure 2.3).

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

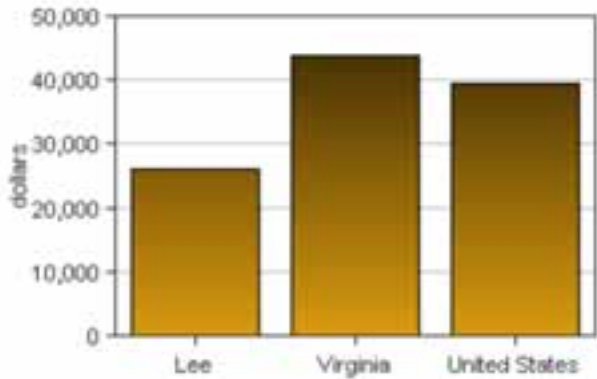


Figure 2.3: Average Per Capita Personal Income for Lee County (2009)

Table 2.1: per Capita Personal Income for Far Southwest Virginia

County	Per Capita Personal Income (2009)
Buchanan	\$30,915
Dickenson	\$26,779
Russell	\$26,543
Scott	\$26,953
Tazewell	\$31,516
Wise	\$30,613
Lee	\$26,054
<b>State Average</b>	<b>\$44,057</b>

Regional poverty rates are considerably higher in FSWVA as compared to the State and U.S. (see Figure 2.4). With the exception of Tazewell County, all other SRRA jurisdictions report levels close to or more than twice the State average. This is likely due to a lack of higher paying jobs in the region that has resulted from the conversion from industrial/manufacturing employment to service sector job creation.

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

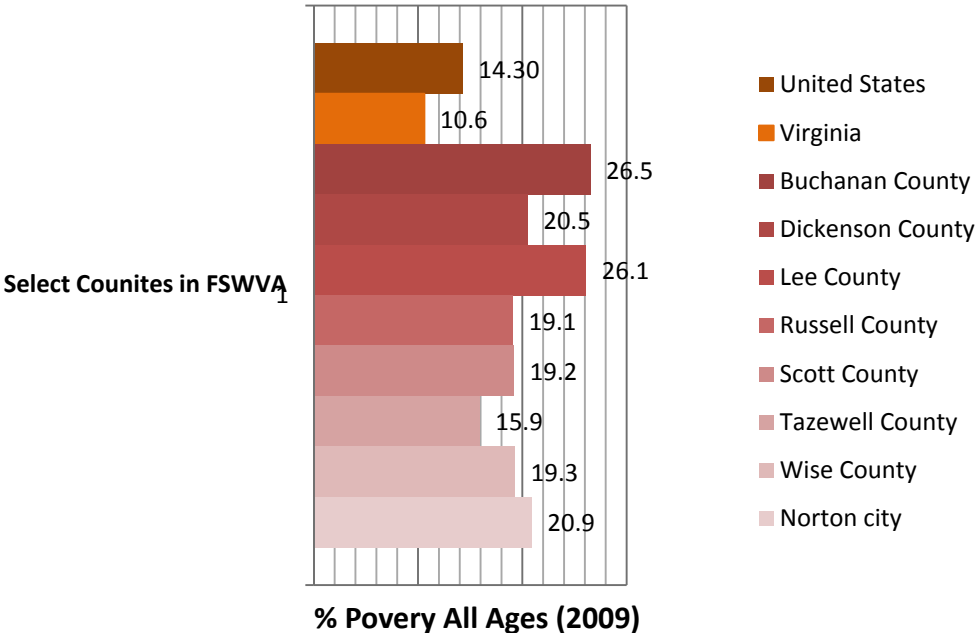


Figure 2.4: Percentage Poverty Rates for Selected Counties in FSWVA

While population has grown within the Commonwealth since the 2000 census, the counties of FSWVA have overall remained flat (overall growth rate of 1%). However, there is considerable variability between counties with those of Buchanan and Dickenson experiencing the most significant declines from 2000 to 2010. This trend continues from the previous census counts indicating continued out-migration from many of the counties. Within the counties of FSWVA the individual towns have generally shown an increase in population indicating a trend towards peri-urbanization (see Table 2.2 and Figure 2.5).

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

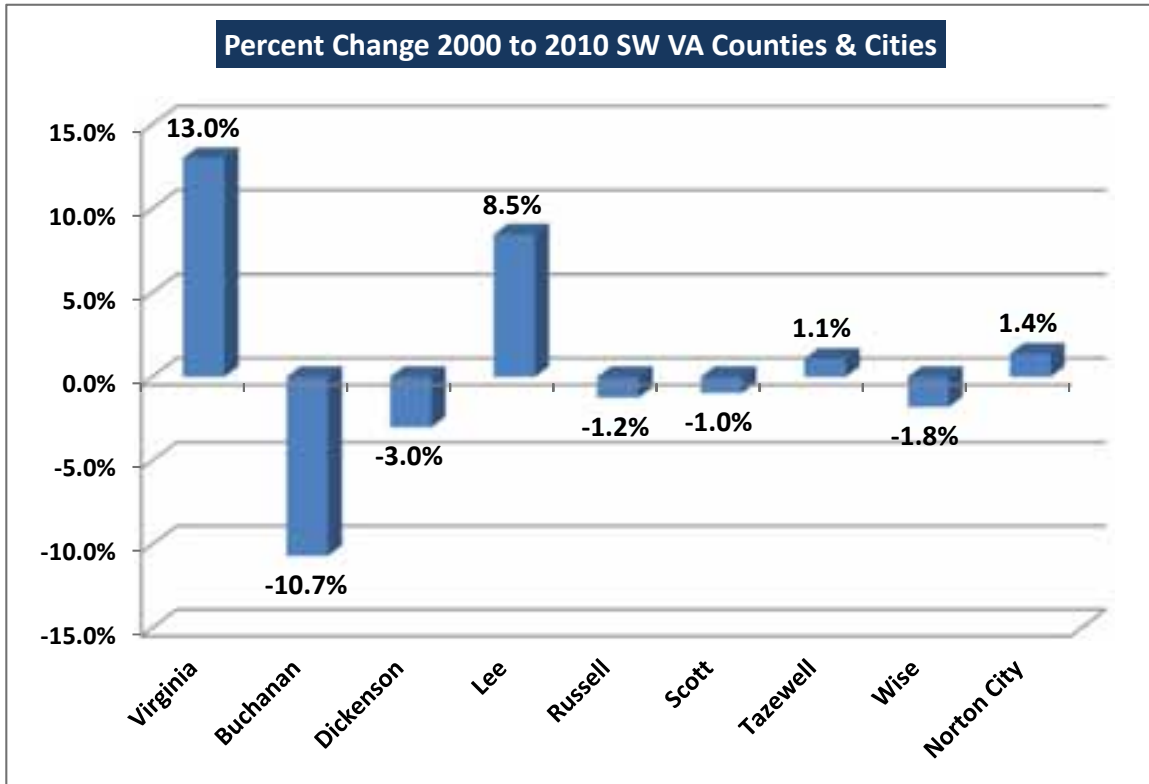


Figure 2.5: Regional Population Loss 2000 to 2010 (U.S. Census Bureau)

Table 2.2: Population & Percent Loss by County in FSWVA

Locality	2010 Census	2000 Census	% Change
Virginia	8,001,024	7,079,030	13.0%
Buchanan	24,098	26,978	-10.7%
Dickenson	15,903	16,395	-3.0%
Lee	25,587	23,589	8.5%
Russell	28,897	29,258	-1.2%
Scott	23,177	23,403	-1.0%
Tazewell	45,078	44,598	1.1%
Wise	41,452	42,209	-1.8%
Norton City	3,958	3,904	1.4%
<b>Totals</b>	<b>208,150</b>	<b>210,334</b>	<b>1%</b>

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

The above data demonstrates that outmigration from FSWVA may be a significant problem to traditional means of economic development (job creation through manufacturing base expansion). The ability to create and maintain high value manufacturing jobs has traditionally been problematic due at least in part to a lack of a skilled workforce and the inaccessibility to the region via the existing road networks. However a 1996 Economic Research Service (ERS) Rural Manufacturing Survey<sup>3</sup> demonstrates that manufacturers (and other employers) may avoid outmigration counties. Funded in part by USDA's Rural Development mission area, this national survey was prompted by concern over rural manufacturing competitiveness amid globalized markets and technological change. Few manufacturers, even ones located in remote areas, reported major problems of access. Instead, the factors most frequently cited tended to be related to human capital (McGranahan, 1998a). The local attribute most often reported to be a major problem in counties not classified as outmigration counties was the quality of available labor (35 percent), which far outweighed the two next most frequently reported problems: state and local taxes (23.2 percent) and environmental regulation (22.6 percent). The SRRA region maintains a significantly lower population of four-year degreed residents however this is not thought to be a major impediment to the existing industrial mining base (see Figure 2.6). It is a potential obstacle regarding the ability to attract and retain high tech industry and higher wage service sector employment.

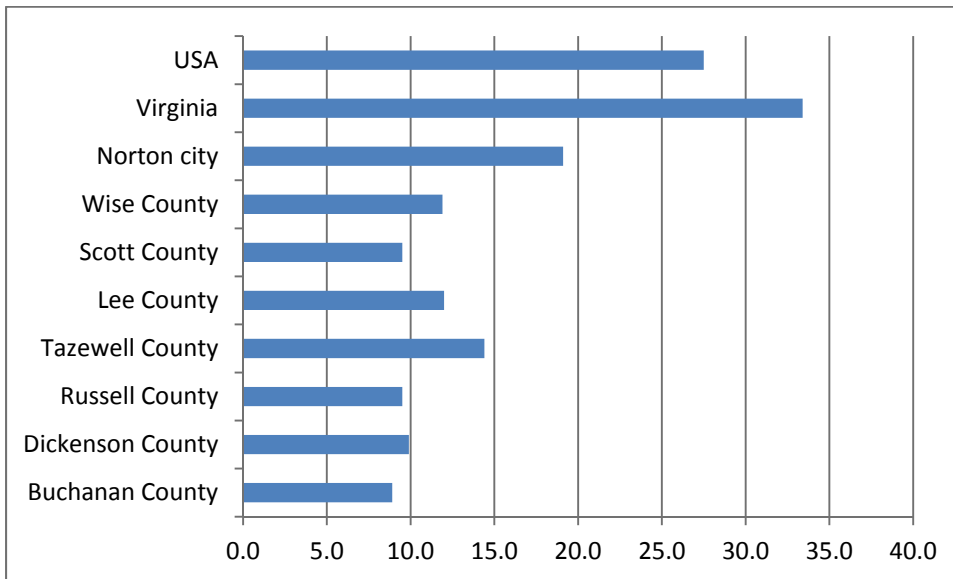


Figure 2.6: Percentage of Population >25 Years Old with a Bachelor's Degree

<sup>3</sup> Issues in Rural Manufacturing: Results of the ERS Rural Manufacturing Survey. Economic Research Service, U.S. Department of Agriculture. Agriculture Information Bulletin No. 736.

## 2.2 Regional Economic Opportunities

A primary concern for this assessment is the determination of the demographics of the SRRA region of influence. Much of this data is already available through the existing U.S. Census Bureau database. The following is a short synopsis of the data, what it means to the outcome of the assessment and how it is likely to change as a result of SRRA impacts. Of primary importance are:

- 1) *changes to the local demographics as a result of the Spearhead Trails Initiative economic impact and,*
- 2) *the demographics of the primary and secondary market area (for future use in marketing and conversion efforts).*

Within Southwest Virginia, the far southwestern counties of Lee, Scott, Wise, Dickenson, Buchanan, Russell, Tazewell and the City of Norton have largely depended upon the extraction industry, (primarily coal and natural gas), the transportation sector, and government or service related jobs as economic drivers and employment generators. While these industries will continue to play an important role in the employment sector and as generators of direct economic output, many of the counties are determined to diversify their economic base with other potential employment sectors, one of which is tourism.

Tourism has long played an important part of the regional economy with specific features being generally successful over a long period. Venues such as, the outdoor drama, “Trail of the Lonesome Pine” and the Crooked Road: Virginia’s Heritage Music Trail have been successful at bringing national and even international attention to the area. Outdoor recreational opportunities are also significant. Breaks Interstate Park, the George Washington and Jefferson National Forests and the Virginia Creeper Trail are well known outdoor recreational venues.

The Spearhead Trails project was started and initially facilitated by Virginia Tourism Corporation’s Partnership Alliance Marketing division. In 2008, the Virginia General Assembly established the Southwest Regional Recreation Authority (SRRA). The purpose and goal of SRRA is to oversee the development and management of the Spearhead Trail System within the counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, Wise and the City of Norton.

The 2009 Comprehensive Plan study prepared by WMTH demonstrated that there is tremendous potential for Southwest Virginia to become a “Trail Destination” for OHV riders, bikers, hikers, canoeists, horseback riders, naturalists and others – “adventure tourists”.

The proposed trail system:

- Is intended to utilize easements on privately owned lands through cooperative agreements, mainly with large corporate landowners;
- Will be governed by a state authority (SRRA), and patrolled by rangers with support from the local sheriff’s departments in each of the jurisdictions;
- Will require users to abide by a strict set of safety and conduct rules - enforced to protect users and the environment; and

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- Can provide economic diversification through development and expansion of businesses such as: outfitters, campgrounds, hotels, cabin rentals, restaurants, gift shops, supplier stores, OHV, bicycle, off-highway motorcycle and equestrian services/sales.

SRRA's Mission Statement captures the goals and objectives of the volunteer, not-for-profit organization.

The Southwest Regional Recreation Authority (SRRA) was created in 2008 by the Virginia General Assembly. The purpose and goal of SRRA is to develop and market a system of trails throughout a seven county area encompassing Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, and Wise Counties, and the City of Norton. "Spearhead Trails" was chosen as the name for the trail system since a map of Southwest Virginia resembles the head of a spear. Also because it is firmly believed that this initiative will help the communities "spearhead" forward towards positive economic growth.

### 2.3 Description of Current Regional Economic Development Initiatives

A number of regional tourism related economic restructuring initiatives have been implemented in FSWVA in recent years. The following is a brief description of these projects including information on their economic impact.

**The Crooked Road (TCR):** Virginia's Heritage Music Trail encourages economic development in the Appalachian region of Southwest Virginia by focusing on the area's unique cultural and musical heritage through the promotion of an unmatched quality of life. The eight major venues located along The Crooked Road are the Ralph Stanley Museum, Country Cabin II, Carter Family Fold, Birthplace of Country Music Alliance, Old Fiddler's Convention/Rex Theater, Blue Ridge Country Music Center, Floyd Country Store/County Sales and Blue Ridge Institute & Museum at Ferrum College.



An Economic Impact Assessment prepared by SDCI in 2008 determined the following:

- Regionally, the Crooked Road counties and cities increased their share of the tourism market in comparison to other regions of the state. From 2003-2007 they outpaced the other regions of the state by almost 2.0%.
- A review of the communities surveyed as part of the longitudinal assessment revealed that in all three major categories, (number of accommodation providers, restaurants and music venues), the rate of increase was significantly greater for the TCR versus non-TCR communities.
- Direct expenditures in the TCR region from all venues along with pro-rated festival attendance provided a total estimated direct economic impact of almost \$13 million in 2008.
- Tax revenues generated to the Commonwealth and local governments for 2008 were approximately \$600,000 in 2008 as a result of The Crooked Road.
- Total economic impact as a result of The Crooked Road was estimated to be almost \$23 million for 2008 with 445 full-time equivalent jobs.



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**Heartwood: Southwest Virginia's Artisan Gateway** is a 29,000 square foot sustainable facility located off of Interstate 81 in the town of Abingdon, Virginia. The building houses handmade craft and artisan agricultural products for sale, along with educational exhibits featuring Southwest Virginia tourism opportunities. A 2007 Market Feasibility Assessment completed by Economic Research Associates (ERA) estimated that the facility will attract approximately 270,000 visitors per year and generate \$21.6 million of direct economic impact and 202 FTE jobs.

**'Round the Mountain: Southwest Virginia's Artisan Network** (RTM) is a non-profit membership-based organization whose mission is to promote sustainable



economic development of the region's communities by assisting local artisans with marketing, educational, and entrepreneurial opportunities (see [www.roundthemountain.org](http://www.roundthemountain.org)). Since the organization's creation in 2004 membership of regional artisans and arts related tourism venues has risen to over 500 making it one of the largest craft membership-based organizations in the country. RTM is a direct supplier of regionally made hand crafted juried products to the Heartwood facility.

**The Southwest Virginia Cultural Heritage Commission (SWVACHC)** is an organization created by the Virginia General Assembly to promote the economic restructuring of Southwest Virginia through the promotion of cultural and outdoor recreation. The SWVACHC oversees the Heartwood, RTM and TCR tourism projects and helps to promote economic diversification in the region through the development of a sustainable economy that is authentic, distinctive and alive. More information regarding this organization can be found at [www.myswva.org](http://www.myswva.org).

**Return to Roots** is a campaign aimed at the estimated 15,000 high school alumni who left the Southwest Virginia nine-county region of Buchanan, Dickenson, Lee, Russell, Scott, Smyth, Tazewell, Washington and Wise and the cities of Bristol and Norton. The campaign seeks to match companies in the aforementioned area to those who want to return to the region or those who want to relocate. The program reaches out to former residents of the area through the website [www.ReturnToRoots.org](http://www.ReturnToRoots.org), direct mail and the news media to inform them about employment opportunities available in Southwest Virginia. The site links these potential employees to regional companies with job openings.



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**The Virginia Coal Heritage Trail** seeks to preserve and protect the Appalachian coalfields way of life and its link to the unique landscape of southwest Virginia, through the development of a 325-mile trail that highlights the coal mining history, structures, and culture, while developing and perpetuating economic opportunities in communities along the trail. More than 300 miles of scenic byways stretch through seven counties and the city of Norton, providing the traveler with glimpses of unique coal mining towns that were formed more than a century ago. Figure 2.7 is a map of the Virginia Coal Heritage Trail.

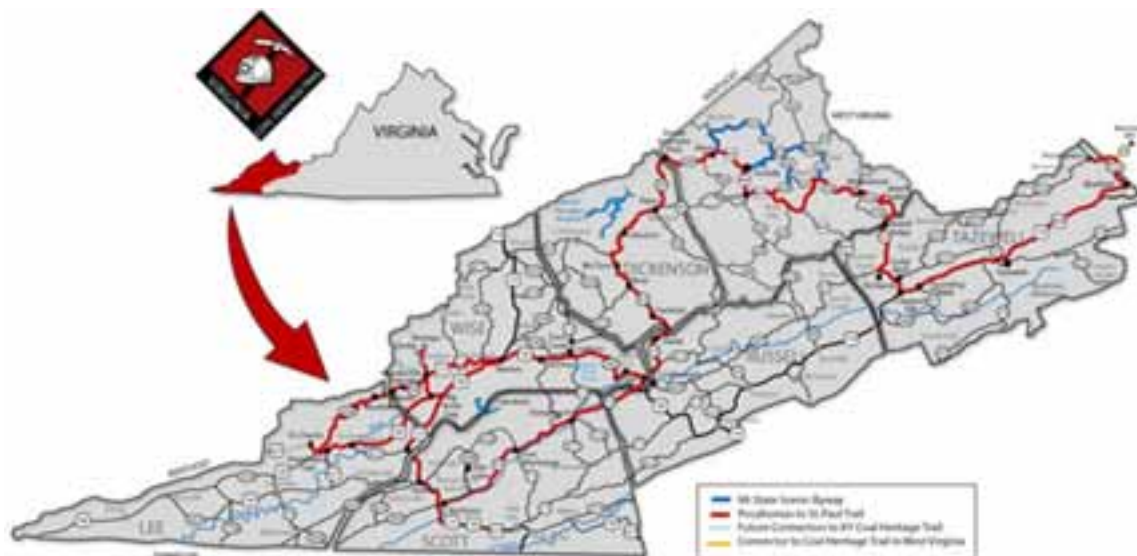


Figure 2.7: Virginia's Coal Heritage Driving Trail

### **Southwest Virginia's e-Region**

Located in southwestern Virginia, the e-Region is an emerging East Coast center for key areas for business - electronic information technology, energy, education and emerging technologies. A trendsetter in broadband access in rural America, Virginia's e-Region has the workforce, low costs, tailored training and way of life that makes employers and their employee families very happy.

### **Virginia Coalfield Economic Development Authority**

Historically referred to as the coalfield region of the Commonwealth, Virginia's e-Region is marketed by the Virginia Coalfield Economic Development Authority (VCEDA), a regional economic development organization created by Virginia's General Assembly in 1988 to enhance and diversify the economic base of the seven-county, one city, coal-producing region.

VCEDA operates several unique incentive and financing programs to encourage new job creation and economic diversification with financial support for fixed assets, construction of buildings for sale or lease, installation of utilities and direct loans to private for-profit basic employers and industrial development authorities. Financing is based in part on the number of new jobs created, wage rates and amount of private investment.

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Accessibility to Interstates 77, 81, 75, 64 and 26 make the region an ideal location to serve markets in both the East and Mid-America. Four-lane arteries include U.S. Routes 19, 23, 58, 460 and 421. Virginia's e-Region is strategically located midway between Atlanta-Pittsburgh, Charlotte-Cincinnati, and Richmond-Louisville, and is within a day's drive of more than half of the U.S. population (see Figure 2.9).

Distance to Markets

- Atlanta, GA - **312**
- Baltimore, MD - **375**
- Birmingham, AL - **372**
- Chicago, IL - **583**
- Columbia, SC - **267**
- Detroit, MI - **505**
- Memphis, TN - **501**
- Nashville, TN - **292**
- New York, NY - **574**
- Philadelphia, PA - **480**
- Pittsburgh, PA - **292**
- Richmond, VA - **288**
- St. Louis, MO - **540**
- Washington, D.C. – **340**

Regional commercial airports include the following:

- Tri-Cities Regional Airport in Blountville, TN
- Roanoke Regional Airport in Roanoke, VA
- McGhee Tyson Airport in Knoxville, TN

Local general aviation airports include the following:

- Grundy Municipal Airport in Grundy, VA
- Lonesome Pine Regional Airport in Wise, VA
- Lee County Airport in Jonesville, VA
- Tazewell County Airport in Claypool Hill, VA
- Virginia Highlands Airport in Abingdon, VA
- Mercer County Airport in Bluefield, WV

Several economic development organizations have been actively promoting the region and developing infrastructure designed to attract high-tech businesses and residents interested in telecommuting. Virginia's eRegion, in association with other development organizations (such as the VCEDA), and the local Planning Districts) have been installing broad-band internet infrastructure within FSWVA.

Vehicular access to the region will also increase over the next few years with the construction of the Coalfields Expressway (see Figure 2.8). The Coalfields Expressway is a proposed four-lane highway in southwest Virginia and southwest West Virginia, and it will be 116 miles long. This four-lane highway will be built on a limited access right-of-way, and most public road crossings will be at-grade, with interchanges at major crossings. The proposed length of the Coalfields Expressway in Virginia is 51 miles.

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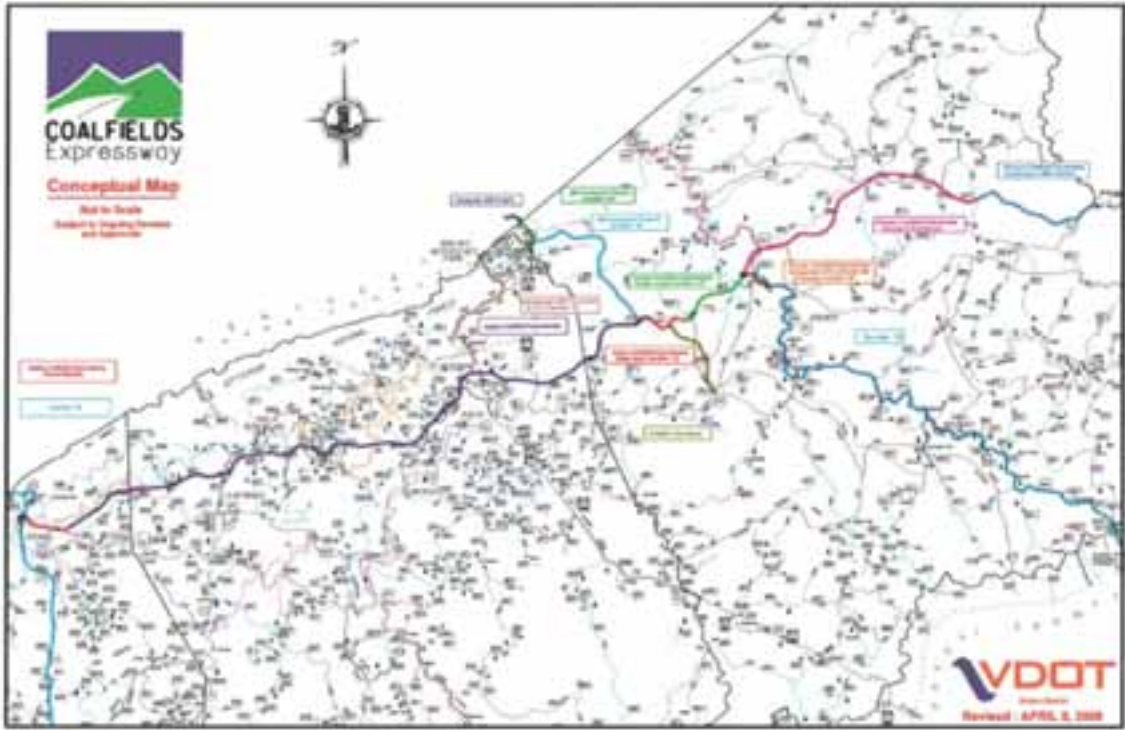


Figure 2.8: Map of the Coalfields Expressway (Under Construction), Source: VDOT



Figure 2.9: Access to Major Markets for the SRRA Region

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Institutions of higher education in the region include:

- Southwest Virginia Community College in Cedar Bluff, VA
- Mountain Empire Community College in Big Stone Gap, VA
- Virginia Highlands Community College in Abingdon, VA
- SWVA Higher Education Center in Abingdon, VA
- University of Virginia College at Wise in Wise, VA
- Appalachian School of Law in Grundy, VA
- Appalachian School of Pharmacy in Grundy, VA
- Lincoln Memorial University in Harrogate, TN
- Bluefield College in Bluefield, WV
- Pikeville College, Kentucky

Major manufacturing employers in the region include:

- Joy Mining Machinery
- Tempur Production
- Mullican Flooring
- Pyott-Boone Electronics
- Bluefield Beverage Co.
- Pepsi-Cola Bottling VFP
- Pemco Corp.
- Jennmar Corp.
- Mtn. Forest Products
- Span Deck, Inc./Tadano
- Mantis Corp.

Major information technology employers in the region include:

- AT&T
- Sykes Enterprises
- Crutchfield Corp.
- Verizon Welcome Center
- VEC
- Telemed
- KCG Call Center
- Serco/SI International
- CGI
- Northrop Grumman
- OnePartner/ATAC Center

## 2.4 Summary of Demographic and Economic Conditions

Critical factors assessed from the review of demographic data are as follows:

- The SRRA region maintains a household income considerably less than the State average. This factor documents that overall, salaries and employment opportunities are not keeping pace with the remainder of the State.
- Counties included in SRRA's sphere of influence have historically had very high rates of unemployment and are economically under-developed. The current rate of unemployment in the seven county SRRA region is 7.7 to 7.8%, which is much higher than the overall state average of 6.6%, with two counties having rates over 9% (Russell and Scott).

*“Now, with coal mining so automated, finding jobs, for all the residents, is a major challenge. While other regions in Virginia have grown substantially since 1980, Southwest and Southside in particular have stagnated. Economically, Southwest Virginia still remains far out of synch with Tidewater and Northern Virginia.” (Source: Geography of Virginia, 2011)*
- Table 2.3 identifies the general demographic conditions for FSWVA as compared to the State and the U.S.

FSWVA historically has lagged behind the Commonwealth in socio-economic indicators of per capita personal income (pCPI) and educational attainment. Like certain other areas of the State the manufacturing base has continued to decline only to be replaced with lower salary/lower skill service sector jobs. More troubling is the continued loss of population within certain counties of the region. The energy sector remains strong in terms of economic output and job generation though through continued mechanization and consolidation it is unclear as to the specific role this sector will play in job creation in the future.

Overall, the region continues to struggle with the loss of manufacturing jobs, for the attraction of new business and the retention of a trained and skilled workforce. There is a current emphasis on the attraction of high-tech business to the region and a return of the workforce from other regions. While there are success stories (such as the new high-tech businesses in Lebanon (Russell County), there is still a need for additional economic development in order to offset previous losses and to raise the overall level of the economy to be on-par with other areas of the state. Part of this strategy is to also enhance the natural and cultural capital of the region in order to develop a tourism economy focused on the heritage and unique skills of the residents and the scenic natural beauty of the landscape. These include hand-made arts and crafts, traditional mountain music and outdoor recreational offerings such as OHV, equestrian, blueway excursions, mountain biking and traditional outdoor sports such as hiking. This not only increases local employment but it infuses income into the region from outside the area (capital inflow). It also serves as a quality of life enhancement for the existing residents and as an enticement to retain and attract a more educated and skilled workforce whilst providing increased economic potential for the current residents.

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Table 2.3: Demographic Summary for Selected Regional Counties, Virginia and USA

Jurisdiction	Population	Median Household Income [2009 inflation adjusted \$]	Percent Persons 65 and Over	Percent Individuals Below Poverty Level	Unemployment Rate (2010)	High School Graduates	College Graduates	Housing Units (% Owner Occupied)	Median Value of Owner Occupied Unit
United States	<b>301,461,533</b>	<b>\$51,425</b>	<b>12.6%</b>	<b>13.5%</b>	<b>9.6%</b>	<b>84.6%</b>	<b>27.5%</b>	<b>66.9%</b>	<b>\$247,100</b>
Virginia	<b>7,721,730</b>	<b>\$60,316</b>	<b>11.8%</b>	<b>10.1%</b>	<b>6.9%</b>	<b>85.8%</b>	<b>33.4%</b>	<b>69.2%</b>	<b>\$185,400</b>
Buchanan County	23,584	\$27,538	14.1%	21.8%	8.2%	65.1%	8.9%	78.3%	\$63,200
Dickenson County	16,099	\$28,296	15.8%	19.0%	8.4%	67.6%	9.9%	80.4%	\$67,000
Russell County	28,921	\$31,770	16.2%	17.9%	10.1%	70.2%	9.5%	75.9%	\$82,400
Tazewell County	44,307	\$35,830	16.6%	15.9%	6.8%	75.1%	14.4%	74.7%	\$76,200

### 3.0 NATIONAL AND REGIONAL TOURISM TRENDS

#### 3.1 General Tourism Trends

##### United States

The travel industry in the U.S. was dramatically hit by the recession during 2009. Measured in current dollars, total direct travel expenditures in the U.S. decreased 8.8 percent to \$704.4 billion. This sharp decline was largely driven by the decreased travel volume and falling travel related prices that resulted from the recession.

Compared with 2008, U.S. domestic travel, including leisure, business, convention and other travel declined 3.4 percent to total 1.9 billion person-trips during 2009. A person-trip is defined as one person on a trip away from home overnight in paid accommodations, or on a day or overnight trip to places 50 miles or more, one-way, away from home. With the improvement of the economy, total domestic person-trips were expected to increase 3.1 percent in 2010.

Domestic leisure travel, which includes visits to friends and relatives as well as trips taken for outdoor recreation and entertainment purposes, declined 2.4 percent in 2009 as compared to 2008, but still totaled close to 1.5 billion person-trips. Leisure travel accounted for 77.3 percent of all U.S. domestic travel in 2009. Domestic travel expenditures in 2009 (current dollars) dropped for the first time since 2002 to a total of \$610.2 billion, a 7.9 percent decline from 2008. This decrease reflects the deflation in travel prices, especially in the cost of gasoline as well as the declines in travel volume and changes in the trips that were taken (e.g., traveling closer to home, spending less at the destination). Domestic travel expenditures grew in 2010 at an estimated 7.2 percent as compared to 2009 and totaling \$654.0 billion. Slower growth was predicted for 2011 due to lingering economic concerns but recent estimates indicate tourism and business travel may be on the upswing in 2012.<sup>4</sup>

Nationally, tourism continues to play a strong role in the economy, despite continued fluctuations in fuel costs and economic stagnation. The travel and tourism industry, as measured by the real output of goods and services sold directly to visitors, grew for the fifth straight year in 2006<sup>5</sup> before leveling off in 2007-2008 and dropping in 2009. Prior to the recessionary shrinkage of current dollar tourism-related output increased to \$1.23 trillion within the U.S. during 2006 (up 7.12% from 2005). Direct domestic and international travelers' expenditures totaled \$739.4 billion in 2007 with the food services sector representing 23.7 percent of the total spending. International tourism spending increased at a faster rate than domestic during 2007, a trend that may be reversed for European travel due to their economic crisis but could continue for Asian travelers due to their strong currencies. The U.S. travel industry generated a more than \$17.6 billion trade surplus for the U.S. in 2007 but these numbers have since declined.<sup>6</sup> Prior to the

<sup>4</sup> Global Business Travel Association, 2012, *U.S. Business Travel Spending, Trips to Increase This Year Despite Slowdown in Economic Growth*

<sup>5</sup> Kern, P. V. and E Kocis 2007. U.S. Travel and Tourism Satellite Accounts for 1998-2006. National Tourism Impact BEA.

<sup>6</sup> Travel Impact on U.S. Economy 2007. Virginia Tourism Corp.



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general economic downturn total tourism employment for the nation increased by 133,000 jobs in 2007 to approximately 8.63 million. The greatest gain in travel employment occurred in the arts/entertainment/recreation industry with a 2.5% increase over 2006 levels. During the five years from 2001-2006, tourism had begun to rebound to its pre-2001 (9/11) levels and by most indicators had surpassed previous levels.

General tourism growth activities and businesses might also be captured as ecotourism, heritage tourism, volunteer tourism, rural tourism, community tourism, wildlife tourism, to name a few. These represent a subset of general tourism and travel related economic impact. Due to the overlapping nature of classifications it is difficult to accurately quantify those impacts specific to adventure tourism. The size and growth of the adventure travel industry is reported under a variety of disparate and overlapping metrics.

### 3.2 Regional Tourism Trends

#### Virginia

A study prepared for the Virginia Tourism Corporation by the U.S. Travel Association (November 2010), *The Economic Impact of Domestic Travel Expenditures on Virginia Counties 2009*, reported on U.S. residents traveling in Virginia (including both state residents and out-of-state visitors traveling away from home overnight in paid accommodations, or on any overnight and day trips to places 50 miles or more away from home). The study revealed the following:

- Domestic travel expenditures in current dollars decreased 7.9 percent to \$17.7 billion in 2009. This decline primarily reflects reduced gasoline prices and hotel/motel room demand (see Figure 3.1).
- Domestic travel expenditures directly generated 204,500 jobs within Virginia in 2009, down 2.9 percent from 2008. These jobs generated by domestic travel spending in Virginia comprised 5.6 percent of total Commonwealth non-agricultural employment in 2009. Travel and tourism was the fifth largest industry by non-farm employment in Virginia in 2009.
- On average, every \$86,586 spent by domestic travelers in Virginia during 2009 generated one job.
- Domestic travel-generated employees in Virginia earned more than \$4.3 billion in payroll income during 2009. This represents a 2.6 percent decrease from 2008.
- Domestic travel spending in Virginia directly generated nearly \$2.5 billion in tax revenue for federal, state and local governments in 2009, down 2.9 percent from 2008.
- Arlington County received more than \$2.3 billion in domestic travel expenditures leading all of Virginia's 134 counties and independent cities (county equivalents). Fairfax County followed Arlington County closely, ranking second with nearly \$2.3 billion. Loudoun County ranked third with over \$1.3 billion.
- Thirty-three of Virginia's 134 counties and independent cities (county equivalents) received over \$100 million in domestic travel expenditures in 2009.

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- Thirty-nine counties and independent cities (county equivalents) in Virginia indicated one thousand or more jobs that were directly supported by domestic travelers during 2009.

**Domestic Travel Expenditures in Virginia  
by Industry Sector - 2009**



Figure 3.1: Virginia Domestic Travel Expenditures (2009). Source: Tourism Economic Impact Report, Virginia Tourism Corp.<sup>7</sup>

### **SRRA Region**

The Southwest Regional Recreation Authority (SRRA) is comprised of seven counties and one city (Norton) within the far southwestern section of Virginia. The SRRA mandate area stretches from Lee County at the far western tip of the state to Tazewell County located at the northeast corner of the area. It borders Kentucky to the west, West Virginia to the north, the balance of Virginia to the east and Tennessee to the south.

Within Virginia there is a considerable discrepancy between the regions with respect to domestic travel spending. The top three jurisdictions (Arlington, Fairfax and Loudoun) received more than \$5.9 billion in direct domestic travel expenditures, generating \$1.8 billion in payroll income and 66,600 jobs (2009). While the eight jurisdictions of SRRA combined only generate a total of \$143 million per year or less than 1% of the state's total. Table 3.1 identifies the specific tourism related economic impacts to the SRRA region per VTAC. Despite this poor showing relative to the other counties in the state, the SRRA counties have shown increases in tourism revenue and there are a number of new tourism initiatives in addition to the Spearhead Trails initiative that will likely drive further increases in the future. Specifically, the following new tourism initiatives have the potential to increase tourism to the region:

- Heartwood: Southwest Virginia's Artisan Gateway
- 'Round the Mountain: Southwest Virginia's Artisan Network

<sup>7</sup> The Economic Impact of Domestic Travel Expenditures on VA Counties 2009. A Study prepared for the VA Tourism Corporation by the Travel Industry Association, 2010.

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- The Crooked Road
- The Coal Heritage Trail

These other initiatives will likely have a positive impact upon the Spearhead Trails as they will market to a similar demographic but not directly conflict with the attraction of the multi-venue trail projects. The opportunity to cross-market and strengthen tourism experiences in the region should be seen as an opportunity.

Table 3.1: 2010 VATC Total Tourism Impact for the SRRA Mandate Area

<b>2010 County</b>	<b>Expenditures (\$ Millions)</b>	<b>Payroll (\$ Millions)</b>	<b>Employment (Thousands)</b>	<b>State Tax Receipts (\$ Millions)</b>	<b>Local Tax Receipts (\$ Millions)</b>
BUCHANAN	16.91	3.69	0.18	0.56	0.20
DICKENSON	6.54	1.44	0.07	0.38	0.15
LEE	10.70	3.00	0.17	0.54	0.26
RUSSELL	10.77	2.52	0.14	0.56	0.17
SCOTT	14.92	3.02	0.17	0.74	0.37
TAZEWELL	45.20	9.71	0.58	2.02	0.64
WISE	29.94	6.38	0.37	1.39	0.44
NORTON CITY	16.56	2.87	0.16	0.79	0.74
<b>TOTAL</b>	<b>151.54</b>	<b>32.63</b>	<b>1.84</b>	<b>6.97</b>	<b>2.97</b>

### 3.3 Outdoor Recreation and Adventure Travel Trends

There is ample evidence, albeit some is anecdotal (see Box 2), of the growth in the adventure tourism market. It is often difficult to tease out these specific statistics due to a lack of uniformity in the definition of “adventure tourism” versus other representations such as ecotourism, heritage tourism, rural tourism, community tourism, wildlife tourism, outdoor recreation, nature-based tourism, to name only a few. According to a survey compiled by the Adventure Travel Trade Association, George Washington University and Xola Consulting (2010)<sup>8</sup> growth in the adventure travel industry can be inferred by examining a range of indicators, for example:

- Growth in participation in outdoor, human-powered activities;
- Growth in the outdoor gear retail industry; and
- Growth in the tourism industry growth overall.

<sup>8</sup> Adventure Travel Trade Association, George Washington University and Xola Consulting, 2010, *Adventure Tourism Market Report*.

*“Travel Industry Association of America has estimated that about 10 percent of Americans have taken an adventure-travel trip, and that it's growing by about 10 percent a year.” (Kristin Jackson, “Going semi-wild on adventure tours,” Seattle Times; May 22, 2005)*

*The VirtuosoLuxe Report, an annual snapshot of travel trends and habits of affluent travelers, indicates that 40% of clients seek active vacations or active “add-ons” and that 68.6% of travelers surveyed at travel trade shows indicated they are planning an “adventure vacation” in the future. (Adventure Travel Study 2005; sponsored by ATTA and Michigan State University)*

#### *Box 2: Adventure Travel Stats*

Adventure travelers may be segregated into “hard” adventure sports such as off-highway vehicle (OHV) riders, rock climbing, backpacking along the Appalachian Trail, mountain biking, whitewater rafting or competitive kayaking whereas “soft” adventure activities include camping, hiking on gradually changing terrain, horseback riding, wildlife viewing and biking.<sup>9</sup> While men and women are equally likely to participate in adventure travel, men are more likely than women to participate in hard adventure. Participation is also related to age. Two thirds of Generation Xers (aged 27-47) and half of all Boomers (47-67) have taken a recent adventure vacation.

The average age of an adventure traveler is 35, (trending higher for tour consumers), slightly younger than the “other” traveler who is on average 42. Adventure travelers are more highly educated than other types of travelers, with 70% of hard adventures having postsecondary education and 63% of soft adventurers having post-secondary education and 47% of other travelers having a two year degree or higher. Considering these demographic trends, it is unsurprising that adventure travelers also have higher levels of household income. Interestingly, while many hard adventure travelers clearly view international travel as important (75% have valid passports), among soft adventure travelers, only 56.5% have valid passports. From this we can theorize that among soft adventurers, many are engaging in activities domestically.

Compared to “other travelers,” adventure travelers place importance on exploring new places and meeting and engaging with local cultures while on vacation. This confirms earlier research which found that travelers were craving more cultural interaction on trips (ATTA, 2006)<sup>10</sup>. Compared to other forms of pre-trip research, the majority of adventure travelers (35%) conduct research online, but they also consult friends and family.

<sup>9</sup> [http://www.atme.org/pubs/members/75\\_311\\_1336.CFM](http://www.atme.org/pubs/members/75_311_1336.CFM)

<sup>10</sup> Adventure Travel Trade Association, 2006.

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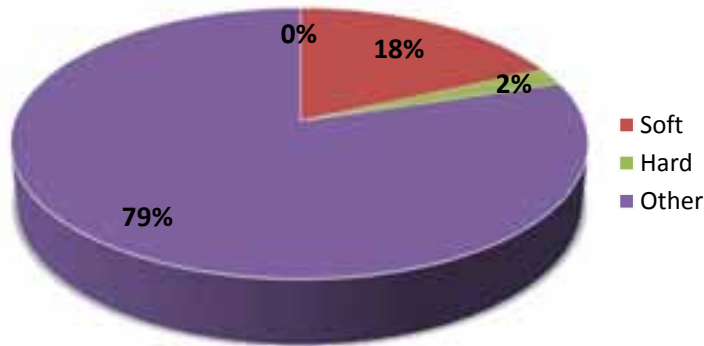


Figure 3.2: North American Adventure Travel Market by Type

On average, hard adventure travelers spend less per trip than soft with North American travelers spending \$500 per trip for hard adventure and \$914 for soft. The other category spends approximately \$605 per trip (costs excluding airfare)

### 3.4 Recommendations from the 2007 Virginia Outdoor Recreation Plan

A review of the 2007 Virginia Outdoor Recreation Plan reveals the following information. For the LENOWISCO Planning District, the counties (Wise, Lee and Scott) spend less than 13% of the state average per capita for parks and recreation. Only the City of Norton spends above the state average. Per capita spending on parks and recreation for the Cumberland Plateau Planning District ranged from a low of \$2.11 in Russell County to a high of \$19.06 in Buchanan County (2005). The statewide average is \$43.75 for counties.

Motorized trails for off-highway vehicles (OHVs), which include all-terrain vehicles (ATV's), side-by-sides, off-road vehicles (ORV), and dirt bikes, are popular recreational resources. In neighboring West Virginia, proponents have developed the Hatfield and McCoy Trail System by linking managed trails on private timber and mineral lands, and other trails into a comprehensive system of OHV trails. Visitors from throughout the region are attracted to the hundreds of miles of the Hatfield and McCoy trails system, bringing much needed tourism to areas of the state that have few other revenue sources. The Virginia Outdoor Recreation Plan recommends consideration be given to identifying lands suitable for a similar trail system in Virginia.

The Powell, North Fork of the Holston and Clinch rivers support recreational flows throughout most of the recreational season and therefore should have priority for the development of access points. Natural Tunnel State Park's staff members conduct interpretive trips on the Clinch River in Scott County. An entrepreneurial outfitter business also recently opened in Scott County offering kayak rentals and guided river trips on the Clinch. The shortage of public access points limits the duration and types of trips that can be offered. Facilities for canoe-in camping and public rest stops are also needed at appropriate distances along each river. State and local officials should work with river user groups to develop a canoe trail for the Clinch and the Powell rivers. Also,

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a management plan should be developed for each canoe trail that addresses law enforcement, education, camping, sanitation, access management and maintenance.

The Big Cherry Reservoir property is a 3,200-acre watershed and lake that provides municipal drinking water to the Town of Big Stone Gap. Opportunities for fishing, boating, trails and wildlife viewing are currently offered. Big Stone Gap should implement the recommendations in the Big Cherry Resource Management Plan to enhance the range of recreational opportunities provided on the watershed property.

The Clinch River, from the confluence with the Little River in Russell County to the Scott County line, should be developed and managed as a canoe trail. Access to the Clinch River is fairly good where the Tennessee Valley Authority and Virginia Department of Game and Inland Fisheries (DGIF) collaborated in the development of a series of access sites. Canoe-in camp sites and managed rest stops should also be added so visitors can enjoy the benefits of a managed canoe trail on these waterways. Access sites are needed at appropriate distances along the Clinch River, Russell Fork River and along stretches of other major streams suitable for encouraging boating and other water sports. There is also a need to improve public access to stocked trout streams in the region. Inadequate parking and access trails create congestion, resource degradation and unsafe conditions during popular fishing days.

### **3.5 Summary of Tourism Travel Trends**

General travel trends tend to follow the general economy and are thus susceptible to economic down turns unrelated to the industry. Given this, adventure travel is seen by the industry as a growth market capturing a greater share of the *GenX* and *Baby Boom* populations due to their higher levels of disposal income and improved health and mobility (as compared to previous generations). World class destinations, and those that aspire to be, must also compete in the global marketplace for the international traveler and are at an even greater risk for economic constraints beyond their control. Owing to the relative inaccessibility to the international traveler and competition from other destinations, coupled with the fluctuating global economy, it is likely that the SRRA region will not experience measurable economic return from the international market. The only exception to this may be in the ability to co-market with other regional tourism destinations that already have an international following such as the Crooked Road.

Domestic visitation is expected to continue to be robust in the adventure tourism market, in particular, the soft adventures that are more family friendly (such as OHV, equestrian and sport kayaking/canoeing) and do not require extensive training or technical support. The FSWVA region is well suited to this type of tourism development owing to its relative rural nature, extensive public lands, large private landowners, miles of streams, proximity to major markets and existing infrastructure. This is confirmed with respect to the development of OHV and blueway trails by the recommendations of the 2007 Virginia Outdoor Recreation Report and the 2009 Comprehensive Plan prepared by WMTH and Summit Engineering.

## 4.0 METHODOLOGY

Economic impact analysis (EIA) attempts to derive the contribution of tourism activity to the economy of a region. It traces the flows of spending associated with tourism activity in a region to identify changes in sales, tax revenues, income, and jobs due to tourism activity. The principal methods are visitor spending surveys, analysis of secondary data from government economic statistics, economic base models, input-output models and multipliers.<sup>11</sup> Alternatively a Demand Analysis attempts to identify, among other things, changes to the number and type of tourists to a region that can be expected from changes to pricing, promotion, competition, quality and tourism offerings. It predicts the number and/or types of visitors to an area via a use estimation, forecasting or demand model. The number of visitors or sales is generally predicted based on judgment (Delphi method), historic trends (time series methods), or using a model that captures how visits or spending varies with key demand determinants (structural models) such as population size, distance to markets, income levels, and measures of quality & competition (Walsh 1986, Johnson and Thomas 1992)<sup>12</sup>.

This EIA developed the following methodology that includes a predictive EIA based on an estimated Demand Analysis to overcome the existing data gaps and more accurately assess the total economic impacts that can be anticipated from the Spearhead Trails initiative. These are each described below in detail. The overall approach is to develop as much specific data as possible and then segregate the most accurate and reliable information. Three points of reference were included:

- Primary data collection at similar venues,
- Industry multipliers sourced from the U.S. Bureau of Economic Analysis (BEA) and,
- Comparable studies used for reference purposes and for comparison against the findings of this research.

### 4.1 Primary Data Collection

Primary data collection is the most important aspect of this EIA as it constitutes the first comprehensive data collection effort for the SRRA since its inception. It has also yielded the greatest amount of information (both quantitative and qualitative) for consideration.

#### 4.1.1 2011 Visitor Profiles

During the 2011 summer season, visitor profile surveys were completed at representative tourism venues in Virginia, Kentucky and West Virginia. The purpose of the visitor profile questionnaire was to capture data on visitor demographics (including socio-economic factors), spending and travel habits. The questionnaires were voluntary, and administered in the majority of cases. A copy of a typical questionnaire can be found in Appendix 10.2. A trained technician was available during the completion of the questionnaire to answer any questions and to provide background information such as

<sup>11</sup> Frechtling, D. A., 2006, *An Assessment of Visitor Expenditure Methods and Models*, Journal of Travel Research, Vol. XX, Month Year. Page 1-10. DOI: 10.1177/0047287506288877 © 2006 Sage Publication.

<sup>12</sup>Starnes 1999.

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the purpose of the effort. Although various sampling methodologies were considered, a nonprobability convenience sampling approach was selected. This method is often used in preliminary or exploratory research to obtain gross estimates of results, while requiring considerably less time and money than selection of a random or stratified random sample. A summary of the results of the venue visitor profile surveys can be found in Section 5 of this Report.

Questionnaires were administered during the months of May through October of 2011. The following venues were surveyed during this period:

#### Blueways

- St. Paul Clinch River Festival (June 2011)
- New River State Park (July 2011)

#### Equestrian Events

- Knott County Trail Ride (May and October; Knott County, KY)
- North Mountain Outfitters (Staunton, VA – May 2011)

#### OHV Trails

- Hatfield-McCoy Trailhead (Indian Ridge, WV – July 2011)
- Hatfield-McCoy Trailfest (Gilbert, WV – October 2011)

#### Biking Events

- Iron Mountain Event (Damascus, VA – July 2011)

## 4.2 Analysis and Model Development

SDCI determined that the U.S. Department of Commerce Bureau of Economic Analysis (BEA) Regional Input-Output II Modeling System (RIMS II) is the most appropriate data source for regional economic multipliers. Two options are available for multiplier data, regional and industry specific. Given that the SRRA market area is spread over a wide region, it was determined that the industry specific data should be used with the nearest BEA economic regional adjustment applied. For this Study, the Johnson City-Kingsport-Bristol and the Roanoke-Radford region industry specific multipliers were utilized. These economic areas are in close proximity to the SRRA mandate area. Industry specific data was obtained for the following aggregate industries:

- Accommodation
- Amusements, gambling and recreation
- Food services and drinking places
- Performing arts, museums, and related activities

Type I data was utilized for each industry.



**5.0 RESULTS OF VISITOR PROFILE SURVEYS**

This Section reports on data collected as part of the visitor surveys and other archival research completed as part of this study. Visitor profile data was collected at selected venues during the 2011 summer visitor season (May to October) based on the methodology described in Section 4 of this report.

**5.1 Visitor Profile Survey Results**

Visitor survey questionnaires were completed throughout the 2011 tourist season. The following table is a summary of the number of surveys and dates completed for each.

Table 5.1: Visitor survey summary

VENUE	NUMBER OF SURVEYS	DATES
St. Paul Clinch River Festival	19	04 June 2011
New River State Park	19	23 July 2011
Knott County Trail Ride	26 241	07 May 2011 08 October 2011 by WMTH
Hatfield-McCoy Indian Ridge Trailhead	10	30 July 2011
Hatfield-McCoy Trailfest	20	08 October 2011
Iron Mountain Mountain Bike Event	8	16 July 2011
<b>Totals</b>	<b>343</b>	<b>7 Surveys</b>

A total of 343 visitor profiles were completed during the summer 2011 season at seven different venues or events representing Blueway (canoeing/kayaking), horseback trail riding, OHV trail riding and mountain biking. These locations and dates were determined to be representative of the overall study period (six months) but do not reflect yearly visitation totals.

Survey data typically included the following information requests:

1. Number of adults in party?
2. Number of children in party? (under 18)
3. How did you hear about the venue? (8 options provided)
4. What other activities do you plan on undertaking while in the region? (8 categories provided)
5. How many days will you stay in the region?
6. How much will your party spend while in the region? (on fuel, lodging, food & beverages, entrance fees and purchases)

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7. What is your home zip code?
8. Highest level of education attained?
9. Age (in ten year brackets)
10. Annual household income (in \$20,000 brackets)
11. Did you plan the trip on the internet and if so, which sites were used?
12. Opportunity for comments regarding the venue.

The following is a summary of the salient findings for each of the tourism types (OHV, Equestrian, Blueway and Biking). Data on visitor origins (non-local) is discussed in Section 6 of this Report.

## 5.2 Results of Survey Data for the Hatfield-McCoy Trail and Comparative Analysis

The Hatfield-McCoy Trail (H-M Trail) is the most successful of OHV venues in the region and an obvious model to assess as part of this Study. It is anticipated that the proposed Spearhead Trails initiative will compete with H-M Trails for visitation but in many ways the two initiatives may benefit each other through unique offerings of trail riding opportunities, expansion and connection of trails thereby increasing total length of trail mileage and through cross-promotional events. Surveys were completed for both a typical Saturday at the Indian Ridge Trailhead and for the Saturday during the Trailfest event in order to test for variances in the visitor profiles. The results of the survey data collected for the H-M Trail are summarized below.

Table 5.2: Hatfield-McCoy Trailhead Survey (Indian Hills) & Trailfest Survey Summary

<b>Hatfield –McCoy Trail</b>	<b>Number of Surveys (non-local)</b>	<b>Number of Visitors Represented</b>	<b>Mean Average Party Size*</b>	<b>Average Spending per Party per Trip</b>
Indian Hills Trailhead 07.30.11	10	41	4.1	\$747
Trailfest Survey 10.08.11	14	55	3.9	\$884
<b>Totals/Averages</b>	<b>24</b>	<b>96</b>	<b>4.0</b>	<b>\$826.92 (weighted average)</b>

\* Mean average party size for all tourism related visits to VA is 2.8 per the VA Visitor Profile of 2009 (VTAC).

The mean average party size per this EIA is slightly larger than the Virginia Profile of Leisure Travelers (2.8) which also only represents those individuals traveling greater than 50 miles.<sup>13</sup> The most likely explanation for the larger party size in this Study is that a higher percentage of respondents to the Visitor Profile completed as part of this assessment are non-local (farther than 50 miles of the Venue) and thus the trend is for multi-family groupings or groupings of friends attending together to travel to the specific venue.

<sup>13</sup> FY2007 Virginia Profile of Leisure Travelers. Virginia Tourism Corporation.

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Question number 1 of the Visitor Preferences Survey deals with the source of information visitors used to learn about the H-M Trail or to plan their trip. The specific question was: “How did you hear about the H-M Trail (please check all that apply)?” A total of eight options were provided (see Figure 5.1). Given that respondents may have used more than one source of info (and in fact most did), the total number of responses exceeds the number of surveys completed. Therefore percentages are based on the number of respondents, not potential responses. Detailed interrogation can be done through additional analysis of the survey data for more specific responses.

Combined responses for Q1 (How did you hear about the H-M Trail or Event?) are provided in Figure 5.1.

■ Television Ad ■ Hatfield & McCoy Website ■ Friend or Co-worker ■ Other

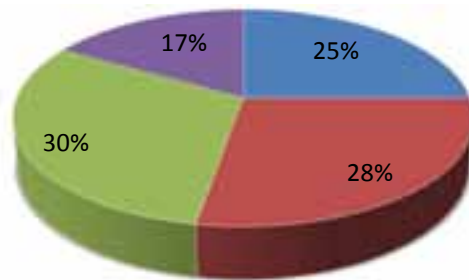


Figure 5.1: Media Exposure Response (top four) for H-M Trail Visitors

This data clearly indicates that the majority of respondents are receiving information from ‘friends or co-workers’ also referred to as, ‘word of mouth.’ Thirty percent of all respondents stated that they received information on the Venue from this source. Second was the ‘H-M Website’ which demonstrates the importance of a robust web presence for both marketing and trip planning. The lowest percentages were from ‘Billboards or Highway Markers’ and ‘Radio Adverts.’

It is also important to determine interests in other activities that visitors typically engage in. This is helpful for cross-promotional/market efforts and advertising.

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Responses for Q2: Top four activities planned while in the region (besides OHV)

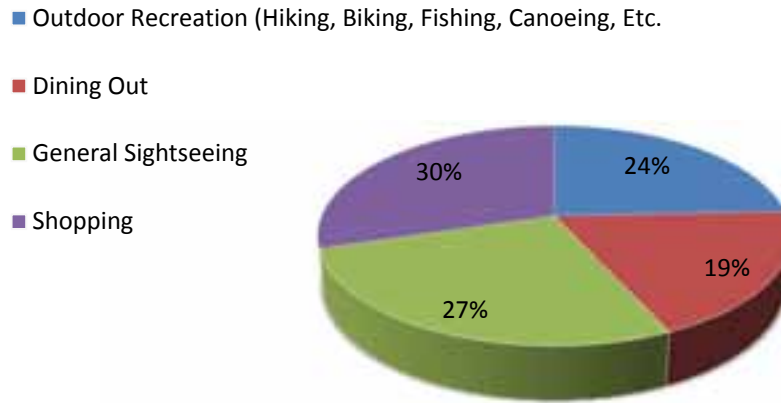


Figure 5.2: Top Four Activities Planned While in the Region (besides OHV)

Data in Figure 5.3 provides input into the types of amenities that OHV visitors are looking for (and in this case not provided by H-M Trails). This data is useful in determining the levels of infrastructure needed to support the planned Spearhead Trails projects. Accommodation options and availability along with restaurants were the most requested.

Responses to Q4: Desired amenities not provided



Figure 5.3: Top Five Responses for Amenities Not Provided (but desired) in the H-M Trail Surveys

Visitor spending characteristics (Figure 5.4) are used to determine total economic impact for the proposed trail system. These surveys, while not statistically transferrable, are a good indicator of the spending patterns and levels that can be anticipated for Spearhead Trails visitors as the visitor demographic will be very similar.

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Responses to Q10: Visitor Spending

- Fuel
- Accommodation
- Food & Beverages
- Entrance/Activities Fees
- Purchases

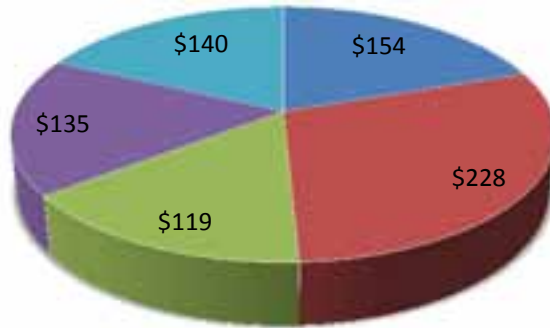


Figure 5.4: Visitor Spending (non-local) at H-M Trails

Additional data collected identified the following demographic summary for visitors to the H-M Trails. The data indicated that regarding education levels of adult riders surveyed, they were just as likely to be college educated as having a high school diploma.

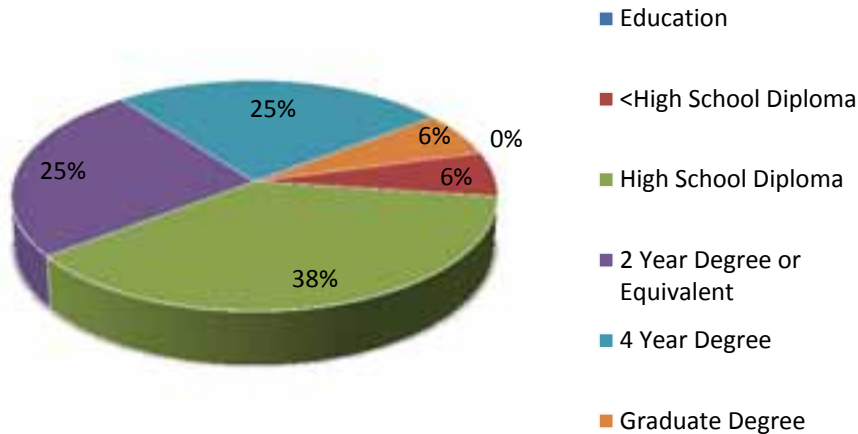


Figure 5.5: Education Levels of Respondents at the H-M Trail

Income levels were also categorized in \$20,000 increments of annual household income starting at less than \$20,000 to greater than \$100,000 per year. Over 56% of respondents indicated a total annual household income of greater than \$80,000 while

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only 19% indicated household income levels of less than \$40,000 per year. The most often checked age classification (increments of 10 years) was the age class of 20-30 (25%) and 50-60 (25%) followed by 60-70 (19%), n=16.

### 5.2.1 Comparative Analysis

A comparison to the Hatfield-McCoy Trail survey conducted in 2006<sup>14</sup> by the Marshall University Center for Business and Economic Research; the 2011 data was completed (see Table 5.3). This study identified a number of metrics, a few of which are used for comparison to the more recent survey data collected per this analysis. The Virginia Tourism Survey (2009) is also used as a comparative to the H-M Trail data collected. Dollars have been normalized to 2011 values for both surveys for equal comparisons.

Table 5.3: Spending Comparisons for H-M Trail Survey

Spending/Party/Trip	H-M Trail SDCI Survey 2011	H-M Trail CBER Survey 2006	Virginia Visitor Survey 2009*
Fuel	\$ 154	\$ 232	
Accommodation	\$ 225	\$ 45	
Food & Beverage	\$ 114	\$ 289	
Souvenirs	\$ 146	\$ 287	
Other	\$ 0	\$ 402	
Entrance Fees	\$ 136	\$ 0	
<b>Total</b>	<b>\$ 775</b>	<b>\$1,255</b>	<b>\$400</b>

\* Virginia Visitor Profile 2009 (VATC)

Adding the fee for “other” which includes fees for vehicle repair and accessories counted by the 2006 survey (average \$402/party – inflation adjusted) to the 2011 survey brings the total for both surveys to \$1,177 per party per visit for 2011 compared to \$1,255 to the 2006 survey. This difference (drop of slightly over 6%) may be attributed to the differences inherent in the survey methodology (number and location) and/or may be a result of the depressed economic conditions in 2011 as compared to 2006. This information also demonstrates the capital intensive nature of OHV tourism by comparing to the more generalized average for State Visitor spending per party as reported by the Virginia Tourism Corporation.

### 5.3 Results of Survey Data and Research for Equestrian Related Tourism and Comparative Analysis

The Spearhead Trails initiative is a multi-trail approach that intends to introduce adventure tourism offerings in a variety of venues, including equestrian. Equestrian venues can include trail riding opportunities catering to the casual rider, to organized trail riding events and even the competitive riders such as those that participate in endurance style competitions. As part of this assessment, SDCI and WMTH collected data at the Knott County Kentucky Trail Ride event held in May and October of 2011. The May

<sup>14</sup> The Economic Impact of the Hatfield-McCoy Trail System in West Virginia, October 31, 2006 prepared by Center for Business and Economic Research Marshall University for the Hatfield-McCoy Regional Recreation Authority

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event surveys were completed on 07 May and included 26 completed questionnaires totaling 205 individuals. A total of 211 responses were completed for the Fall 2011 event. The following is a summary of a portion of the results from data collected at these two events.

Total visitation at the May event was estimated at 7,000 and for the October event at just under 9,000. Attendance has grown each year of the event since its inception in 2006. Average party size at the May event was 7.9 and the total days stay averaged 3.4 (compared to 4.1 at the October event).

Responses for Q1: How did you hear about the Knott County Trail Ride? (n=46 responses).

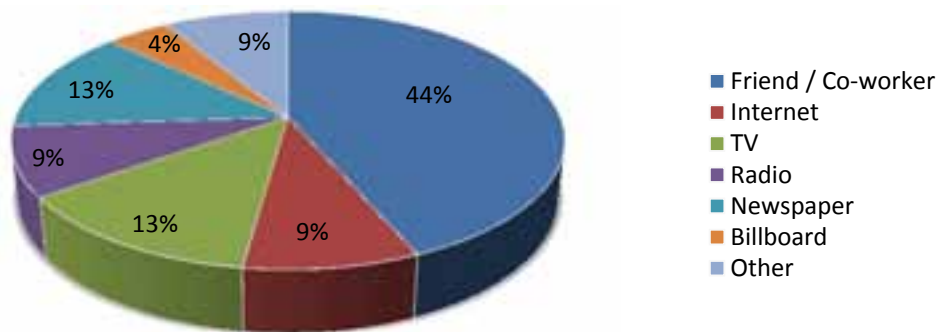


Figure 5.6: Results of Surveys for Source of Information for the Knott County Trail Ride

Respondents showed a clear preference for “Friends and Co-workers and Relatives”. This is consistent across adventure tourism surveys from surveys completed as part of this assessment and published data.

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Visitor spending was also recorded for fuel, entrance fees, purchases and food & beverages. The total average spending per party per trip was \$484. Accommodation costs were not included as the vast majority of respondents camped at the event with the fees included with the price of admission (\$15). Camping is primitive only.

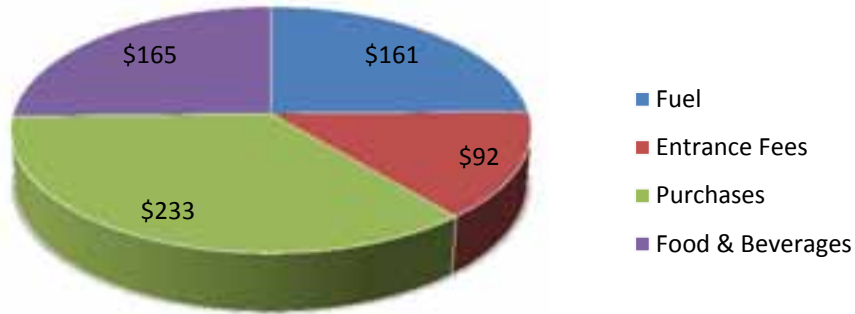


Figure 5.7: Results of Visitor Spending for the Knott County Trail Ride (May 2011)

Q12. What other recreational activities do you engage in on a regular basis (at least once per year on average)?

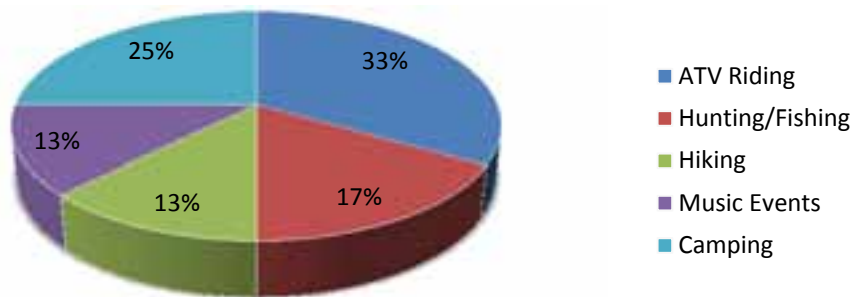


Figure 5.8: Visitor Preferences for Other Recreational Activities (n=24)

This data is similar to that reported from the 2011 H-M Trail surveys in that the most often cited responses were for other outdoor recreational activities such as canoeing/kayaking, hunting, fishing, boating and camping. Interestingly, horseback riding was not mentioned as a favorite recreational activity by the OHV riders indicating a relationship wherein equestrian trail riders are also OHV enthusiasts but the inverse is not true.



### 5.3.1 Comparative Analysis

A review of “The Economic Impact of the Horse Industry in Virginia (Rephann 2011)<sup>15</sup> reveals the following comparisons. The average visitor (participant) spends \$1,590 in total expenditures during horse shows/competitions in the State of Virginia. Out-of-State respondents spent on average \$2,983 with an average of 49% of all spending spent at the local venue. The single largest expenditure is for lodging. The average party size is 3 and the average number of days spent per trip ranges from 2.8-5.2 (in-state and out-of-state respectively). These expenditures are larger than those represented by the Knott County Trail Ride surveys (\$484) but they also reflect a larger variety of venues including major categories of events such as hunter/jumper, dressage, western and other. Other surveys were included from off-track betting parlors (OTB) and horse races. Of the three types of venues surveyed, shows and competitions reported the highest expenditures per party. Also of interest is the surveys indicated that trail riders share similar characteristics of spending and demographics with show and competition riders.

### 5.4 Results of Survey Data and Research for Blueway (Canoeing and Kayaking) Tourism and Comparative Analysis

As part of this assessment, SDCI conducted site specific visitor surveys at the St. Paul Clinch River Festival on 4 June 2011 and at the New River State Park trails on 23 July 2011. The June event surveys included 19 completed questionnaires totaling 23 individuals (18 adults and 5 children). The Clinch River festival is a local event supported by the Town of St. Paul (Wise/Russell Counties) which includes a 2-3 hour paddle trip down the Clinch River. It is advertised in local papers, with flyers and on the Town’s website. This event includes a high percentage of local participation and thus economic data (visitor expenditures) was not collected. Visitor preference surveys were completed at the New River State Park included a total of 19 responses representing 39 adults and 11 children. The following is a summary of a portion of the results from data collected at these two venues.

Figure 5.9 that follows identifies the visitor spending patterns for the New River State Park (NRSP). On average, each respondent (n=14) spent \$139/party/trip. A total of 47% stated that they were on an overnight trip and overnight accommodations accounted for almost 50% of total travel expenditures.

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<sup>15</sup> Virginia Horse Industry – add reference

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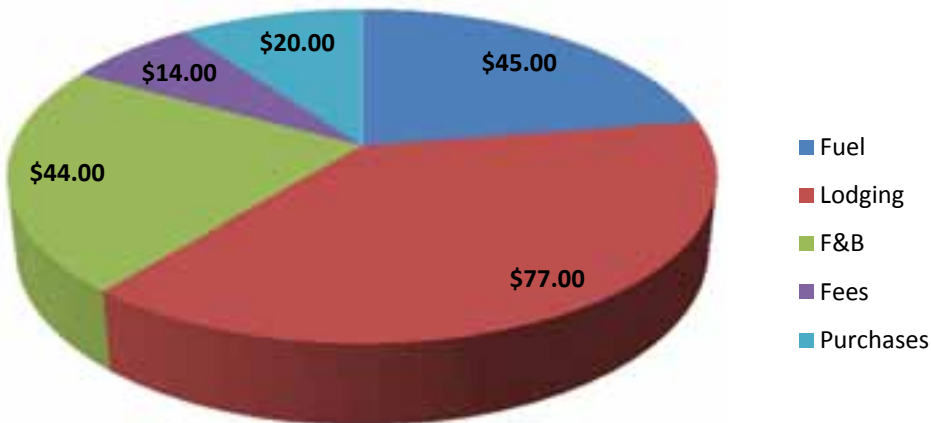


Figure 5.9: Visitor Spending Patterns for the New River State Park (2011)

Questions regarding their preferences for outdoor activities yielded the following results. A most requested amenity was the availability of local restaurants. Figure 5.10 identifies the preferred amenities. Not surprisingly, other forms of outdoor recreation (including hiking, biking, canoeing/kayaking and camping) topped their list of typical recreational activities that they engage in.

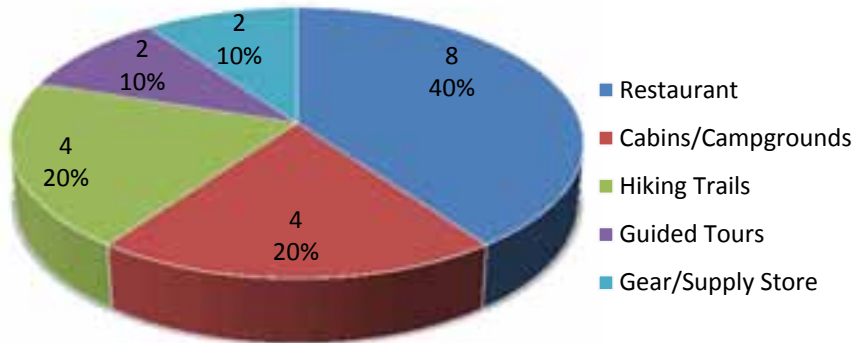


Figure 5.10: Visitor Preferences for Amenities

Various organizations, including SRRA, are considering the development of a linear State Park along portions of the Clinch River. When questioned as to their preference for this development, visitors to the Clinch River Festival responded overwhelmingly in favor (100%) and 90% stated they would be willing to pay a daily put-in/take-out fee for canoeing/kayaking on the Clinch. A full 90% of respondents also stated that they were aware that the Clinch River is one of the most biologically diverse river systems in the United States.

#### 5.4.1 Comparative Analysis

Section 6.2.1 summarizes the results of economic surveys completed in 2004 on the New River State Park system. This data identified per person spending of \$36.64 (inflation adjusted) compared to \$67.74 per person spending in 2011. This can be accounted for by the differences in average party size which averaged 3.85 in 2004 but were only 2.6 in 2011 and the higher averages recently recorded also likely reflect increased fuel costs for travel. Average per party spending per the 2004 survey was \$136.21 (inflation adjusted) compared to \$188.71 in 2011.

#### 5.5 Summary of Visitor Profiles

A comparison of the data collected as part of the visitor surveys to the various outdoor recreation venues yields the following conclusions:

- The typical outdoor recreational traveler stays longer than the average leisure traveler.
- The typical outdoor recreational traveler spends considerably more (120% - >300%) than the average leisure traveler.
- Not surprisingly the typical outdoor recreational traveler engages in multiple outdoor travel activities during the year.
- The visitor profiles described in this report are likely representative of the adventure recreation market that exists for Far Southwest Virginia.

In comparison to State averages, the breakdown between day trips and overnight trips for regional visitors is evenly split, with approximately 52 percent of visitors staying overnight while statewide the average is 80%. The average party size is 1.83 persons and parties staying in Virginia overnight are approximately 2.0 in size (showing a slight tendency for couples and families).<sup>16</sup> According to the Virginia Leisure Traveler Profile (2009) the mean average nights spent (including zero nights) was 3.5 with 82% of visitors spending three nights or less in the State. This data is useful to characterize the “typical” leisure traveler to Virginia and as a comparison to the data collected in this survey.

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<sup>16</sup> Information extracted from Economic Research Associates, “Southwest Virginia Artisan Center Market Analysis” 2007.

## **6.0 MARKET ASSESSMENT**

### **6.1 Introduction**

This Economic Impact Assessment is a predictive tool to estimate the potential trips per year by venue type and resulting economic impact to the SRRA region. Market and Demand assessment is an important component of the economic analysis. Once the potential market and demand for a recreation type is established, it is important to assess the existing inventory to determine if it is capable of meeting the demand or if there is unmet capacity (growth opportunity). Where a sufficient business model can be developed, it is then that investments can be proposed that will capture the unmet demand and convert it into visitor trips to the region. The previously determined spending habits for that type of travel, along with the demand assessment can then be converted into an estimate of economic output. The following is a summation of the market and demand assessment for the various trail opportunities previously identified within the SRRA mandate area by the Comprehensive Plan. Calculations are based on data obtained from the National Recreational Survey (2010) and expert opinion.

In order to contextualize the types of investment opportunities potentially available to the subject area, a number of case studies have been utilized (see Section 6.2). These represent similar public and private ventures aimed at capturing market demand in their regions for various types of tourism activities. These were used to estimate potential market capture rates in the demand assessment. Sections 6.3 through 6.7 represent specific market assessments for the various types of trail opportunities. Section 6.8 is a summary of the market areas, estimated capture rates and demand assessment.

In order to determine the market area (defined as the primary source of visitors for each tourism activity), the Visitor Profile survey requested information on the visitor's home zip code. In most cases this was recorded for the individual who completed the survey on behalf of the party however, in some cases zip codes representing all members of the party were included. This information was then fed into a GIS (geographical information system) for graphical representation for each venue surveyed. It is important to note that these are based on the specific survey dates and other dates or specific events may yield a slightly different result. Additionally, each venue typically included a small number of outliers (locations well beyond the typical range identified). These were mapped but are not graphically represented. These were then compared with other similar venues identified in the Case Studies or literature reviews to determine if they were similar.

### **6.2 Case Studies**

As part of this Economic Impact Assessment a number of tourism destinations were assessed to determine the potential for replication of their positive attributes to the SRRA mandate area. Features such as the type of tourism experience offered (canoe/kayaking opportunities, trail riding and trail ride events, OHV trails and mountain biking events), the facilities provided, marketing, client base, annual visits and user expectations were assessed where available. The following is a short synopsis of the relevant findings.

**6.2.1 Blueways – New River State Park: Pulaski, Virginia**

The New River State Park (NSRP) corridor runs for 57 miles and includes a bike and hiking trail that parallels the river, camping locations and other area attractions. A 39 mile segment is designated as the New River Trail and runs from the town of Pulaski to Galax, Virginia. The newly renovated Foster Falls Canoe Livery is open on weekends from the first Saturday in April through Memorial Day, then open daily Memorial Day through Labor Day, and open on weekends again Labor Day through the last Sunday in October. The livery rents canoes, kayaks, tubes, bikes and safety equipment, and it offers shuttle service, snacks and drinks. An assessment of user demographics was completed in 2004 (Bowker, Bergstrom and Gill)<sup>17</sup> and additional data was collected during the summary of 2011 as part of this assessment (see Section 5.4). The previous study identified the following for users:

Visitors/Year (2004):	16,708 (non-local water user parties)
Average Party Size:	3.85
Average Spending/Person:	\$30.46
Average Distance Traveled from origin to trail:	217 miles (non-locals)
Average Time Spent on River (non-locals):	13.62 hours

Figure 6.1 identifies the preferred uses of the New River State Park (NRSP) by visitors.

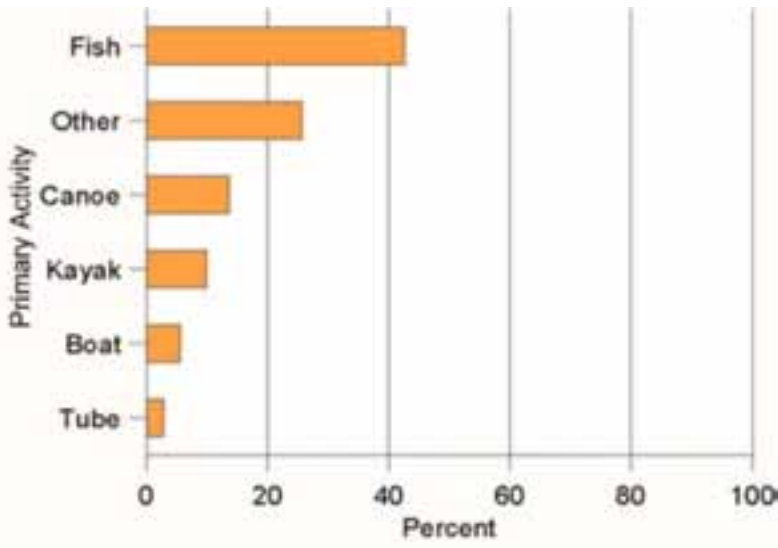


Figure 6.1: Visitor Uses of New River Trail

Based on the economic assessment of the New River Trail, the total estimated economic impact to the region is \$2,272,000 per year.

<sup>17</sup> Bowker, J.M., et al., 2004. *The Waterway at New River State Park: An Assessment of User Demographics, Preferences, and Economics*, Virginia Department of Conservation and Resources

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Figure 6.2: Photos of the New River State Park Entrance and Trail Map (July 2011)



### 6.2.2 Hiking / Biking Trails and Events

This assessment has reviewed a number of case studies for hiking/biking trails and rails to trails projects in order to determine the potential economic impact to the SRRA mandate of additional trail development. It should be noted that SRRA does not currently propose to construct any new hiking/biking or rails to trails projects in the region but will support their usage through various promotional methods.

#### New York State 2008 Trail Survey: New York Case Study

The State of New York released a report regarding the financial impact of eight different trail projects across the State (2010).<sup>18</sup> These surveys established the following aggregated results for all eight trail systems.

- Average per party non-local spending (excluding equipment purchases) = \$26.60/trip for food and \$97 for accommodation (n=408). Total spending with equipment averaged \$202.35 per trip.

<sup>18</sup> New York State Department Office of Parks, Recreation and Historic Preservation, 2010, An Analysis of the 2008 Trail User Surveys.

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- 89.5% of all visitors were local and the average distance travelled from their point of origin to the destination trail was 4.8 miles for all visitors and 13.5 miles for non-locals.
- Average group size = 2.74
- The total economic impact (including multipliers) was approximately \$2 million per year to the State.

### **Greenbrier River Trail: Greenbrier, West Virginia Case Study**

This report presents the results of a 10-month project designed to inventory the recreation opportunities in the Greenbrier River Trail corridor (81 mile rails-to-trails project), to assess the level of use of the Greenbrier River Trail and the economic impact generated by that use, and to generate broad-based cooperative efforts to expand marketing and promotion of the area.<sup>19</sup> The inventory of Greenbrier and Pocahontas Counties revealed that a total of 87 lodging accommodations; 28 recreation areas, facilities, and businesses; and 14 historic/cultural sites currently exist within the corridor. Survey analysis showed that trail users were highly educated, had family incomes exceeding \$60,000 per year (unadjusted), and that more than 60 percent of them were residents of other states. Spending by out-of-state visitors far exceeded that spent by West Virginia residents and 95% of the out-of-state visitors indicated that they were highly likely to plan a return visit to the area. Surveys also revealed that biking (75%) and hiking (20%), followed by horseback riding and others were the preferred activities (Busbee 2001).

### **York County Heritage Rail Trail: York County, Pennsylvania Case Study**

The Heritage Rails-to-Trails project is a 21 mile project that has been in place since 1999 and runs from the Maryland/Pennsylvania border north to the city of York, PA. Surveys indicated the following results:

- 61% of the respondents were local (from within York County).
- Biking was the preferred activity (71%) with hiking second.
- Word of mouth was the most often form of information exchange regarding knowledge of the trail.
- 12% of the respondents stayed overnight and spent on average \$51 per trip.
- Spending per person per trip averaged \$12.60.<sup>20</sup>

### **Virginia Creeper Trail: Damascus, Virginia Case Study**

The Virginia Creeper Trail was surveyed in 2002-3 (Bowker et al 2004) to determine the economic impact to the region as a result of tourism visits. Based on multiple surveys conducted over different seasons it was determined that the 34 mile trail averaged a total of 134,000 visits per year. The total economic impact as a result of trail spending was over \$1.5 million per year with the creation of 27.4 FTE jobs. Other important considerations included:

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<sup>19</sup> Busbee, R., 2001 Maximizing Economic Benefits from a Rails-to-Trails Project in Southern West Virginia: A Case Study of the Greenbrier River Trail. Marshall University Park Resources and Leisure Services and the West Virginia Trails Coalition.

<sup>20</sup> Heritage Rail Trail County Park 2007 User Survey and Economic Impact Analysis. 2007.

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- Non-local primary visitors per year: 40,034 (day use) and 10,305 (overnight stay)
- 72% of surveyed stated using the trail was the primary purpose of the trip
- Average annual number of trips per party to the trail – 4.8
- Biking was the most popular activity (55% of all users and 75% of non-local)
- Average spending per person was \$11.15 (day use) and \$30.05 for overnight
- Consumer surplus was calculated at \$42.54 per party<sup>21</sup>

### **Iron Mountain 100 K Ride: Damascus, VA Case Study**

The Iron Mountain 100 kilometer bike race has been held annually for the past three years in Damascus, Virginia and is sponsored by Shenandoah Mountain Touring of Harrisonburg, Virginia. This organization also sponsors other events throughout Virginia including the Shenandoah 100 (held annually for the past 13 years) and the Mountain Bike Festival. The Iron Mountain race (2011) had 105 participant/visitors for the weekend event, up from 87 participant/visitors in 2010. In contrast, the larger Shenandoah Mountain 100 event in Stokesville, VA had 589 participants in 2011. Of the visitors surveyed during the Iron Mountain 100, 38% were from the Washington D.C. area, 25% from northern Virginia and 38% from North Carolina (predominantly Raleigh and Greensboro). The weighted average distance travelled for participants by those surveyed was 244 miles.

### **Canadian Trail Survey Case Study**

The Canadian trail project reported visitation rates of 68% (non-local) riders for three regional mountain biking venues (MBTA 2006)<sup>22</sup>. The average party size ranged from 2.9-3.3 with 10% completing day trips and 90% overnight stays. The overnight stay subset indicated an average party size of 4.5-5.0 with average spending/person/day of \$83.79-\$133.13. Total visitation for the season was estimated at 25,695 riders. By comparison, the Wisconsin off-road mountain bike series reported 9,870 entrants (2004) and 11,800 spectators with a visitor origin radius average of 228 miles.

### **6.2.3 OHV Trails**

#### **Hatfield-McCoy Trails**

The Hatfield-McCoy Trails project has been widely reported in other documents (see Comprehensive Plan by WMTH and the Economic Impact of the Hatfield-McCoy Trail System in West Virginia by CBER [2006]) and therefore the following is only a brief summary of the project.

The HM Trail project was formed by legislation in 1996 and described as, “. . . a system of recreational trails and appurtenant facilities, including trail head centers, parking areas, camping facilities, picnic areas, recreation areas, historic or cultural interpretive sites and other facilities...” The plan calls for a network of over 2,000 miles running in

<sup>21</sup> Bower, J., Burgstrom, J., and Gill, J. 2004. The Virginia Creeper Trail: An Assessment of User Demographics, Preferences and Economics.

<sup>22</sup> MBTA, *Sea to Sky Mountain Biking Economic Impact Study – The Whistler Report* Western Canada Mountain Bike Tourism Association, Vancouver, BC, Canada.



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nine West Virginia counties. In 2000 the first 300 miles opened over both private and public land and as of 2011 approximately 500 miles are available (CBER 2006).

According to literature produced by HM Trails, the project reports the following accomplishments:

- The project is the fastest growing outdoor recreation tourist destination in the State of West Virginia.
- Approximately 25,000 trail user permits were sold to the public in 2007 (the most recent year data was available) with 80,000 visitor days on the trails.
- Currently there are five trail systems located in four counties with over 500 miles available for use. The plan calls for 2,000 miles of trails with appropriate facilities and amenities in all nine counties along with an Off-Highway Vehicle Park to be built in Kanawha County.
- Since the first trails were opened, users have increased by more than six fold.
- The system is governed by the Hatfield~McCoy Regional Recreation Authority.
- The West Virginia Legislature has provided exemptions from liability for private landowners whose property is being used as part of the trail system. This exemption created a mutually beneficial public-private partnership which was a significant innovation for trails in the eastern United States.
- Throughout the year, the Hatfield~McCoy Trail System schedule five significant ATV and dirt bike events which bring not only significant numbers of users but provide national visibility to the system. These events are essential to increased use of the system in the future.
- For the State of West Virginia the total economic impact of the Hatfield~McCoy Trail System was an increase in output of \$7,776,116, an increase in income of \$2,789,036 and the generation of 146 new jobs.
- The total amount from all sales taxes is \$622,752. The state legislature provides \$500,000 per year in financial support to the Authority yielding a return on investment of 125%. The total public investment provides a tax return of 80%.
- Average spending per party per day is approximately \$271.44 or per trip is \$814.33 (in West Virginia).
- The weighted average distance travelled by visitor was estimated at 307 miles with greater than 75% travelling farther than 200 miles.

According to surveys completed by H-M Trails and CBER (see Table 6.1), riders come from the following surrounding states at the following ratios:

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Table 6.1: Visitor Origins by Percentage for the H-M Trails

<b>HM Trails</b>		<b>CBER</b>
• Ohio	21%	17.6%
• West Virginia	20%	14.6%
• North Carolina	11%	8.4%
• Pennsylvania	11%	18.7%
• Virginia	08%	7.4%
• Other	29%	16.2%
•		4.3% Michigan
•		3.8% Maryland
•		3.1% Kentucky
•		3.1% New York
•		2.8% Florida

**Tug Hill Region ATV Case Study<sup>23</sup>**

In the spring of 2005, the New York State Legislature allocated \$850,000 for an ATV trail fund from revenues generated by ATV registration fees. The Tug Hill region in upper New York State consists of 41 towns containing 21 villages. With about 50 people per square mile, the Tug Hill region is sparsely populated. In total, the population of Tug Hill is comprised of a little more than 100,000 people who reside mostly in villages around its edge. A few thousand individuals reside within an 800 square mile area comprised of dense forest with few public roads. The Tug Hill region is one of the largest intact land blocks in New York State, comprising over 200,000 acres of working forestlands in four counties.

Data on ATV spending obtained through the trail intercept surveys was analyzed to determine the total net new spending that occurs in the Tug Hill region as a result of ATV use, which is classified as the “direct” economic impact. Based on its research the total direct impact of ATV use on the Tug Hill economy includes \$23.1 million in sales for local businesses, supporting employment of 564 individuals who earn \$7.9 million in wages. The second phase of the impact study was to enumerate the indirect and induced impacts that result from the \$23.1 million of new sales. The indirect impacts include purchases by local businesses from other Tug Hill region producers of goods and services. These local businesses also pay wages to their employees, who spend a portion of their earnings in Tug Hill. These expenditures are categorized as the “induced” impacts on the Tug Hill Region. The indirect and induced impacts of ATV use increase sales by \$12.2 million, supporting employment for 137 individuals who earn wages of \$3.5 million. The total economic impact is the sum of the direct, indirect, and induced impacts. The total economic impact of ATV spending in Tug Hill is approximately \$35.2 million supporting employment of 701 individuals. However, these jobs include full-time, part-time and seasonal jobs. Adjusting for this fact, the total number of full-time equivalent jobs supported by Tug Hill ATV use is 369.

<sup>23</sup> Camoin Associates, Saratoga Springs, New York, *Tug Hill Region Economic Impact Study*, January 2006.

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An analysis of the results indicates that over 75% of riders are male with a mean age of 42.7 years. A majority of intercept respondents were between the ages of 35 and 54. A majority of the respondents (43.1%) have household incomes between \$40,000 and \$80,000 over 35% have household incomes less than \$40,000. Approximately 41.4% of respondents obtained a high school degree, with the next highest grouping having attended some college or completing a technical school (28.9%). Group education levels followed similar patterns, with over 48% having some high school or a high school diploma. Almost 90% of respondents were from New York State, with the next highest level of respondents (4.6%) coming from Pennsylvania. Average group size per trip was slightly less than 6 individuals and mean spending per group per trip was \$360 per day. Repeat trips during the year are high for this location with almost 25% of riders making 5 – 10 trips per year.

**Knott County ATV Adventure Park**

Knott County Mine-Made Adventure Park is a private/public enterprise that opened in the Fall of 2011 offering both OHV and equestrian trails including 32 miles of single track for the dirt bike crowd. The Knott County Fiscal Court owns and operates the facility which is located on 43,000 acres of reclaimed mining land just outside the town of Softshell, Kentucky (see Figure 6.3). It is too early to calculate the economic impact of this project but there has been significant interest in the park from users, promoters, writers and OHV distributors.

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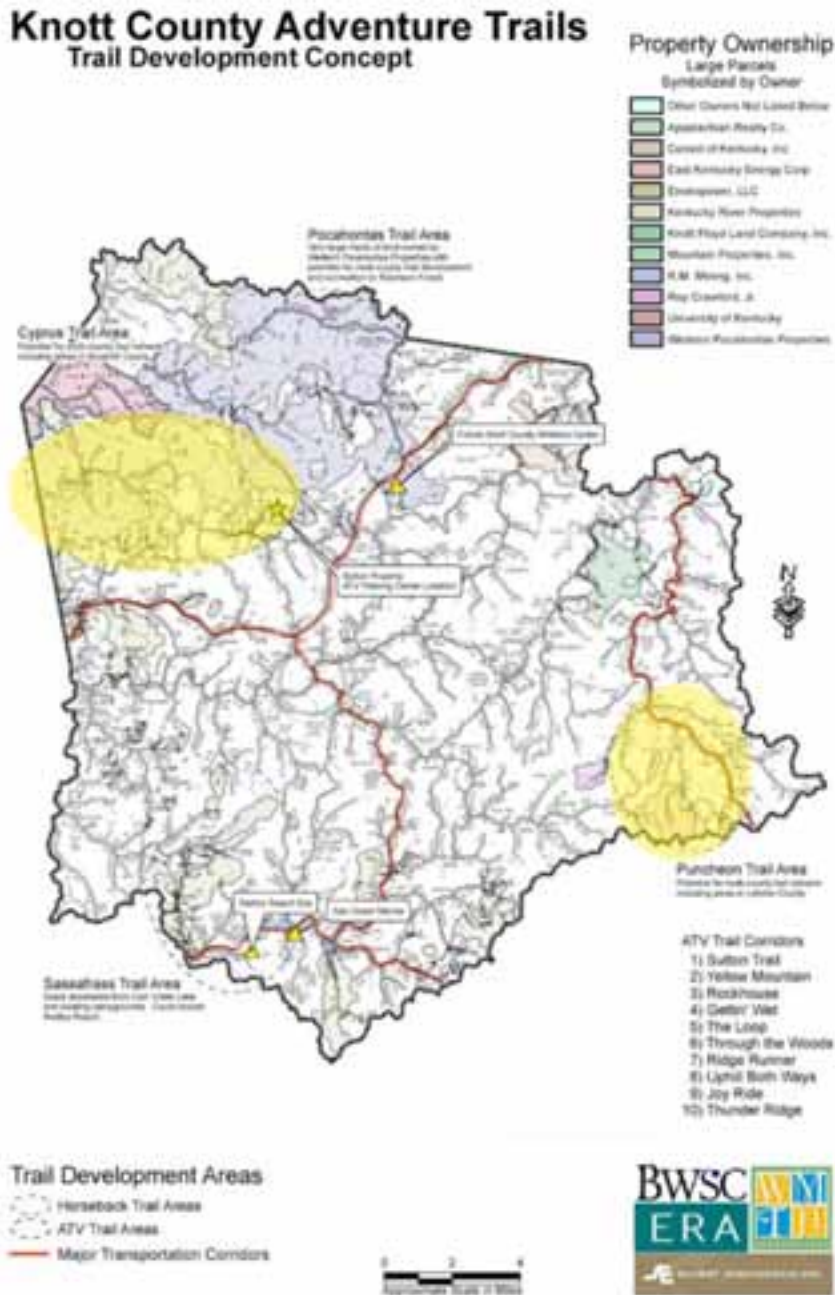


Figure 6.3: Knott County, KY Trail Potential

### 6.2.4 Equestrian Trails

Two equestrian venues were assessed as Case Studies for this assessment. Each represents a venue type that is potentially applicable to the SRRA mandate area. The biannual Knott Country Trail Ride is a rapidly growing equestrian event within a two hour drive of FSWVA. Economic and demographic data have been collected at this location by consultant team members and therefore accurate information is available from which to draw inferences.

### **Knott County Trail Ride Case Study**

Knott County is located in Eastern Kentucky. The County Seat, Hindman, is roughly a three to four hour drive from Cincinnati, Ohio; Charleston, West Virginia; or Knoxville, Tennessee. The county is easily accessed via KY 80, which connects to the Hal Rogers Parkway at Hazard, Kentucky and US 23 near Prestonsburg, Kentucky. There is very little commercial development within the county, most of which is centralized within a few miles of the county seat.

The Knott County Trail Ride was started in the Fall of 2006 and has experienced growth every year. Riders and spectators attend the three day event and pay an entrance fee which includes a camping space. Surveys conducted by WMTH in the Fall of 2011 indicate the following:

- Of 194 respondents the average attended 5 trail rides a year with the highest being 20 and the lowest being 1 (Fall Ride in Knott Co.)
- States they attended other Rides included: PA, DE, NJ, WY, FL, MI, MO, IN, IL, VA, TN, OH, NC, WV, KY which indicates a willingness to travel.
- Of 211 surveyed over one half stayed overnight in a horse trailer or truck, 34% slept in an RV/camper, less than 10% slept in a tent and 3% went home at night.
- During the Fall 2011 Ride, approximately 5,870 wrist bands (entrance requirement) were distributed (4,870 paid and 1,000 free for children and workers). The entrance fee was \$15.
- The most popular source of information regarding the event was from friends (64%), family (11%), previous knowledge (9%) and the internet (6%). TV and radio were both at 5%.

### **North Mountain Outfitters Case Study**

The second Case Study is based on data collected by SDCI at a venue that caters to individual and group trail rides on publicly available trails (also referred to as a *livery* business). This outfitter/guide services provides an example of entrepreneurial investment into a business model that would not likely exist without the availability of accessible, publicly maintained trails for horseback riding. The business represents a model that can be replicated in FSWVA. If the Spearhead Trails initiative is carried forward successfully it can assist these types of entrepreneurial style operators through cross marketing and trail development.

The North Mountain Outfitters are located in Swope, Virginia just outside of Staunton. The 180 acre working horse ranch maintains 20 horses, associated barns and stables, riding rings and a bunk house built in 2009 that is used for overnight accommodations (see Figure 6.4). The bunkhouse sleeps 12-14 people and is complete with a kitchen and living area.

According to the owner, approximately 1,000 customers took guided horseback rides along designated trails on private property and the adjacent George Washington National Forest in 2010 and roughly half of these were overnight guests. The peak riding season is April through November and the primary market area for visitors is the

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northern Virginia / Washington, D.C. metropolitan region (an approximate 2-3 hour drive). The business supports one full-time individual and three part-time employees. Day ride fees range from \$115 (1/2 day) to \$175 (full day) and with overnight accommodations at the bunkhouse, fees are \$225 including the 1/2 day ride and \$290 for the full day. The accommodation includes three meals and overnight stay. A popular event is the “Cowgirl Weekend” that caters to women’s groups for a weekend getaway that includes three days of rides and all meals/accommodations (cost is \$675/person).



Figure 6.4: Photos of North Mountain Outfitters Bunkhouse

### 6.2.5 Camping / RV Parks

Accommodations include hotels, motels, bed and breakfast inns, traditional/historic inns, and campgrounds. Campgrounds include primitive sites (no services), improved (full services with water and electric hook-ups and bath facilities, or some combination of these) and sites that are accessible to recreational vehicle (RV) in addition to rental cabins which may also be counted in the motel category. Many full service sites are accessible to tow-behind and RVs up to a certain size. Camping sites are closely related to tourism development within any destination area and are much more closely related to adventure tourism due to a strong preference for visitors to camp at a campground. Most OHV and equestrian visitors are towing a trailer for their vehicles or horses.

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Surveys conducted in the region indicate that OHV trail users are generally split between staying at a hotel/motel versus campground/cabins (55% to 45%). Other surveys have indicated similar findings (see Tug Hill Case Study). Data on equestrian related visitors is not as easy to estimate as many events are strongly associated with camping at the specific venues though it is clear from surveys that many do stay at regional hotel/motels and that there is a strong industry that caters to the occasional trail rider who stays at themed B&Bs and ranches/bunkhouses that offer guided rides.

A suitable accommodation infrastructure is necessary in order to provide value-added services to visitors and to attract participants to the various adventure-based tourism venues envisioned for the region. SDCI, in conjunction with WMTH, has attempted to compile a list of the availability of accommodation within the SRRA mandate by type. Data on the availability of hotels/motels within the region was provided by the Virginia Tourism Corporation (VATC) and data on campgrounds/RV parks was compiled from a variety of sources.

The total number of rooms classified as hotel/motel and B&B per the VATC data (amended) was estimated 1,544 for the SRRA area whereas the total number of camping spaces is estimated at 731 (194 primitive and 527 improved). Of greater importance is their proximity to the existing and proposed trail projects. Most adventure tourists desire to stay in close proximity to the attractions. Additionally important is the marketing of accommodation offerings to the target market. Given the distance that the majority of visitors will travel, it is imperative that accommodation options and proximity to attractions be co-marketed with the venue.

A review of current travel websites associated with camping venues in FSWVA yields the following results:

- Virginia Campground Association Directory 2011 - No campgrounds listed.
- Heart of Appalachia Website – 15 Campgrounds Listed (with information & links)
- KOA Campground website – No campgrounds listed for SRRA Mandate Area.
- Trails.com website listings –
  - Bark Camp Lake, Coeburn, Wise County; 19 sites, \$8-12 with electric hookup
  - Wilderness Road Campground, Cumberland Gap National Historic Park, 121 primitive sites, and 49 electric sites
  - Cave Springs Recreation Area, Dryden, 41 Sites \$8/night
  - High Knob Recreation Area, Norton, 14 Sites
  - Breaks Interstate Park
  - 138 individual sites
  - Bark Camp Lake
  - TrailsRUS and County Government websites
- Dickenson and Buchanan Cos.: Breaks Interstate Park
  - 138 total sites from primitive to full hook up
  - Standard Electric = 73, Tent Only = 9, Lodge = 81
- Lee Co: Link to Wilderness Road State Park
- Russell Co: None Listed
- Scott Co:
  - Natural Tunnel State Park 34 Electric Hookup Sites

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- Riverside Campground
- Clinch River Valley Campground
- Bark Camp Recreation Area (34 tent sites)
- Tazewell Co: Cavitt's Creek / 9 full service RV sites
- Wise Co:
  - Bruce Funk RV Park
  - Cane Patch Camping
  - Cave Springs Camping (41 full sites)
  - Country Inn RV Park
  - Jessie Lea RV Park (32 RV sites)
  - North Fork Reservoir Camping (33 tent sites)
  - Whispering Pines Family Campground (8 Sites)

### **Tennessee Valley Authority Campground Case Study**

The Tennessee Valley Authority (TVA) maintains 80 recreational areas within its 293,000 acre region and 8 seasonal campgrounds with approximately 1,300 sites. This region includes 11,000 miles of shoreline around rivers, streams, lakes and other impoundments. An economic assessment of recreational values within the TVA system concluded that the average campground maintains a 50% occupancy rate with an average visitor stay of 2 nights and an average group size of 4.7 during the 120 day seasonal camping period. TVA captures approximately 156,000 camping person days per year from a total regional population of 6.5 million. At a demand rate of 15.6% (2010) this equates to a capture rate of approximately 7.7%. Direct economic impact from camping within TVA facilities ranges from \$156,000 to \$585,000 per year<sup>24</sup>.

### **6.3 OHV Market Assessment**

Off Highway Vehicles represent a growth segment of the adventure travel tourism segment for this region. Off highway vehicles (OHV) visits to national forests grew from 5 million in 1975 to a whopping 51 million in 2005 primarily because these were often the only places people could legally ride their ATV's and dirt bikes. Entire trail systems are now being shut down due to the heavy impact this magnitude of riders has had on the forest. The success of the Hatfield-McCoy ATV trail system has demonstrated a demand for this type of tourism offering in the larger region and the user surveys have indicated a primary and secondary market area that represents a significant percentage of the U.S. population. The SRRA mandate area is uniquely situated to take advantage of this market segment and to competitively compete with the H-M system. However, it must be recognized that H-M Trails have greater name recognition, have successfully branded their user experience, have 10 years of operational experience and a fully developed trail system (albeit geared almost exclusively to OHV uses). It has access that is as good as the SRRA region to major markets. Therefore, this component of the SRRA trail system will be at a competitive disadvantage until such time as it reaches parity in both trail mileage and branding/marketing efforts with the H-M product. Altering the product through complimentary marketing with other potential tourism draws to the region (such as equestrian events, music events or other tourism draws) will help to segregate SRRA from other competitors. For this reason, capture rates for the OHV

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<sup>24</sup> Cardno Entrix, 2011 TVA Economic Assessment



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market segment have been downgraded to account for the initial competitive disadvantage SRRA will have.

Competition for the OHV market is represented by the H-M product, the Knott County ATV Park, and a number of smaller private and public OHV trail systems in the region. A review of potential competitors reveals the following number of venues for the surrounding states (approximate 400 mile radius):

- Tennessee: 13
- Kentucky: 19
- West Virginia: 15 (each H-M trailhead is listed separately)
- Virginia: 14
- Pennsylvania: 66
- Maryland/Delaware: 14
- North Carolina: 40

Based on listings from [www.riderplanet-usa.com](http://www.riderplanet-usa.com) and [www.trailsources.com](http://www.trailsources.com), the total number of potential venues within Virginia and the surrounding states is 181, but the majority of these are not true trail systems and are thus not likely to be a major competitor for the Spearhead Trails Initiative. An examination of just the SRRA mandate area identified only one trail within the SRRA mandate area (Stone Mountain Trail in Lee County). It is assumed that the existing Mountain View ATV trail club will be assimilated into the Spearhead Trails initiative and does not therefore represent a competitor to the SRRA sponsored trails (it was not identified on either of the above listed websites).

Besides the continued development of H-M Trails, there are several trail development projects that are underway which may pull potential visitors from the Spearhead trails initiative. The following is a brief description of each (only those trail projects that list advertise 100+ miles of trails are listed below as smaller day use trails are not considered as competition for the Spearhead Trails Initiative).

- Coal Creek OHV trails in Oliver Springs, Tennessee is a 72,000 acre area with 250 miles of OHV trails and a 25 mile mountain biking trail. Permit fees range from a one day riding fee of \$17 to \$88 for a yearly pass.
- Callalantee ATV trails and campground is located near Mountain City, Tennessee and includes access to the Cherokee National Forest (near Furnace Creek). The adjacent campground offers full RV and tent sites and the trail length is listed as 130 miles.
- The Royal Blue ATV Resort near Pioneer (Campbell County) is located in the northeast section of Tennessee adjacent to the North Cumberland Wildlife Management Area. This area hosts 430 miles of trails within a 130,000 acre area. Daily permits are \$30.50 for non-residents. The resort offers cabin rentals, RV hookups and tent sites.
- The Wilderness Trail in Kentucky is a 120 mile trail located in the Cumberland Gap (near Pineville) in Bell County.
- The Daniel Boone ATV Trail states that it offers “hundreds” of miles of trails located on approximately 3,800 acres of land in southeast Kentucky near Hyden.

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The trail fees are \$7/day, \$15 for a 3 day pass and \$40 for an annual pass. Camping, including full hook-up RV sites, are available off the trail.

- Knott County Mine-Made Adventure Park is a private/public enterprise that opened in the Fall of 2011 with approximately 200 miles of OHV and horse trails (see description provided above).
- The Burning Rock ATV trail is listed as 100 miles and located in the southern part of West Virginia southwest of Beckley, WV with access from State Route 16 (and future access to the Coalfield Expressway). This park is not part of the H-M Trail System. It is professionally operated year around with a variety of on-site camping, RV and cabin rental opportunities on roughly 8,000 acres of mountainous terrain. The yearly in-state permit fee is \$35 and out-of-state is \$65.
- Bell County, Kentucky Holler Crawlers ATV Club states that they are attempting to gain access to 50,000 acres of land in an effort to make Bell County, “the premier destination in trail sports and outdoor recreation on the east coast.” (<http://wildernesstrailoffroadpark.net>). They currently maintain 120 miles of trails and there is no fee to ride or camp (primitive) at the Wilderness Trail Off Road Park.
- The Black Mountain Off-Road Adventure Trail is located in Harlan County, Kentucky and advertises year-round use with over 150 miles of marked and rated trails on 8,000 acres of mountainous terrain.

These last four locations are important potential competitors due to their location within a one day driving distance to the major urban markets of the Norfolk, Richmond, Washington D.C., Baltimore, Atlanta, Knoxville, Nashville, and Raleigh-Durham markets. Essentially, visitors to Spearhead Trails from these markets must drive past at least two of these other venues to get to the SRRA sponsored trail locations. Therefore, Spearhead Trails must offer a better value and a more rewarding rider experience in order to attract sufficient capture rates from these markets and competitors.

Primary and secondary markets for OHV riders were based on surveys from the H-M Indian Head Trailhead in July and Trailfest in October along with visitor registry data. The resulting map of showing visitor origin by zip code is shown in Figure 6.5.

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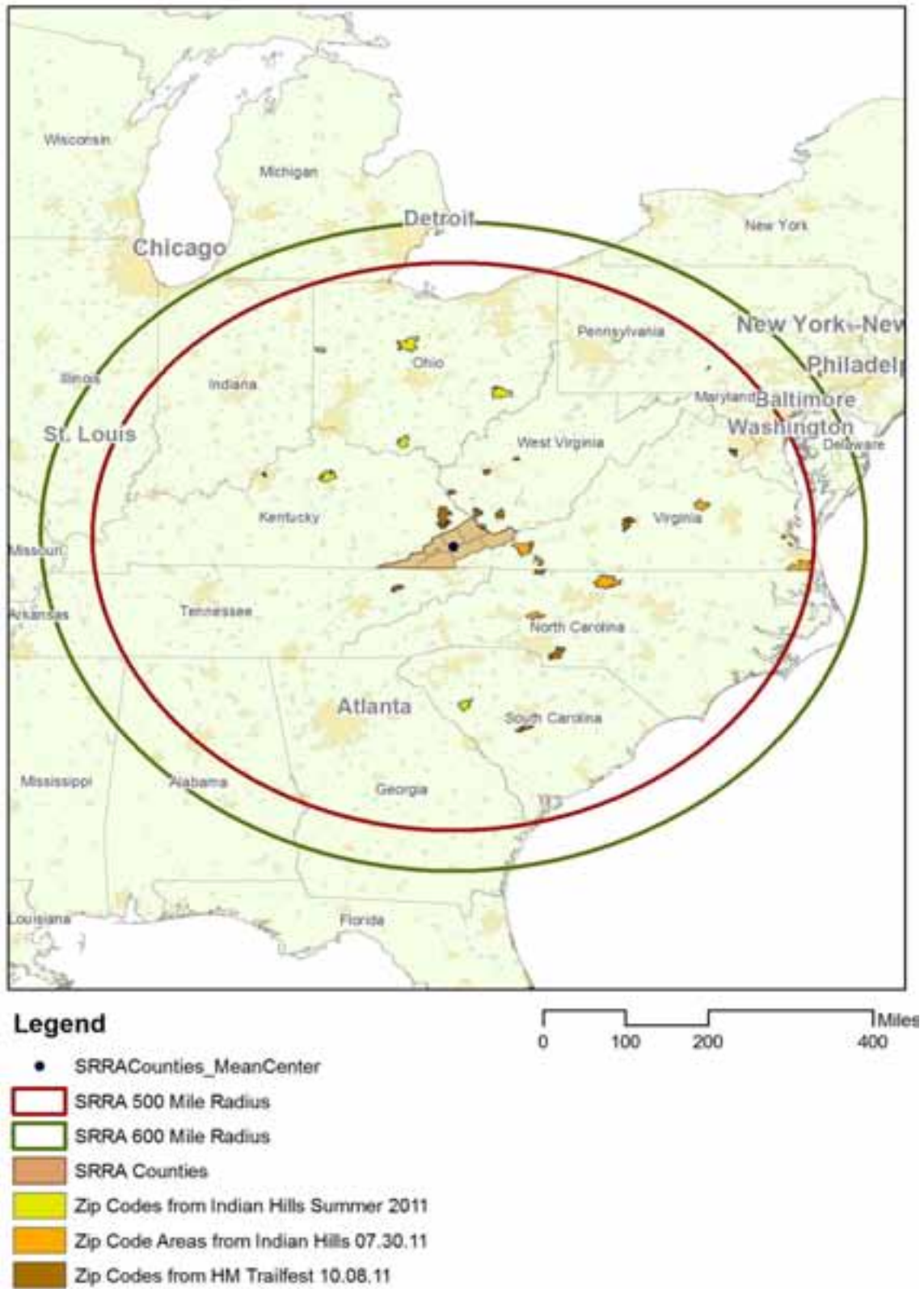


Figure 6.5: Primary and Secondary Market for OHV Riders

This market represents a total U.S. Population of approximately 130 million.

#### **6.4 Equestrian Market Assessment**

As reported by the American Horse Council, 42% of the approximate 9.2 million horses in the United States are owned and used for recreational trail riding purposes. Over 2 million people are horse owners contributing to nearly 4.6 million people who are involved in the industry either as owners, breeders, trainers, service providers, or otherwise.

Virginia itself is home to over 170,000 horses. The average Virginia horse owner spends \$2,969 per horse yearly. Horse owners spend \$505 million in annual expenses and support approximately 20,000 jobs statewide. Nearly 700 equine events are held in Virginia each year, attracting over 800,000 participants and spectators who spend more than \$167 million at these events. In total, Virginia's horse industry has a \$1 billion impact on the state's economy according to the 2011 Equine Survey conducted by the Virginia Agricultural Statistics Service. Trails are located throughout the state at a multitude of public locations including state parks, national parks, historic battlefields, and city parks and cover a variety of terrain from sandy and hilly, to mountainous, flat and rough". According to the Virginia Horse Council, Virginia offers over 285 public access horse riding trails across the state so "it is not surprising to find that recreation and trail riding is the number one use for Virginia horses."

Virginia has an equestrian culture dating back to colonial times. The horse industry in the Commonwealth is a significant source of economic development. Far Southwest Virginia has a strong affinity with the horse industry but it is nowhere as nearly developed as other regions of the state (i.e., Lexington, Virginia). For example, the equine industry within the entire 7 counties of the SRRA region contributes over \$25 million in total annual sales along with employment of 656 individuals and almost \$513,000 in tax revenue. Compared to just the Lexington, Virginia (counties of Rockbridge and cities of Buena Vista and Lexington) which contribute over \$61 million in total sales, 1,331 jobs and \$2.3 million in tax revenue FSWVA still has considerable growth potential.

Even within the SRRA mandate there is considerable diversity in equine economic impact (see Table 6.2). The case studies and venues surveyed as part of this assessment have demonstrated a strong unmet demand for increased equestrian tourism development in the region. Likewise, the region is well suited to compete with other offerings in that it has a small but dedicated equestrian culture, suitable landscape and land management opportunities, willing entrepreneurial members of the community who are able to develop an equine tourism industry and governmental support from organizations such as SRRA and other tourism related entities, including local governments. However, in order to determine the potential market for increased equestrian development in the SRRA mandate area, it is important to consider the capacity of the existing operations to become competitive and an evaluation of the likely competition in the region.

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Table 6.2: Comparison of FSWVA Counties in Equine Economic Impact<sup>25</sup>

Jurisdiction	Employment	Total Sales	Tax Revenue
Buchanan	9	\$384,441	\$10,346
Dickenson	8	\$349,368	\$13,274
Lee	119	\$4,805,263	\$66,616
Russell	126	\$5,697,273	\$95,830
Scott	223	\$11,580,569	\$193,472

**6.4.1 Existing Operations within the SRRA Mandate Area**

**Summary from Comprehensive Plan prepared by WMTH (2009)**

There are a very limited number of trails in the SRRA region that are or could be dedicated primarily for horseback riding. In fact, through research, only two trails were found. One is the 26 mile trail from Pound Gap in Wise County to Potter’s Flats in the Breaks Interstate Park which is still “in the works”. Limited signage at this time requires the rider to obtain a map prior to entering the trail. Once completed, it is recommended to add adequate signage to help riders stay on the trails. New equestrian trailheads have also recently opened in Jefferson National Forests although the trails themselves are multi-use and camping overnight with horses is discouraged. Most of these trails are less than five miles long. As noted in the 2008 study by the Virginia Horse Council, riders need longer trails to encourage them to come to the area to ride and stay multiple days. A minimum of 20 but preferably 25 miles is recommended.

The Consultant Team’s recommendation is to develop camps outside the park and establish trails that are longer than twenty miles long to encourage riders from outside the region to come use the trails creating greater economic impact for the region. Table 6.3 identifies existing and proposed trails and trail systems and provides an overall qualitative rating of their potential for economic impact based on their level of development, location, accessibility and desirability for the equestrian market.

Table 6.3: Existing Equestrian Venues in the SRRA Mandate Area

County	Venue	Description	Rating
Buchanan	Riding Ring at Poplar Gap	Owned and operated by County	Poor – suitable ring facilities with no existing trails but potential exist to develop trails
Buchanan / Dickenson	Breaks Interstate Park Horse Trails	State owned and open to the public	Poor to Moderate – existing trail is too short but potential exist for expansion

<sup>25</sup> *The Economic Impact of the Horse Industry in Virginia* 2011 Rephann, T., Weldon Cooper Center for Public Service, University of Virginia

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County	Venue	Description	Rating
Dickenson	Cumberland & Pine Mountain Trail Riders	Pound River Show Grounds	Poor to Moderate – suitable support infrastructure with potential for trail development.
	John Flannagan Dam	John W. Flannagan Pound River Area / managed by the Cumberland Mountain Trail Riders.  A 26 mile trail exists from Pound Gap in Wise County to Potter’s Flats in the Breaks Interstate Park which is still “in the works”. Limited signage at this time requires the rider to obtain a map prior to entering the trail. Once completed, it is recommended to add adequate signage to help riders keep on the trails.	Good – 26 mile Cumberland Mountain Trail is suitable with multiple access points and support infrastructure.  I can’t find anyone that can tell me the condition of this trail and whether or not it is open all the time or only for special rides. Hate to list is without knowing more.
	Jefferson National Forest	Multiple non-motorized trails managed by the U.S. Forest Service	Moderate – suitable trails but not suitable for events, support infrastructure is limited
Lee	Stone Mountain Trail (Multi-use) – 14.3 miles	Town of Pennington Gap and U.S. Forest Service	Poor to Moderate – trailhead is complete but trail is incomplete
	Wallen Ridge Trail (non-motorized) – 6.9 miles.	Jefferson National Forest managed by the U.S. Forest Service	Moderate – suitable trails but not suitable for events, limited support infrastructure

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<b>County</b>	<b>Venue</b>	<b>Description</b>	<b>Rating</b>
	Wilderness Road State Park Trail (non-motorized) – 6.47 miles of multi-use trail	Managed by the DCR	Good – suitable trails and support infrastructure
	Cave Springs to Lake Keokee Trail with two 4 mile loops	Managed by the DCR	Moderate - scenic trail from one attraction to another but limited support
Scott	Scott County Horse Park	Owned and Managed by Scott County Horse Association, Inc. [501(3)c]	Moderate – suitable support infrastructure with proposed trails. Good trail potential.
	Multiple non-motorized trails in the Jefferson National Forest	Managed by the U.S. Forest Service	Moderate – suitable trails but not suitable for events, support infrastructure is limited
Tazewell	Cavitt’s Creek Trail - There is a Cavity’s Creek Park/Lake, J. Witten Rec. Area which offers a trail around the lake and into the wooded area on the 164 acre property. but I find no mention of horse trails.	Managed by County	Moderate – Good support facilities and trailhead but trails are not yet developed. Potential is good.
Wise	Dan Hall Mountain Resort & Country Club	Private facility offering horseback riding and other amenities	Good – suitable trails and infrastructure
	Cumberland & Pine Mountain Horse Trail	Will connect Breaks Interstate Park to Pound Gap	Moderate – infrastructure is limited

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Please note: Nearly all of the equestrian trails noted above are too short in length to attract riders from outside the region and therefore would not meet the recommended 20-mile minimum.

Regional equestrian venues marketed in the region are summarized below:

**Southwest Virginia**

**Name** - Kissing Rock Camp

**City/State** - Sugar Grove, VA

**County** - Smyth

**Region** - Blue Ridge Highlands - Southwest Virginia

**Description** - A primitive horse camp in the center of the Mount Rogers Recreation Area. Direct access to the Virginia Highlands Horse Trail. Also available is the Looney Cabin at Camp, VA, which is a 4-6 hour ride east. Link is available from KRC site. Campers, hikers, mountain bikers and fisherman are welcome.

**Name** - Hill Crest Farm

**City/State** - Max Meadows, VA

**County** - Wythe

**Region** - Blue Ridge Highlands - Southwest Virginia

**Description** - At Hill Crest Farm we offer horse training, boarding, sales, and lessons. We train all types of horses and incorporate showing and trail riding into our training based on what our clients request. Check out our website to find out more about us.

**Name** - Bull Mountain Trail Ride

**City/State** - Stuart, VA

**County** - Patrick

**Region** - Central Virginia

**Description** - August 27,28 & 29 2004 Bull Mountain Trail Ride Over 5,000 acres of a Privately owned farm all inclusive includes meals, camping w/electrical, riding, trout fishing. Limited to 30 riders.

**Western North Carolina**

**Name** - Purple Pony Cottage and Stables -Walnut Hollow Ranch

**City/State** - Hayesville, NC

**County** - CLAY

**Region** - Western North Carolina

**Description** - Overnight Lodging/Stables & mountain trail riding vacations with your horses.

**Name** - Winding Creek Stables

**City/State** - Asheville, NC

**County** - BUNCOMBE

**Region** - Western North Carolina

**Description** - Comprehensive riding lesson program for adults and children ages 6 and up. No "rent and ride" or unsupervised riding available.



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**Name** - Springmaid Mountain - Horseback Riding

**City/State** - Spruce Pine, NC

**County** - MITCHELL

**Region** - Western North Carolina

**Description** - Over 10 miles of riding trails through the beautiful Blue Ridge Mountains. Guided trail rides are offered for ages 8 and up for 1 hour or 1.5 hour and new overnight trail ride.

**Name** - Leatherwood Mountains Horseback Riding

**City/State** - Ferguson, NC

**County** - WILKES

**Region** - North Carolina High Country

**Description** – Trail Rides

**Name** - Clear Creek Guest Ranch

**City/State** - Burnsville, NC

**County** - YANCEY

**Region** - Western North Carolina

**Description** – Open from April to Thanksgiving. Lodge and cabin. Horseback riding, three meals daily, trips to waterfalls, craft shops, the Blue Ridge Parkway and nightly entertainment.

**Name** - Pisgah Forest Stables

**City/State** - Brevard, NC

**County** - TRANSYLVANIA

**Region** - Western North Carolina

**Description** - Come have some fun and ride the beautiful trails in Pisgah National Forest. Guided trail rides from 1 - 3 hours. Please see our website for further details.

**Name** - Whitewater Equestrian Center

**City/State** - Sapphire, NC

**County** - TRANSYLVANIA

**Region** - Western North Carolina

**Description** - Whitewater Equestrian Center is located on over 400 acres of private property adjoining the Nantahala National Forest which also adjoins the North Carolina Gorges State Park. Additional gem mine on-site, and also offer fly-fishing.

**Name** - Riverside Riding Stables

**City/State** - Lake Lure, NC

**County** - RUTHERFORD

**Region** - Western North Carolina

**Description** - We offer pony rides, guiding trial rides, 2 hour river rides for the Lonesome Dove wannabe's, & overnight packing trips. Swim with your horses.

### **Eastern Tennessee**

**Name** - Blanche Manor Horseback Riding

**City/State** - Copperhill, TN

**County** - McCAYSVILLE

**Region** - North Georgia Mountains

**Description** - Blanche Manor Horseback Riding offers beginner to advanced trail rides on forest trails with stream crossings, and mountain views astride Tenn. Walking horses.

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**Name** - Dogwood Springs Ranch

**City/State** - Butler, TN

**County** - JOHNSON

**Region** - East Tennessee

**Description** - Dogwood Springs Ranch . . . provides a great opportunity to see the beauty of the Tennessee mountains. Our horseback trail rides climb up into the mountain surrounding the ranch. Open Daily! Reservations suggested

**Name** – B and B Guest Ranch of Sequatchie Valley

**City/State** - Dunlap, TN

**County** - BLEDSOE

**Region** - East Tennessee

**Description** - A Christian owned and operated Family Guest Ranch where each guest receives their very own Guest Ranch Horse for the duration of their stay.

**Name** - Douglas Lakeview Stables

**City/State** - Sevierville, TN

**County** - SEVIER

**Region** - East Tennessee

**Description** – Trail rides for all riding levels.

**Name** - Arrowmont Stables & Cabins

**City/State** - Cullowhee, NC

**County** - JACKSON

**Region** - North Carolina High Country

**Description** - Vacation cabins with fireplaces, trout fishing, boating, waterskiing on the highest Lake east of the Mississippi River. 6 trail miles.

**Name** - An Eagle's View Farm

**City/State** - Canton, NC

**County** - HAYWOOD

**Region** - Great Smoky Mountains North Carolina

**Description** - Guided horseback riding for small groups on our private mountain.

While not all of these venues represent direct competition to proposed trail development within SRRA, they do offer a number of alternatives for the casual rider and those wanting to enter the market for equestrian experiences. The goal of SRRA is to either narrowly define itself with a particular brand for a segment of the equestrian market or to offer a wide range of trails with development investment targeted to the niche that is most underserved within the market place.

The primary and secondary market areas noted in Figure 6.6 was determined by the Knott County Trail Ride based on the surveys completed in 2011 by SDCI and WMTH and additional data obtained from the literature review of similar surveys including calculated visitor travel distances. Figure 6.6 identifies the results of the surveys completed at the Knott County Trail Ride in May of 2011 (by zip code), from October 2011 (by State) and the estimated potential primary (150 mile) and secondary market areas for equestrian venue offerings within the SRRA mandate area. The secondary market area (350 mile radius) includes 5,732 zip codes that represent a total population of over 55 million.

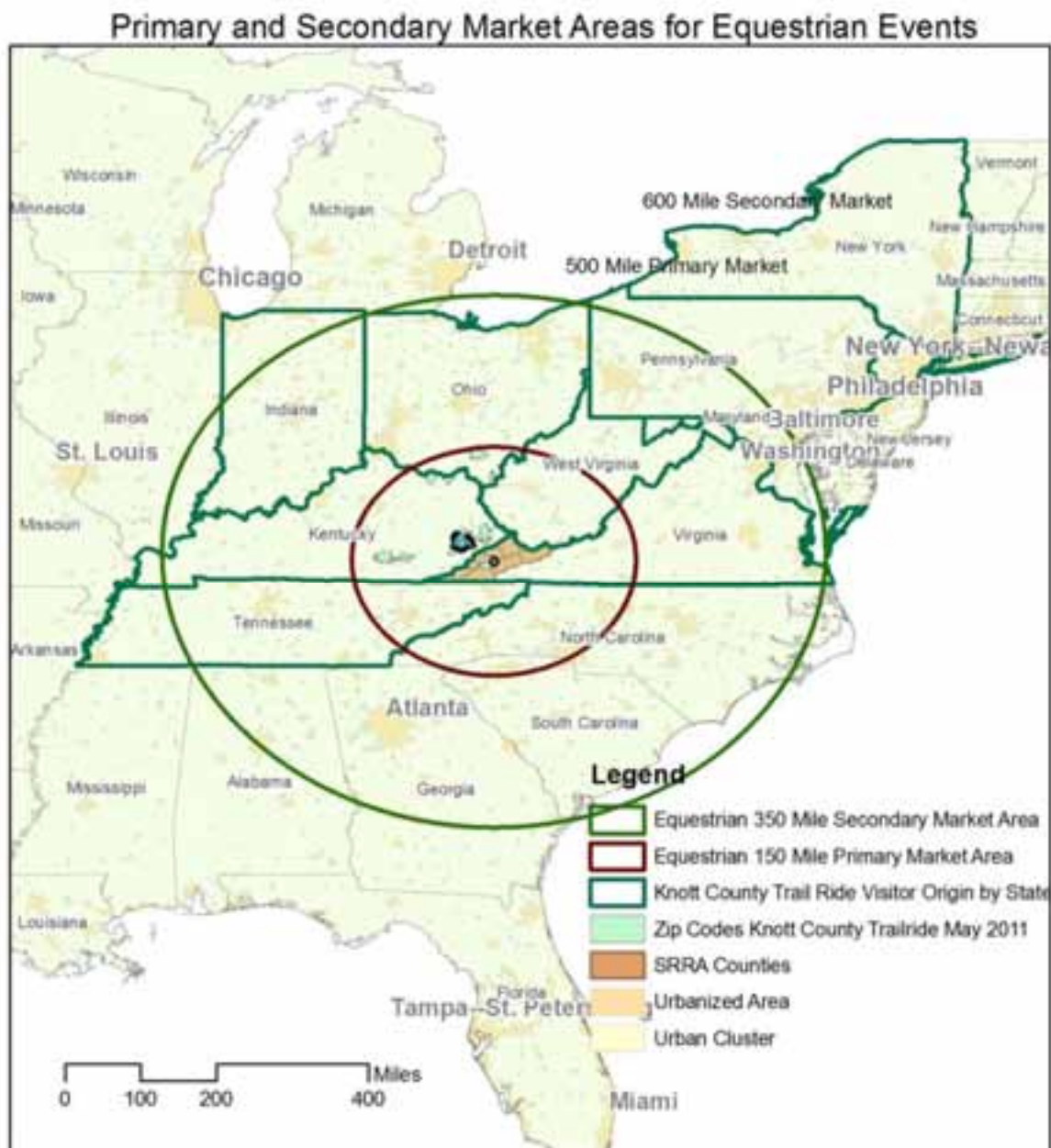


Figure 6.6: Estimated Primary and Secondary Market Areas for Equestrian Events

### 6.5 Blueways (Canoeing/Kayaking) Market Assessment

Water trails (*blueways*) are becoming more and more popular as opportunities for a variety of nature-based activities are available. Water trail users get an up-close look at the great outdoors from a different vantage point. According to the Virginia Department of Game and Inland Fisheries (VDGIF) there are about 1,200 miles of water trails in the commonwealth, including the Captain John Smith Chesapeake Bay National Historic Trail. Water trails provide access along rivers, streams, the Chesapeake Bay and lakes while providing opportunities to learn about an area's natural, historical and economic assets. Blueways can also generate considerable economic impact (see discussion of

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NRSP). Within the recreational lands managed by the TVA the visitation is estimated at 150 person-trips per mile of blueway. Annual activity economic impact is \$1,500-4,000/blueway mile with economic impact of \$10-27 per trip.

The previously prepared Comprehensive Study (Volume 2, Appendix B) for SRRA identifies a number of blueway opportunities within the region.

### **Powell River**

The headwaters of the Powell River actually start in Wise County northwest of Norton near the Laurel Grove community and flows approximately 80 miles through the Lee County communities of Dryden, Pennington Gap and Jonesville before entering the State of Tennessee. The upper section that flows through Wise County is not recommended for boaters due to the extreme gradient. This is an extreme whitewater stream that drops 130 feet in a mile in some places. The section from the Town of Appalachia to Big Stone Gap should only be paddled by expert whitewater boaters. It is a tight stream that is only navigable in high flow conditions. A unique aspect is that these "high flow conditions" produce water that resembles chocolate milk. Business Route 23 runs parallel to this stream. Due to the extreme elevation gradient, it is best paddled by expert kayakers. This is not a stream that would safely and enjoyably be paddled by canoes and rafts unless handled by experts adapted for this specialized setting. This is extreme whitewater.

*Note:*

*American Whitewater Description of the Powell River from Appalachia to Big Stone Gap:*  
<http://www.americanwhitewater.org/content/River/detail/id/1989/>

*Description of other sections of the Powell may also be viewed on the AWA, Virginia web page at:* <http://www.americanwhitewater.org/content/River/state-summary/state/VA/>

There is a section of the Powell River in Lee County that does have the potential to attract boaters but the shortage of public access sites limits the duration and types of trips that can be offered. Facilities for canoe-in camping and public rest stops are also needed at appropriate distances along the river. The newly launched "Fish Virginia First" website says there are no public accesses along the Powell River but actually one was added just a few years ago at Dryden in Lee County. But there needs to be at least one public access for the put-in and one for the take-out unless a private landowner opens a section as part of an entrepreneurial business.

Something unique about this particular section of river is that it has three swinging bridges. The Powell River is also a very popular fishing river but one must buy a \$11.00 fishing license from the county as well as an \$18.00 license from the state.

### **Clinch / Pellissippi River**

Pellissippi is the Native American name for the Clinch River. This river begins in Tazewell County, Virginia in the vicinity of the Town of Tazewell and it runs 135 miles east to west through Russell and Scott counties. The Clinch is deemed navigable by the Virginia Department of Game and Inland Fisheries (VDGIF) from the junction of Indian Creek and the Clinch River in downtown Cedar Bluff all the way to the Tennessee/Virginia State line. This is approximately 112 miles of floatable water with

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fourteen access points. Currently this is the longest blueway in the state. Two portions of the river totaling 29.2 miles are part of Virginia's Scenic River Program. Also the Big Cedar Creek flowing out of the Lebanon area into the Clinch is a scenic waterway. Big Cedar Creek is one of two creeks listed as scenic waterways in the State of Virginia. The remaining 21 scenic waterways are rivers.

"Riding the rapids" down the Russell Fork River has international appeal for whitewater enthusiasts. It was designated a Scenic River during the 40th Anniversary Year for the Virginia Scenic River Program. Another designated Virginia Scenic River in the SRRA region is a 5.8 miles section along the Big Cedar Creek which flows out of the Lebanon area into the Clinch.

A nice stop for floaters is at the confluence of the Big Cedar and the Clinch. Here at the 683 acre Pinnacle Natural Area Preserve trails, a swinging bridge and a series of small waterfalls are found. The VDGIF maintains a series of maps that identify various put-in and take-out locations for canoes, kayaks and float trips along the Clinch (see Figure 6.7 for example).



Figure 6.7: Portion of VDGIF Map of Access along the Clinch River (source: VDGIF website).

Figure 6.8 identifies the market area for Blueway trails based on the visitor origins obtained from the New River State Park surveys conducted on 7.23.11. The primary market area ranges from 0-50 miles and a secondary market exists out to 200+/- miles. The entire market area (primary and secondary) represents a total population of 13 million.

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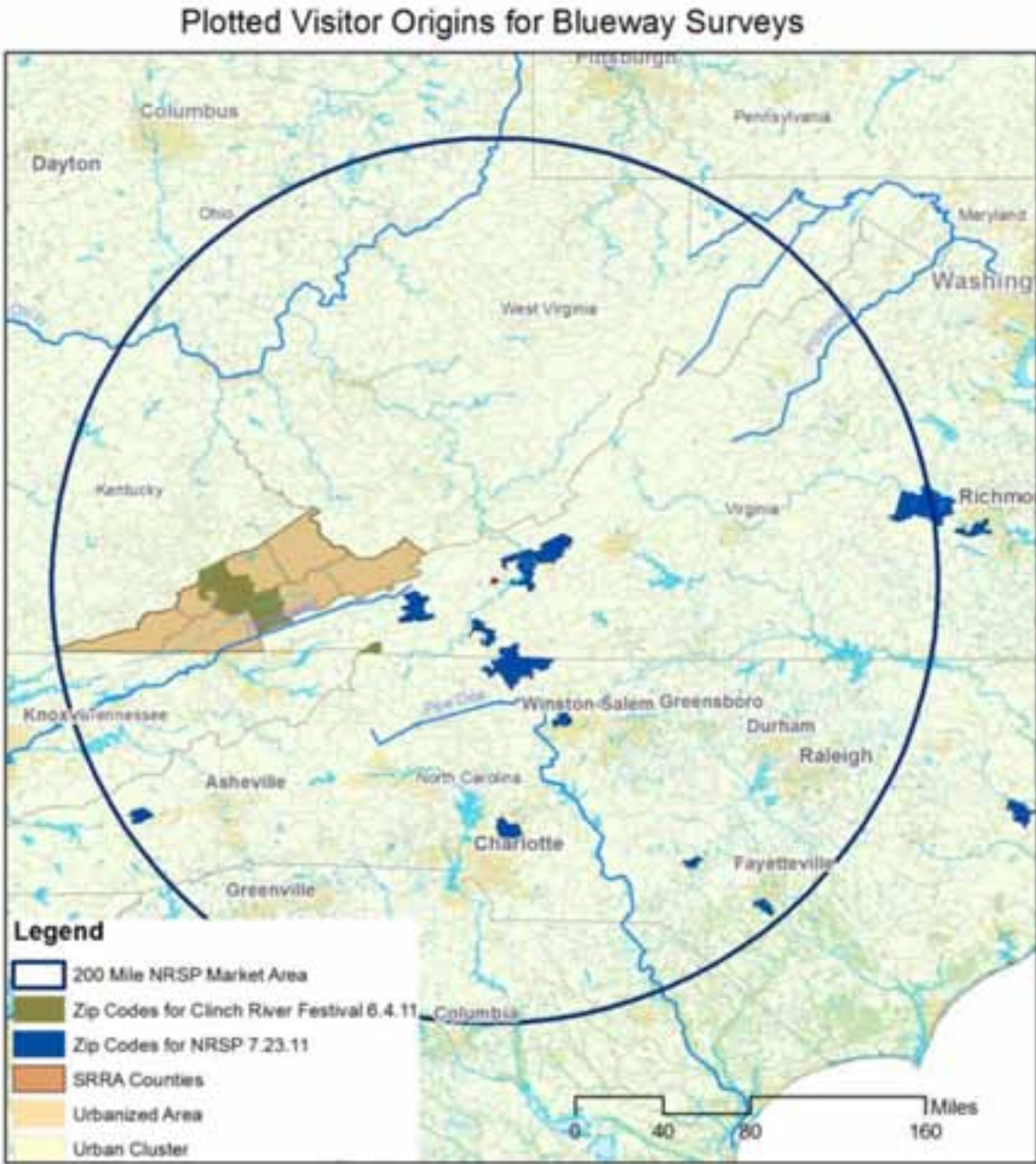


Figure 6.8: Visitor Origins for the New River State Park and Clinch River Festival

**6.6 Mountain Biking / Touring Market Assessment**

The Mountain States Bicycling Alliance (MSBA) in the Western US estimates that bicycling creates \$133 billion in annual contribution to the US economy and 60 million adult Americans (18 years of age and older) bicycle annually. American bicyclists spend money on their pursuit, creating jobs and supporting local communities. Whether bicycling for family recreation, transportation, or competition, the American bicyclist generates enormous economic power. The following are MSBA-produced statistics:

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- Contributes \$133 billion annually to the U.S. economy
- Supports nearly 1.1 million jobs across the U.S.
- Generates \$17.7 billion in annual federal and state tax revenue
- Produces \$53.1 billion annually in retail sales and services
- \$6.2 billion in bicycling gear sales and services
- \$46.9 billion in bicycling trip-related expenditures
- Provides sustainable growth in rural communities

While these estimates are attractive, they represent economic output for a variety of types of recreational bicycling, a portion of which may not be applicable to the Spearhead Trails initiative or unquantifiable for the study area. While the overall economic and recreational benefits of bicycling are significant, this assessment focuses on the potential for mountain biking trails and events as an economic driver within the SRRA mandate area. The FSWVA region is suited to mountain biking due to its topography, large areas of public lands, existing trail networks and access to markets. While there is opportunity for mountain bike trail development and events in the region, there is yet a sponsor for this activity. SRRA will provide advertising and marketing support but no trail development is planned at this time. In order to actualize the economic impact potential a trail development plan must be initiated for the region including trail development, sponsorship, event organization and promotion.

## **6.7 Other Trail Related Tourism Market Assessment**

There are numerous hiking, bird-watching/wildlife viewing, fishing, motorcycle tours, and specialty car tours, to name only a few, that are promoted by governmental and private organizations throughout Virginia and many of these include trails located within FSWVA. VDGIF has developed an extensive state-wide viewing initiative which includes marked trailheads in numerous locations within SRRA's seven county area. In addition, there are cultural tourism trails such as the Crooked Road, 'Round the Mountain Artisan Trails, Virginia Coal Heritage Trail, and others that also bring visitors to the region. These initiatives generally have their own marketing efforts and while there are cross-marketing opportunities for SRRA and these organizations they are not considered in this market assessment. These linear tourism projects all contribute in varying degrees to economic development within their region and their collective impact can be substantial. However they are not specifically assessed or quantified as part of this document.

## **6.8 Market Assessment Summary**

This market assessment concentrates on the potential for increased visitation resulting from development of OHV, equestrian, blueway trails (kayak and canoe trips) and mountain bike and hiking trail development. The primary arbiter of visitation potential is the determination of travel distance from potential source markets. Based on a review of the visitor survey data and case studies, primary and secondary markets have been established for OHV riders, equestrian, blueway and biking/hiking trail users. Table 6.4 identifies the calculated market distances and total population with the identified radii and Figure 6.8 graphically portrays the distances and urban areas. Demand rates are

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established from existing recreational surveys for each activity type. This is the total participant population with the market area radii for each activity type. The most conservative or up-to-date data was used to estimate the total demand as a percentage of total adult (participant) population within the market areas. Non-adult population (age 10 and under) was assumed to be on average 13 percent of the total and subtracted from the total population estimate<sup>26</sup>.

Table 6.4: Estimated Market Area Demand Rates per Population by Tourism Activity Type<sup>2728</sup>

<b>Tourism Type</b>	<b>Demand Rate</b>	<b>Primary Radius (miles)</b>	<b>Secondary Radius (miles)</b>	<b>Total Demand Participant Population</b>
OHV	18.6%	400	600	21,046,259
Equestrian	3.5%	250	400	2,171,237
Canoeing	3.6%	250	400	2,233,272
Hiking	12%	250	400	7,444,240
Mtn. Biking	2.5%	250	400	1,550,883
<b>Totals</b>				<b>34,445,891</b>

### 6.9 Capture Rates

Capture rates are that percentage of the total demand participant population that is expected to be “captured” by the Spearhead Trails Initiative by the fourth operational year (2016). Annual capture rates are estimated for each tourism activity type. OHV capture rates from the total potential demand population presented in Table 6.4 are estimated at 0.03% for the primary radius and 0.003% for the secondary radius. This reduction accounts for additional distance that participants will need to travel to access the Spearhead Trails and the other competitive venues that will reduce the final capture rates. This assumption is repeated for the other activity types. This equates to an estimated annual visitor count of 28,490 per year or an overall capture rate of slightly less than 0.16% of the demand population. The capture rates, in particular those for the secondary market areas were reduced to reflect competition from other venues. Equestrian capture rates are estimated at 0.6% and 0.03% respectively. These equate to 4,080 total yearly visits or an overall capture rate of 0.16%. The capture rates for equestrian were also reduced due to regional competition between the major markets and the SRRA region. The practical impact upon actual visitation rates will be a factor of the ability of SRRA to effectively develop and market the demand population with

<sup>26</sup> U.S. Census data for Virginia – U.S. Census Bureau

<sup>27</sup> Demand Rates Estimated from *2010 Outdoor Recreation Participation Report*, Outdoor Foundation.

<sup>28</sup> Data for OHV demand is estimated from, Cordell, H. Ken, et al., *Off-Highway Vehicle Recreation in the United States, Regions and States: A National Report from the National Survey on Recreation and the Environment (NSRE)*. June, 2005



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venues that are superior to the competition. The same caution applies to blueways, hiking and mountain biking venues. The same methodology is applied for the other venues with the resulting annual visitation estimates provided in Table 6.5. The combined primary and secondary market areas are represented on Figure 6.9.

Table 6.5: Estimated Capture Rates and Yearly Visitation Totals by Tourism Activity

<b>Tourism Type</b>	<b>Primary Market Capture Rate</b>	<b>Capture Visits</b>	<b>Secondary Market Capture Rate</b>	<b>Capture Visits</b>	<b>Total Yearly Visits</b>
OHV	0.3%	34,616	0.03%	6,314	40,930
Equestrian	0.6%	4,882	0.03%	651	5,533
Canoeing	0.1%	837	0.05%	1,117	1,954
Hiking/Biking	0.01%	279	0.01%	744	1,023
Mtn. Biking	0.1%	581	0.05%	775	1,357

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Figure 6.9: Primary and Secondary Market Areas for all Venues

## **7.0 ECONOMIC IMPACT ASSESSMENT**

Tourism economic impacts for SRRA are difficult to quantify using traditional economic tourism models. This is due to a number of confounding variables:

- Projected visitation is estimated using capture rates (as opposed to actual counts);
- Spending profiles from primary data collected at similar venues is used as a surrogate for actual spending; and
- Visitation at events and venues associated with the Spearhead Trails Initiative is predicated upon the development, implementation and management of these projects at a service level that is competitive in the market place.

Since this EIA was tasked with identifying the total estimated economic impact to the communities that make up the SRRA, a regional assessment model has been developed based on the methodologies discussed in Chapter 4 and the results as reported in Chapters 5 and 6. The following is a summary of the model results.

### **7.1 Visitation**

Visitation rates were estimated using the demand population and capture rates presented in Section 6 of this Report. Table 7.1 identifies those rates per year allowing for yearly increases consistent with the projections of the SRRA Business Plan model development. This data is for trail use visitors only and does not include return visitation per visitor. Visits related to planned SRRA sponsored events (such as a OHV trail festival, equestrian trail ride/show, mountain bike race, etc.) will generate person trips beyond the normal capture rates for trail use and these are also not included in Table 7.1 along with yearly return visits per party. The result is a conservative estimate of total visitation (visitor days). OHV return visits can be estimated at 1.5 times for those visitors who reside in the primary market area. No estimates were obtained for the other activity types.

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Table 7.1: Yearly Predicted Trail and Event Visits FY 2013-2017 (Total Person Trips)

<b>SRRA Related Venue</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
OHV/Year	10,232	13,643	27,286	40,930	45,023
Equestrian/Year	1,383	1,844	3,689	5,533	6,087
Canoeing/Year	488	651	1,302	1,954	2,149
Hiking/Year	256	341	682	1,023	1,126
Mountain Biking/Year	339	452	904	1,357	1,492
<b>Total Person Trips (all venues)</b>	<b>12,699</b>	<b>59,800</b>	<b>33,864</b>	<b>122,120</b>	<b>55,876</b>

## 7.2 Spending

Anticipated total spending per person per trip (without return visits) is project in Table 7.2 along with the three year cumulative visitation for both normal trail use and event attendance. The result is a direct economic impact of over \$19 million over a three year period.

Table 7.2: Predicted Direct Spending FY 2013-2017 (Total per Person per Trip)

<b>SRRA Related Venue</b>	<b>Total Spending per Person per Trip</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
OHV/Year	\$274	\$2,803,67	\$3,738,236	\$7,476,472.54	\$11,214,709	\$12,336,180
Equestrian/Year	\$172	\$237,939	\$317,252	\$634,504.79	\$951,757	\$1,046,933
Canoeing/Year	\$148	\$72,282	\$96,376	\$192,752.00	\$289,128	\$318,041
Hiking/Year	\$148	\$45,108	\$60,145	\$120,289.12	\$180,434	\$198,477
Mountain Biking/Year	\$133	\$37,866	\$50,488	\$100,975.59	\$151,463	\$166,610
<b>Totals</b>		<b>\$3,196,87</b>	<b>\$4,262,497</b>	<b>\$8,524,994</b>	<b>\$12,787,49</b>	<b>\$14,066,24</b>

The economic impact includes the direct effects of the production of goods and services resulting from the implementation of the Spearhead Trails Initiative. This “direct effect” is the result of output results from direct spending on labor, supplies, equipment and services. That spending creates income for workers and suppliers which is then respent within the region thus inducing an “indirect” and “induced” effect. Indirect spending is by companies that provide employment and support of the direct spending and the induced is spending by households that benefit from the employment.

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The total direct spending over the five year fiscal period is estimated to be \$42.8 million. The majority of this output will not exist without the development of the Spearhead Trails. Using the U.S. Bureau of Economic Analysis (BEA) Regional Input-Output data for the Arts, Entertainment and Recreation values yields the following total economic impact assessment based on the predictions presented in Tables 7.1 and 7.2.

Table 7.3: Total Economic Impact Over a 3 Year Period (2014 through 2016)

Multipliers		FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Final Demand/Direct Spending*		\$3,196,873	\$4,262,497	\$8,524,994	\$12,787,491	\$14,066,240
Output Multiplier (\$)	1.003	\$3,207,422	\$4,276,563	\$8,553,127	\$12,829,690	\$14,112,659
Earnings Multiplier (\$)	0.3499	\$1,118,586	\$1,491,448	\$2,982,895	\$4,474,343	\$4,921,777
Employment (jobs)/1 mil.(FTE)	22.5888	88.63	118.17	236.34	354.51	389.96
Output Impact (\$)		\$7,522,881	\$10,030,508	\$20,061,016	\$30,091,524	\$33,100,676
Virginia Wage Tax (5%)		\$55,929	\$74,572	\$149,145	\$223,717	\$246,089
Virginia Sales Tax (4%)		\$256,171	\$341,562	\$683,124	\$1,024,687	\$1,127,155
Local Sales Tax (1%)		\$64,042	\$85,390	\$170,781	\$256,171	\$281,788
Local F&B Tax Not Included						
Excise and Business Taxes Not Included						

\*This excludes the economic impact of the trail and related facility construction.

As discussed in Chapter 1, direct economic impact alone does not adequately describe the total economic impact to the local economy resulting from increased visitation and expenditure at the various trail venues and events. It is appropriate to apply a multiplier to the direct impacts in order to determine induced economic impacts as well. This EIA has obtained the economic multipliers used by the U.S. Bureau of Economic Analysis (BEA) developed as part of the Regional Input-Output Multiplier II (RIMS II) model. Multipliers were applied based on specific industry related categories using the 2006 input/output data set for arts, entertainment and recreation industries in Virginia.

Induced impacts are based on the tax revenue generated by the sales of product and wages paid in the Commonwealth. Job creation (in FTE) as a result of the Spearhead Trails Initiative is estimated at 390 by year five. Based on the total estimated direct earnings of **\$43 million** the total return to the Commonwealth on wage taxes (at 5 percent) will average over **\$750,000** over the five year period. Sales tax was calculated for direct expenditures yielding **\$3.4 million** yearly to the Commonwealth (4.0%) and **\$858,000** collectively to the local governments (1.0%). Excluding excise and local wage taxes, the Commonwealth will receive over **\$1.6 million** per year (by 2017) in wage and sales taxes from the Spearhead Trails initiative. Additionally, the impact of local tax revenue based on accommodation income (also referred to as an Occupancy tax), and food and beverage taxes were not determined as these vary considerably by jurisdiction.

## 8.0 Marketing and Product Development

### 8.1 Market Penetration

This report identifies the potential economic impact for the development and operation of multiple trail venues within the SRRA mandate area. The specific economic impact from the development of OHV and equestrian trails represents the greatest potential return on investment due to the higher spending patterns and longer stays in the region by visitors who represent this segment of the adventure tourism market. In order to capitalize on these potential returns it is incumbent upon the SRRA organization to effectively develop, manage and market the product to the adventure tourist. Market capture rates have been conservatively estimated to account for the fact that the Spearhead Trails initiative is a new venture and it will require some period of time for development and implementation hence the optimal years of 2014-2016 were utilized to calculate economic impact. This allows 2012-2013 to be dedicated for development, implementation and marketing.

Marketing should be initiated prior to the first trail system being developed and operational but only after a firm opening can be established. Promoting a “coming soon” attraction is only viable if the predicted dates of operation are achievable. The negative consequences of not being able to deliver on the marketing promises are significant and should be avoided. However, in order to build excitement and expectation it is important to initiate marketing as soon as these opening dates can be fixed with a high degree of certainty. In addition, many of the most important marketing vehicles will require 8 to 12 months of lead-time in order for print media to be developed and circulated.

### 8.2 Marketing Methods and Venues

Adventure tourism is big business. It is also well trodden area for Destination Marketing Organizations (DMOs). The accessibility to major markets, natural appeal and variety of landscapes in FSWVA are an advantage that many other competing DMOs do not have. The ability to build on successful marketing campaigns such as the *Welcome to My Southwest Virginia*, the *Crooked Road* and *Virginia is for Lovers* (to name a few) is another strong advantage for SRRA. SRRA, in addition to its other operational mandates, is in-fact, a DMO and must operate as one in order to successfully market its product.

There are several recommendations that should be followed in the development and roll-out of a marketing campaign.

**8.2.1 Keep it Authentic** - Authenticity should be a key for every marketer, but especially for those within adventure tourism. Consumers want an authentic experience that matches the claims of the marketing campaign (i.e., the experience should match the website videos). This report and others have documented the importance of word of mouth marketing within the tourism market. A bad experience can erase thousands of dollars of marketing expense and cause the loss of economic impact. This is magnified many, many times over due to the proliferation of social websites and blogs. This point

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also reinforces the requirement for professionally developed and operated trails that deliver superior experiences to the visitor.

### 8.2.2 Social Media

DMOs must use social media wisely and profusely. In the digital age it is a necessity to establish and maintain a web presence. This can be done even before or at least during the development of the website. Google, Yahoo!, NAVTEQ (GPS Units), Foursquare, Yelp, Facebook, etc, are just a few of the online outlets that require a presence in order to be successful in marketing of a brand or product.

Potential starting points:

- Google places
- NAVTEQ
- Bing Business Portal
- Foursquare Business
- Gowalla Business
- Flickr
- News Feeds/Blogs (Pageflakes, Newsgator, My AOL, Netvibes, etc.)
- Youtube
- Facebook
- Twitter
- Mobile Apps

While the technical term for off-highway vehicles (OHV) may be used by industry professionals, the vast majority of practitioners continue to use the abbreviation of ATV (all-terrain vehicles) to describe their activity and thus, search engine optimization and web presence should continue to utilize the more common terminology.

The marketing program must include both online outlets and print advertising. Most outlets have a combined presence wherein a comprehensive marketing strategy will seek to optimize banner space, feature articles, news releases, product reviews and traditional ad space. Magazines such as Dirt Wheels, ATV & sXs Illustrated, ATV Action, ATV Rider and others maintain a robust circulation and online presence as well. Ad dollars must be allocated proportionally based on web metrics and total reader audience.

A typical demographic and circulation for a major hard copy magazine with an online presence is provided below (ATV Rider from Source Interlink Media Research).

<b>ESTABLISHED:</b>	<b>2002</b>
<b>PUBLISHED:</b>	<b>MONTHLY</b>
<b>TOTAL AUDIENCE:</b>	<b>224,000*</b>
<b>CIRCULATION:</b>	<b>22,446</b>
<b>READERS PER COPY:</b>	<b>10*</b>

*(USPS Statement of Ownership, Management, and Circulation  
2011 / \*Source Interlink Media Research Estimate)*

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**WEBSITE:** www.atvrideronline.com

**DEMOGRAPHICS:**

Male:	97%
Single:	43%
Married:	48%
Attended College:	41%
Working Full Time:	n/a
Mean Household Income:	\$63,767
Median Household Income:	\$58,666
Mean Age:	29.2
Median Age:	28.6

**AGE:**

18 to 24 Years:	12%
25 to 34 Years:	36%
35 to 44 Years:	22%
45 to 54 Years:	5%
55 to 59 Years:	2%
60+ Years:	1%

**HOUSEHOLD INCOME:**

Under \$35,000:	20%
\$35,000-\$49,999:	20%
\$50,000-\$74,999:	29%
\$75,000 & Over:	32%

*(Source: 2004 Reader Survey)*

Digital only outlets are also an important online presence. Sites to be considered include:

- ATV Trails (<http://www.atvtrails.org/index.html>)
- ATV Pathfinder (<http://www.atvpathfinder.com/>)
- ATV Trail Source (<http://www.trailsource.com/atv/index.asp>)
- OHV Trails.net (<http://ohvtrails.net/>)
- ATV Fan (<http://www.atvfan.com/>)

The opportunities and necessities of the online promotions and print media justify a full-time staff position with many DMOs. Outsourcing of this work is also a consideration. Appendix C is a copy of the media kit from ATV Rider as an example of the marketing potential these types of media buys can produce.

Equestrian markets are separate from OHV and other adventure travelers. Many of the same attributes apply but obviously the marketing campaign must be specific to each variety of adventure tourists. EQUUS is the largest print and online publisher of equestrian recreation publications. According to their website EquiSearch.com was among the first horse websites, and is one of the few continually active since 1995. In 1999, it joined forces with award-winning equine magazines EQUUS, *Dressage Today*, *Practical Horseman*, *Horse & Rider*, *Spin to Win Rodeo*, *The Trail Rider*, *Horse Journal*,



and *American Cowboy*. EquiSearch.com works closely with these magazines to deliver the content horse owners care about: tips on riding and training, authoritative information on horse care, the latest horse sports and industry news, plus sweepstakes and active online forums.

Today, with more than 4,000 articles, EquiSearch.com is one of the most in-depth horse websites on the Internet.

### **Equine Network**

EquiSearch.com is an integral part of Active Interest Media's Equine Network, which includes magazines, websites and book publishing.

### **Magazines**

- EQUUS, a legend in equine publishing, is the horse owner's resource.
- Practical Horseman offers expert how-to for English riders.
- Horse & Rider is the leading authority on Western riding and training for both competitive and recreational riders.
- Dressage Today is the quintessential monthly handbook for dressage riders of all levels.
- Spin to Win Rodeo educates and entertains readers who actively participate in the sport.
- The Trail Rider caters exclusively to trail and recreational horseback riders from coast to coast.
- Horse Journal provides practical solutions and hands-on information you can take into the barn and use.
- American Cowboy celebrates everything within the cowboy culture.
- Discover Horses at the Kentucky Horse Park spotlights the horses, people and events of the Kentucky Horse Park in Lexington.
- In Stride is the official magazine of the U.S. Hunter Jumper Association.
- EquiManagement provides business solutions for equine practitioners.

### **Websites**

- EquiSearch.com, your online source for everything horse!
- Equine.com is the leader in connecting buyers, sellers and breeders of horses and related goods.
- DiscoverHorses.com introduces people to the wonderful world of horses.
- HorseBooksEtc.com offers a broad selection of horse books and videos.
- MyHorse.com features extensive content about horse care, training, and more.
- AmericanCowboy.com is a community for all things cowboy.
- Horse Journal provides practical solutions and bottom-line recommendations on products

Another potential market area for equestrian related adventure tourism is the long-distance rider (long rider or competitive endurance rider). Organizations such as the American Endurance Ride Conference (AERC) sponsor trail programs, grants, education and promotion of these types of events. According to their website<sup>29</sup> the American Endurance Ride Conference (AERC) was founded in 1972 as a national

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<sup>29</sup> <http://www.aerc.org/About.aspx>

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governing body for long distance riding. Over the years it has developed a set of rules and guidelines designed to provide a standardized format and strict veterinary controls. The AERC sanctions more than 700 rides each year throughout North America. In 1978 the Federation Equestre Internationale (FEI) recognized endurance riding as an international sport, and since that date the U.S. and Canada have regularly swept the team and individual medals. In 1993 Endurance became the fifth discipline under the United States Equestrian Team (U.S.E.T.).

In addition to promoting the sport of endurance riding, the AERC encourages the use, protection, and development of equestrian trails, especially those with historic significance. Many special events of four to six consecutive days take place over historic trails, such as the Pony Express Trail, the Outlaw Trail, the Chief Joseph Trail, and the Lewis and Clark Trail. The founding ride of endurance riding, the Western States Trail Ride or "Tevis," covers 100 miles of the famous Western States and Immigrant Trails over the Sierra Nevada Mountains. These rides promote awareness of the importance of trail preservation for future generations and foster an appreciation of our American heritage. The AERC also maintains Endurance.Net ([www.endurance.net/aerc/](http://www.endurance.net/aerc/)) an online trading/blog site for vendors and customers.

Another organization dedicated to this sport is the North American Trail Ride Conference (NATRC) which promotes horsemanship and horse care as they apply to the sport of distance riding by offering a variety of challenging and educational experiences designed to strengthen horse and rider partnerships.<sup>30</sup>

Utilizing corporate sponsors is another avenue of marketing that should be included in the final Marketing Plan. This creates opportunities for advertising revenue within the SRRRA organization as well offering a national platform for the getting the message out to a target demographic. Specific partners could include equipment manufacturers, suppliers, promoters and network media. Managed Adventure Systems (MAS) has considerable experience in developing these relationships with the OHV and equestrian industries. Their involvement in the final marketing strategy is encouraged.

### **8.2.3 Train the Support Infrastructure**

FSWVA does not have a strong tourism infrastructure but thanks to recent initiatives it is growing. The Spearhead Trails initiative is a new venture that must also work with existing support services as well as help develop new providers. Part of this effort needs to involve training of service providers (both existing and new) to inform them of the initiative's goals and objectives, history and particular needs (permit fees, trailhead locations, rules, etc.). Informing service providers and the general public locally about the initiative is just as important as national marketing campaigns. A comprehensive outreach program and training should be coordinated between SRRRA and the VATC.

### **8.3 Marketing FSWVA as a Destination Marketing Area (DMA)**

A local or regional destination marketing organization (DMO) needs to promote not only the destination as a whole, but also hotels, tourist attractions, restaurants, theatre,

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<sup>30</sup> <http://www.natrc.org/index.htm>

sports, activities in the destination itself. The primary vehicle used to do this is the DMO website. Best Management Practices (BMPs) for DMO marketing include:

1. **Sell the Region and the experience both in Print and Online Media Outlets:** The adventure tourist is looking for a superior experience. This includes not just the event or destination but the planning, travel, support services, accommodation, food, variety, scenery and post-trip review. For example, certain areas of FSWVA do not present a suitable aesthetic in the form of poor land use, poor roadside rubbish clean up and poor enforcement (or lack of) adequate regulations against dumping, litter, abandoned vehicles, etc. The primary gateway into Russell County includes at the entrance (Route 19/58) a metal salvage company that significantly detracts from the aesthetics of the landscape.
2. **Effective Web Presence:** The importance of a robust and attractive website has already been presented. SRRA should work with other DMOs to coordinate and collaborate on the extensive media content and trip planning functions provided by the Southwest Virginia Cultural Heritage Commission, the Heart of Appalachia, and the Virginia Tourism Corporation in the development of the Spearhead Trails initiative website.
3. **Effective SEO:** The best website in the world is useless unless it is seen. Search Engine Optimization (SEO) is a functional requirement and requires the allocation of appropriate resources in the marketing budget (see Business Plan).
4. **Effective Use of Maps and Graphics on websites:** Map mash-ups, embedded videos, quality print media and other graphics are very important at selling the experience to the viewer. Professional videography, photography and graphic content is required for a well presented and polished look. This should be properly accounted for in the marketing budget (see Business Plan).
5. **Information has to be kept current:** Vendors, suppliers, accommodations, restaurants, and other support services and destinations constantly fluctuate. Some businesses close and others open, hours, services, locations and other important information constantly changes. For this reason it is important to provide the resources for continual assessment and revision to the website and print media.
6. **Social Media Strategy:** Social media can transform a DMO virtually overnight. This can be either a positive or negative transformation depending upon the experience of the poster. It is important to develop a comprehensive social media strategy and dedicate resources to keeping it current.
7. **Do Not Duplicate:** SRRA is to a certain extent duplicating other DMOs in their product and care must be taken to not appear as a duplicate or redundant. Online and print media must be fresh and different in order to set it apart from other similar venues in the region. It should also take into context the intended audience as a media campaign for OHV enthusiast will look considerably different than one proposed for equestrian riders.
8. **Follow-Up:** An important, and often overlooked, part of the tourism experience is the post-travel review. Travelers like to review and remember their trip as well as advertise it to their friends and other interested parties. In the past this typically occurred days or even weeks after the travel occurred but due to the proliferation of digital technology this now happens in a matter of minutes. The ability to post to websites, social media and other sites is important to today's tourist and while they

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make their own opportunities to do so, it is important for the DMO to provide the scenery and support technology (Wi-Fi, Hotspots, Cell Service, etc.) to facilitate this process.

## 9.0 Conclusions and Recommendations

### 9.1 Conclusions

This Economic Impact Assessment (EIA) provides a summary of the total economic impact to the State of Virginia and the communities that make up the Southwest Regional Recreation Authority. This assessment included a six month data collection effort which included tourism surveys and research. Despite a wealth of anecdotal data on the positive economic benefits of other similar venues there was a need to gather and interpret more specific data in order to estimate the full potential economic impact of the Spearhead Trails Initiative.

The following are a few key points that resulted from this assessment:

1. The general economy of the U.S. has been negatively impacted due to the slow recovery from the recession, high unemployment rates and stagnated personal income levels. Projections for economic growth through 2012 do not indicate these trends to change significantly in the near term with longer-term projections focused on slow improvements.
2. FSWVA continues to lag behind the State average for unemployment rates and salaries. Economic development is needed in this region more so in other areas of the State that are experiencing slow but moderate growth.
3. The general economic downturn has been reflected to the extent that possible in the capture rates for this economic assessment. A positive upturn in the economy will likely yield greater economic returns than those projected.
4. Tourism wages do not equal those of manufacturing or high-tech industries however these higher paying jobs have been slow to develop in FSWVA and other than the energy sector, there is not likely to be a major shift in this condition. Therefore, increasing the recreational tourism economy will yield job creation and economic output by bringing non-local dollars into the communities.
5. The development and implementation of the Spearhead Trails initiative offers economic opportunities for both local and state government and private sector businesses through increased sales, taxes and job creation.
6. There are few other competing economic opportunities for many of these regions other than timber or mineral extraction and in most cases this has already been done. The *opportunity costs* of dedicating land to the Spearhead Trails initiative appears to be minimal and was excluded from this analysis.
7. Adventure travel demand (soft) is diffusing itself into the general tourism market and this trend is expected to continue.
8. FSWVA maintains the suitable land base, low density of population, large tracts of relatively undisturbed lands (both federal, state and private), all of which could be dedicated to trail development projects.
9. This EIA has demonstrated that if properly implemented the Spearhead Trails Initiative will have a positive economic impact upon the state and region.

## 9.2 Recommendations

The following general recommendations are provided for the Southwest Regional Recreation Authority.

1. This EIA should be considered along with the Trails Development Plan and Business Plan prepared by the Consultant Team. The documents are meant to be reviewed in their totality as each offers only a portion of the total strategic vision.
2. The product offered by SRRA should be professionally designed (the trail concepts have been professionally planned) and constructed. The competition has set a high bar for Spearhead to follow and it must be not only met but exceeded in order to garner the capture rates estimated in this report. This is possible due to the scenic beauty of the region and access to major markets.
3. The product must also be professionally operated and marketed. A significant marketing effort is needed to introduce the product once it is available (to be initiated once a firm opening date is established). A major (but not only) component of the marketing strategy should be web-based with a significant portion dedicated to mobile and social media options.
4. Training of the local tourism support services should be an on-going effort and coordinated between SRRA and the Virginia Tourism Corporation with possible assistance by the local community colleges (Southwest Community College and Mountain Empire Community College).
5. This report should be re-assessed following the opening of the trails in order to adjust the capture rates and to determine if market opportunities are being maximized.

**10.0 APPENDICES**

**Appendix 10.1: Sample Questionnaire for the Knott County Trail Ride – 07 May 2011**

**Visitor Preferences**

**1. How many people are in your traveling party?**

Adults: \_\_\_\_\_

Children (under 12): \_\_\_\_\_

**2. How did you hear about this venue (*insert name*)? - please check all that apply**

\_\_\_\_\_ Television advertisement

\_\_\_\_\_ Radio advertisement

\_\_\_\_\_ Newspaper article or advertisement - do you remember the name? \_\_\_\_\_

\_\_\_\_\_ Magazine article or advertisement (do you remember the name?) \_\_\_\_\_

\_\_\_\_\_ Internet site

\_\_\_\_\_ Friend or co-worker

\_\_\_\_\_ Billboard or highway marker

\_\_\_\_\_ Other

**3. What other activities do you plan on undertaking while in this region (Southwest Virginia)? – please check all that apply**

\_\_\_\_\_ Overnight stay

\_\_\_\_\_ Bed and Breakfast

\_\_\_\_\_ Hotel

\_\_\_\_\_ Cabin/Campground

\_\_\_\_\_ Other (such as private home)

\_\_\_\_\_ Shopping

\_\_\_\_\_ Music items (CDs, books, instruments)

\_\_\_\_\_ Clothes (t-shirts, hats, jackets, other)

\_\_\_\_\_ Arts and crafts (hand made items, paintings, prints, pottery, jewelry, other)

\_\_\_\_\_ Outdoor trips (State Parks, hiking, biking, fishing, boating, bird-watching, other)

\_\_\_\_\_ Cultural or agricultural tours or sightseeing

\_\_\_\_\_ Visits to historical places of interest

\_\_\_\_\_ General sightseeing

\_\_\_\_\_ Other (or no other activities planned)

**4. How many days will your party be spending in this region? \_\_\_\_\_**

**5. How much do you anticipate spending (approximately) while in this region (include fuel, lodging, food and beverages, entrance fees, and purchases)?**

\$ \_\_\_\_\_

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6. **What is your home zip code?** \_\_\_\_\_
7. **What is the highest level of education attained by the person completing this questionnaire?**  
\_\_\_\_\_ Less than a High School Diploma or equivalent  
\_\_\_\_\_ High School Diploma or equivalent  
\_\_\_\_\_ Two year college or professional program of study  
\_\_\_\_\_ Four year university degree  
\_\_\_\_\_ Graduate degree
8. **Check the appropriate box for your age:**  
 < 20 years old  
 20-30 years old  
 30-40 years old  
 40-50 years old  
 50-60 years old  
 60-70 years old  
 70-80 years old  
 >80 years old
9. **Check the appropriate box for your annual household income:**  
 < \$20,000 per year  
 \$20-40,000 per year  
 \$40-60,000 per year  
 \$60-80,000 per year  
 \$80-100,000 per year  
 >\$100,000 per year  
 70-80 years old  
 >80 years old
10. **Did you plan this trip on the internet and if so, did you find the experience helpful? Please list the websites you used to plan this trip.**
11. **Any other comments you would like to add to assist us in this effort?**



**Appendix 10.2: Summary of Recommendations and Comments Received from  
Questionnaires**

Knott County Trail Ride: 05/05/11 (Recommendations and Comments)

1. Please have portable toilets serviced at least once per day.
2. Great ride.
3. Everything is good but no horse ring.
4. Portable toilets need to be serviced every day. Water outlets and power to camp sites is needed.
5. Needs showers, more vendors and electricity at camp sites.
6. More portable toilets are needed with more frequent service. Also needs parking for showers, vendors and customers.
7. Enforce the no drinking policy.
8. Segregate the pace horses from the rest.
9. Move the vendors off the main road to avoid conflicts with traffic.
10. Have a horse show.
11. Needs showers and camp sites with water.
12. More ambulances on hand are needed. Keep dust down. Move the ride to later in May for better weather.
13. Keep up the good work – we have been here every trail ride and still plan on coming back.
14. No alcohol. There are few things for families to enjoy.
15. Stop some of the drinking.
16. Pave the highway. Provide electric service. Obtain legal rights for continuing all events.
17. Great job. Needs better maps.
18. Needs trail marshals and a better layout.

Clinch River Survey: 06/04/2011 (Recommendations and Comments)

1. I regularly boat the Clinch River and other rivers in the area.
2. We need a rental shop for boats and bikes.
3. Great place to visit – fun place – nice folks.
4. Provide bottled water for participants.
5. Needs more boats and helpers.

New River Trail: 07/23-24/2011 (Recommendations and Comments)

1. Needs more private campsites.
2. More advertising for the Charlotte, NC area is needed and better signage information about the trail on Interstate 77.
3. The side rail of the bridge south of Foster Falls over the New River is unstable if you lean against it.
4. Thanks for having the trail for us to enjoy.
5. Needs a small restaurant with power bars, burgers, hotdogs, etc., and more cabins and campgrounds.
6. Needs more engaging park activities and tours.
7. Everything is good.
8. More drinking water is needed – Great trail.

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9. Better maps and signage needed – beautiful area.

Hatfield-McCoy Trail (Ashland Store parking lot): 07/30/11 (Recommendations and Comments)

1. Add harder trails.
2. Good campground.
3. Clean up the trails and have a smaller fee for out-of-state riders.
4. Open food and gas stations on Sundays.
5. Provide maps of outlaw trails.

Hatfield-McCoy Trail (Trail Fest): 10/08/11 (Recommendations and Comments)

1. Doing a great job – thanks.
2. Allow night riding.
3. Have more activities for the kids.
4. Have less police.
5. Connect trail from Charleston to Gilbert.
6. Have full hook-ups for campers.
7. Need full hook-ups for campers.
8. Local people should not be charged so much.
9. Police the muffler requirements.
10. More blue trails but I am happy with the ones in the area.

RECOMMENDATIONS FROM THE 2011 KNOTT COUNTY FALL TRAIL RIDE (by WMTH)

Add trees and better directions to camp sites

Allow campers to pay ahead to reserve larger area for their group

Auction

Auction

Better arrangement on parking

Better food, shower house, electric

Better Trail Map

Camper hookups

Charge \$5 per each day campers come in early

Concessions opened earlier

Cut grass, golf carts are good

Dust control

Dust control, Auction

Electric

Electric

Electric & Water

Electric & Water

Electric & water hook ups

Electric, water on roads

Entertainment

Everything was grand!

Extend the parking area

Fine the way it is

Fix section for large groups

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Free showers & electric sites  
Good Job  
Great job!  
Have a ring and horse show  
Have concerts promised  
Have more concerts  
Have more concerts  
Hitching rails by the stage, Map, Water roads  
Horse Auction  
Horse Show & Standard Breed Race  
It is great now  
It is great now  
Keep concerts as planned  
Keep having it. So much fun!  
Layout of camping area  
Layover assistance for travel  
Let people stay together in groups  
Let people stay together in groups  
Make a place for lost/Found (horses)  
Maps and make one –way road into event  
Mark off areas for large groups and let them pay in advance  
Mark trails better and map of trails  
More & better map  
More & better vendors  
More camp space  
More concession stands, newer bands  
More driveways into camping  
More hitching posts  
More management  
More places to water horses and a riding ring to show horses  
More police patrol, more port-a-potty  
More port-a-johns  
More port-a-johns  
More port-a-johns  
More showers  
More showers  
More showers  
More showers & stalls  
More vendors and make main road one-way  
More vendors and spread them out towards back camping area  
More vendors spread out and on same side of road  
More water and slow down horses although this has improved  
More water and have main road be one way  
More water  
More water and more bush hogging  
More water on roads  
More water tanks and easier access  
National advertising  
Need more police  
Not let people rope off spots

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Offer group rates  
Oil roads  
One way traffic  
One way traffic  
Organize the parking  
Organize the parking, slow down the horses on main road (gaited)  
Provide shuttle service to vending area and let people pay donation for the service  
Rent horses. More vendors  
Ring  
Ring & organized straight away race  
Roads One way to camp  
Running water  
Sections to camp together. Pay in advance  
Separate Horse Lanes and car  
Separate road for fast horses  
Separate road for traffic & horses  
Separate traffic from horses  
Set up vendors and tack on same side of road closer to back camping area  
Spread vendors out  
Spread vendors out  
Spread vendors out but don't cross road. Very dangerous  
Spread vendors toward back camping area on same side of road.  
Stables  
Stables and main campground  
Stables and more baths  
Stables at main campground  
Tie ups  
Trade Days  
Trade Days  
Trade Days  
Trade Days  
Trade Days  
Traffic control  
Trees  
Wagon rides or shuttle to vendors and concession area  
Want to come and stay 3 weeks  
Water all roads  
Water all roads  
Water for RV & George Jones  
Water on the road  
Water on the road  
Water on the road  
Water roads  
Water roads  
Water roads  
Water roads more  
Water roads more - let groups rope off areas to stay together  
Water roads more - Vendors on one side  
Water roads more - Vendors on one side  
Water roads, more lights, let fast horses ride  
Water the roads to keep dust down

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL  
RECREATION AUTHORITY PROPOSED TRAIL PROJECT

Water the roads to keep dust down  
Water the roads to keep dust down  
Water the roads to keep dust down  
Water truck to keep dust down  
Water, electric hook-ups for camper  
Water, Lights, vendors all on one side  
Wet the roads better  
Widen main road

Appendix 10.3: Sample Media Kit



ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

From the editors of *Dirt Rider*, by the far the world's largest off-road motorcycle magazine. *ATV Rider* applies that successful format to the ATV market and provides a new and better way to reach ATV enthusiasts. *ATV Rider* features the many ways enthusiasts can enjoy ATV riding. Regular features include new-bike tests, modification and set-up stories, tech stories, gear and accessory reviews, personality profiles and more.



**CIRCULATION DEMOGRAPHICS**

Established: 2002  
 Published: Bi-Monthly  
 Total Audience: 224,000\*  
 Circulation: 22,446  
 Subscribers: 20,436  
 Newsstand: 6,642  
 Readers Per Copy: 10.00\*  
(USPS Statement of Ownership, Management, and Circulation 2011 / \*Source Interlink Media Research Estimate)

**DEMOGRAPHIC PROFILE**

Male: 97%  
 Single: 43%  
 Married: 49%  
 Attended College: 47%  
 Working Full Time: 73%  
 Mean Household Income: \$63,767  
 Median Household Income: \$58,666  
 Mean Age: 29.2  
 Median Age: 28.6

**AGE**

18 to 24 Years: 12%  
 25 to 34 Years: 36%  
 35 to 44 Years: 22%  
 45 to 54 Years: 5%  
 55 to 64 Years: 2%  
 65+ Years: 1%

**HOUSEHOLD INCOME**

Under \$40,000: 20%  
 \$40,000-\$49,999: 20%  
 \$50,000-\$74,999: 20%  
 \$75,000 & Over: 32%

(Source: 2004 Reader Survey)

ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

GENERAL COVERS					
SIZE	1x	3x	6x	9x	12x
Cover 2	\$7,030	\$6,680	\$6,325	\$5,975	\$5,625
Cover 3	\$6,710	\$6,375	\$6,040	\$5,705	\$5,370
Cover 4	\$7,670	\$7,285	\$6,900	\$6,515	\$6,135

GENERAL FOUR COLOR					
SIZE	1x	3x	6x	9x	12x
1 Page	\$6,390	\$6,070	\$5,750	\$5,430	\$5,110
2/3 Page	\$4,795	\$4,555	\$4,315	\$4,075	\$3,835
1/2 Page	\$3,705	\$3,520	\$3,335	\$3,150	\$2,965
1/3 Page	\$2,555	\$2,430	\$2,300	\$2,175	\$2,045

GENERAL TWO COLOR					
SIZE	1x	3x	6x	9x	12x
1 Page	\$5,750	\$5,465	\$5,175	\$4,890	\$4,600
2/3 Page	\$4,315	\$4,100	\$3,880	\$3,670	\$3,450
1/2 Page	\$3,335	\$3,170	\$3,000	\$2,835	\$2,670
1/3 Page	\$2,300	\$2,285	\$2,070	\$1,955	\$1,840

GENERAL BLACK & WHITE					
SIZE	1x	3x	6x	9x	12x
1 Page	\$5,110	\$4,855	\$4,600	\$4,345	\$4,090
2/3 Page	\$3,835	\$3,645	\$3,450	\$3,260	\$3,065
1/2 Page	\$2,965	\$2,815	\$2,670	\$2,520	\$2,375
1/3 Page	\$2,045	\$1,940	\$1,840	\$1,740	\$1,635

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ECONOMIC IMPACT ASSESSMENT FOR THE SOUTHWEST VIRGINIA REGIONAL RECREATION AUTHORITY PROPOSED TRAIL PROJECT

