

# ECONOMIC IMPACT OF BIKING

## THE ECONOMIC IMPACT OF BIKING

Sixty million Americans (18 years and older) bicycle each year. Whether they are bicycling for family recreation, transportation, or competition, the American bicyclist spends money, creates jobs and supports local economies.<sup>1</sup>

- Bicycling contributes \$133 billion 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



Bringing this a little closer to home, the South Atlantic States (DE, DC, FL, GA, MD, NC, SC, VA, and WV) is home to more than 10 million bicyclists who contribute more than \$11.3 billion to the regional economy, generating more than \$1.6 billion in annual state and federal tax revenues and over \$9.6 billion in retail sales and services.

Add in the surrounding states of Alabama, Kentucky, Mississippi and Tennessee and one sees that Southwest Virginia has a huge opportunity which they need to capitalize on.



### ECONOMIC BENEFIT OF OFF-ROAD BICYCLE TRAILS



*Definition: A bicycle trail is one that tends to wind through the woods and across the land on softer surfaces such as gravel or dirt and is used primarily with mountain bikes rather than street bikes.<sup>2</sup>*

All across the country, bicycle and pedestrian trails are bringing new dollars and economic growth to the communities in which they pass attracting and revitalizing businesses and downtown areas, creating jobs and increasing public revenue. They also have a positive effect on nearby properties as homebuyers and business owners realize the benefits.

### BIKE TRAILS MEANS BUSINESS FOR COMMUNITIES<sup>3</sup>

- *The downtown area of Dunedin, Florida was suffering a 35 percent storefront vacancy rate in the early 1990's until the Pinellas Trail came into town. Now, storefront occupancy is 100 percent and business is booming.*
- *Peak-season hotel rooms along Wisconsin's Elroy-Sparta State Park Trail are booked up to a year in advance. A study of the trail revealed that the average visitor travels 228 miles to experience it.*
- *After biking the Youghiogheny River Trail in southwestern Pennsylvania, Robert Benns and his wife purchased a rundown trailside building and converted it into the River's Edge Café which now serves over 1000 meals a day.*

# ECONOMIC IMPACT OF BIKING

According to a 2006 study by the Outdoor Industry Foundation, one in five Americans 16 years and older mountainbike<sup>1</sup>. It also reported that there are as many people who mountain bike as there are those who watch or feed birds. And the National Golf Foundation in 2006 reported that there are more mountain bikers than golfers (50 million bikers to 29 million golfers). It is much less expensive to maintain miles and miles of trails than it is to maintain one golf course.

## THE VIRGINIA CREEPER TRAIL HAS BROUGHT MONEY AND JOBS TO SOUTHWEST VIRGINIA

The Virginia Creeper Trail (VCT) in Southwestern Virginia is one of the most renowned bike trails in the United States. Although this 34 mile rail-trail is open to both foot travel and horseback riding, it is most popular with bicyclists. In fact, the Virginia Creeper Trail has become to mountain bikers what the Hatfield – McCoy Trails have become to off-highway vehicle enthusiasts. It is THE place to come to ride. There are very few mountain bikers who have not heard about the Virginia Creeper Trail and many others from across the East who have actually experienced it.



**Background:** Once a rail line for the Norfolk & Western connecting White Top to Abingdon, the rail was abandoned in 1977. The eastern section of the railbed through Virginia was purchased by the USDA Forest Service and became part of the Mount Rogers National Recreation Area, the western section was purchased by Damascus from funding received from Virginia Commission for Outdoor Recreation. The trail opened in 1984 with trailheads located in Abingdon and Whitetop Station ending at the North Carolina state line.

Please Note: Efforts have been made to continue the Virginia Creeper trail into North Carolina but that portion of rail reverted back to the original landowners who are unwilling to relinquish ownership. There is a valuable lesson to be learned.

**Recommendation:** The Southwest Regional Recreation Authority needs to request all abandoned railways within the seven county area become a part of the Spearhead Trails initiative. This may need to be accomplished through legislation.



MAP OF THE VIRGINIA CREEPER TRAIL

## ECONOMIC IMPACT OF THE VIRGINIA CREEPER TRAIL<sup>4</sup>



In a 2004 study of the Creeper Trail, it was estimated that a total of 130,172 people used the trail with 47% of them locals and the other 53% coming from outside the area. Local users (those working or living within Washington or Grayson County) traveled on average 7.8 miles with an average travel time of 15 minutes while the nonlocal users traveled on average 260 miles with an average travel time of 4.6 hours drawing people from as far away as Knoxville TN, Charlotte NC, Asheville WV, Charlottesville SC, Roanoke VA & Washington DC, with nearly 23% reporting that they visited five times or more each year. 72% of the Virginia Creeper Trail users were in the area for the primary purpose of visiting the trail with over 75% of the nonlocals planning to bike.

- The estimated total economic impact of the Virginia Creeper Trail to the State of Virginia is \$2.5 million with over \$1.5 million dollars spent in the local economy (Washington and Grayson counties).
- An estimated 27.4 jobs were created due to the increased visitors to the area.

### Other comparable trails noted in a 1995 study by Siderelis and Moore had similar findings:

Trail Name	In 1995	Adjusted to 2003 dollars
• Lafayette/Moraga Trail	\$1.9 million	\$2.3 million
• Heritage Trail	\$4 million	\$5 million
• St. Mark's Trail	\$8.5 million	\$10.6 million

## ECONOMIC IMPACT OF THE VIRGINIA CREEPER TRAIL<sup>4</sup>

The Town of Damascus has become known as Trail Town U.S.A. It is the halfway point on the Virginia Creeper Trail. Also, the Appalachian Trail, the Transcontinental Bike Route, the Iron Mountain Trail, and the Daniel Boone Trail all intersect in Damascus. A weeklong festival to honor hikers known as “Trail Days” brings approximately 25,000 visitors to Damascus in May of each year raises the town’s population of 900 by nearly 300%. What has been the economic impact of all of this?



**Business Tax Revenues:** In 2003, business license fees collected were \$23,000. In 2005, this number grew to \$45,000. And in 2008, when most towns were experiencing a downturn and businesses were closing, Damascus experienced an increase to \$52,000 for a 56% increase in just five years. Even today this number continues to grow. Revenues for 2009 have already surpassed \$55,000.<sup>6</sup>

**Restaurant/Lodging Tax Revenues:** Meal and lodging tax revenues have also seen a continual increase in the past few years from \$42,000 in 2001/2002 to \$80,000 in 2003/2004 and to \$104,150 in 2007/2008.<sup>7</sup> This is a 60% increase in just six years.

**Tourism-related Businesses that have opened:** Damascus, a town of 9,000 has seven (7) bike rentals and shuttle services, twenty-one (21) lodging facilities within the corporate limits including an RV Park, an additional 19 lodging facilities within 2 to 17 miles of the town plus seven (7) restaurants.<sup>8</sup>

*Please Note:* There are no chain hotels or restaurants in Damascus. In fact, all are Mom & Pop businesses. This is great for the small entrepreneurs and insures that the money made within the community actually stays in the community, something those in the Spearhead Trails region may want to keep in mind as their areas begin to develop.

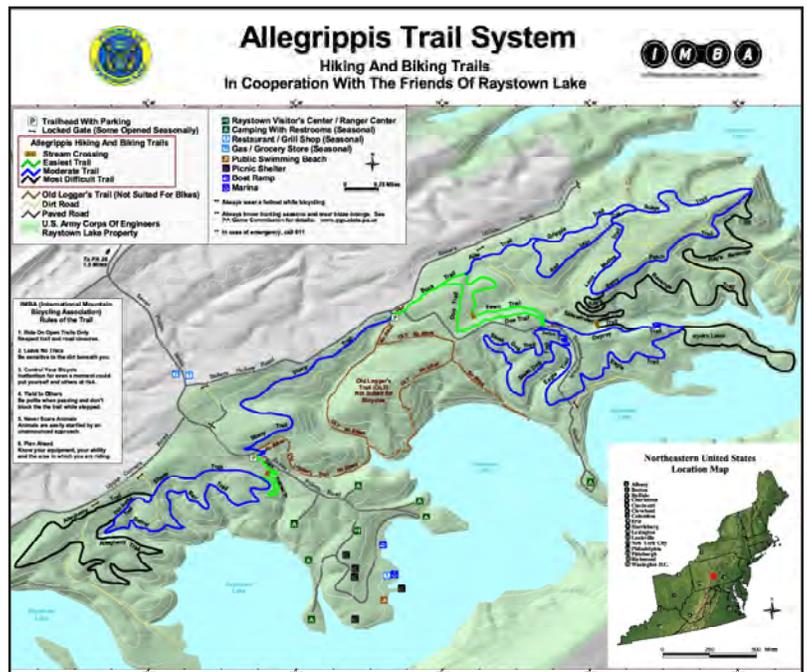
# CASE STUDIES: VIRGINIA CREEPER & OTHER BIKE TRAILS

## A STACKED LOOP TRAIL SYSTEM IS BECOMING VERY POPULAR<sup>9</sup>

The following information was taken from the website <http://raystown.nab.usace.army.mil/Activities/agt.htm>

The Allegrippis Trail System, managed by the Friends of Raystown Lake in Huntingdon County PA, is a 30+ mile single track trail system designed by mountain bikers, primarily for mountain bikers, but with opportunities available for hiking and other nature based outdoor recreation. The 23 trail system was designed in a stacked loop format, which means that small trail loops exist close to the access point with trail spurs joining onto those loops to create longer, more difficult trail opportunities. **Similar stacked looped bike trails are recommended for the SRRA project area.**

This trail construction project is a multi-partner project being coordinated by the Friends of Raystown Lake.\* It's considered a model trail system by IMBA with future consideration of becoming an IMBA Ride Center.



A popular looped stacked trail system in Huntingdon, PA.



*“When the project started, it was a ‘build it and they will come’ proposition. Now there’s a bike shop in town, and the Raystown Mountain Bike Association, which didn’t exist 18 months ago, has more than “500” active members,”*

said Frank Maguire IMBA Mid-Atlantic Region Director. *“Interest in the Allegrippis is already spreading beyond the regional level. This is going to have a huge impact on the economy in the area.”*

*“To date, more than 100 volunteers have donated more than 2,300 volunteer hours toward the construction and maintenance of the Allegrippis Trail System,”* said Ron Rabena, President FORL. *“The end result is a unique trail system that will benefit the region and community for years to come, including an additional estimated \$1.2 million in annual revenue into Huntingdon County.”*

### THEY PREDICTED THEIR SUCCESS!

In a study conducted in 2006/10, it was anticipated that building the looped trail system for mountain biking around Raystown Lake in Huntingdon County, PA would result in the following:

- An estimated 9,800 additional visitors each year.
- 77% will be day trippers and 23% will be multiple day guests
- Day trippers spend on average \$98.00 per trip on food & drinks (\$29), transportation (\$38), recreation & entertainment (\$14), and souvenirs (\$17).
- Overnight guests are expected to spend an average of \$227/trip on food & drinks (\$55), transportation (\$57), recreation & entertainment (\$17), and lodging (\$79).

These additional visitors were expected to bring an additional \$1,254,188 per year to Huntingdon Co. Trail opened in Spring of 2009 and is already a huge success!

\*Other partners include: the Southern Alleghenies Planning and Development Commission, Pennsylvania Department of Conservation and Natural Resources, Appalachian Regional Commission, Huntingdon County Visitors Bureau, Raystown Mountain Biking Association, International Mountain Biking Association, Corps of Engineers, Pennsylvania Conservation Corps, Juniata College Center for Entrepreneurial Leadership, Huntingdon Business & Industry, and Youth Forestry Camp #3.

## VISITOR ANALYSIS OF TRAIL RIDERS ON TWO POPULAR MOUNTAIN BIKE TRAILS IN NORTH CAROLINA AND TENNESSEE<sup>12</sup>

*Between June 27th and July 6th, Andy Mullins of Big Stone Gap VA conducted an intercept survey of riders at three popular mountain bike trails to determine where the riders were traveling from and how much they spent while in the area. One of the trails was located in North Carolina. The other two in Tennessee. Below is an overview of his findings:*

On June 27, 2009 I visited DuPont State Forest near Brevard, NC. While there I spoke with 18 different riders. Of all of them, 12 didn't consider themselves locals. Of these 12, nine were spending the night in the area (camping) while the other 3 were on a day trip. The group of nine were mostly from the Atlanta area, traveling approximately 200 miles to get there. Their estimate is that they would spend about \$65/day while in the area. This includes campground fees, food, entertainment, and fuel. They also indicated they would prefer to visit locally owned restaurants and stores while visiting. The three day trippers had traveled from the Statesville, NC area driving approx 125 miles to reach their destination. While in town they estimated they would spend about \$25 each on food and fuel. We too were on a day trip traveling approx 150 miles and estimating we would spend about \$25 each. Everyone interviewed said mountain biking was the reason for their travel to the area.

On July 3-6, 2009 I visited Chattanooga, TN. While there I was able to visit the Raccoon Mountain Trail System and Tanasi Trail System. At Raccoon Mountain, I spoke to 25 riders. Of those, 12 didn't consider themselves local. Of the non-locals, 9 were from the Nashville area, traveling about 140 miles to get there. While in town they estimated they would spend \$75-\$100 per day. This includes motel lodging, food, entertainment and fuel. They indicated mountain biking was a large factor in their visit to Chattanooga but would also be visiting the aquarium and partaking in the city's July 4th festivities. The 3 other non-locals were from the Atlanta area. They estimated spending \$50/day in the area. They were staying with family so their daily cost was greatly reduced. They mentioned that while mountain biking wasn't the only reason for their trip, it does make them want to come visit their family more often.

At the Tanasi Trail System I spoke with 7 riders, 3 of whom were non-locals. This group was staying in Cleveland, TN and also visiting the aquarium in Chattanooga. For them, they stated mountain biking was a great perk to bringing the family to visit the area. They estimated they would spend \$65/day per person while visiting to cover food, fuel, entertainment, and motel lodging.



### RESULTS FROM THE INTERCEPT SURVEYS:

- Day visitors spent between \$25 to \$50 a day on food and fuel.
- Overnight visitors spent between \$65 to \$100 a day. More if they were staying in a hotel. Less if they were camping.
- The groups drove between 125 to 200 miles to their destination with a majority saying that the trails were a factor when choosing where to travel.

# INVENTORY OF MOUNTAIN BIKING TRAILS



## SOUTHWEST VIRGINIA NEEDS TO DEVELOP MORE MOUNTAIN BIKING OPPORTUNITIES

The communities within the Spearhead Trails area need to look at their communities for the potential of developing bike trails. In our research we found tremendous interest especially in the Wise, Lee, and Russell County area. We were also contacted by a number of mountain bikers from those areas who expressed a strong interest in helping to both develop and maintain single track trails for mountain biking.

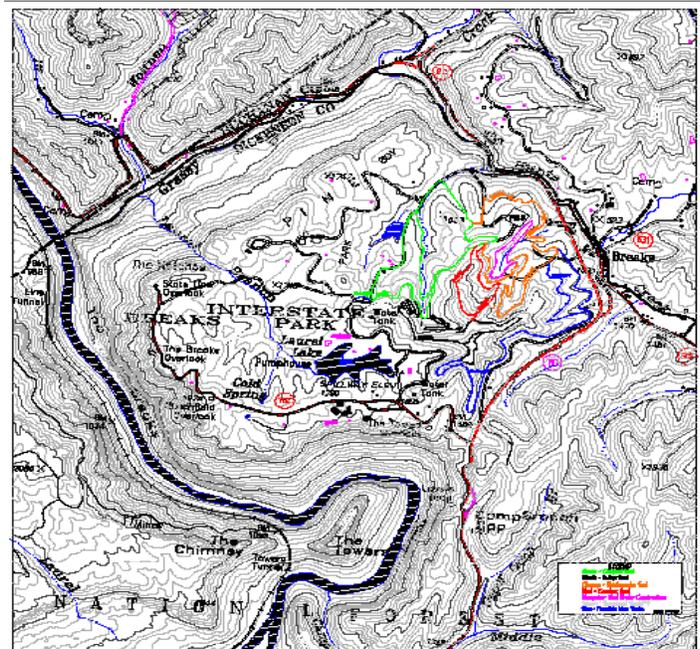
In fact, the president of the Northeast Tennessee Mountain Bike Association (NTMBA) contacted the consultants to say that a large portion of his membership were actually from Southwest Virginia who joined their club and road the trails in Tennessee but this would quickly be reversed and many would be riding in Southwest Virginia if trails were available to ride.



*To the right are approximately 24 miles of trails within Breaks Interstate Park which are specifically dedicated for mountain biking.*

*Please note: These were the only designated trails where maps were available in the Spearhead Trails region.*

Natural Tunnel State Park offers seven walking trails, (longest one being 1.1 miles long) most of which are open to mountain bikes with bike rentals available at the campground host campsite. Although these trails offer unique features along the way worthy of seeing, the shortness of their length make them less desirable to avid mountain bikers unless in conjunction with other activities while in the area.



APPALACHIAN CYCLING ASSOCIATION - BREAKS TRAIL PROJECT

There are some noted trails near the High Knob area just north of Norton. A number of mountain bikers also ride the Sugar Hill/Clinch River multi-use trails near St. Paul as well as a few trails in the Clinch Mountains of Russell County.

Other trails include Hidden Valley and Hyders Cap Road, Guest River Gorge Trail and trails around Laurel Bed Lake with the potential for more trails to be added. Other than those mentioned above as well as the proposed Dante Trail in Russell County, the number of trails for mountain biking are few and far between especially considering the strong interest level of those within the region.

**RECOMMENDATION:** The SRRA should contact the Northeast Tennessee Mountain Bike Association, the Appalachian Cycling Association and other mountain bike organizations and groups to ask for assistance in identifying and developing bike trails in southwest Virginia for public use.

# INVENTORY OF MOUNTAIN BIKING TRAILS

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## POTENTIAL AREAS FOR MOUNTAIN BIKING TRAILS

In Wise Co. the mountain area between Big Stone Gap and Appalachia would make a great place for trails. There is also potential for trails to be opened in areas around the region's lakes such as the Wise Reservoir or Big Cherry Lake and around the Mendota and National Forest area in Scott County.

The High Knob area offers a tremendous opportunity for mountain biking and once was heavily used for this purpose although many of these trails have grown up over time. Maintenance work needs to be done, the trails mapped and then marketed to the public.

The stacked loop trail design is the best option when it is possible. It gives beginners a chance to go out on the trail and as they gain ability go further. It also gives more experienced riders a chance to warm up before hitting the more technical of trails. Of course sometimes it isn't possible to go this route due to land features, location of the trail head etc. I've attended trail building seminars and the stacked loop is always the preferred trail design. The trails at Warriors Path that I would like to show you aren't a stacked loop system but they do offer an easier trail from the trailhead and then spur off onto more difficult trails. You can also access some of the park's most difficult trail directly from the trailhead.

# ECONOMIC IMPACT OF BIKING

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## BIBLIOGRAPHY

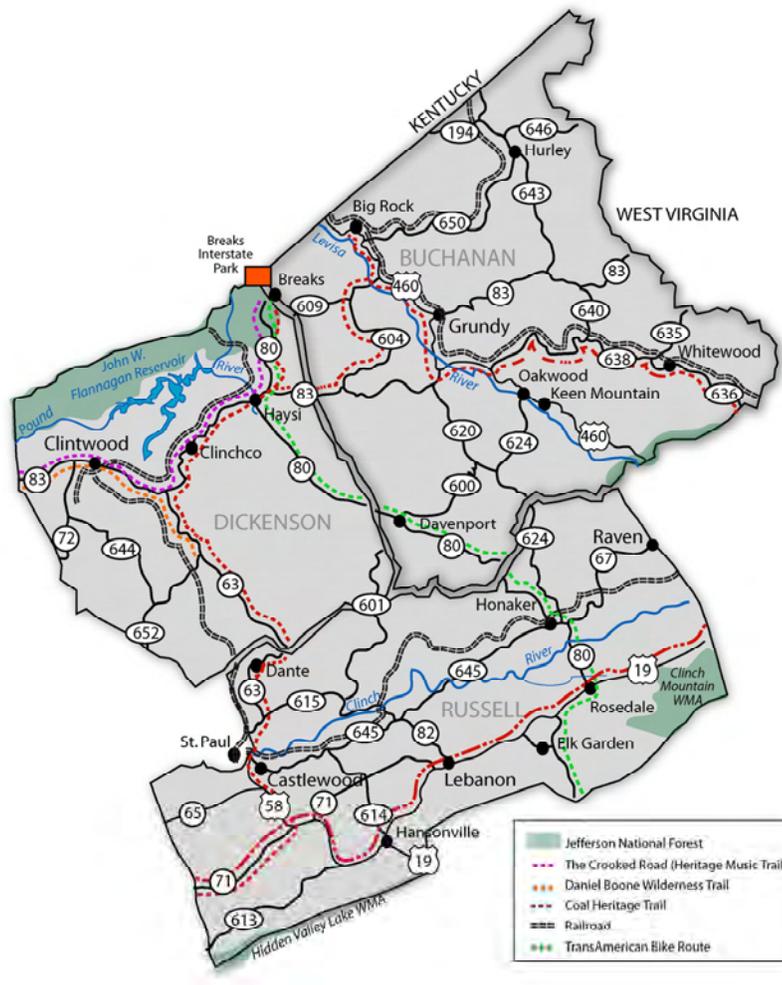
- <sup>1</sup> The Active Outdoor Recreation Economy, Outdoor Industry Foundation, 2006.
- <sup>2</sup> More on definitions of Bike Route and Bike Path are noted in the 2000 MUTCD findings and revised in January 2006. <http://members.cox.net/ncutcdbtc/fall05/bike06-bicycletrail.pdf>
- <sup>3</sup> The Economic and Social Benefits of Off-Road Bicycle and Pedestrian Facilities, NBPC Technical Brief, National Bicycle and Pedestrian Clearinghouse, Technical Assistance Series, Number 2, September 1995.
- <sup>4</sup> Bowker, J.M., Bergstrom, J.C., and Gill, J.K., The Virginia Creeper Trail, An assessment of user demographics, preferences and economics, USDA Forest Service & University of Georgia Department of Agricultural and Applied Economics, 2004.
- <sup>5</sup> 1995 study by Siderelis and Moore
- <sup>6</sup> Telephone interviews with both the Town Clerk and the Town Treasurer for the Town of Damascus, July 17, 2009.
- <sup>7</sup> Written information provided by the Damascus Town Hall. Updated 2009.
- <sup>8</sup> Damascus Website: <http://www.damascus.org/>
- <sup>9</sup> Raystown Lake Website: <http://raystown.nab.usace.army.mil/Activities/agt.htm>
- <sup>10</sup> The Alleghenies Unveils New Multiuse Trail System, PRNewswire, RAYSTOWN and HUNTINGDON, Pa., May 8 2009. <http://www.wthr.com/Global/story.asp?S=10329838>  
Also <http://raystown.nab.usace.army.mil/Activities/agt.htm>
- <sup>11</sup> IMPLAN Economic modeling based on data collected by the Outdoor Industry Foundation and Allegheny Great Passage Economic Impact Study.
- <sup>12</sup> E-mails and personal interviews between March – July 2009.

# CAPITALIZING ON EXISTING BICYCLE ROUTES

*Definition: A bicycle route (as opposed to a bicycle trail) tends to be located on hard road surfaces and used by street or touring bikes such as those used in the Tour de France.*

## LONGEST BICYCLE ROUTE IN THE U.S. GOES THROUGH SOUTHWEST VIRGINIA

In 1976, as part of the bicentennial celebration, an effort was started to develop a bike route across the entire United States starting in Oregon and ending 4,262 miles later in Yorktown Virginia. Over 500 miles of the route goes through Virginia including Dickenson, Russell and the corner of Buchanan in SW Virginia.



In 1982, the section through Virginia was completed and markers placed along the route. The 76 Bicentennial



Bike Route across America crosses into the state at Breaks Interstate Park from Elkhorn City and follows Highway 80 down through Burk's Garden. Thousands of people ride this route every year and yet many in the communities it goes through know nothing about it.

**RECOMMENDATION:** Southwest Virginia needs to better capitalize on the 76 Bicycle Route! This is a missed opportunity that needs to be corrected. Other areas have developed “triptiks” and informative websites which highlight unique sites and towns one might find along the way, encouraging riders to stop, stay awhile and spend money in the communities at the local restaurants, B&B’s, and small shops located on or near the route. This can be done very simply by providing more information of amenities and offerings and encouraging entrepreneurs to fully capitalize on the rider’s visit.

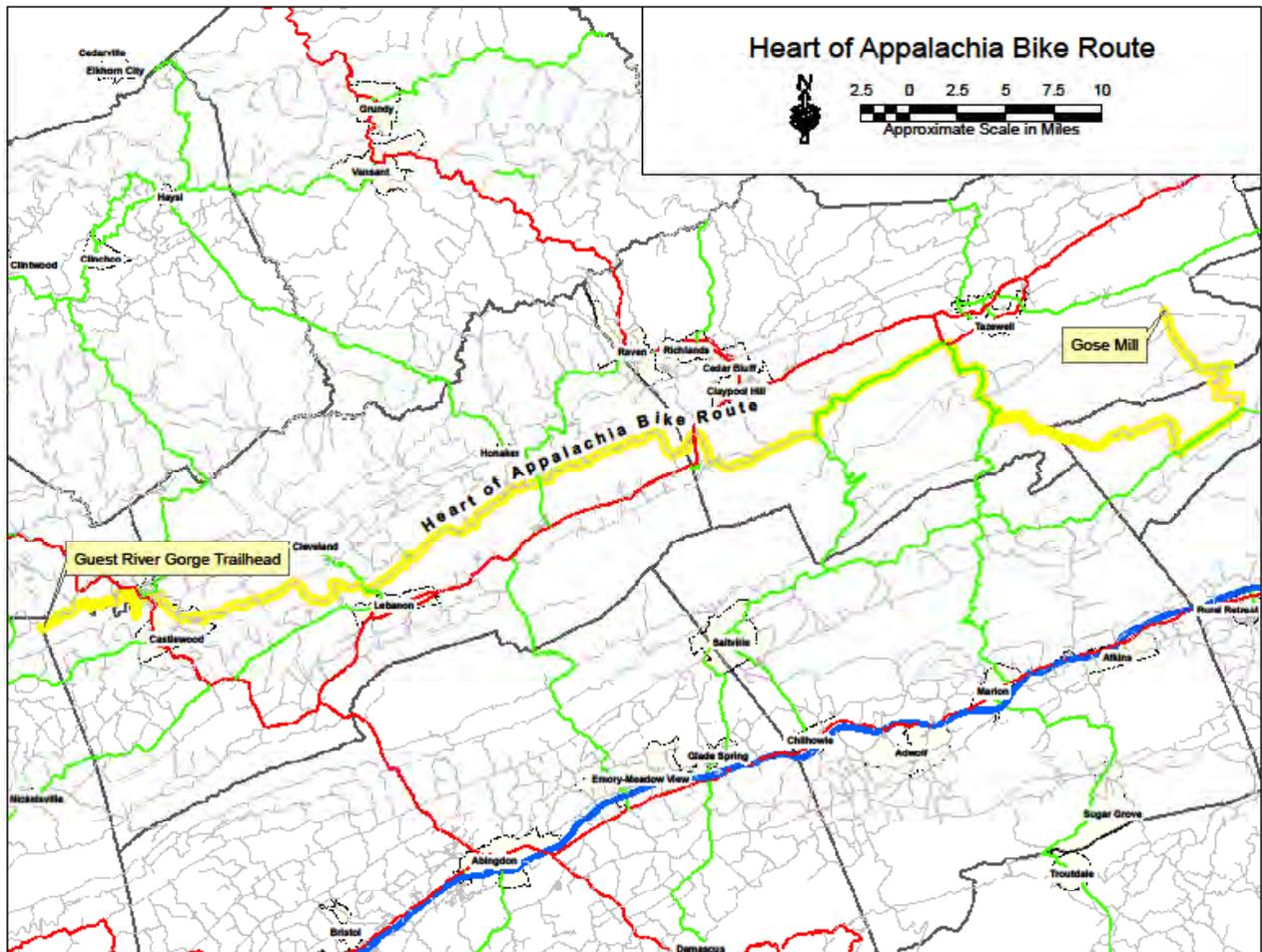
*PLEASE NOTE: Serious consideration needs to be made to reroute the Bicentennial Bike Route off of Hwy 80 once one exists Breaks Interstate Park. Due to increased traffic, Highway 80 is no longer safe for bicyclists. Turning off at Haysi and taking either Highway 83 or 63 through Clincho and eventually connecting back with Hwy 80 somewhere in Russell County would be highly recommended.*

**IMMEDIATE ACTION: A Spearhead Trails Committee needs to be formed to work on this route.**

# CAPITALIZING ON EXISTING BICYCLE ROUTES

## SPEARHEAD TRAILS REGION HAS ANOTHER BIKE ROUTE

The Heart of Appalachia Bike Route is a combination of both a bike route and bike trail offering both paved and unpaved roads. Starting at the Guest River parking lot in Wise County, this 127 mile trail continues through both Russell and Tazewell counties and ends at Gose’s Mill in Burkes Garden.



**RECOMMENDATION:** Here again, Southwest Virginia is blessed with a very scenic bike route that needs greater marketing to those who will come great distances to use it. This too should be addressed and promoted as part of the mission of the Spearhead Trails initiative.

*Please Note: Other potential bike routes are noted in the Site Visit section of this document under specific counties.*

Also keep in mind the potential for organizing long distance or looped bicycle rides which would encourage people to come to southwest Virginia and stay multiple days if properly planned. RAGBRAI which is an annual ride across the State of Iowa attracts over 20,000 bicyclists into their state to ride nearly 500 miles in seven days. The economic impact in those small communities in which they travel and to the state as a whole is phenomenal. Virginia has begun their own “Ride across Virginia” event. SRRRA should meet with the planners and see how best to ensure the route goes through southwest Virginia.

## CAPITALIZING ON EXISTING BICYCLE ROUTES

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*Please note:* In a search for information on both road and mountain biking opportunities in southwest Virginia, we found the website [bbbiking.com](http://bbbiking.com) which features both bike routes and bike trails throughout the United States and provides a list of Bed & Breakfasts one will find along the way. There were 20 listings for the State of Virginia. None were located in any of the counties within the Spearhead Trails Region. We also found a website for the Blue Ridge Bicycle Club which “promotes bicycling in southwest Virginia” ([www.blueridgebicycleclub.com](http://www.blueridgebicycleclub.com)) and yet none were listed for the counties within the study area although they do offer some excellent maps for the trails around Roanoke. An example of one of the trail maps provided by the Blue Ridge Bicycle Club on their website can be found at: [http://www.brbcva.org/maps/carvins\\_cove\\_map.pdf](http://www.brbcva.org/maps/carvins_cove_map.pdf).

**RECOMMENDATION:** As part of the Spearhead Trails initiative, similar maps should be created for all biking routes and trails in the seven counties of Southwest Virginia and posted online. The SSRA needs to designate a committee to work with local bike clubs, groups and organizations in accomplishing this goal. There may also be opportunities for SW Virginia routes and trails to be included on [www.bikeguy.net](http://www.bikeguy.net), [www.greenway.org](http://www.greenway.org), [www.more-mtb.org](http://www.more-mtb.org), [www.exploresingletrack.com](http://www.exploresingletrack.com) and other biking websites.

## BIBLIOGRAPHY

- <sup>1</sup> The Active Outdoor Recreation Economy, Outdoor Industry Foundation, 2006.
- <sup>2</sup> More on definitions of Bike Route and Bike Path are noted in the 2000 MUTCD findings and revised in January 2006. <http://members.cox.net/ncutcdbtc/fall05/bike06-bicycletrail.pdf>
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- <sup>4</sup> Bowker, J.M., Bergstrom, J.C., and Gill, J.K., The Virginia Creeper Trail, An assessment of user demographics, preferences and economics, USDA Forest Service & University of Georgia Department of Agricultural and Applied Economics, 2004.
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