

The Economic Impact of the Hatfield~McCoy Trail System in West Virginia

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Final Report

Prepared for:

The Hatfield~McCoy Regional
Recreation Authority

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Executive Summary

The Center for Business and Economic Research at Marshall University was commissioned by the Hatfield~McCoy Regional Recreation Authority to prepare a comprehensive economic impact study of the Hatfield~McCoy Trail System. The results of the analysis can be summarized as follows.

- The Hatfield~McCoy Trail System was established in 1996 by the West Virginia Legislature to provide trail based outdoor recreational opportunities in seven (now nine) southern West Virginia Counties.
- Since the first trails were opened in 2000 the impact of the Hatfield~McCoy Trail System has grown and become a significant factor in the economic life of the region.
- 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 to 24,285 in 2005.
- 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.
- Despite its short lifespan, the Hatfield~McCoy Trail System has received several national recognitions for excellence in its facilities and activities. This includes being chosen as one of the very few National Recreation Trails designated by the U.S. Department of the Interior.
- The economic base of the region served by the system is one of the poorest areas in the U.S. with incomes, wages and earnings well below the national and West Virginia averages, though in 1969 the figures for all three were virtually identical. In 2004, while West Virginia's per capita income was only 78 percent of the national average, the Hatfield McCoy region's was only 63 percent. For earnings, West Virginia was only 68 percent of the national average and the study region's was only 48 percent. The Hatfield McCoy Trails is a major factor in improving the economic conditions of the area.
- The region is one of the most isolated in the nation, although the presence of Corridor G has reduced that situation and made development of the Hatfield~McCoy Trail System possible.
- Educational attainment is also low in the region as the lack of jobs has caused an out-migration of the better educated seeking improved opportunities elsewhere. The result of this is a household poverty rate which is well above the West

- Virginia average of 17.9 percent and the national average of 12.4 percent. For the region, 26 percent of the families live with incomes below the poverty line.
- The economic impact of the Hatfield~McCoy Trail System to the region and the State is significant and includes benefits which were beyond the scope of this study.
 - While not estimated in this study the Hatfield~McCoy Trail System provides significant health benefits to participants with significant reduction in medical costs from diseases such as cardiovascular, cancer, diabetes, osteoarthritis, osteoporosis, obesity and depression. By providing outdoor-recreational activities to the residents of the area savings to the State result as most medical costs in the region are directly or indirectly paid by the State.
 - There are also significant benefits to landowners from the public-private partnerships into which they enter when they allow use of their land for trail purposes. As economic development takes place the tax burden on existing property owners may decrease or governmental services increase. As development continues property values rise. Professional trail management also reduces illegal use of private property and improves access and infrastructure.
 - Educational opportunities are enhanced by the presence of the trails as they serve as living laboratories where students can experience science and history. The trails system also provides a way for those pursuing degrees in biology or outdoor recreation to gain real world experience.
 - The potential demand for the opportunities presented by Hatfield~McCoy Trail System is increasing. Almost half of the population of the U.S. and inhabitants of all major metropolitan areas in the East, South and Mid-West lives within a day's drive of the area. These individuals possess the financial capacity to use the system. The relative shortage of trail related opportunities in the Eastern U.S. provides a fertile market for continued growth and expansion of the Hatfield~McCoy Trail System.
 - Outdoor recreation is one of the fastest growing economic activities in the nation. Last year over \$33 billion was spent on outdoor recreation equipment. Over 159 million individuals in the U.S. participated in 18.3 billion outdoor recreation activities. This participation assures future demand for the system.
 - The current economic impact of the Hatfield~McCoy Trail System was demonstrated using two methods.
 - The first was to look at the changes in economic activity in business most likely to be impacted by the trails. These impacts are measured using the latest data and compare the 1997 Census of Business with the 2002. Since the trails only opened in 2000, their effect will not be fully reflected in the figures. Not all of these changes can be solely attributed to the trails as the completion of Corridor G has opened up the area to increased commercial activity. But there is no doubt that the Hatfield~McCoy Trail System has been a major factor in this development.
 - Total retail sales have grown by 12 percent and sales per establishment by 25 percent.

- Payroll increased by \$104 million or 9.5 percent.
 - These gains in sales and payroll were seen in all related sectors including gasoline stations, accommodations, food service and real estate sales and rentals. This latter sector experienced the greatest growth due to the improving property values adjacent to the study area.
- The second method was to use input-output analysis to isolate the effect of the Hatfield- McCoy system on the economy of West Virginia. This was completed using the IMPLAN model which relates changes in economic activity in one sector to changes statewide. The analysis determines the effect on output, income and jobs. It does so by determining the direct or first round impacts, the indirect impacts which result from the direct spending and the induced effects which are caused as the money is spent and respent though out the state. Calculations are provided for year 2005.
- 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 direct, indirect and induced effects are summarized in Table Ex 1.

**Table Ex 1: Summary Impacts of
The Hatfield~McCoy Trail System**

Output	\$7.7 million
Income	\$2.7 million
Jobs	146
State & Local Tax Revenue	\$622,752

- The increase in output, incomes, jobs and state revenue would not have happened in the absence of the system. West Virginia also experiences increases in State revenue from the Hatfield~McCoy Trail System. The total amount from all sales taxes that is created by the system is \$622,752. The amounts from each tax displayed by source are given in Table 19.
- The Legislature provides \$500,000 in funding to the Hatfield~McCoy Regional Recreation authority. The tax return on their investment is 125 percent.

- The West Virginia Parkways Economic Development and Tourism Authority provides the Authority with an additional \$250,000. The total public investment provides a tax return of 80 percent which is considered excellent for a new public project.
- When the returns to the state for additional output and income are considered the pay-off to public investment is 1,037 and 373.1 percent respectively.

The overall conclusion to be reached is that the Hatfield~McCoy Trail System is and will continue to be an important component of the economic development of West Virginia and of the southern part of the State. It will be a catalyst for further development and expansion. As tourism grows it will bring increased visibility to the region as well as its attractiveness for location of other types of business.

THE ECONOMIC IMPACT OF THE HATFIELD~MCCOY TRAIL SYSTEM IN WEST VIRGINIA

Introduction

The Hatfield~McCoy Regional Recreation Authority, more commonly known as the Hatfield~McCoy Trail System, contracted with the Center for Business and Economic Research at Marshall University to prepare an evaluation of the economic impact of the trails system on the economy of West Virginia. This report has the following objectives:

- Provide background and trace the development of the Hatfield McCoy Trails
- Discuss the economic base of the region served by Hatfield~McCoy Trail System
- Explain how trails contribute to the economic development of a region
- Indicate the impact on jobs, income, output and state revenue from the presence of the Hatfield McCoy Trails in West Virginia

From the time the trails first opened in 2000 until today, the Hatfield~McCoy Trail System have already become a major factor in the economy of the region and West Virginia. Tourism is the State's third largest industry. The system has opened the depressed area of the southern coalfields to the economic opportunities which outdoor recreation offers.

This report also includes the results of a user survey conducted during 2006 of those who visited the Hatfield~McCoy Trail System. The survey collected data on activities, expenditures and personal characteristics of trail users. Information was also retrieved on distance traveled, home state and sources of information about the system. The complete results of the survey are provided in Appendix B.

Background and Development

History

From a vision in 1989, the Hatfield~McCoy Trail System has seen spectacular growth.¹ In that year a survey was completed to determine local community leader's interest. Receiving a highly favorable response from these leaders, the Hatfield~McCoy Recreation Development Coalition began consultations with the federal Bureau of Land Management regarding technical assistance. Later, under the sponsorship of Rep. Nick J. Rahall, federal legislation was enacted to finance a feasibility study to be completed by the U.S. Army Corps of Engineers. That study indicated very positive economic impacts if the project was undertaken.²

¹ Hatfield~McCoy Trail System Project History, *WVATV ONLINE* retrieved 9/25/2006 at www.vatvonline.com

² Trailhead Facilities Economic Impact Study, Final Report, April 1996. U.S. Army Corps of Engineers, Huntington District and Booker Associates, Inc. of Kentucky (now Parsons, Brinckerhoff Quade & Douglas, Inc.).

Proponents of the project wondered if the “field of dreams” (If we build it they will come) postulate would hold true. To find an answer three separate trail rides were planned and completed in 1993 and 1996. The results were more than encouraging and the land owners along the route suggested that testing end and the project move forward.³

In 1996 the West Virginia Legislature established the Hatfield~McCoy Regional Recreation Authority.⁴ Among the Legislative findings supporting this legislation, the following was stated.

- Need for a well managed facility for trail oriented recreation (off-highway vehicles, mountain bicycling, horseback ridding, motorcyclists, hikers, campers) in the Eastern United States.
- Well managed trail facilities on private property could exist without hurting the landlord’s economic interests or increasing the landlord’s exposure to liability.
- The trails and associated facilities will provide significant economic benefits to the State and to Southern West Virginia through increased tourism and related activities.
- The creation of a statutory corporation with wide stakeholder representation would “greatly assist” in realizing this potential.

The Legislation further defined the Hatfield~McCoy Recreation Area 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. . .”⁵ The plan calls for a network of over 2,000 miles running in the nine West Virginia counties.⁶ In 2000 the first 300 miles opened over both private and public land and today approximately 500 miles are available.

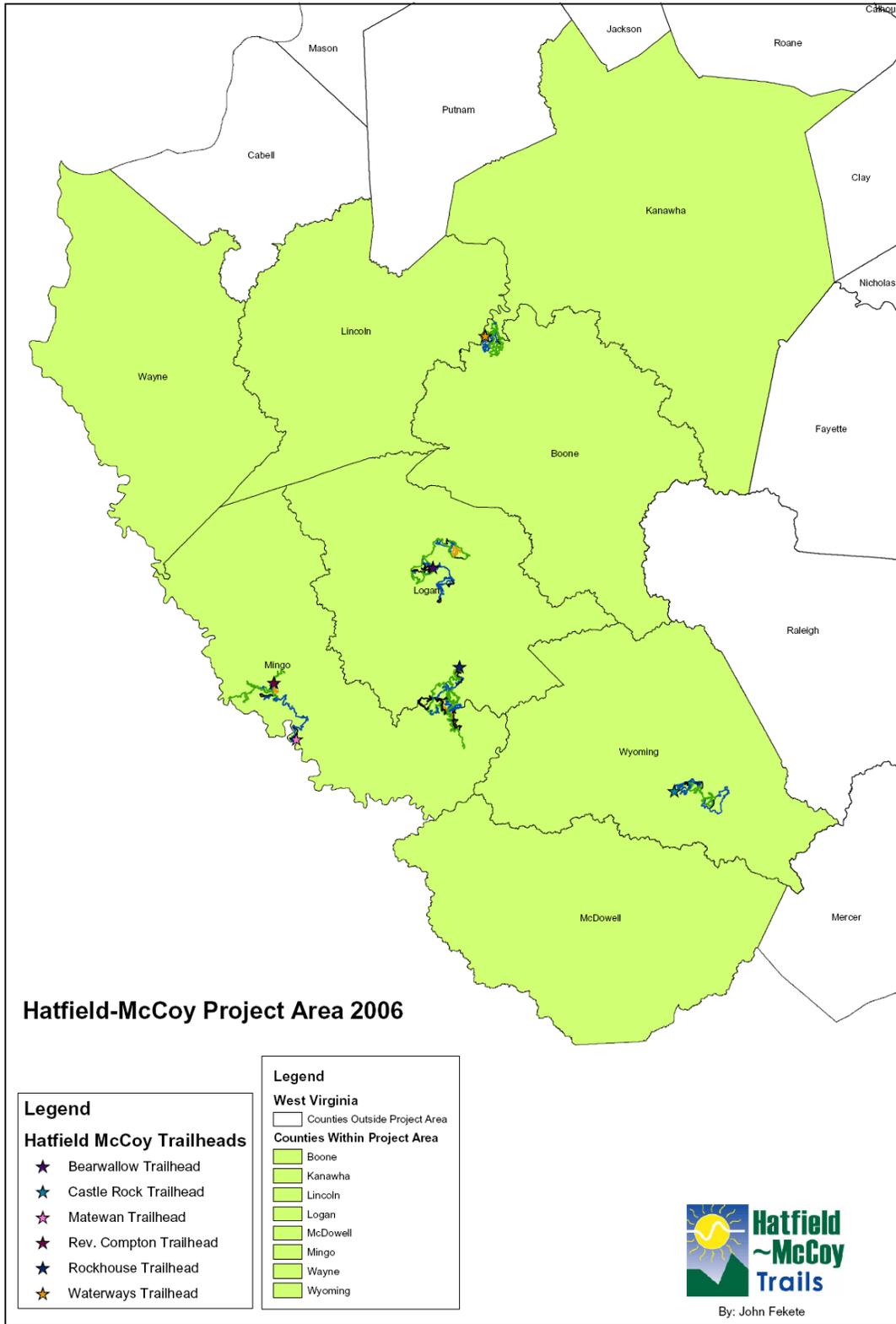
³ Hatfield/McCoy Trail (October 23, 2005) *Motorcycle/ATV Racing*, pp. 3-4

⁴ WV Code #20-14-1 ff.

⁵ Ibid.

⁶ Boone, Lincoln, Logan, McDowell, Mingo, Wayne and Wyoming were the original seven counties. Recently Mercer and Kanawha have been included.

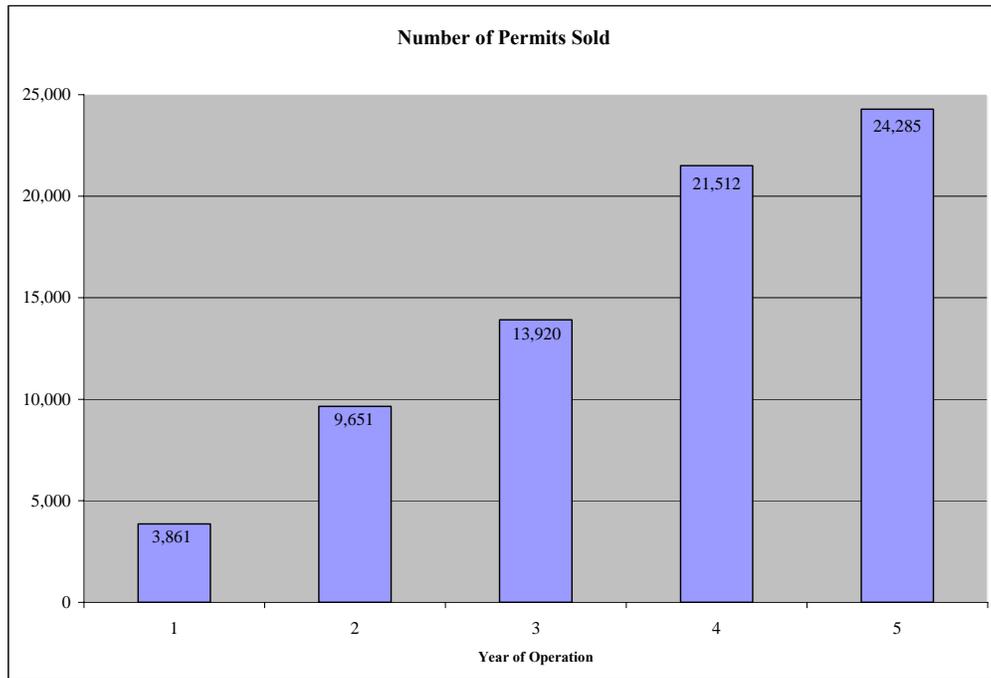
**Figure 1: Hatfield~McCoy Project Area
2006**



By: John Fekete

The early success of the Hatfield~McCoy Trail System can be seen from the increase in the permits they have sold. Table 1 indicates permits increased by 631 percent since inception.

Table 1: Permits



Current Status

The Hatfield~McCoy Trail System is one of the premier multi-use trail systems in the nation. Its 500 miles meander through some of the most beautiful, unmolested and historic territory in the nation. The system can accommodate off-highway motorcycles, all-terrain vehicles (ATVs), horseback riders, mountain bikers as well as hikers. The professionally designed and managed system is constructed with an emphasis on safety for those who use it. Accommodations from camping to quality resorts cater to all tastes.

The system includes many “decision points” where the user can choose among routes. This ensures that return visitors are never without new experiences that await them. Appendix B indicates the majority of first time users who return to the system. Connecting trail corridors provide access to communities where amenities including lodging, food, fuel, supplies and other services are readily available.

Currently, the system consists of five independent systems: Browning Fork, Buffalo Mountain, Dingess Run, Little Coal and Pinnacle Creek trails. Table 2 presents a matrix detailing the characteristics of each system. These present a spectrum of alternatives for beginners through the most experienced riders. Each trail is marked (from Green to Black) indicating degree of difficulty.

**Table 2: Hatfield~McCoy Trail System -
Characteristics and Amenities**

	Hatfield~McCoy Trail System				
	Browning Fork	Buffalo Mountain	Dingess Run	Little Coal River	Pinnacle Creek
Location	Between Man & Gilbert, WV	Between Williamson, Delbarton & Matewan, WV	Near Logan, WV	Near Danville & Madison, WV	Near Pineville, WV
Trailheads	Rockhouse Trailhead (Near Man, WV)	Reverend Compton Park Trailhead	Bearwallow Trailhead	Waterways Trailhead	Castle Rock Trailhead
		Matewan Trailhead			
Length	~ 115 miles	~ 95 miles	~ 105 miles	~ 65 miles	~ 105 miles
Green Trails (Easiest)	49%	20%	42%	58%	44%
Blue Trails (More Difficult)	23%	65%	27%	30%	35%
Black Trails (Most Difficult)	21%	12%	18%	6%	21%
Orange Trails (Single Track Only)	7%	3%	13%	6%	0%
Community Connector(s)	Man CC (1.2 miles from Rockhouse Trailhead)	Williamson CC (8 miles from Reverend Compton Park Trailhead)	Currently there are no Community Connectors	Currently there are no Community Connectors	Pineville CC (2.8 miles from Castle Rock Trailhead)
	Gilbert CC	Delbarton CC (3 miles from Reverend Compton Park Trailhead)			
		Matewan CC			
Amenities	Largest Total Mileage	“Most historic” of trails	Known for more difficult level trails	High % of “Easiest” trails	Less than one hour from whitewater rafting and a snow skiing resort.
	Wide variety of trails for all difficulty levels	Direct access to fuel, full service food and lodging accommodations.	Indirect access to fuel, full service food and lodging accommodations.	Direct access to lodging accommodations, near family summer season activities.	Direct access to food, fuel and lodging accommodations.

Maps of each trail are available in Appendix C.

Available Amenities. The visitor is never far from the amenities available in the nearby communities. These include:

- Seven motels (3 Dingess Run, 2 Browning Fork, and 1 each at Little Coal River and Pinnacle Creek)
- 32 Lodges and Rental Houses (25 Browning Fork, 6 Buffalo Mountain, 1 Pinnacle Creek)
- 15 Cabins, Campgrounds and RV Parks (8 Browning Fork, 2 Buffalo Mountain, 3 Little Coal and one each at Pinnacle Creek and Dingess Run)
- 2 Bed and Breakfasts (1 each at Dingess Run and Buffalo Mountain)

In addition to many restaurants and fast food establishments there are three ATV and motorcycle dealers (two at Dingess Run and one at Buffalo Mountain) and five ATV rental establishments (two at Buffalo Mountain and one each at Pinnacle Creek, Little Coal and Browning Fork) within easy access. Twin Falls State Resort Park is located near the Pinnacle Creek system and Chief Logan State Park and Resort near Dingess Run. Golfers will find the Twisted Gun course near Matewan a most pleasant challenge.

Governance. The Hatfield~McCoy Regional Recreation Authority is the governing body for the Hatfield~McCoy Trail System. The Authority has the responsibility under State statute for “enabling and facilitating the development and operation of a system of trail-oriented recreation facilities by off-highway vehicle enthusiasts, equestrians, mountain bicyclists and others”.⁷ It is governed by a board of at least seventeen members from stakeholders in the system.

- The county commission of each participating county is given two seats on the Board of Directors; one representative for economic development and one member from a corporation or individual landowner whose property will be part of the system.
- One member associated with tourism.
- Three members selected by the other board members at least two of whom should be recreational users of the system.
- In addition, the Director of the Division of Tourism, the Director of the Division of Natural Resources and the Director of the Division of Forestry are non-voting, ex-officio members.

The governing body also appoints an executive director who has full administrative responsibility for the system.

One of the major responsibilities of the governing board is to enter into agreements with corporations and individuals who own land over which the trails will pass. A good portion of this land is either reclaimed surface mine area or area which has the potential to be surface mined in the future. The Legislature has given exemption from liability for activities on the trail lands which they own.⁸ This exemption has made it possible to secure these agreements.

⁷ WV Code #20-14-3

⁸ WV Code #20-14-5(29)

The governing body has the authority to issue bonds to be paid from its own resources.⁹ These bonds are not considered to be obligations of the State.¹⁰ To date, no bonds have been issued.

Public Private Partnerships

Crucial to the success of the Hatfield~McCoy Trail System has been the creation of a public-private partnership which has benefited both entities. The system could not have been built without this collaboration. While the system will make use of available public land, the majority of it will traverse private land. The Hatfield~McCoy Trail System were the first to use this innovative concept in the eastern United States. Through the public-private partnership, the Authority receives a license to permit public recreational use of the land where trails are developed and maintained. The Authority has not been required to purchase land for trail development.

Events

Events are extremely important in the field of outdoor recreation. They provide nationwide publicity for a site as the news about them is included in the specialty journals for each outdoor activity. Many of these have more than one publishing outlet. Add to that, the magazines and advertising by manufacturers and distributors of the machines and equipment that are used by these enthusiasts. There is no better way to spread the word than by having events. As Appendix B indicates “word of mouth” is the most effective means of recruiting visitors.

These events have a cumulative impact. Usually, starting with modest attendance if the event is reviewed favorably by participants,¹¹ the result will be growing attendance in future recurrences. Those with similar interests enjoy interaction with others that provide the opportunity to swap stories and evaluate machines and equipment. Those who attend events tend to stay longer, bring family members and spend more money than do others who are users of the system.¹²

For 2007 the Hatfield~McCoy Trail System has the following events scheduled.

- Mountain State ATV and Dirtbike Jamboree-2007 April 26-29
- Hatfield~McCoy Reunion Days ATV and Dirtbike Festival-2007 June 7-10
- Suzuki Dirt Days on the Hatfield~McCoy Trail System-2007 July 11-15
- National ATV and Dirtbike Rally Week-2007 August 30-September 3
- Hatfield~McCoy Trailfest-2007 October 4-8

⁹ WV Code #20-14-5(14)(15)(16)(17)

¹⁰ WV Code #20-14-7

¹¹ See a positive review in “The Suzuki Dirt Days Event Held at West Virginia’s Hatfield and McCoy Trail System” ATV Connection, accessed 10/7/2006 at www.atvconneection.com/features/feature-articles/Hatfield~McCoy-Dirt-days.cfm as an example.

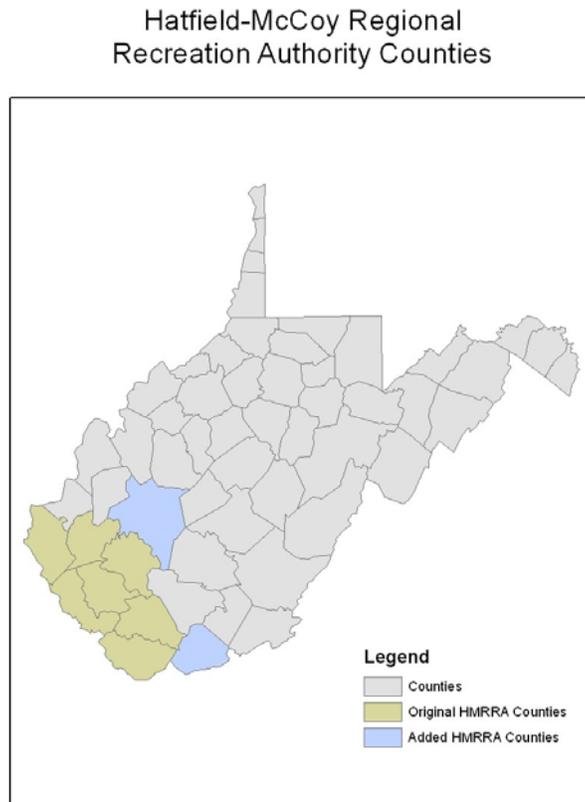
¹² See Appendix B

This schedule covers the entire riding season. These events have received increased interest and attendance each year they are made available.

Future Plans

The system currently has trails in Logan, Mingo, Boone and Wyoming counties. Future plans include a new system in McDowell County by the end of 2006. All nine participating counties will have trails and facilities by 2010. In addition, an Off-Highway Vehicle Park will be developed in Kanawha County.¹³ When these are completed, it can be anticipated that the current economic impact as discussed below will substantially increase.

Figure 2: Hatfield~McCoy Regional Recreation Authority Counties



¹³ Lusk, J. "Financial Plan for Future Growth and Development of the Hatfield~McCoy Trail System System," (July, 2006), Hatfield~McCoy Regional Recreation Authority.

Recognitions

In the short time it has been operating, the Hatfield~McCoy Trail System has received national recognition for its accomplishments. These include:

- National Millennium Trail. The Hatfield~McCoy Trail System is only one of 16 trail systems in the United States to receive this designation from the White House.
- ATV Magazine recognizes the Hatfield~McCoy Trail System with its Product Innovation Award as the “best new product of ATV owners” in 2002.
- National Coalition for Recreational Trails Award was bestowed on the Hatfield~McCoy Trail System for “Outstanding Construction of a Long Distance Trail System.”
- The U.S. Department of the Interior, National Parks Service designates the system as a National Recreation Trail.

In addition, the Hatfield~McCoy Trail System serves as a model for projects in both Virginia and Kentucky. The proposed plan for development of the “sKYward trails” project in Kentucky states, “This trail system, which is modeled after the growing Hatfield~McCoy Trail System in southern West Virginia, continues to progress toward reality in eastern Kentucky.”¹⁴ When the Kentucky project is completed it will connect with portions of the Hatfield~McCoy Trail System as part of the 2,000 mile trail network.

Economic Base

It is important to understand the economic base of the region where the Hatfield~McCoy Trail Systems are located. In addition to being one of the most scenic in the nation, it is one of the poorest. By providing jobs and stimulating growth, the system is an effective instrument for bringing economic development to an area.¹⁵

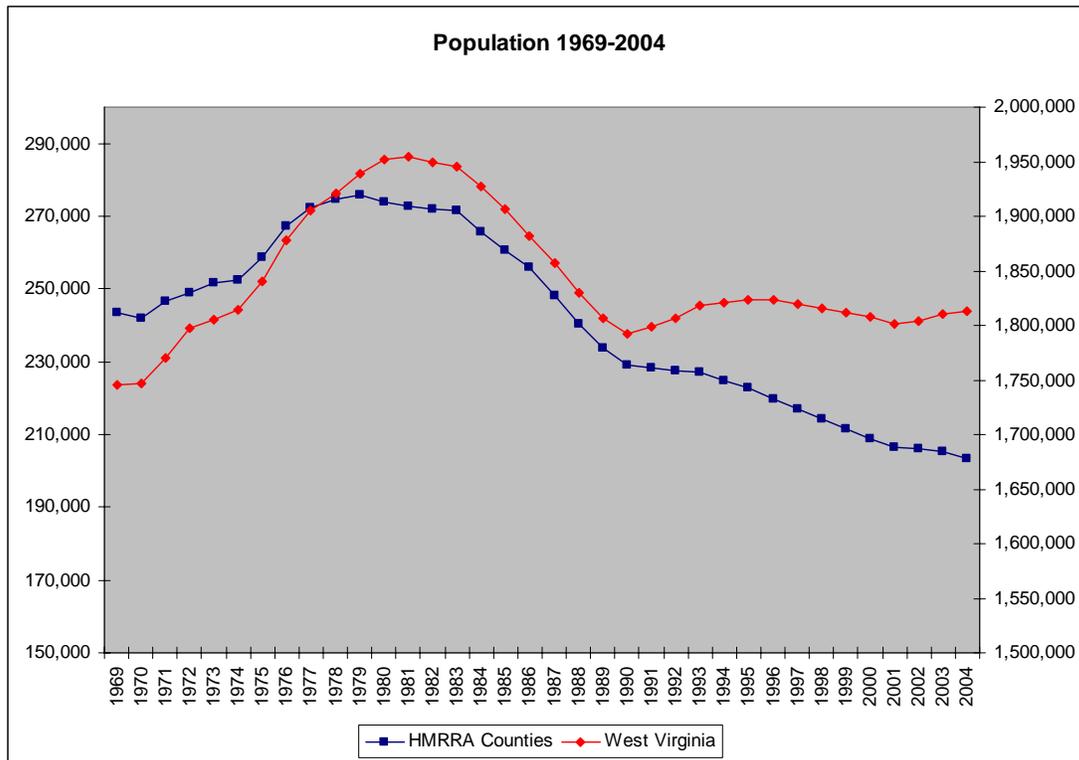
Population

Figure 3 and Table 3 show the changes in population in the system counties. While paralleling the State’s population changes until the late 1980s, the Hatfield~McCoy counties have steadily lost population since that time while the State’s has shown only very slight growth. Much of the population loss has been among those in the 18-45 age group who have left to find employment opportunities elsewhere. Often they are the most productive and, therefore, the highest income group. Providing employment opportunities would not only contribute to reversing the decline in population but could help retain those who would earn higher incomes.

¹⁴ *sKYward trails*, details retrieved October 1, 2006 at www.trailscouts.com

¹⁵ Institute for New Hampshire Studies (June 2003). “Economic Impacts of Trails,” Plymouth State University. Moore, R. and Barthlow, K. (1996). “The Economic Impacts and Uses of Long-Distance Trails,” North Carolina State University. “The Economic and Social Benefits of Off-Road Bicycle and Pedestrian Facilities,” (1995). National Bicycle and Pedestrian Clearinghouse, Technical Assistance Series, Number 2.

**Figure 3: The Hatfield~McCoy Regional
Recreation Authority County Level Socio-
Economic and Demographic Data:
Population**



Source: Regional Economic Information System, Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Table 3: Population, 1995-2004

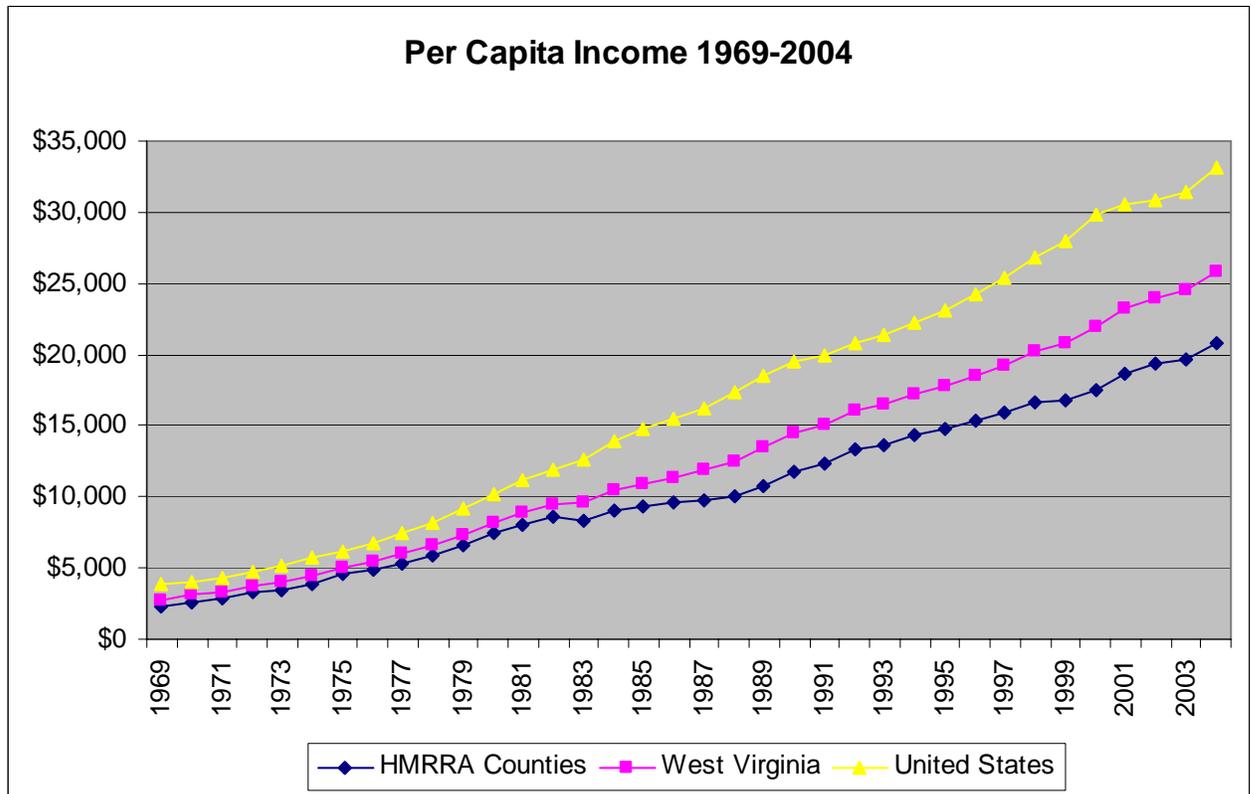
Year	West Virginia	Hatfield~McCoy Counties
1995	1,823,700	222,719
1996	1,822,808	219,895
1997	1,819,113	217,202
1998	1,815,609	214,403
1999	1,811,799	211,748
2000	1,807,442	208,954
2001	1,801,438	206,682
2002	1,804,529	206,105
2003	1,810,347	205,133
2004	1,812,548	203,348

Source: Regional Economic Information System,
 Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Per Capita Income

The lack of job opportunities in the region along with the other demographic characteristics has resulted in per capita incomes which are below both the national and State average. As Figure 4 and Table 4 reveal, per capital income in 1969 for West Virginia and the Hatfield~McCoy region were virtually equal. Since that time the U.S. figure has outpaced both the study area and the State. In 2004 (the latest year for available data), West Virginia per capita income was only 78 percent of the national average while the Hatfield~McCoy counties' was only 63 percent.

Figure 4: Per Capita Income for the Hatfield~McCoy Study Area



Source: Regional Economic Information System, Bureau of Economic Analysis
<http://www.bea.gov/beat/regional/reis/>

Table 4: Per Capita Income, 1995-2004

Year	United States	West Virginia	Hatfield~McCoy Counties
1995	\$23,076	\$17,727	\$14,724
1996	\$24,175	\$18,445	\$15,291
1997	\$25,334	\$19,243	\$15,987
1998	\$26,883	\$20,226	\$16,629
1999	\$27,939	\$20,729	\$16,758
2000	\$29,845	\$21,899	\$17,495
2001	\$30,574	\$23,261	\$18,649
2002	\$30,810	\$24,002	\$19,340
2003	\$31,463	\$24,515	\$19,684
2004	\$33,090	\$25,792	\$20,842

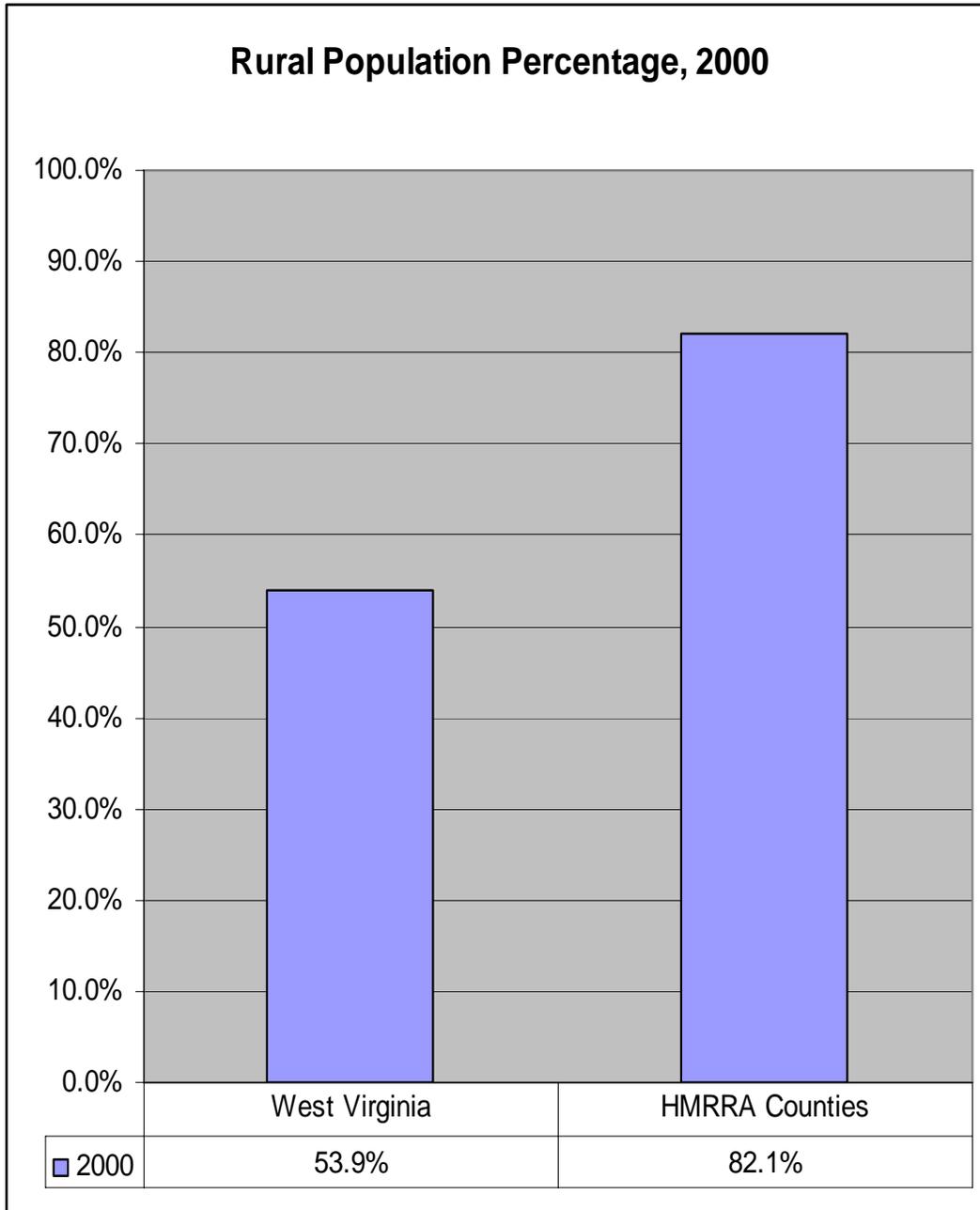
Source: Regional Economic Information System,
Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Isolation

Part of the economic problem in the Hatfield~McCoy Trail System area is its relative isolation. Figure 5 reflects this. Even though West Virginia is the second most rural state in the nation with about 52 percent living outside of urban areas,¹⁶ for the study counties it is over 80 percent rural. While corridor G (US119) has partially reduced the effects of isolation and added employment opportunities in the area, the problem of economic isolation will continue to affect the region until additional remedies can be applied.

¹⁶ The Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of Urbanized Areas and Urban Clusters. Please see The U.S. Census Bureau for further discussion of the definition at http://www.census.gov/geo/www/ua/ua_2k.html.

**Figure 5: Rural Population Percentage,
2000**

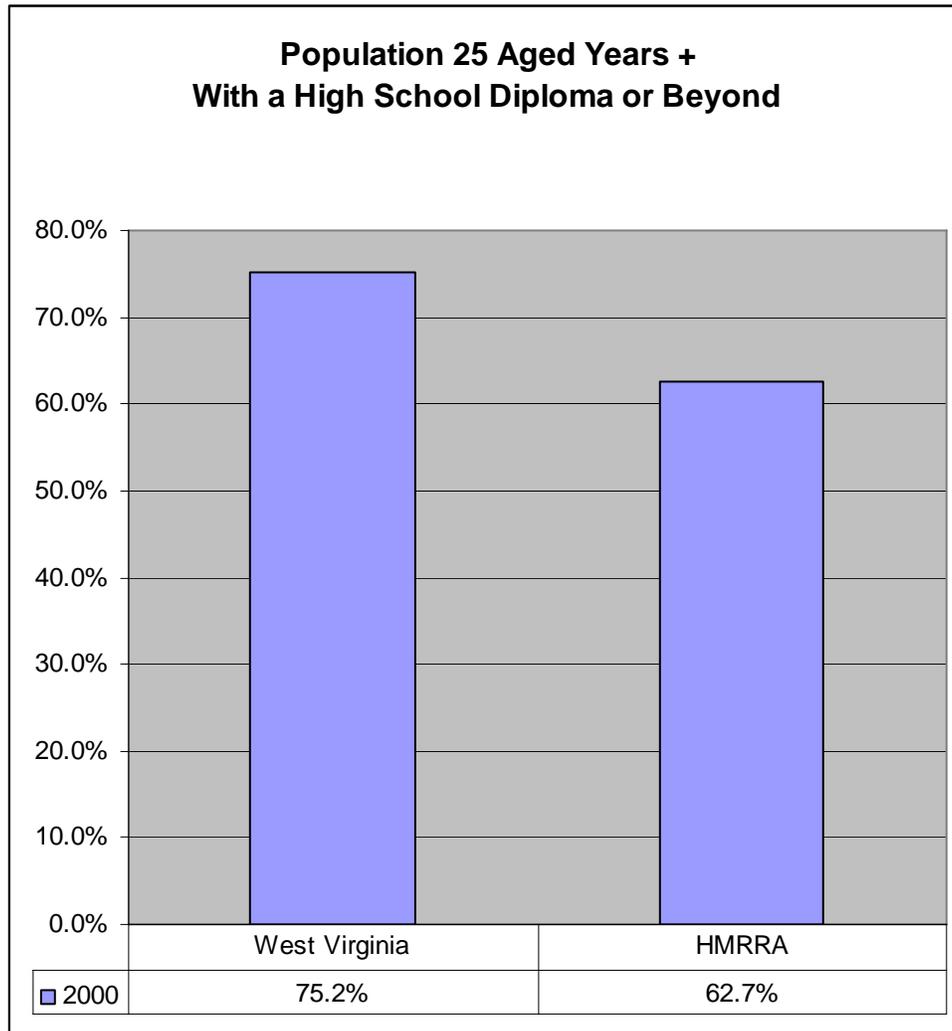


Source: U.S. Census Bureau, 2000 Census, Summary Tape File 3
<http://www.census.gov>

Educational Attainment

One significant factor in determining the economic development potential of a region is its educational attainment. Due to the lack of job opportunities many of the more highly educated and skilled workers have left the Hatfield~McCoy counties. The result is that a much larger percentage of the population lacks even a high school education than is the situation for the State as a whole. Figure 6 illustrates the difference. A factor in reversing the trend will be to create those opportunities which will not only attract but hold a better educated workforce.

Figure 6: Population 25 Aged Years with a High School Diploma or Beyond

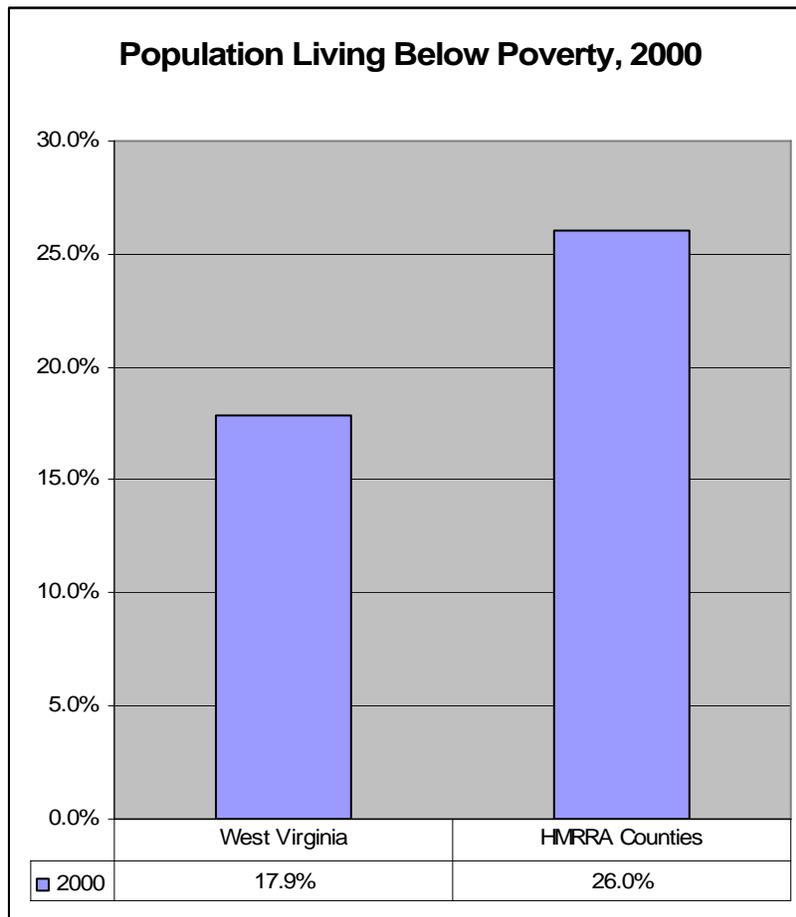


Source: U.S. Census Bureau, 2000 Census, Summary Tape File 3
Includes High School Diploma, GED (or Equivalency) and Beyond
<http://www.census.gov>

Incidence of Poverty

The data shows the cumulative effect of these indicators is a much higher incidence of poverty in the study counties than in the State. Figure 7 indicates for West Virginia the poverty rate in 2000 was 17.5 per cent (which exceeds the national rate of 12.4) and the rate increases to 26 percent for the area served by the trail system. Eradication, or at minimum a significant reduction, of this incidence is the key objective of the State's economic development efforts. The Hatfield~McCoy Trail System is a positive factor in that process.

**Figure 7: Population Living Below Poverty,
2000**



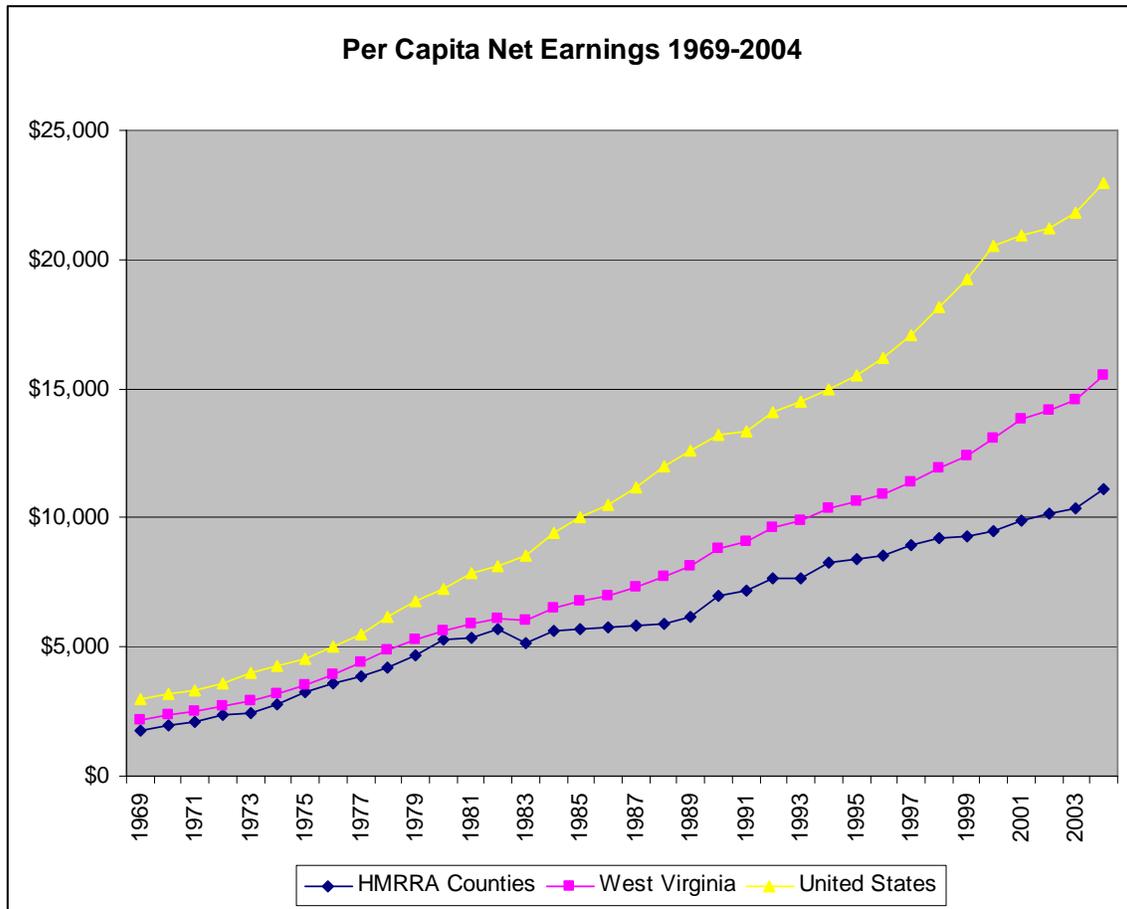
Source: U.S. Census Bureau, 2000 Census, Summary Tape File 3
<http://www.census.gov>

Net Earnings

The comparisons are even more staggering when net earnings are considered. Net earnings measure what is earned as opposed to what is received. Transfer payments such as welfare, social security, workers compensation and disability payments are removed. Additionally, dividends and rental incomes received are subtracted. The result is a more accurate depiction of a region's economic vitality.

Back in 1969, net earnings in the U.S., West Virginia and the Hatfield~McCoy counties were approximately equal. As Figure 8 and Table 5 illustrate, the region has fallen even further behind than when per capita income is used for comparison. When contrasted with the U.S., West Virginia's per capita net earnings are only 68 percent of the U.S. figure and the Hatfield~McCoy counties represent only 48 percent. These comparisons provide an even stronger case for increased economic opportunity such as the Hatfield~McCoy system can provide.

Figure 8: Comparative Per Capita Net Earnings



Source: Regional Economic Information System, Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Table 5: Per Capita Net Earnings, 1995-2004

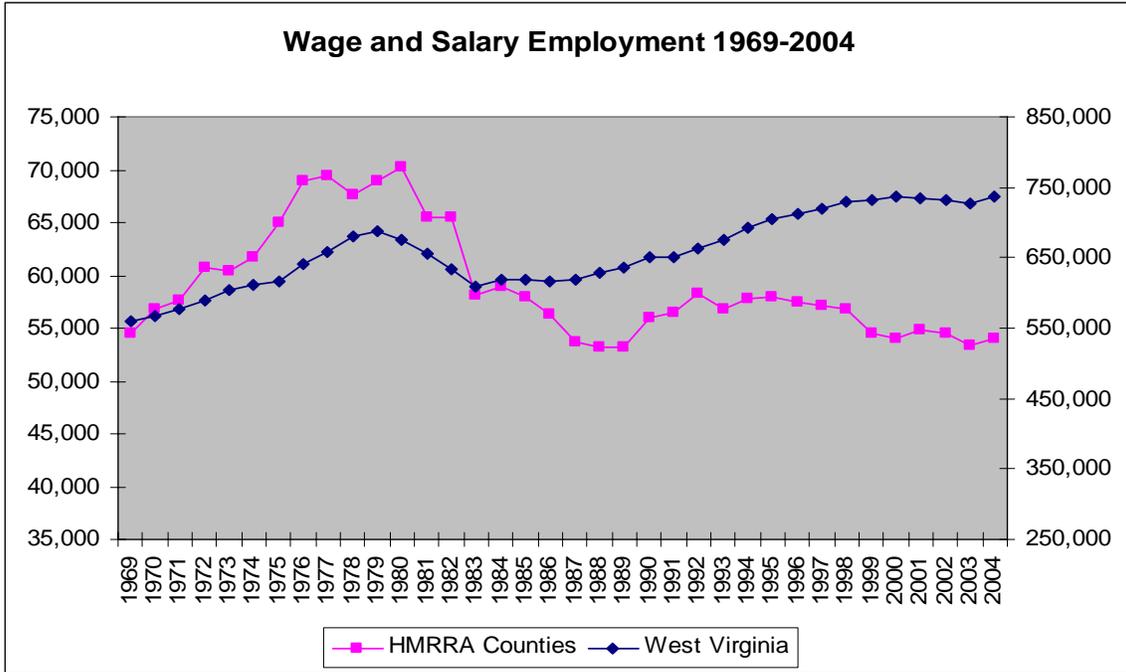
Year	United States	West Virginia	Hatfield~McCoy Counties
1995	\$15,509	\$10,641	\$8,420
1996	\$16,213	\$10,909	\$8,567
1997	\$17,043	\$11,408	\$8,965
1998	\$18,189	\$11,946	\$9,241
1999	\$19,221	\$12,421	\$9,259
2000	\$20,560	\$13,065	\$9,507
2001	\$20,964	\$13,823	\$9,922
2002	\$21,186	\$14,188	\$10,157
2003	\$21,809	\$14,588	\$10,350
2004	\$22,978	\$15,512	\$11,130

Source: Regional Economic Information System,
Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Wage and Salary Employment

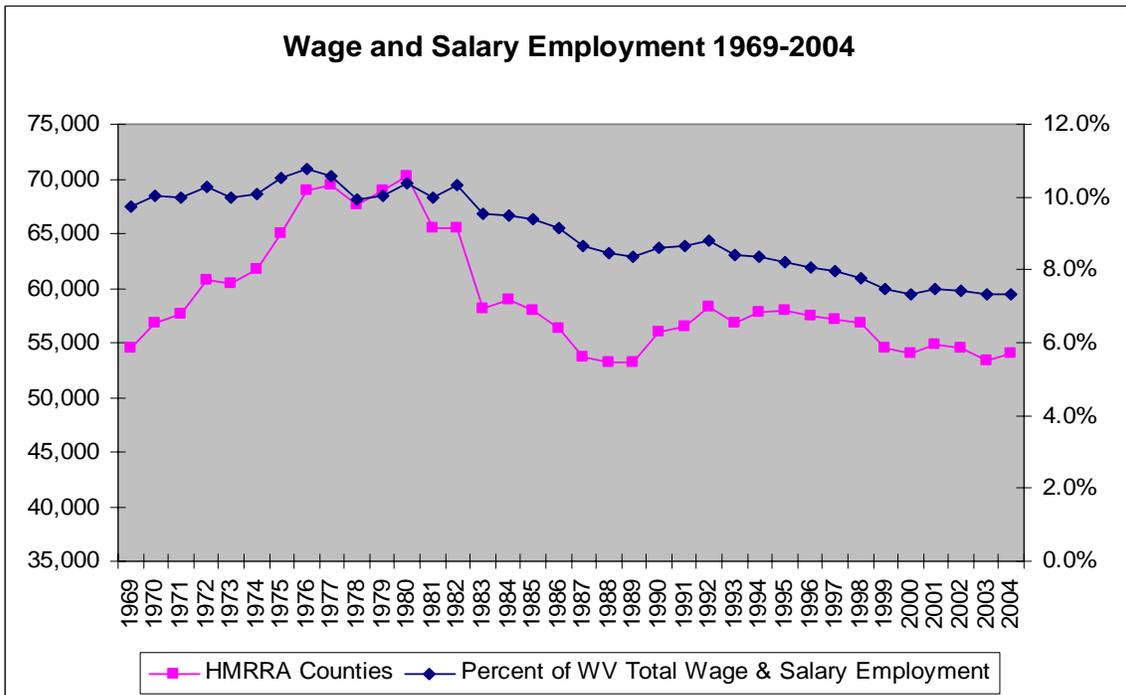
The critical need for job generation in the Hatfield~McCoy counties is demonstrated in Figures 9 and 10 and Table 6. Despite spiking in the 1970's and early 1980's employment in the study area declined in the later 1980's, slightly increased in the 1990's and then declined and held stable since 1990. Wage and salary employment is currently about where it was in 1969. While the recent boom in coal prices has increased employment in extractive industries in the Hatfield~McCoy region, this may not indicate a permanent turnaround.

**Figure 9: Wage and Salary Employment
1969 - 2004**



Source: Regional Economic Information System, Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

**Figure 10: Wage and Salary Employment
1969 - 2004**



Source: Regional Economic Information System, Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

**Table 6: Wage and Salary Employment
1995-2004**

Year	West Virginia	Hatfield~McCoy Counties	% of West Virginia Total
1995	704,416	57,944	8.2%
1996	711,575	57,454	8.1%
1997	718,489	57,185	8.0%
1998	728,329	56,734	7.8%
1999	731,641	54,575	7.5%
2000	736,143	54,064	7.3%
2001	733,604	54,873	7.5%
2002	732,605	54,541	7.4%
2003	728,259	53,426	7.3%
2004	737,567	54,001	7.3%

Source: Regional Economic Information System,
Bureau of Economic Analysis
<http://www.bea.gov/bea/regional/reis/>

Economic Impact

This section of the report reviews several indicators of the economic success of the Hatfield~McCoy Trail System in the region it serves. It must be noted that not all of the improvements in the indicators can be solely attributed to the Hatfield~McCoy Trail System. The area has benefited greatly from the opening of Corridor G (US 119) from Pikeville, KY through the Hatfield McCoy counties terminating in Charleston, WV.¹⁷ Without Corridor G, the access to the Hatfield~McCoy Trail System would not have been possible and the system would not have been feasible. There are also economic benefits from trails which have not been quantified in this study.

Health and Fitness

While not included in the calculations of benefits from the Hatfield~McCoy system, trails have a well documented history of promoting health and reducing medical costs.¹⁸ The Surgeon General has reviewed the research and found that outdoor recreation (biking, hiking, swimming, horseback riding and other vigorous sports) reduce the incidence of:

- Cardiovascular Diseases
- Colon Cancer
- Non-Insulin-Dependent Diabetes
- Osteoarthritis
- Osteoporosis

¹⁷ Global Insight and Wilbur Smith Associates (July 2003) *Economic Development Highway Corridors Study in West Virginia: Final Report*, Federal Highway Administration, U.S. Department of Transportation

¹⁸ Centers for Disease Control and Prevention (1996) *Physical Activity and Health: A Report of the Surgeon General*, U.S. Department of Health and Human Services. See also National Center for Health Statistics (2001) *Healthy People in Healthy Communities*, U.S. Department of Health and Human Services

- Falls among the elderly
- Obesity
- Depression and Anxiety
- Lower back pain

A recent study found a cost-benefit ratio of \$1-\$2.94 for expenditures on trails.¹⁹ Interpreted this means that every one dollar spent on providing trails results in nearly three dollars in benefits. Benefits are greatest for the elderly for, as people age, they tend to become more sedentary.

Medical Costs

While not included in this study, reductions in medical costs would have a significant impact on health care costs. Considering that the majority of health care costs are paid in West Virginia either by the State through Medicaid or by PEIA, any lessening of this burden would be beneficial. A recent CBER study concluded that reducing the major diseases related to inactivity to the national average would save the State and southern West Virginia:

- Cancer \$230 million and \$70 million
- Cardio-vascular Disease \$236 million and \$72 million
- Diabetes \$250 million and \$77 million
- Obesity \$96 million and \$29 million²⁰

West Virginia has the highest rate of obesity of any state.²¹ One reason identified for this situation is the lack of available outdoor recreational facilities. The lack of trails for walking, biking and other forms of physical activity is a major cause.²² Having trails in a region where roads follow rivers and the only walking area is the railroad track, nearby trails could be a partial solution to this problem.

Benefits to Land Owners

The public-private partnership has many economic benefits for landowners.²³ Among these are:

- Reduction in tax burden as more development takes place and a greater tax base is created to support local services.
- Enhanced property values as the area develops demand for property increases.

¹⁹ Wang, G., Macera, C. et.al “Cost-benefit analysis of physical activity using bike/pedestrian trails” *Journal of Health Promotion Practice* (April 2005) 6:2 pp 174-179.

²⁰ Kent, C. and Sowards, K. (December 2004) “Potential Impacts of a University Wellness and Fitness Facility at Marshall University”, Center for Business and Economic Research, Marshall University

²¹ Centers for Disease Control and Prevention (2003), *2003 State Health Report*, U.S. Department of Health and Human Services.

²² Acker, T.S. et.al (2002) *Southern West Virginia Health: An Assessment and Initial Plan for Improving Lives and Building Futures*. Robert C. Byrd Center for Rural Health, Marshall University.

²³ “Economic Benefits of Trails and Greenways,” Rails to Trails Conservancy and “The Economic Benefits of Trails” American Hiking Society. “The Effects of Greenways on Property Values and Public Safety. The Conservation Fund and Colorado State Parks State Trails Program.

- Professional trail management will provide an alternative to the current illegal use of “informal” trails on the land owner’s property without their permission.
- Increased enforcement of federal, state and local laws and regulations will mitigate existing abuses and reduce land owner’s potential liability.
- Improved maintenance of the area, as the trails are developed and kept ready for use, will result as the system assumes these expenses.
- Improved access to the land owner’s property as roads and trail heads are developed.
- Expanded infrastructure will, in many instances, become available in the form of utilities such as electricity, water, sewer and telecommunications.
- Community goodwill toward the land owners is also a major benefit particularly to coal companies which operate surface mines.

As mentioned above, the Authority has assumed the potential liability and agreed to reimburse the land owners for any losses incurred as a result of legal action.

Education

Among the often overlooked or at least underemphasized benefits of trails is their contribution to education. Trails serve as outdoor classrooms.²⁴ Students can learn the State’s history, its ecology and its social-economic structure from study along the trails. For students in biology and environmental science trails can be more than classrooms, they can be living laboratories.

Also important is the education delivered to students who seek outdoor recreation as a vocation. Training for jobs from rangers to naturalists can be provided. Those seeking degrees in recreational science can experience internships. Students as well as others can fulfill their desire to serve while learning as volunteers. These opportunities would not be there without the trails.

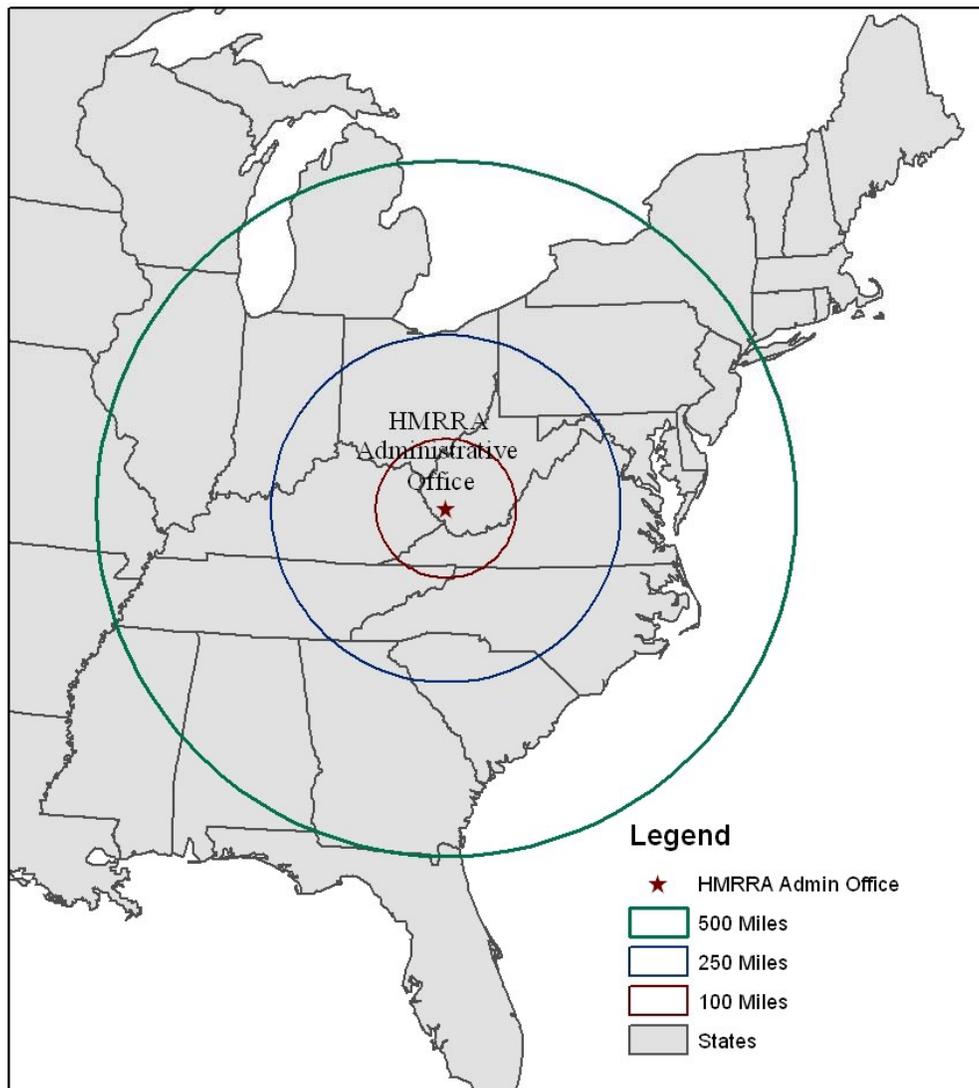
Potential Demand

Currently the Hatfield~McCoy Trail System is ideally located. Approximately 48.5 percent of the nation’s population lives within a day’s drive of the area (500 straight-line miles from Lyburn, WV – the location of the Hatfield~McCoy Administrative Office) as shown in Figure 11. Table 7 provides information on the approximate distances between eastern, southern and mid-west western population centers. The area covers almost all of the major metropolitan areas of the northeast, south and midwest. Many of these areas are densely populated with limited outdoor recreation sites. The geographic location of the Hatfield~McCoy Trail System provides an attractive, nearby option for those seeking to escape the urban environment.

²⁴ West Virginia Trail Plan Committee, (July 2002) “Pathways to the future: The West Virginia statewide trail plan 2002-2005” West Virginia Development Office.

Figure 11: 100, 250, and 500 Mile Radius

100, 250, and 500 Mile Radius
From the Hatfield-McCoy Regional
Recreation Authority Administrative Office



**Table 7: Selected Characteristics of
Population at 100, 250 and 500 Mile Radii
from The Hatfield~McCoy Regional
Recreation Authority Administrative Office**

	100 Mile Radius	250 Mile Radius	500 Mile Radius	United States Total
Total Population	2,450,624	30,789,646	128,968,628	281,421,906
Percent of U.S. Total Population	0.9%	10.9%	45.8%	100.0%
Population Age 18 and Over	1,903,414	23,354,127	96,541,493	209,279,149
Percent of U.S. Total Population, Age 18 and Over	0.9%	11.2%	46.1%	100.0%
Population Density	77.7	159.3	216.8	79.6
Percent of Population Age 25 or Over, High School Graduate or Higher *	70.2%	79.0%	80.2%	80.4%
Percent of Population Age 25 or Over, Bachelor's Degree or Higher	13.1%	20.5%	24.1%	24.4%
Labor Force Participation Rate +	52.1%	63.2%	64.0%	63.9%
Unemployment Rate	7.6%	5.2%	5.7%	5.8%

Source: 2000 U.S. Census Data, Summary Tape File 3

Compiled using LandView 6 Software.

* Includes GED or Equivalency

+ Population 16 Years and Over, In Labor Force

The potential draw area includes households with the financial capacity to use the system. The data in Table 8 indicates that outside the immediate region poverty is low and incomes sufficient that outdoor recreation is within the household's ability to pay. The presence of children under 18 indicates a demand for family oriented recreational opportunities.

Table 8: Selected Characteristics of Households at 100, 250 and 500 Mile Radii from the Hatfield~McCoy Regional Recreation Authority Administrative Office

	100 Mile Radius	250 Mile Radius	500 Mile Radius	United States Total
Total Households	987,319	12,131,116	49,153,849	105,539,122
Family Households with Own Children Under 18 Present	294,370	3,776,500	15,814,968	35,234,403
Percent of Households – Family Households with Own Children Under 18 Present	29.8%	31.1%	32.2%	33.4%
Percent of Households with Income above \$50,000	24.4%	36.9%	42.3%	42.0%
Percent Families Below Poverty	15.5%	8.9%	8.9%	9.2%
Percent of Owner Occupied Housing Units Valued at \$200,000 or Above	7.1%	10.9%	18.3%	21.4%

Source: 2000 U.S. Census Data, Summary Tape File 3
Compiled using LandView 6 Software.

The demand for outdoor recreation is strong and is growing. As an example, last year's sales of outdoor equipment totaled \$33.3 billion. Total participation in 2004 was 159 million people in the U.S. engaging in 18.3 billion separate outdoor activities.²⁵

Table 9 indicates what percentage of the population by age group in the drawing area for the Hatfield~McCoy Trail System participate in various outdoor recreational activities. With the exception of mountain climbing, all are available in the study area. This data reflects annual activities indicating that demand does not dissipate over time.

²⁵ "Outdoor Industry Snapshot," (2006). State of the Industry Report retrieved Oct. 10, 2006 at www.outdoorindustry.org.

Table 9: Participation in Selected Outdoor Recreation Activities - People Living in U.S. Forestry Service Regions 8 and 9

Activity Participation within Last 12 months	Ages 16-34	Ages 35-54	Ages 55 +	Ages 16+
Visit a Wilderness or Primitive Area	37.3%	34.7%	23.2%	32.2%
Day Hiking	34.1%	35.8%	21.9%	31.1%
Developed Camping	29.5%	27.5%	15.4%	24.6%
Drive Off-Road	25.8%	17.3%	9.1%	17.7%
Mountain Biking	29.7%	23.3%	8.6%	21.2%
Horseback Riding on Trails	10.5%	8.7%	3.3%	7.7%
Backpacking	13.3%	9.7%	3.7%	9.2%
Mountain Climbing	6.6%	5.9%	3.1%	5.3%
Rock Climbing	6.8%	5.6%	1.9%	4.9%

Source: 2000-2004 National Survey on Recreation and the Environment. USDA Forestry Service. Southern Research station. Athens, GA.

U.S. Forestry Service Region 8 consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.

U.S. Forestry Service Region 9 consists of Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia and Wisconsin.

Current Economic Impact of the Hatfield~McCoy Trail System

There are alternate methods of establishing the contribution a project makes to the economy of a region. Two methods are employed in this analysis. The first is to show what has happened to selected economic indicators in the region. The second is to model the effects on state income, output, jobs and revenue.

Retail Trade is the economic activity which is most impacted by tourism and outdoor recreation spending. Using the North American Industry Classification System (NAICS) comparisons have been made for changes between 1997 and 2002.²⁶ For all retail establishments, the number of establishments fell by eight, but sales increased by over \$130 million or 12 percent. Annual payroll increased by \$104 million but employment dropped by slightly more than 500 (or 7.3 percent) with the greatest drop occurring in Mingo County. During the same period, sales per establishment rose by almost \$350 thousand or 25 percent. The data are provided in Tables 10 for each of the Hatfield~McCoy counties and Table 11 for the region.

²⁶ The U.S. Census Bureau collects Economic Census data on five year cycles. The next data collection year will be 2007 with full results not being available until late 2008 or early 2009.

**Table 10: Retail Trade (NAICS 44-45)
Breakdowns 1997 and 2002**

2002	Retail Trade			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	87	156,269	14,921	807
Lincoln	52	61,357	5,118	403
Logan	165	432,841	35,291	2,097
McDowell	84	106,823	9,961	680
Mingo	102	124,845	11,579	599
Wayne	117	216,673	19,080	1,198
Wyoming	103	127,124	12,133	787
HMRRA Counties	710	1,225,932	108,083	6,571
1997	Retail Trade			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	110	146,266	14,441	984
Lincoln	51	52,295	4,724	358
Logan	204	335,709	30,950	1,996
McDowell	97	108,253	11,916	860
Mingo	122	176,131	15,859	1,006
Wayne	111	168,527	15,425	1,127
Wyoming	98	108,377	11,330	759
HMRRA Counties	793	1,095,558	104,645	7,090

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

**Table 11: Retail Trade (NAICS 44-45)
Change 1997 – 2002**

Retail Trade				
Sales			Sales Per Establishment	
2002	\$1,225,932,000		2002	\$1,726,665
1997	\$1,095,558,000		1997	\$1,381,536
Change	\$130,374,000		Change	\$345,129
Percentage Increase	11.9%		Percentage Increase	25.0%
Annual Percentage Increase	2.4%		Annual Percentage Increase	5.0%
Annual Payroll				
Annual Payroll			Employment	
2002	\$108,083,000		2002	6,571
1997	\$104,645,000		1997	7,090
Change	\$3,438,000		Change	-519
Percentage Increase	3.3%		Percentage Increase	-7.3%
Annual Percentage Increase	0.7%		Annual Percentage Increase	-1.5%

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

The number of gasoline stations in the study region has shown a small drop (eight establishments) but sales have risen by 14.4 percent with sales per establishment up by \$212 thousand or 20.1 percent. The 2002 figures are not affected by the recent run up in gasoline prices. Employment did show an increase of less than one per cent. Annual payroll increased by almost \$2.5 million or 21 percent. The data is arrayed in Tables 12 and 13.

**Table 12: Gasoline Stations (NAICS: 447)
Breakdowns 1997 and 2002**

2002	Gasoline Stations			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	19	30,352	2,689	191
Lincoln	13	16,218	1,028	91
Logan	34	56,749	3,376	229
McDowell	25	23,384	1,779	147
Mingo	18	16,730	1,552	138
Wayne	27	37,528	2,134	194
Wyoming	24	22,760	1,525	160
HMRRA Counties	160	203,721	14,083	1,150
1997	Gasoline Stations			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	24	30,616	2,382	214
Lincoln	12	10,378	612	55
Logan	41	48,968	2,797	286
McDowell	23	20,908	1,454	141
Mingo	20	18,668	1,442	146
Wayne	23	29,797	1,725	179
Wyoming	25	18,793	1,227	123
HMRRA Counties	168	178,128	11,639	1,144

Source: 1997 and 2002 Economic Census, U.S. Census Bureau

<http://www.census.gov/econ/census02/>

<http://www.census.gov/epcd/www/econ97.html#1997>

**Table 13: Gasoline Stations (NAICS: 447)
Change 1997 – 2002**

Gasoline Stations				
Sales			Sales Per Establishment	
2002	\$203,721,000		2002	\$1,273,256
1997	\$178,128,000		1997	\$1,060,286
Change	\$25,593,000		Change	\$212,971
Percentage Increase	14.4%		Percentage Increase	20.1%
Annual Percentage Increase	2.9%		Annual Percentage Increase	4.0%
Gasoline Stations				
Annual Payroll			Employment	
2002	\$14,083,000		2002	1,150
1997	\$11,639,000		1997	1,144
Change	\$2,444,000		Change	6
Percentage Increase	21.0%		Percentage Increase	0.5%
Annual Percentage Increase	4.2%		Annual Percentage Increase	0.1%

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

The data for accommodations (including hotels/motels, campgrounds, lodges, rental houses, bed and breakfasts) remained fairly constant. The area lost five establishments while sales rose over 15.8 percent or over \$11 million. Annual payroll increased by \$3.5 million or nearly 19 percent. Employment showed a small gain (25) or around one percent but sales per establishment increased by close to 24 percent (roughly \$73 thousand per establishment). This data is recorded in Tables 14 and 15.

**Table 14: Accommodation and Food
Services (NAICS: 72) Breakdowns 1997
and 2002**

2002	Accommodation and Food Services			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	24	9,623	2,751	307
Lincoln	14	3,028	830	77
Logan	66	29,221	7,905	839
McDowell	14	5,282	1,417	146
Mingo	36	10,930	3,062	338
Wayne	41	14,915	4,303	423
Wyoming	23	9,674	2,076	209
HMRRA Counties	218	82,673	22,344	2,339
1997	Accommodation and Food Services			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	22	8,269	2,355	259
Lincoln	11	2,160	539	72
Logan	63	24,045	6,121	751
McDowell	17	5,608	1,447	176
Mingo	42	10,801	3,089	346
Wayne	49	12,384	3,429	443
Wyoming	29	8,156	1,848	267
HMRRA Counties	233	71,423	18,828	2,314

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

Table 15: Accommodation and Food Services (NAICS: 72) Change 1997 – 2002

Accommodation and Food Services				
Sales			Sales Per Establishment	
2002	\$82,673,000		2002	\$379,234
1997	\$71,423,000		1997	\$306,536
Change	\$11,250,000		Change	\$72,697
Percentage Increase	15.8%		Percentage Increase	23.7%
Annual Percentage Increase	3.2%		Annual Percentage Increase	4.7%
Accommodation and Food Services				
Annual Payroll			Employment	
2002	\$22,344,000		2002	2,339
1997	\$18,828,000		1997	2,314
Change	\$3,516,000		Change	25
Percentage Increase	18.7%		Percentage Increase	1.1%
Annual Percentage Increase	3.7%		Annual Percentage Increase	0.2%

Source: 1997 and 2002 Economic Census, U.S. Census Bureau

<http://www.census.gov/econ/census02/>

<http://www.census.gov/epcd/www/econ97.html#1997>

The greatest gains occurred in Real Estate, Rental and Leasing as provided in Tables 16 and 17. Even though the number of establishments fell by five, sales rose by 54 percent and sales per establishment increased by almost 62 percent. Employment showed an increase of 7.3 percent or 35 employees. Annual payroll showed a significant gain of around 37 percent which is over \$2 million.

Table 16: Real Estate and Rental and Leasing (NAICS: 53) Breakdowns 1997 and 2002

2002	Real Estate and Rental and Leasing			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	10	2,117	359	23
Lincoln	6	1,064	335	21
Logan	30	20,153	2,931	112
McDowell	14	8,044	791	48
Mingo	15	4,035	721	35
Wayne	21	9,717	2,487	110
Wyoming	7	1,547	198	18
HMRRA Counties	103	46,677	7,822	367
1997	Real Estate and Rental and Leasing			
	Establishments	Sales (\$1,000)	Annual Payroll (\$1,000)	Paid Employees
Boone	15	4,411	334	26
Lincoln	5	607	273	12
Logan	23	7,415	1,726	87
McDowell	18	5,556	981	55
Mingo	16	2,601	333	34
Wayne	21	5,880	1,113	66
Wyoming	10	3,761	959	62
HMRRA Counties	108	30,231	5,719	342

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

Table 17: Real Estate and Rental and Leasing (NAICS: 53) Change 1997 – 2002

Real Estate and Rental and Leasing				
Sales			Sales Per Establishment	
2002	\$46,677,000		2002	\$453,175
1997	\$30,231,000		1997	\$279,917
Change	\$16,446,000		Change	\$173,258
Percentage Increase	54.4%		Percentage Increase	61.9%
Annual Percentage Increase	10.9%		Annual Percentage Increase	12.4%
Real Estate and Rental and Leasing				
Annual Payroll			Employment	
2002	\$7,822,000		2002	367
1997	\$5,719,000		1997	342
Change	\$2,103,000		Change	25
Percentage Increase	36.8%		Percentage Increase	7.3%
Annual Percentage Increase	7.4%		Annual Percentage Increase	1.5%

Source: 1997 and 2002 Economic Census, U.S. Census Bureau
<http://www.census.gov/econ/census02/>
<http://www.census.gov/epcd/www/econ97.html#1997>

Any time a major recreational area is opened a primary result is rising real estate activity. That increase is reflected in the Economic Census data. Recreational opportunities are a major attraction for real estate development as people look for second homes to be nearby the attraction. Land is purchased to build new business and old businesses sometimes change hands as entrepreneurs seek to develop opportunities. This “boom” should lead to higher tax revenues for local governments and improved service provision to residents.

Summary

It appears that some gains from the presence of the Hatfield~McCoy Trail System have already begun to occur. The Hatfield McCoy Trails did not open until the year 2000 so its effect on these figures is limited to two years. The 2007 Census data will provide much more helpful insight. The industries discussed above are those which will be most heavily impacted by the system. It is anticipated that significant gains will be recorded in all.

Impact on Income, Output, Jobs and State Revenue

In order to determine the economic impact on the State, CBER used the IMPLAN model.²⁷ IMPLAN is an input-output model which takes the mathematical relationships between sectors of a region's economy and relates them to the social and economic characteristics of that economy. Based on these relationships the economic impacts of a given program or project can be determined. The result is an estimate of the income, output and jobs which can be attributed to that specific program or project. In the case of this analysis, the region is the State of West Virginia and the project is the Hatfield McCoy Trails.

The most important component of an economic impact study is output which estimates the total production of goods and services from the presence of a program in an area such as the Hatfield~McCoy Trail System. Output results from direct spending on labor, supplies, equipment and services and is called the "direct effect." That spending creates income for workers and suppliers which is then respent many times in the region. The respending has both "indirect" and "induced" effects. Indirect spending is by establishments which provide employment and materials in support of the direct spending. The induced effect is spending by households as a result of employment from direct and indirect spending.

The economic key is the respending that creates a multiplier effect which ripples throughout the state as money is spent many times more. The summary impacts from the Hatfield~McCoy Trail System are given in Table 18.

The total economic impact on the Hatfield~McCoy region²⁸ is already significant. The data used are those collected from the survey results in Appendix A. The spending by survey participants is used as a proxy for spending by all those who used the trail system during the past year. The number of usable respondents provides a statistically valid sample. In addition, spending from other sources such as grants, sponsor support, State funding and advertising are also included.

As Table 18 indicates, for direct effects the Hatfield~McCoy Trail System produced over \$5 million in additional regional output that would not have existed if the system had not been there. This translates into almost \$2 million in additional income for those 112 individuals who were directly employed (full or part time) due to the spending. This direct spending resulted in indirect results of approximately an additional \$1 million in output, almost \$300 thousand in additional income received and employment of 10.5 additional workers.

The induced effects as the direct and indirect spending by households is respent many times within the region are even more impressive. An additional \$1.7 million in output, \$642 thousand in income and 23.2 more workers were employed as the direct and

²⁷ IMPLAN Professional Version 2.0 (1999) Minnesota IMPLAN Group, Stillwater, MN.

²⁸ For purposes of this analysis only the original seven counties are included as no projects have been launched in Kanawha or Mercer Counties.

indirect spending is spent by households in the region. The total impact of the Hatfield McCoy Trails is \$7.8 million in additional regional output, \$2.8 million more labor income and 146 additional employment.

Table 18: Impacts of Hatfield~McCoy Trail System

	Direct	Indirect	Induced	Total
Output	5,183,698	934,764	1,657,654	7,776,116
Income	1,861,242	294,725	642,068	2,798,036
Jobs	112	11	23	146*

* FTE – Full Time Equivalent

The personal income originating from the recreation related activities also generates tax revenue for the State. Table 19 represents the additional tax dollars attributable to the income from the direct, indirect and induced income produced as a result of the operations of the Hatfield~McCoy Trail System.

Table 19: Hatfield~McCoy Trail System Impact on State Tax Revenue

Tax	Direct	Total
Personal Taxes	\$168,466	\$218,103
Consumer Sales & Use Taxes	\$153,066	\$198,165
Business Taxes**	\$106,861	\$138,347
Excise Taxes	\$50,366	\$65,206
Misc Fees & Transfers	\$2,264	\$2,930
Total State	\$481,023	\$622,752

** Severance, Property Transfer, Racing Fees, Estate and Inheritance taxes are omitted.

The Hatfield~McCoy Regional Recreation Authority is funded through a variety of public and private sources. The primary public funding comes from two sources, the West Virginia Legislature, through direct appropriations, and quarterly contributions from the West Virginia Parkways Economic Development and Tourism Authority. These funds currently constitute approximately thirty-five percent of the total revenue received by the Authority. These two sources of revenue totaled \$750,000 in fiscal year 2005.²⁹

The benefits of an investment such as the Hatfield~McCoy Trail System can be measured by several methods, including job creation, increase in tourism, and jobs for its citizens. However, Table 19 shows the specific return of tax revenue to the State directly attributed to the operation of the Hatfield~McCoy Trail System. For the \$500,000 directly appropriated by the West Virginia Legislature the annual return is approximately \$623,000. This tax revenue shows a return on investment to the State of 125%. When the contributions from the West Virginia Parkways Economic Development and Tourism Authority are added, the return on investment still exceeds 80% annually. This is an outstanding return for an established project, let alone one such as this which is still in its infancy. As additional trails are completed and projected counties added to the system, the return on the State's investment should see exponential growth in all areas of economic impact.

²⁹ Lusk, J. "Financial Plan for Future Growth and Development of the Hatfield~McCoy Trail System System," (July, 2006), Hatfield~McCoy Regional Recreation Authority.

Appendix A: Survey Instrument

Hatfield~McCoy Trail System Visitor Questionnaire

Hatfield~McCoy Trail System Visitor Questionnaire

By answering the questions in this brief survey you can help us create an experience you will want to repeat again and again!

All personal information will remain anonymous and confidential.

Date of Interview: _____ Event (if applicable) _____

1. Is this your first visit to the Hatfield~McCoy Recreation Trails? Yes No

If “No”, how many other visits have you made? _____

2. How did you first hear about the Hatfield~McCoy Recreation Trails?

- Television Magazine Newspaper Hatfield~McCoy Website
 CallWVA Website Trade Shows Word of Mouth
 Other (Specify) _____

3. What type of permit did you purchase?

- Event Package One-Day Three-Day
 Annual, In-State Annual, Out-of-State

4. How many people are in your group? _____

5. What are the approximate age ranges of the members of your group?

Age	Male	Female
0-15		
16-24		
25-34		
35-54		
55-64		
65 +		

6. Where are you (or your group) from?

City: _____ State: _____ Zip Code: _____

7. How many days do you plan (or did you) stay? _____

8. Approximately how many miles did you travel to visit Hatfield~McCoy?

- Less than 25 201-300 501-1000
 25-100 301-400 1000 +
 101-200 401-500

9. Where did you stay during your time at Hatfield~McCoy?

- Own home Hotel/motel With friends or family
 Camping Bed & Breakfast Rental property/condo
 Other _____

10. Was this part of a larger trip or vacation? Yes No

If yes, was Hatfield~McCoy your primary destination? Yes No

11. Approximately how much did you spend (or plan to spend on the following categories?)

Category	Total Expenditures	WV Expenditures
Accommodations		
Prepared Food (restaurants, etc.)		
Groceries		
Fuel for automobile		
Fuel for trail vehicles		
Trail vehicle repairs		
Riding and/or vehicle accessories		
Souvenirs		
Other (please specify) _____		

12. Which of the following statements best describes yourself as a rider?

- I ride the trails for leisure and/or scenery
 I enjoy a challenging ride
 I prefer an “extreme” ride on the trails

13. What trails did you (or do you plan to) ride?

- Browning Fork Buffalo Mountain Dingess Run
 Little Coal River Pinnacle Creek

14. What type of trail vehicle did you ride?

- ATV Motorcycle Mountain Bike
 Other _____

15. Please rate your satisfaction with the following items:

Item	Poor	Fair	Average	Good	Excellent
Trail difficulty					
Condition of trails					
Trails were well marked					
Scenic value of trails					
Permit purchasing system					
Information of website					
Directions to trailheads					
Trailhead facilities					
Hatfield~McCoy staff					
Overall Experience					

17. How likely are you to return to the Hatfield~McCoy trail?

- Will definitely return
 Probably will return
 May or may not return
 Probably will not return
 Definitely will not return

18. How many visits will you (or do you plan to) make to Hatfield~McCoy this year?

- 1 4 8-9
 2 5 10-12
 3 6-7 More than 12 (specify) _____

19. How many days will you (or do you plan to) spend on the trails at Hatfield-McCoy this year?

- 1 4 8-9
 2 5 10-12
 3 6-7 More than 12 (specify) _____

20. What changes or improvements do you feel would add to the overall quality and experience of the Hatfield~McCoy Trail System?

Thank you for your cooperation, we really appreciate your help!

Appendix B: Survey Results

Hatfield~McCoy Trail System Visitor Survey Results

Hatfield~McCoy Trail System Visitor Survey Results

The Visitor Questionnaire was developed in partnership by the Center for Business and Economic Research (CBER) and the Hatfield~McCoy Regional Recreation Authority. It was distributed to trail visitors during the months of May through October of 2006. Results were tabulated by the CBER and are summarized here. Incomplete or invalid instruments were removed to ensure the quality of the data provided.

Is this your first visit to the Hatfield~McCoy Recreation Trails?

	Responses	Percentage
Yes	197	50.4%
No	194	49.6%
Total Responses	391	100.0%

If "No", how many other visits have you made?

	Responses	Percentage
1 to 5	144	74.2%
6 to 10	12	6.2%
11 to 15	8	4.1%
15 to 20	0	0.0%
More than 20	2	1.0%
No Response	28	14.4%
Total Responses	194	100%

How did you first hear about the Hatfield~McCoy Recreation Trails?

	Responses	Percentage
Television	15	3.8%
Magazine	62	15.9%
Newspaper	0	0.0%
Hatfield~McCoy Website	92	23.5%
Call WV Website	17	4.3%
Trade Shows	5	1.3%
Word of Mouth	178	45.5%
Other	21	5.4%
No Response	1	0.3%
Total Responses	391	100.0%

What type of permit did you purchase?

	Responses	Percentage
Event Package	50	12.8%
Annual, In-State	51	13.0%
One-Day	28	7.2%
Annual, Out-of-State	46	11.8%
Three-Day	203	51.9%
No Response	13	3.3%
Total Responses	391	100.0%

How many people are in your group?

Group Size	Responses	Percentage
1	15	3.8%
2	69	17.6%
3	48	12.3%
4	78	19.9%
5	38	9.7%
6	20	5.1%
7	28	7.2%
8	29	7.4%
9	4	1.0%
10	8	2.0%
11 to 15	16	4.1%
16 to 20	21	5.4%
21 to 25	1	0.3%
26 to 30	3	0.8%
31 to 35	0	0.0%
36 to 40	3	0.8%
No Response	10	2.6%
Total Responses	391	100%

What are the approximate age ranges of the members of your group?

Age	Male	Female
0 to 15	5.8%	1.6%
16 to 24	7.0%	0.7%
25 to 34	17.9%	1.9%
35 to 54	42.6%	10.5%
55 to 64	9.8%	0.9%
65 and over	1.2%	0.2%
Total Responses	84.2%	15.8%

How many days do you plan (or did you) stay?

Days	Responses	Percentage
1	28	7.2%
2	39	10.0%
3	111	28.4%
4	96	24.6%
5	43	11.0%
6	13	3.3%
7	32	8.2%
8	3	0.8%
9	1	0.3%
10	4	1.0%
14	2	0.5%
No Response	19	4.9%
Total Responses	391	100%

Where are you (or your group) from?

Location	Responses	Percentage
Pennsylvania	73	18.7%
Ohio	69	17.6%
West Virginia	57	14.6%
North Carolina	33	8.4%
Virginia	29	7.4%
Michigan	17	4.3%
Maryland	15	3.8%
Kentucky	12	3.1%
New York	12	3.1%
Florida	11	2.8%
New Jersey	10	2.6%
Missouri	8	2.0%
South Carolina	7	1.8%
Tennessee	7	1.8%
Indiana	6	1.5%
Georgia	4	1.0%
Mississippi	4	1.0%
Maine	4	1.0%
Canada	4	1.0%
Illinois	2	0.5%
Connecticut	2	0.5%
Vermont	1	0.3%
Maine	1	0.3%
Louisiana	1	0.3%
Nebraska	1	0.3%
Bahamas	1	0.3%
No Response	1	0.3%
Total Responses	391	100%

Approximately how many miles did you travel to visit Hatfield~McCoy?

Miles	Responses	Percentage
Less than 25	17	4.3%
25 to 100	33	8.4%
101 to 200	46	11.8%
201 to 300	89	22.8%
301 to 400	75	19.2%
401 to 500	54	13.8%
501 to 1000	68	17.4%
1000 and over	8	2.0%
No response	1	0.3%
Total Responses	391	100.0%

Where did you stay during your time at Hatfield~McCoy?

Accommodation	Responses	Percentage
Own Home	31	7.9%
Camping	128	32.7%
Hotel/Motel	75	19.2%
Bed & Breakfast	25	6.4%
With Friends or Family	13	3.3%
Rental Property/Condo	89	22.8%
Other	14	3.6%
No response	16	4.1%
Total Responses	391	100.0%

Was this part of a larger trip or vacation?

	Responses	Percentage
Yes	144	36.8%
No	247	63.2%
Total Responses	391	100.0%

If yes, was Hatfield~McCoy your primary destination?

	Responses	Percentage
Yes	179	89.1%
No	22	10.9%
Total Responses	201	100.0%

Approximately how much did you spend (or plan to spend) on the following categories?

Accommodations				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	13	\$555	32	\$1,239
\$51 to \$100	22	\$1,774	59	\$5,135
\$101 to \$200	34	\$5,715	74	\$12,588
\$201 to \$300	18	\$5,064	31	\$8,404
\$301 to \$400	12	\$4,510	19	\$7,034
\$401 to \$500	6	\$2,845	12	\$5,825
\$501 to \$750	8	\$4,850	14	\$8,750
\$751 to \$1,000	2	\$1,800	5	\$4,380
\$1,000 and over	3	\$3,710	4	\$4,790
		\$30,823		\$58,145

Prepared Food				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	37	\$1,320	99	\$3,478
\$51 to \$100	38	\$3,560	71	\$6,555
\$101 to \$200	16	\$2,845	37	\$6,645
\$201 to \$300	8	\$2,200	15	\$4,150
\$301 to \$400	1	\$400	4	\$1,600
\$401 to \$500	1	\$500	3	\$1,450
\$501 to \$750	1	\$720	1	\$720
		\$11,545		\$24,598

Groceries				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	45	\$1,555	109	\$3,936
\$51 to \$100	14	\$1,245	54	\$4,955
\$101 to \$200	6	\$1,000	16	\$2,664
\$201 to \$300	4	\$1,025	6	\$1,625
\$301 to \$400	0	\$0	0	\$0
\$401 to \$500	0	\$0	1	\$500
		\$4,825		\$13,680

Fuel for Automobile				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	14	\$425	41	\$1,504
\$51 to \$100	45	\$3,967	74	\$6,530
\$101 to \$200	34	\$5,865	89	\$15,515
\$201 to \$300	7	\$2,030	35	\$9,880
\$301 to \$400	5	\$2,000	16	\$6,270
\$401 to \$500	1	\$500	10	\$5,000
\$501 to \$750	0	\$0	3	\$1,900
\$751 to \$1,000	0	\$0	4	\$3,360
		\$14,787		\$49,959

Fuel for Trail Vehicle				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	67	\$1,964	190	\$5380
\$51 to \$100	27	\$2,250	53	\$4465
\$101 to \$200	3	\$425	8	\$1375
\$201 to \$300	3	\$850	1	\$250
\$301 to \$400	0	0	1	\$300
		\$5,489		\$11,770

Trail Vehicle Repairs				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	14	\$444	25	\$779
\$51 to \$100	2	\$100	5	\$460
\$101 to \$200	1	\$150	7	\$1,020
\$201 to \$300	1	\$225	1	\$225
\$301 to \$400	0	\$0	0	\$0
\$401 to \$500	0	\$0	1	\$500
		\$919		\$2,984

Riding and/or Vehicle Accessories				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	15	\$524	37	\$1,274
\$51 to \$100	11	\$981	23	\$2,011
\$101 to \$200	2	\$310	7	\$1,160
\$201 to \$300	0	\$0	1	\$300
\$301 to \$400	0	\$0	1	\$350
\$401 to \$500	1	\$500	1	\$500
		\$2,315		\$5,595

Souvenirs				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	62	\$2,054	133	\$4,425
\$51 to \$100	9	\$800	25	\$2,282
\$101 to \$200	1	\$150	9	\$1,700
\$201 to \$300	1	\$300	2	\$550
\$301 to \$400	0	\$0	1	\$400
		\$3,304		\$9,357

Other				
	In WV	Amount Spent	Total	Amount Spent
\$50 or less	2	\$21	4	\$46
\$51 to \$100	3	\$220	5	\$390
\$101 to \$200	2	\$390	2	\$400
\$201 to \$300	0	\$0	6	\$1,750
\$301 to \$400	1	\$400	1	\$345
\$401 to \$500	0	\$0	1	\$500
\$501 to \$750	0	\$0	2	\$1,310
\$751 to \$1,000	2	\$1,650	1	\$1,000
\$1,000 and over	1	\$7,000	1	\$7,000
		\$9,681		\$12,741

Which of the following statements best describes yourself as a rider?

	Responses	Percentage
I ride the trails for leisure and/or scenery	207	52.9%
I enjoy a challenging ride	190	48.6%
I prefer an "extreme" ride on the trails	68	17.4%
No Answer	9	2.3%

*Response percentages sum more than 100.0% due to multiple potential responses.

What trails did you (or do you plan to) ride?

	Responses	Percentage
Browning Fork	181	46.3%
Little Coal River	198	50.6%
Buffalo Mountain	164	41.9%
Pinnacle Creek	131	33.5%
Dingess Rum	113	28.9%

*Response percentages sum more than 100.0% due to multiple potential responses.

What type of trail vehicle did you ride?

	Responses	Percentage
ATV	342	87.5%
Motorcycle	50	12.8%
Mountain Bike	2	0.5%
Other	3	0.8%

*Response percentages sum more than 100.0% due to multiple potential responses.

Please rate your satisfaction with the following items:

	Poor	Fair	Average	Good	Excellent	NA	Total
Trail difficulty	1	16	59	160	104	51	391
	0.26%	4.09%	15.09%	40.92%	26.60%	13.04%	
Condition of trails	3	16	44	177	102	49	391
	0.77%	4.09%	11.25%	45.27%	26.09%	12.53%	
Trails were well marked	0	8	41	130	162	50	391
	0.00%	2.05%	10.49%	33.25%	41.43%	12.79%	
Scenic value of trails	1	12	31	128	168	51	391
	0.26%	3.07%	7.93%	32.74%	42.97%	13.04%	
Permit purchasing system	2	13	29	142	152	53	391
	0.51%	3.32%	7.42%	36.32%	38.87%	13.55%	
Information of website	2	8	28	131	154	68	391
	0.51%	2.05%	7.16%	33.50%	39.39%	17.39%	
Directions to trailheads	8	10	41	136	144	52	391
	2.05%	2.56%	10.49%	34.78%	36.83%	13.30%	
Trailhead facilities	3	9	42	162	125	50	391
	0.77%	2.30%	10.74%	41.43%	31.97%	12.79%	
Hatfield~McCoy staff	1	2	14	115	205	54	391
	0.26%	0.51%	3.58%	29.41%	52.43%	13.81%	
Overall Experience	0	3	12	113	216	47	391
	0.00%	0.77%	3.07%	28.90%	55.24%	12.02%	

How likely are you to return to the Hatfield~McCoy trail?

	Responses	Percentage
Will definitely return	296	75.7%
Probably will return	62	15.9%
May or may not return	6	1.5%
Probably will not return	2	0.5%
Definitely will not return	3	0.8%
No Response	22	5.6%
Total Responses	391	100.0%

How many visits will you (or do you plan to) make to Hatfield~McCoy this year?

	Responses	Percentage
1	135	34.5%
2	121	30.9%
3	56	14.3%
4	12	3.1%
5	5	1.3%
6 to 7	13	3.3%
8 to 9	1	0.3%
10 to 12	9	2.3%
More than 12	15	3.8%
No Response	24	6.1%
Total Responses	391	100%

How many days will you (or do you plan to) spend on the trails at Hatfield~McCoy this year?

	Responses	Percentage
1	17	4.3%
2	36	9.2%
3	58	14.8%
4	52	13.3%
5	38	9.7%
6 to 7	76	19.4%
8 to 9	20	5.1%
10 to 12	24	6.1%
More than 12	48	12.3%
No Response	22	5.6%
Total Responses	391	100%

Appendix C: Trail Maps

Hatfield~McCoy Trail Maps

