National Transportation Library

Section 508 and Accessibility Compliance

The National Transportation Library (NTL) both links to and collects electronic documents in a variety of formats from a variety of sources. The NTL makes every effort to ensure that the documents it collects are accessible to all persons in accordance with Section 508 of the Rehabilitation Act Amendments of 1998 (29 USC 794d), however, the NTL, as a library and digital repository, collects documents it does not create, and is not responsible for the content or form of documents created by third parties. Since June 21, 2001, all electronic documents developed, procured, maintained or used by the federal government are required to comply with the requirements of Section 508.

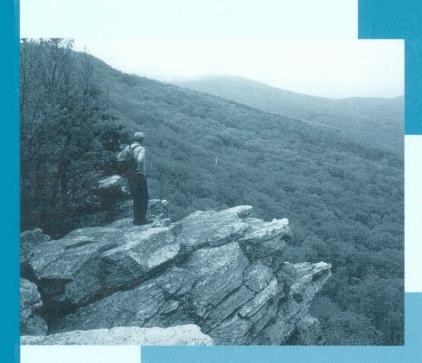
If you encounter problems when accessing our collection, please let us know by writing to librarian@bts.qov or by contacting us at (800) 853-1351. Telephone assistance is available 9AM to 6:30PM Eastern Time, 5 days a week (except Federal holidays). We will attempt to provide the information you need or, if possible, to help you obtain the information in an alternate format. Additionally, the NTL staff can provide assistance by reading documents, facilitate access to specialists with further technical information, and when requested, submit the documents or parts of documents for further conversion.

Document Transcriptions

In an effort to preserve and provide access to older documents, the NTL has chosen to selectively transcribe printed documents into electronic format. This has been achieved by making an OCR (optical character recognition) scan of a printed copy. Transcriptions have been proofed and compared to the originals, but these are NOT exact copies of the official, final documents. Variations in fonts, line spacing, and other typographical elements will differ from the original. All transcribed documents are noted as "Not a True Copy."

The NTL Web site provides access to a graphical representation of certain documents. Thus, if you have any questions or comments regarding our transcription of a document's text, please contact the NTL at librarian@bts.qov. If you have any comment regarding the content of a document, please contact the author and/or the original publisher.

The Economic Impacts and Uses of Long-Distance Trails



A Case Study of the Overmountain Victory National Historic Trail

United States Department of the Interior National Park Service







The Economic Impacts and

Uses of Long-Distance Trails

Featuring a Case Study of the Overmountain Victory National Historic Trail

March 1998

By
Roger L. Moore, Ph.D., and Kelly Barthlow
Department of Parks, Recreation and Tourism Management
North Carolina State University
Raleigh, N.C.

Prepared for
United States Department of the Interior
National Park Service

Table of Contents

Executive Summary	vii
Acknowledgments	ix
Introduction	1
Part 1. Conducting a Long-Distance Trail Study Using the Overmountain Victory National Historic Trail as a Model	3
Planning for the Sampling	5
Sample Sites 6, Sample Sizes 10, Data Collection 12, Data Analysis 13	
Reporting the Findings	15
User Characteristics 15, Characteristics of Visit 15, Site Experience 18, Trail Experience 21, Economic Impact 25	
Interpreting the Results	31
User Characteristics 31, Characteristics of Visit 31, Site Experience 32, Trail Experience 33, Economic Impact 34, Results Compared by Site 35	
Taking Action	37
Message for Managers 37, Further Research 39, Conclusions 40	
Part 2. Analysis of Current Literature	41
Economic Impact Studies	43
Benefits of Trails Generally 45, Impacts of Long-Distance Trails 47, Economic Impacts of Other Trails 49, Forecasting Economic Impacts 55, Effects on Property Value 57, Summary Tables 59, Conclusions 63	
Measuring Trail Use	65
Information on Use and Users 65, Techniques for Estimating Trail Use 66, Conclusions 68	
Measuring Economic Impacts	69
Planning the Study 69, Defining the Local Impact Area 71, Data Gathering Options 71, Using Multipliers 72, Conclusions 74	
Appendices	
A. On-site Questionnaire	76
B. Mail-in Questionnaire	79
C. Results Compared by Site	92
D. Contact Persons	108
E. Visitor Comments	110
Bibliographic References	121
Index	127

List of Figures

1.	Map of Overmountain Victory National Historic Trail	. 4
2.	Visitor Age	15
3.	Education Level	16
4.	Annual Household Income	17
5.	User Groups	17
6.	Group Size	17
7.	Nature of Visit	18
8.	Reason for Trip	18
9.	Nights Away From Home	19
10.	Lodging Used	19
11.	Miles Traveled	19
12.	Length of Stay	19
13.	How Learned of Site	20
14.	Repeat Visits	22
15.	Enjoyed Visit	23
16.	Number of Sites Visited	23
17.	Number of Sites Ever Visited	23
18.	Interest in More Sites	24
19.	Use of Off-Road Trail Segments	24
20.	Interest in Off-Road Trail Segments	24
21.	Average Expenditures/Person/ Day	26
22.	Average Expenditures/Person/Day by Outside Visitors	27
	List of Tables	
1.	Sample Sizes and Response Rates	13
2.	U.S. Visitors	16
3.	International Visitors	16
4.	Reasons for Visiting Site	21
5.	Best Liked Features	21
6.	Least Liked Features	22
7.	Average Expenditures/Person/Day	25

8.	Estimated Average Expenditures by Visitors in Trail Corridor	27
9.	Total Economic Impact of Overmountain Victory Trail Sites	29
10.	Economic Impact Studies of Trails and Trail Activities	60
10a.	Forecasts of Economic Impacts Related to Proposed Trails	. 62
Table	es 11–38, Appendix C, compare the survey results by individual sites.	
11.	Visitor Gender	94
12.	Visitor Age	94
13.	Education Level	95
14.	Annual Household Income	95
15.	U.S. Visitors	96
16.	International Visitors	96
17.	User Groups	97
18.	Group Size	97
19.	Nature of Visit	98
20.	Reasons for Trip	98
21.	Overnight Away From Home	99
22.	Number of Nights Away From Home	99
23.	Lodging Used	. 100
24.	Miles Traveled	. 100
25.	Length of Stay	. 101
26.	How Learned of Each Site	. 101
27.	Importance of Reasons for Visiting Site	. 102
28.	First Visit to Site	. 102
29.	Repeat Visits in Last Two Years	. 103
30.	Enjoyed Visit	. 103
31.	Aware of OVT Events and OVT	. 104
32.	Aware of Brochure and Interest in OVT	. 104
33.	Involvement in OVTA	. 105
34.	Visit Result in Unplanned Stops Along OVT	. 105
35.	Interest in Visiting Other OVT Sites	. 106
36.	Interest in Off-Road Trail Segments	. 106
37.	Average Expenditures/Person/Day	
38.	Expenditures in Each Site's County by Outside Visitors	. 107

Executive Summary

his report investigates use patterns and economic impacts of long-distance trails. The project goals were

- to review the existing literature related to the economic impacts of trails and trail use,
- to adapt existing research methods for use in documenting the use patterns and resulting economic impacts of long-distance trails, and
- to apply these methods to one of these trails, the Overmountain Victory National Historic Trail (OVT).

The OVT, one of 20 long-distance trails in the National Trails System, crosses parts of Virginia, Tennessee, North Carolina, and South Carolina and is administered by the National Park Service. The OVT traces the route of frontier militia volunteers along their march to defeat a Loyalist army at the Battle of Kings Mountain in 1780. The Trail consists of some 300 miles of motor route, a series of historic sites and visitor centers operated by a variety of public and private agencies, and several off-road trail segments.

The literature review revealed a substantial body of research documenting a wide range of benefits to users, trail communities, and local landowners as a result the existence of trails and trail use. One important benefit is the economic impacts that trails and their use generate. The levels of these impacts may vary depending on the trails themselves, the users, and the size and structure of the local economy. Users' levels of expenditures seem to be particularly affected by how far they travel to get to the trail, how long they stay, and what types of lodging they use.

Trail-related visitor expenditures have been found to range from less than \$1/person/day to over \$75. The total economic impacts of

individual trails have been estimated to be well over a million dollars annually, and one state has estimated that \$400 million is spent annually on trail recreation within its borders.

The existing research regarding the economic impacts of trails varies in terms of methods used and level of sophistication. A large number of studies are summarized in Part 2 of this report, and information from each is presented in two ways. All the reviewed literature is discussed in the text. In addition, a concise summary table of the most relevant economic impact studies related to trails is provided beginning on page 60. The table presents the most essential information from each study and makes it possible to compare across studies and check information quickly.

In order to examine the users, uses, and economic impacts of the OVT, a sample of 2,815 users were contacted at 10 OVT sites, 2 off-road segments, and 2 trail-related events from July 1995 through January 1996. Sixtythree percent of the contacted users returned mail questionnaires sent to them shortly after their visits. Overall, OVT visitors had a mean age of 48 and were slightly more likely to be male than female. Most had completed college, and about half had annual household incomes between \$35,000 and \$75,000. Sixtytwo percent had come from the three main OVT states (NC, TN, and SC). However, nearly 10% had come from states west of the Mississippi, and 2% came from other nations, primarily Great Britain and Canada. The most common types of visitor groups were families, and two was the most common group size. Nearly 60% spent at least one night away from home. Motels and hotels were the most common form of lodging.

The most frequently given reason for being on the Trail was to visit the particular site

where they were interviewed, but 30% wanted to learn more about Revolutionary War history and 12% wanted to travel part of the OVT. The median distance traveled to the sites was 130 miles, and the median length of stay was 1 1/2 hours. The most common ways visitors had first heard about the site was from family or by seeing a highway sign. While two-thirds were first time visitors, one-fifth had been to the interview site five or more times in the past two years. The most important reasons for visiting the sites related to history, nature, and having a good time. The vast majority enjoyed their visits and reported that the interpretive information and natural settings were the aspects they liked the best about their visit. The thing liked least was not finding enough interpretive information at the sites.

Half of the visitors had been aware of the Overmountain March and the Battle of Kings Mountain prior to their visit; but only 28% had been aware of the National Historic Trail. Only one-third had seen the OVT brochure even after their visit was completed. The nonprofit Overmountain Victory Trail Association (OVTA) and its activities were even less visible. Only 16% had attended a reenactment event, less than 2% had ever marched along during the annual reenactment, and just 1% were OVTA members. Most had only visited one OVT site; but interest in visiting other sites was high. One fifth said their visit had prompted them to make an unplanned visit to another OVT site during their trip, and over two-thirds wanted to know more about the OVT and Kings Mountain.

Visits to Overmountain Victory Trail sites were found to generate a significant economic impact in 1995. On average, users spent \$49.05 per person per day on their trips, \$16 of this in the 15 counties through which the Trail passes. In 1995, there were an estimated 1,148,832 visits to the 14 OVT sites examined in this study. The total direct spending in the 15 Trail counties by visitors from outside these

counties (i.e., "new money") was just over \$16 million for the year.

Using the USDA Forest Service "IMPLAN" software to estimate the economic impacts, the study suggests that the visitors to the OVT generated over \$22.4 million in total industrial output, \$12.4 million in total income, and \$14.1 million in total value added in the 15 Trail counties in 1995. The existence of the OVT sites were estimated to support 521 jobs in the Trail counties. When considering only those who visited to travel the OVT or learn more about Revolutionary War era history, \$5.38 million in "new" money" and \$7.55 millionin total economic impact were generated. The biggest beneficiaries were the eating and drinking, retail, and hotel and lodging industries.

In general, the OVT and the sites associated with it were found to be popular and to provide many benefits to visitors and surrounding communities, particularly in terms of on-site experiences and regional economic impacts. There is, however, room for improvement in getting the word out regarding the OVT before, during, and after visitors' stops at the individual sites. This is particularly true in terms of informing the public that each site is part of the National Historic Trail and motivating people to follow more of the route, visit more of the sites, and learn more about their related history. As with all long-distance trails, the success of the OVT will continue to depend on the effective cooperation and coordination of the many public and private partners that make it possible.

This is the first trailwide (end-to-end) study of any of America's national scenic and historic trails that assesses use levels and determines economic impacts. Hopefully, the method developed to examine the OVT can be used to assess other long-distance trails for comparable results—and also to repeat previous studies in order to determine trends and changes over time.

Acknowledgments

he authors would like to thank all the people who contributed to this project. Our special thanks go to the managers of the trail sites who welcomed us and assisted with the study in every way and to the staffs at these sites who added visitor interviewing to their duties for six months in 1995. Thanks to the leaders and members of the Overmountain Victory Trail Association for their advice and assistance; to graduate students Robert Langston, David Dannenberg, Alan Roberds, and David Cernicek for their major contributions in the literature review, data entry and analysis; and to Dr. Gene Brothers and Rachel Chen for their advice and contributions in the final calculations of economic impacts. Special thanks are also extended to Steve Elkinton, Program Leader for National Trails System Programming at the National Park Service, who developed the idea for this study, and to Dr. John Karish, who served as the National Park Service project coordinator for the effort. Their support in project guidance, resources, and review of drafts were invaluable. In addition, we want to express our appreciation to Janice McCoy for the final editing and design of this book. The authors would also like to acknowledge the valuable comments of four reviewers of drafts of the final report: Dr. Charles Strauss of the School of Natural Resources at the Pennsylvania State University; Dr. Jeffrey Marion, Unit Leader and Research Scientist for the U.S. Geological Survey; Dr. Daniel Stynes of the Park, Recreation and Tourism Resources Department at Michigan State University; and Jim Renner, Executive Director of the Oregon Trails Coordinating Council.



OVTA reenactors display the colors at the Kings Mountain Monument. Photo by Mike Dahl.

Introduction

Trail System Act in 1968, the
United States has established 20
national scenic and national historic trails linking together all but six states. These trails are the Appalachian, Pacific Crest, Continental Divide, North Country, Ice Age, Florida, Potomac Heritage, and Natchez Trace National Scenic Trails; and the Oregon, Mormon Pioneer, Lewis and Clark, Iditarod, Overmountain Victory, Nez Perce (Nee-Me-Poo), Santa Fe, Trail of Tears, Juan Bautista de Anza, California, Pony Express, and Selma to Montgomery National Historic Trails.

Together, their combined corridors total over 37,000 miles.

Many trail proponents feel strongly that national scenic and historic trails generate significant benefits for trail users and for the communities, states, and regions through which they pass. Of particular importance, they feel, are the recreational, historical, cultural, and economic benefits long-distance trails provide. Until now, however, little research had been conducted on the use or benefits of long-distance trails. The use and economic impacts of long-distance trails offers an important area for systematic study since much of the information until now has been only anecdotal.

To assess adequately the benefits of a network of resources as large and diverse as long-distance trails will take many studies over many years. This report is the result of a cooperative agreement between the National Park Service and North Carolina State University to begin this assessment process. The research program has four objectives:

• To determine the economic impacts of long-distance trails. How much eco-

- nomic impact does long-distance trail use generate for the communities, states and regions through which it passes?
- To profile trail users and assess the total visitor use of long-distance trails. How many people use long-distance trails? What are the characteristics of these users? Where do they come from and how long do they stay? How do they use the trails and how frequently do they visit them?
- To compare and contrast the use, users, economic impacts and recreational

My husband and I were interested in learning more about the American Revolution. We are both teachers in a junior high school in Pennsylvania. Driving from S. C to N. C to visit relatives, we visited the Star Fort at '96, then decided to visit Kings Mountain and Cowpens. At Cowpens we picked up the Overmountain Victory Trail brochure, but frankly found it very confusing. While visiting relatives in Morganton, we stopped at the local tourism office and were told about the display at Old Burke County Courthouse. At dinner in a Morganton restaurant we spoke with a gentleman who takes part in the reenactments. After visiting the court house and talking with the participant, then observing the trail signs, we finally understood the concept of the trail and we hope to visit more of the sites on a return trip.

-Old Burke County Courthouse Visitor

benefits among the different long-distance trails. Of particular interest are similarities and differences that exist between national scenic and national historic trails.

To examine the experiences long-distance trail users are seeking and the extent to which their trail visits are yielding the benefits they seek.

To accomplish these objectives, the National Park Service, North Carolina State University, and others developed a comprehensive research methodology to examine the use patterns and estimate the economic impacts of long-distance trails and tested the methodology at sites on the Overmountain Victory National Historic Trail (OVT) in Tennessee, North Carolina, and South Carolina. The results are presented here as a case study in how to conduct a use and economic impacts study of long-distance trails.

The first task in the development of the methodology was to review thoroughly the existing literature relating to long-distance trail use and economic impacts. The second task was to design a study based on the best literature reviewed which would yield high quality data at a reasonable cost and which could be applied to any of the long-distance trails with minimal adaptation. The third task was to test

the study design by applying it to one of America's long-distance trail. Refinements and adaptations to the original methodology will be made as necessary for each future study, particularly in terms of sampling locations, sampling techniques, and sample sizes. Other objectives may be added to the original four if the circumstances of a trail warrant.

This report presents the comprehensive study of the users, their levels of use, and the economic impacts of the OVT. The study was conducted from July 1995 through January 1996 and involved over 2,800 interviews and mail surveys of visitors to OVT sites and spectators at OVT-related events. The report is organized into two parts—the case study itself and the review of literature. Visitor comments appear throughout the report to illustrate in the respondents' own words their reactions to their Trail visit. Appendices contain copies of the study instruments, names of contact persons for both the study and the Overmountain Victory National Historic Trail, a collection of the comments of visitors made on the questionnaires, and a comprehensive reference list. It is hoped that the results of this study and the program of research will be useful to trail advocates and managers in their efforts to effectively protect and manage national trails across America.



Typical OVT trail marker at the beginning of a footpath segment in North Carolina. Photo by author.

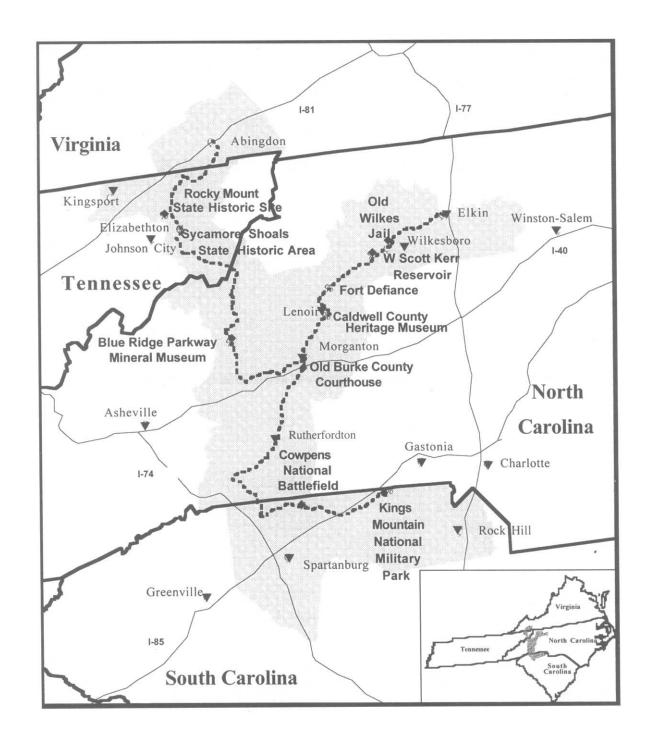
Part 1

Conducting a Long-Distance Trail Study Using the Overmountain Victory National Historic Trail as a Model

Study Procedures

Plan the Sampling5	Interpret the Results		
Select the sites Decide on the sample sizes Decide how to collect the data Decide on a method of analysis	Analyze the trail users Analyze the economic impacts Compare the results		
Report the Findings 15	Take Action	37	
Identify the trail users	Coordinate with related sites		
Quantify their experiences	Refine the methodolgy		
Quantify the economic impacts			





Planning for the Sampling

ong-distance trail studies are generally conducted to provide planners, managers, and cooperators with information on trail use and impacts that will assist them in accomplishing trail objectives. Economic effects are an impact of long-distance trails that are of great interest to many local communities. Economic impact studies attempt to provide information on the "total economic impact" of expenditures in a specified locality by users of specified resources who are from outside that locality. "Total economic impact" is the total of direct and indirect effects. Direct effects are the actual "first round" expenditures made by visitors. Indirect effects refer to the spending generated by additional rounds of re-spending the initial visitor dollars.

The study designer must decide how to obtain valid and reliable information on the direct expenditures made by users. In order to estimate the secondary (indirect) effects from re-spending those direct dollars, the information collected is analyzed using computerized economic models that take into account the extent to which industries are interconnected to produce the goods people buy.

The literature review summarized in Part 2 (see p. 41, et seq.) identifies a broad spectrum of approaches that can be used to obtain the information needed for an economic impact study. Techniques for measuring trail use range from labor-intensive interviews along the entire length of a trail on a frequent basis over a long period of time to trail traffic counters (see p. 65, et seq.). Techniques for measuring economic impacts range from gathering simple anecdotal information to sophisticated approaches that require careful analysis using

computer models. These techniques are described in detail beginning on page 69.

When planning an economic impact study involving primary data collection, study designers must decide on the sites to be sampled, the number of people to be contacted, how the subjects are to be selected, how the data will be collected, and how it will be analyzed. The discussion below describes how these decisions were made in the study of the Overmountain Victory National Historic Trail (OVT), applying principles arising from the various sources discussed in Part 2.

The approach described here, and the survey instruments used (see Appendices A and B) were approved by the U.S. Federal Office of Management and Budget (OMB). Any information gathering supported by Federal funds must be approved by OMB. Federal trail managers planning similar studies should be aware that this process often takes several months after the research design is completed and submitted for approval.

We first saw the sign for Sycamore Shoals when passing the park in Elizabethton. We also noted a plaque on an overhanging rock along side TN highway 143 near Roan Mt. State Park, and asked the friends who own the home we rented about it. They explained it was an overnight stop on the Overmountain Victory Trail (for the Overmountain Men) and suggested we visit Sycamore Shoals.

-Sycamore Shoals State Historic Area Visitor

Sample Sites

The Overmountain Victory National Historic Trail (OVT) traces the route traveled by Colonial volunteers from the frontier to intercept and defeat an armed force of colonists loyal to the British and under British command at the Battle of Kings Mountain in 1780. The OVT route travels through parts of Virginia, Tennessee, North Carolina and South Carolina and is approximately 300 miles long. It was designated as a National Historic Trail in 1980 and consists of a marked motor route. a series of historic sites and visitor centers operated by a variety of public and private agencies, and several short off-road trail segments. The National Park Service describes the OVT as follows:

In the fall of 1780, upcountry patriots from Virginia, Tennessee, and North Carolina formed a militia to drive the British from the southern colonies. This trail marks their 14-day trek across the Appalachian Mountains to the Piedmont region of the Carolinas. There they defeated Loyalist troops at the Battle of Kings Mountain, setting in motion the events that led to the British surrender at Yorktown and the end of the Revolutionary War. Each year history buffs commemorate this patriotic event. Much of the trail has become road and highway; only a small 20-mile portion remains as a foot trail across the mountains. In most places roadside signs indicate proximity to the trail (NPS, 1993).

There are numerous historic sites, visitor centers, and other points of interest along the OVT route that vary greatly in size, visitation and emphasis on the Overmountain Men and their historic march. These sites range from the heavily visited Kings Mountain National Military Park in South Carolina to Fort Defiance in North Carolina, which has few

visitors and is open only two Sundays each month. In addition to historic sites and visitor centers, there are several short, off-highway trail segments available for public use.

Although many sites along the route are identified in the interpretive materials for the Trail, there is no official list of which sites actually comprise the OVT. Therefore, a key step for this study (and any to be conducted on other national historic trails) was to select the sites to be included in the sample. This was accomplished with input from experts most closely involved with the OVT.

The principal investigators and the National Park Service Program Leader for National Trails System Programming visited the sites along the route and met with the managers of each. They then met with the Board of Directors of the Overmountain Victory Trail Association (OVTA), the non-profit citizens' historical society founded to help establish the National Historic Trail and to commemorate and interpret the events surrounding the March and Battle. The consensus of these experts was that 10 historic sites and visitor centers and 2 off-highway trail segments should be included in the study sample for a total of 12 sample sites. These sites were

Tennessee: Rocky Mount Museum and State Historic Site; Sycamore Shoals State Historic Area

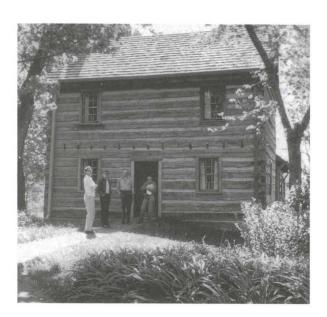
North Carolina: Blue Ridge Parkway Mineral Museum; Blue Ridge Parkway Trail Segment; Old Wilkes Jail; W. Scott Kerr Reservoir Visitor Center; W. Scott Kerr Reservoir Trail Segment; Caldwell County Heritage Museum; Fort Defiance; Old Burke County Courthouse

South Carolina: Cowpens National Battlefield; Kings Mountain National Military Park

It should be noted that some of the 12 study sites are "certified" OVT sites, and some are not. Certified sites are nonfederal sites and segments along a national historic trail that are officially recognized as contributing to the trail and meet the criteria of the National Trail System Act.

A sample of OVT users was selected and surveyed twice weekly at each of these 12 sample sites during a six-month data collection period. The following is a brief description of each of the 12 sample sites arranged roughly from north to south (the direction of the March) along the route. A list of contact persons for each site is included in Appendix D.

Rocky Mount Museum and State
Historic Site. Rocky Mount is the
18th-century home of William Cobb
and one of the first muster sites along
the OVT route. It consists of a museum and theater, the Cobb home, and
several outbuildings. The site features
building and grounds tours, first person interpretation of 18th-century
skills and crafts, and exhibits of
Revolutionary War era history including the OVT March and Battle at
Kings Mountain. The site is owned by



Cobb House, Piney Flats, TN. NPS photo.

the State of Tennessee and operated by the nonprofit Rocky Mount Historical Association. It is open daily.

Sycamore Shoals State Historic Area. Sycamore Shoals was the site of the main gathering of 1,100 Overmountain Men in September of 1780. It was a safe place to ford the Watauga River and the location of Fort Watauga. The site is now a Tennessee state historic area and consists of a visitor center, a reconstruction of the fort, and a short trail to the shoals themselves. Sycamore Shoals is also the site of an outdoor drama depicting the settlement of the area and the events of the Overmountain March. The drama. called *The Wataugans*, attracts large crowds on nine nights every July. Sycamore Shoals is operated by Tennessee State Parks and is open daily. It is a certified site of the OVT.



Ft. Watauga reconstruction at Sycamore Shoals, TN State Park. NPS photo.

Blue Ridge Parkway Mineral Museum. The Mineral Museum is a National Park Service facility located along the Blue Ridge Parkway in North Carolina at Gillespie Gap. The structure houses both the Museum and the local Chamber of Commerce and is heavily visited by Parkway travelers and others. Although the primary focus of the Museum is the geologic and natural history of the area, there are exhibits relating to the OVT and its history. The site is operated by the Eastern National Parks and Monuments Association under agreement with the National Park Service and is open daily.



The Mineral Museum at Gillespie Gap. Photo by Mike Dahl.

Blue Ridge Parkway Trail Segment.

This off-road trail segment begins at the Mineral Museum and roughly parallels the Blue Ridge Parkway for two miles of the segment's five-mile length. Near its midpoint is a privately owned and operated orchard called "The Orchard at Altapass." It contains a packing house and retail shop that are popular with Parkway and Trail users. The Orchard owners are quite interested in the history of the area and host interpretive programs from nearby National Park Service campgrounds that relate the events of the

Overmountain March. The sampling for this trail segment occurred at the Orchard. This Trail segment is a certified segment of the OVT.

Old Wilkes Jail. Wilkesboro, NC, was the easternmost muster site along the Trail. The Old Wilkes Jail, located in Wilkesboro, was built in 1860 and is now a museum which interprets these events and other aspects of area history. The restored home of Charles Cleveland, brother of one of the prominent patriot officers, has been relocated behind the Jail. Across from the jail are the remains of the Tory Oak from which British sympathizers were reportedly hanged during the Revolution. The Jail and Cleveland House are operated by the nonprofit Old Wilkes, Inc. and are open Tuesdays through Fridays.



Old Wilkes Jail. Photo by author.

W. Scott Kerr Reservoir Visitor Center. W. Scott Kerr (pronounced "car") Reservoir is operated by the U.S. Army Corps of Engineers and is located just south of Wilkesboro. The visitor center houses a small museum

which interprets the history and environment of the area. There are several exhibits relating to the OVT and Revolutionary War era history. The center is open on weekdays only.

W. Scott Kerr Reservoir Trail segment. This off-road Trail segment at Kerr Reservoir is four miles long, with much of it located in and around Warrior Creek Campground. Sampling at this site occurred at the entrance station to the Campground. Warrior Creek is one of two public camping facilities operated by the Corps of Engineers at the Reservoir. It has 88 campsites and 3 group sites and is open daily from May through September. This trail is a certified segment of the OVT.

Caldwell County Heritage Museum.

The Caldwell County Heritage
Museum is operated by the local historical association and is housed in a
large two-story building that was originally the town high school. It has several exhibits about the OVT and its
history and is staffed by one of the
original advocates for the creation of
the Overmountain Victory National
Historic Trail. It is open for two hours
on Mondays and Wednesdays and all
day Saturdays.

Fort Defiance. Fort Defiance was the home of William Lenoir, one of the leaders of the Overmountain Men. It has been recently renovated and contains many artifacts of the period. Fort Defiance is owned and operated by a nonprofit volunteer organization and is open the first and third Sunday afternoons of each month. It is a certified site of the OVT.

Old Burke County Courthouse. The Old Burke County Courthouse houses a museum which contains artifacts and information relating to the Overmountain March and American Revolution. It is open Tuesday through Friday and is operated by Historic Burke, a nonprofit organization. Historic Burke also operates the nearby Quaker Meadows Plantation, home of Charles McDowell, one of the prominent patriot leaders. Quaker Meadows is where troops from Tennessee, Virginia, and North Carolina joined forces. Recently designated as a certified site of the OVT, Quaker Meadows Plantation is the site of several annual events, but it is open only irregularly until restoration is complete.



McDowell House at Quaker Meadows, Morganton, NC. Photo by author.

Cowpens National Battlefield.

Cowpens National Battlefield is actually the site of a battle that occurred three months after the Overmountain March and Battle at Kings Mountain. However, it is also the last muster site and campsite used by the Overmountain Men during their

March, and these events are also highlighted. Cowpens is managed and operated by the National Park Service and is open daily.



General view of Cowpens National Battlefield. Photo by author.

Kings Mountain National Military

Park. Kings Mountain is the site of the battle that culminated the march of the Overmountain Men on October 7, 1780. It consists of a visitor center and theater, interpretive traits, and monuments in the Battlefield itself The site is located in South Carolina near the North Carolina border and is managed



and operated by the National Park Service. The visitor center and grounds are open daily.

Visitors at these 12 sites were surveyed in regular sampling periods, one of which was scheduled during the 1995 reenactment. The reenactment recreates the Overmountain Victory March and Battle on the same days of the year and, whenever possible, using the same routes and campsites as the original March. It has been conducted annually since 1980. OVTA members give demonstrations and presentations at many locations along the route.

Supplemental sampling took place during three annual OVT-related events. Members of the OVTA surveyed a sample of visitors at OVTA presentations during the 1995 reenactment of the Overmountain Victory March and Battle. In addition, interviews were carried out during two of the nine nights of *The Wataugans* outdoor drama at Sycamore Shoals.

Sample Sizes

Visitor records for 1994 were available for eight of the twelve sample sites along the OVT. Visits to these eight sites combined was in excess of 685,000 in 1994. To help determine the number of users to be sampled at each site, the twelve sample sites were stratified based on their significance to the Trail. This classification was based on the estimated number of users each year at each site and the emphasis on the events associated with the Overmountain Victory Trail that the site exhibited.

The resulting classification yielded three "primary sites," five "secondary sites," and four "tertiary sites." Primary sites were those of the most significance to the OVT. They each focused specifically on the March, the Battle at

Kings Mountain National Military Park Battle Memorial. NPS photo by R. Sussman. Kings Mountain, or related events during the Revolutionary War. All primary sites were open seven days per week and were heavily visited. Secondary sites were those with a major focus on the OVT and its associated events, but not as much as at the primary sites. Tertiary sites gave some attention to the OVT, but were open to the public four days per week or less and received considerably fewer visitors than the other sample sites.

Desired sample sizes were chosen to be large enough to provide acceptable levels of sampling errors while minimizing the burden to visitors and the study cost. The differences in sample size among the three types of sites were designed to be proportional to the estimated actual use across the three. The 12 OVT sample sites are listed by category below.

Primary Sites. Kings Mountain National Military Park; Sycamore Shoals State Historic Area; Cowpens National Battlefield

Secondary Sites. Rocky Mount State Historic Site; Blue Ridge Parkway Mineral Museum (Visitor Center and Trail segment); W Scott Kerr Reservoir (Visitor Center and Trail segment)

Tertiary Sites. Old Wilkes Jail; Old Burke County Courthouse; Fort Defiance; Caldwell County Heritage Museum

We would like to visit the other sites now that we know about them. We are interested in history (Civil War & Rev War) but that was not the purpose of our visit. However we decided to take the time to watch the film. After visiting many Nat. Parks out west, we consider yours equal to them. Guided tours of battlefields would be nice - not just a film and a pamphlet. More period reenactors, weapons demonstrations, more artifacts on display & for study. Give Kings Mountain an electric map like Cowpens. Get the state more involved in this American History - more signs, more advertisements more reenactment - just more interactions! Enjoyed the trip immensely!

-Kings Mountain National Military Park Visitor

On-site data collection ran from July 1 through December 31, 1995, at each of the sample sites. This 26-week period included 9 weeks of summer (July and August), 8 weeks of early fall (September and October), and 9 weeks of late fall (November and December). In order for the sample to reflect estimated actual use patterns as closely as possible, the sample times were stratified in two ways. Managers reported that most of their users come in the summer and during weekends. Therefore, the sample was drawn proportionally to reflect seasonal and weekly differences. Fifty percent of the sample was drawn during the two summer months, 40% during the fall months, and 10% during the two winter months. Throughout the study period, 50% of the sample was drawn on weekend days and the other 50% on weekdays. Sample times were scheduled to represent morning and afternoon hours, with half of the sample coming from each. Each site was provided with a schedule of sample time periods selected systematically in advance by the principal investigators. Each site was also provided with a quota of interviews needed for each period to achieve the desired sample sizes and in the desired proportions by season, day of week, and time of day.

⁻Kings Mountain National Military Park Visitor

Data Collection

A combination of brief on-site contacts and mailed follow-up questionnaires was used at each of the sample sites. Under the sampling schedule and quotas, a systematic sample of visitors at each of the sites was stopped and asked to participate in the study by providing their names and addresses and the answers to a few short questions. This initial interview took less than two minutes per respondent. The names and addresses were sent to the principal investigators who then mailed these users a more extensive questionnaire within two weeks of their site visit. The combination of on-site contacts followed by mailed surveys was employed for two primary reasons:

- Since a primary objective of this study was to estimate economic impact, data needed to be gathered after users' travel was completed so they could report actual rather than estimated expenditures.
- A significant proportion of trail and site users were on brief visits with busy travel schedules. To ask these users to interrupt their visits for more than two minutes would have been a considerable intrusion and burden and would have increased refusal rates.

I saw a sign denoting the Overmountain Trail, but I didn't know what it was. I'd like to have secluded, primitive tent camping at an historic site like this. [At Cowpens] offer as much detailed information as possible about each individual who fought at the battle sites for genealogical reasons and to foster family pride in American history.

-Cowpens National Battlefield Visitor

Was not aware of the formal trail. Would like to see more about it, including advertising or articles in travel press. My travel plans included these specific sites because they were in the AAA Guide. Had I known of the trail, I would have considered my plans and possibly followed the entire trail. Send info and I will consider it in the future.

—Sycamore Shoals State Historic Area Visitor

The mail-in questionnaires were sent to all users from the previous week's on-site contacts who agreed to participate in the study. A reminder letter and replacement questionnaire were sent to nonrespondents approximately 10 days later. Study participants who had still not responded after three weeks were sent a final reminder and replacement questionnaire. This methodology was a slightly modified version of the Dillman Total Design Method (Dillman, 1978). It took subjects approximately 13 minutes to complete the 12-page mail questionnaire booklet. Copies of the on-site and mailback questionnaires are included as Appendix A and B, respectively.

Nearly all of the on-site interviews were conducted by agency employees or volunteers staffing the front desk of each facility. Interviewers received orientations regarding the study and sample selection procedures. They selected users during the two scheduled time periods each week by randomly selecting one person from each party entering the site until that period's quota was met. Only persons 18 years old and older were selected, and no user was included in the sample more than once. If fewer parties than the quota visited the site during any sampling period, additional interviews were to be conducted in the next period(s) until the quota was met. Table 1 presents the sample sizes and response rates achieved.

Data Analysis

In order to establish the total regional expenditures associated with Trail use, average user expenditures were multiplied by the total number of visits for 1995. Other economic impact analyses were then conducted using these expenditure figures and IMPLAN to estimate additional indirect effects. In addition,

another statistical software program called STATA was used. Estimates of total number of visits for 1995 were provided by site managers based on their ongoing visitor counts. Most of these were derived from traffic counts adjusted for estimates of the average number of visitors per vehicle. Some were based on or supplemented by visitor registers or direct counts.

Distribution location	Questionnaires Distributed		Undeliverable Questionnaires	Questionnaires Returned		Response Rate
	#	%		#	%	%
Primary Sites						
Kings Mountain National Military Park*	647	23.0	13	407	23.5	64.2
Sycamore Shoals State Historic Area	542	19.3	11	322	18.7	60.6
Cowpens National Battlefield*	595	21.1	13	393	22.7	67.5
Secondary Sites						
Rocky Mount State Historic Site	275	9.7	3	164	9.5	60.3
Blue Ridge Parkway Mineral Museum Visitor Center*	256	9.1	1	163	9.5	63.9
Blue Ridge Parkway Mineral Museum Trail Segment (Orchard at Altapass)	41	1.5	0	30	1.7	73.2
W. Scott Kerr Reservoir Visitor Center	79	2.7	1	42	2.4	53.8
W. Scott Kerr Reservoir Trail Segment	94	3.3	1	39	2.2	42.0
Tertiary Sites						
Old Wilkes Jail	86	3.1	1	51	2.9	60.0
Old Burke County Courthouse	53	1.9	2	35	2.0	68.6
Fort Defiance	30	1.1	0	19	1.1	63.3
Wataugans (Outdoor drama)	60	2.1	2	39	2.2	67.2
Caldwell County Heritage Museum	11	0.4	0	4	.2	36.4
Mountaineer Days (Kings Mountain, NC)	30	1.1	3	13	0.7	48.1
Quaker Meadows	16	.6	0	13	0.7	81.3
Grand Total	2815	100%	51	1734	100%	62.7%

missed during the Federal shutdowns in late 1995.

Reporting the Findings

he survey findings identify some of the characteristics of Overmountain Victory National Historic Trail (OVT) users, characterize their experiences when they visited the Trail sites, examine their knowledge of the OVT, and measure the economic impacts of their visits. The results are described below rising statistical information calculated on the sample of Trail visitors as a whole and on a site-by-site basis. The sample sizes (N) vary considerably. The tables with approximately 2,800 respondents are based on questions taken from the on-site questionnaire. Those with less than 1,700 respondents are based on questions included in the mail-back questionnaire. The results, by site, are shown in Appendix C for each factor measured.

User Characteristics

A slight majority (56.5%) of the visitors sampled at the OVT sites were male. The OVT users tended to be middle aged or older—nearly 70% were 40 years old or older and the average age was 48. Over one-fourth (26.7%) of all OVT users were between 40 and 49 years of age (Figure 2).

OVT users were highly educated and had correspondingly high incomes. Over half (51.2%) had completed college, and over a quarter had an advanced college degree (Figure 3). Nearly half of the respondents reported annual household incomes between \$35,000 and \$74,999, and over 40% earned greater than \$50,000 per year (Figure 4).

Overall, 98% of OVT users were from the United States and represented 45 states and the District of Columbia. Not surprisingly, the majority of users came from the three states in which most of the Trail is located. Visitors

from North Carolina, Tennessee, and South Carolina combined accounted for nearly 62% of Trail users, with nearly one-third (31.9%) of all U.S. visitors coming from North Carolina. (Table 2). Just over 9% of Trail visitors came from states west of the Mississippi.

International visitors accounted for 2% of all visitors to the Trail sites. The largest number (48.1%) of these came from the United Kingdom. Canadians and Germans were the second and third most common international users of the Trail. International visitors came from five different continents and from as far away as China, Australia, and Japan (Table 3).

Characteristics of Visit

Family groups (65.5%) were by far the most common type of traveling party along

Figure 2. Visitor Age

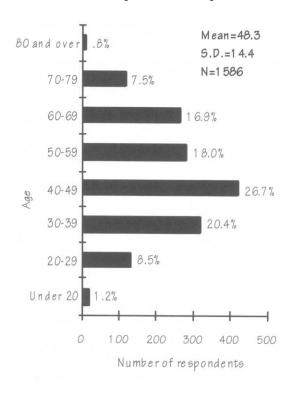
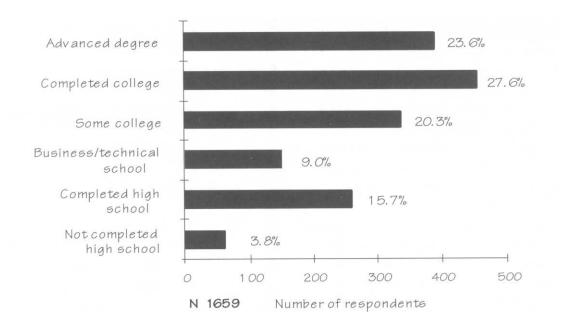


Table 2. U.S. Visitors					
State Number of % of U					
	individuals	visitors			
North Carolina	880	31.9			
Tennessee	466	16.9			
South Carolina	356	12.9			
Florida	183	6.6			
Georgia	111	4.0			
Virginia	104	3.8			
California	58	2.1			
Texas	58	2.1			
Ohio	55	2.0			
Pennsylvania	43	1.6			
Illinois	40	1.5			
Maryland	36	1.3			
Alabama	35	1.3			
New York	29	1.1			
other	305	10.9			
Overall	2759	100.0%			

Table 3. International Visitors					
o can in y	Number of individuals	70 01 111101111			
United Kingdom	27	48.1			
Canada	12	21.4			
Germany	5	8.9			
France	3	5.4			
Australia	2	3.6			
People's Republic of Chin	a 1	1.8			
Belgium	1	1.8			
Mexico	1	1.8			
Holland	1	1.8			
Japan	1	1.8			
Switzerland	1	1.8			
Venezuela	1	1.8			
Overall	56	100.0%			

Figure 3. Education Level



the OVT. However, over 12% of the visitors were traveling alone and another 10% were with friends (Figure 5). The median group size was two, with 43% of all parties consisting of two people. Groups of five and more accounted for 14.5% of the total (Figure 6).

Day trips were the most common type of visit to the Trail sites. Over half (50.7%) of the visitors reported they were on a day trip, while nearly one-third were visiting the sites as part of a vacation (Figure 7).

The reasons given for making the trip were quite varied. When asked, "Which of the following were among your reasons for deciding to take this trip?" over one-third (35.0%) reported the reason was to visit the specific site where they were interviewed. About 30% made the trip "to learn Revolutionary War era history," while 12.1% reported that "traveling part of the Overmountain Victory Trail" was one of their reasons. Roughly half, however, reported that none of these were among their reasons for taking the trip (Figure 8).

Figure 4. Annual Household Income

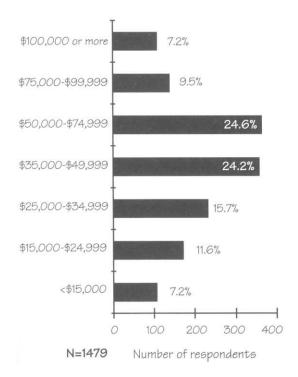


Figure 5. User Groups

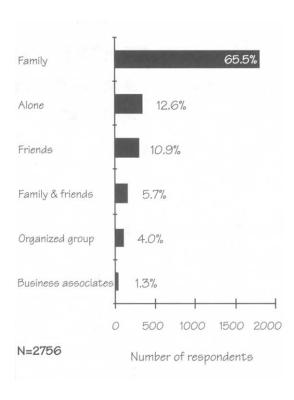


Figure 6. Group Size

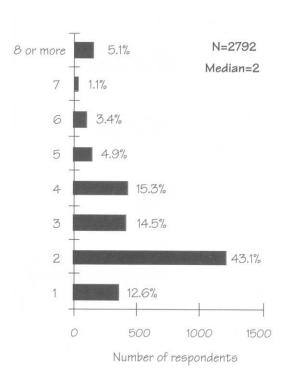
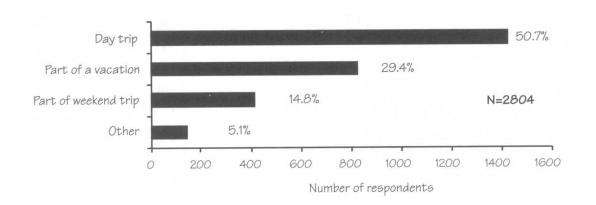


Figure 7. Nature of Visit



The majority (58.9%) of Trail users reported that their trip included an overnight stay away from home. Of those on overnight trips, the median number of nights away from home was five. Over one-third (36.3%) of the users who were on overnight trips were away from home from three to seven nights. Another third (34.8%) reported being away for eight or more nights (Figure 9).

Figure 8. Reason for Trip



When the overnight visitors were asked what types of lodging they had used during their trips, the majority (64.9%) reported staying in a hotel or motel. Over one-third (34.1%) reported staying with friends or relatives, and approximately 18% had camped in campgrounds (Figure 10).

Site Experience

The majority (58.4%) of users traveled 200 miles or less (one-way) to reach the OVT sites where they were interviewed. Many came much longer distances, however, with nearly one-fourth (24.2%) traveling 500 miles or more to reach the site (Figure 11). The median distance traveled was 130 miles one way. The vast majority (77.1%) reported staying two hours or less at the Trail site. The most common length of stay was between one and two hours. The median stay was an hour and a half (Figure 12).

Users first learned of the Overmountain Victory Trail site from a variety of sources. The most common source of initial information was a family member (22.9%), followed closely by a highway sign (21.3%). Only 2.8% learned of the site from an Overmountain Victory Trail brochure, while 5% learned about the site from a history class (Figure 13).

Figure 9. Nights Away From Home

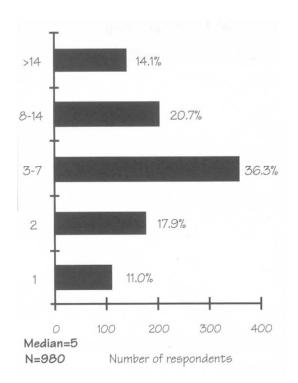


Figure 10. Lodging Used

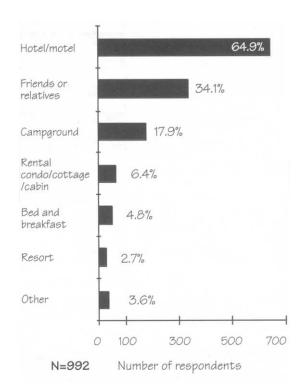


Figure 11. Miles Traveled

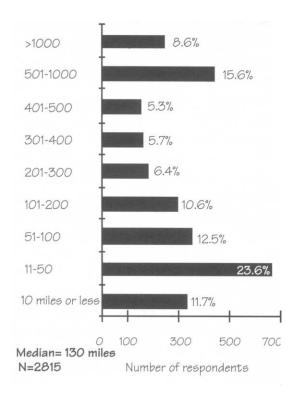
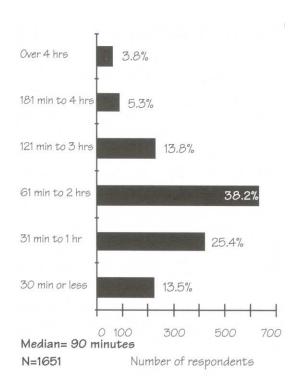
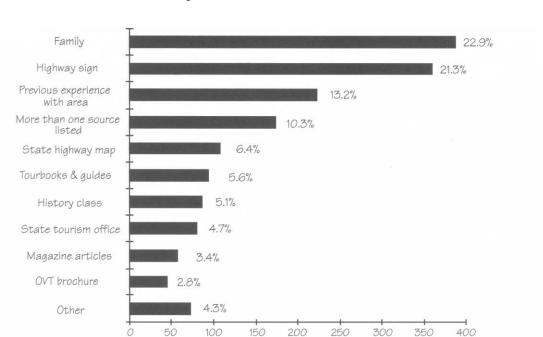


Figure 12. Length of Stay





Number of respondents

Figure 13. How Learned of Site

Table 4 reports why visitors decided to come to each site. They rated each factor on a scale from 1 (indicating a "not at all important reason) to 7 (indicating an "extremely important" reason for deciding to visit the site). The table arranges 19 potential reasons from the most to the least important based on overall means. The most important reason was to "have a good time" (5.68). This was followed by "see where history happened" (5.62) and "develop my knowledge" (5.60). The only reasons that were unimportant to OVT visitors (i.e., overall mean less than the midpoint of 4 on the 7-point scale) were "learn more about my ancestors," "escape from work pressures," and "buy things in the gift shop."

N=1688

The majority (67.8%) of the visitors reported that this was their first visit to a particular OVT site. Nearly one-third (30.0%) of the repeat visitors to a site reported they had visited the site two times in the last two years. There was, however, a small group a frequent visitors. Slightly more than one-fifth (20.4%) of the repeat visitors reported visiting the site

five or more times in the last two years (Figure 14).

A pair of open-ended questions asked visitors what things they liked best and least about each site. Table 5 presents the categories of things liked best and arranges them from the most to the least frequent responses. The most frequently mentioned feature was "the interpretive information or exhibits" (16.0%). This was followed by "the natural setting or scenery" (10.3%). "The movie or slide presentation" and "the trail or walking" tied for the next best liked feature. When asked, "What things did you like least about this site," 16% of the visitors reported "not enough interpretation or information." Site visitors reported "the weather" (9.6%) and "facilities" (8.1%) as their second and third least-liked features, respectively (Table 6).

Overall, most visitors enjoyed their trip to each site. Over 93% agreed or strongly agreed with the statement, "I thoroughly enjoyed my visit to this site." The overall mean on this 5-point scale was a very high 4.4 (Figure 15).

Table 4. Reasons	for Visiting Site			
	Mean*	S.D.	N	
Have a good time	5.68	1.35	1593	
See where history happened	5.62	1.52	1612	
Develop my knowledge	5.60	1.41	1594	
Observe the beauty of nature	5.49	1.54	1592	
Learn more about Revolutionary War era history	5.10	1.74	1584	
Feel close to nature	5.03	1.78	1561	
Learn more about state history	4.76	1.69	1574	
Get some fresh air	4.70	1.93	1567	
Be away from crowds	4.68	1.98	1567	
Find quiet places	4.65	1.96	1566	
Learn more about Overmountain Men's march to Kings Mt.	4.58	1.89	1561	
Get some exercise	4.43	1.95	1567	
Do things with other people	4.31	2.02	1553	
Teach others about history	4.28	2.04	1540	
Tell others about it at home	4.20	1.89	1547	
Relieve my tensions	4.00	2.05	1549	
Learn more about my ancestors	3.88	2.17	1543	
Escape from work pressures	3.86	2.10	1529	
Buy things in gift shop	2.65	1.83	1534	
* Means calculated on scale where 1= "not at all important" to 7="extremely important"				

Trail Experience

One part of the survey related to the Overmountain Victory Trail itself. The findings describe visitors' awareness of and interest in the OVT and the events it commemorates as well as their use of the trail and involvement with the Overmountain Victory Trail Association (OVTA).

Visitors were nearly evenly split in the extent of their awareness of the Overmountain March and the Battle of Kings Mountain.

Slightly more than half (51.1%) were aware of these events before their visit. Far fewer had been aware of the Overmountain Victory National Historic Trail. Only 28.4% reported that they knew of the Trail before their visit. One-third of the visitors (33.3%) reported that they had seen the Overmountain Victory Trail brochure. This brochure is available at the sites and through the National Park Service and Overmountain Victory Trail Association

Table 5. Best Liked Features				
	N	%		
Interpretive information/exhibits	243	16.0		
The natural setting/scenery	157	10.3		
Movie/slide presentation	131	8.6		
The trail/walking	130	8.6		
History	127	8.4		
Staff	111	7.3		
Clean/well maintained	94	6.2		
Visitor/interpretive center	63	4.1		
Information/learning	58	3.8		
All of it/everything	54	3.6		
Preservation/authenticity	48	3.2		
Interpreters/reenactors	48	3.2		
Museum	46	3.0		
Location/accessibility	35	2.3		
Fort	31	2.0		
Mineral displays	26	1.7		
Bookstore/reference books	25	1.6		
Reenactment	18	1.2		
Presentation/play	17	1.1		
Other	59	3.8		
Overall	1521	100.0%		

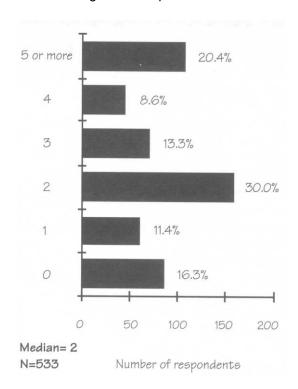
Table 6. Least Liked Features				
	N	%		
Not enough interpretation/ information	125	16.0		
Weather	75	9.6		
Facilities	63	8.1		
Displays (not enough/not working/ outdated)	57	7.2		
Maintenance/not clean	38	4.8		
Site marker audio not working/ trail signage	35	4.5		
Small museum/needs more attractions	35	4.5		
Entrance fees/park hours	30	3.7		
Inaccurate information	22	2.7		
Lack of directions/hard to find	18	2.3		
Lack of time	18	2.3		
Fort needs more displays	14	1.8		
Staff	14	1.8		
Lack of activity	13	1.7		
Not enough souvenirs/books	13	1.7		
Parking	11	1.4		
Not accessible enough for handicapped/older visitors	10	1.3		
Not enough vending machines/ concessions	10	1.3		
Trail	9	1.2		
Bugs	9	1.2		
High prices in gift shop	7	0.9		
Other	157	20.0		
Overall	783	100.0%		

Overmountain Victory Trail Association (OVTA).

The majority of the visitors (84.2%) had never attended an Overmountain Victory Trail reenactment event, and the vast majority (98.4%) reported never having marched in any of the annual Overmountain Victory Trail reenactments. Only one in 100 reported being members of the Overmountain Victory Trail Association.

The majority of users (74.1%) visited only one Overmountain Victory Trail site while on

Figure 14. Repeat Visits



this particular trip. About one-fifth (20.4%) had visited two OVT sites on this trip (Figure 16). When asked how many OVT sites they had ever visited, over half of the visitors (58.7%) reported to have been to two or more sites (Figure 17).

Some of the sites apparently spurred visitors' interest enough to make them want to see more. When asked, "Did your site visit lead to any unplanned stops along the Overmountain Victory Trail?" 21.7% of the visitors responded "yes". Similarly, the vast majority (73.0%) of the visitors reported that they were more interested in visiting other Overmountain Victory Trail sites as a result of their visit to the Overmountain Victory Trail site where they were interviewed (Figure 18).

In addition to the historic sites along the OVT, there are off-road trail segments available for people who wish to walk and, in some cases, ride horses or bicycles along parts of the route. These segments range from the paved trail around Kings Mountain to the rugged

Figure 15. Enjoyed Visit

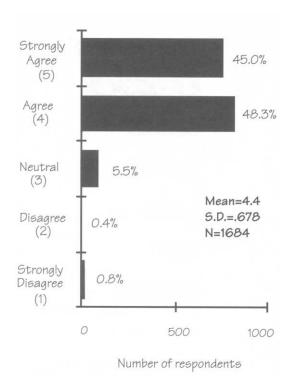
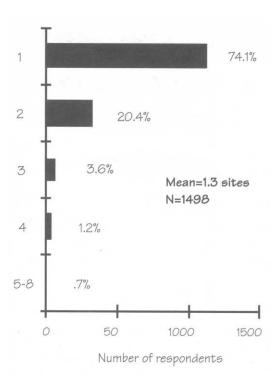
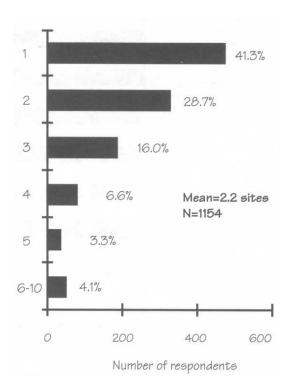


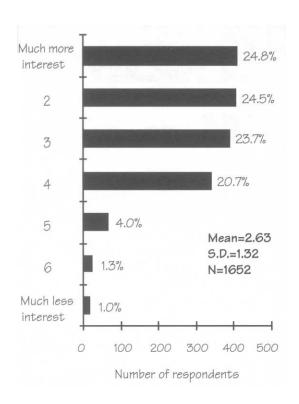
Figure 16. Number of Sites Visited



historic segments through Roan Mountain State Park and Yellow Mountain. Nearly onethird (29.3%) of the visitors reported using the off-road trail segment at Kings Mountain. The trail segment at Cowpens National Battlefield was the second most commonly used. Nearly one-fourth (24.6%) of the visitors reported using that segment (Figure 19). The least commonly used segment was that at Yellow Mountain. Current interest in using these offroad trail segments was somewhat mixed among those sampled. When asked, "How interested are you in using off-road segments of the historic route for walking or other trail activities?," 54.6% of the visitors reported to be interested, 28.2% were uninterested, and 17.2% were neutral (Figure 20). However, interest in the OVT and related history was high. The majority (68.5%) of the visitors reported that they would like to know more about the Overmountain Victory Trail and the Battle of Kings Mountain.

Figure 17. Number of Sites Ever Visited





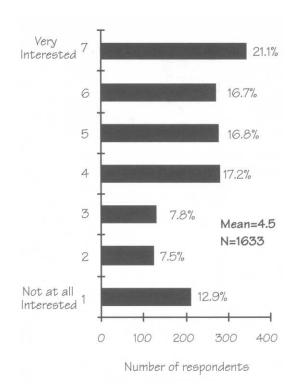
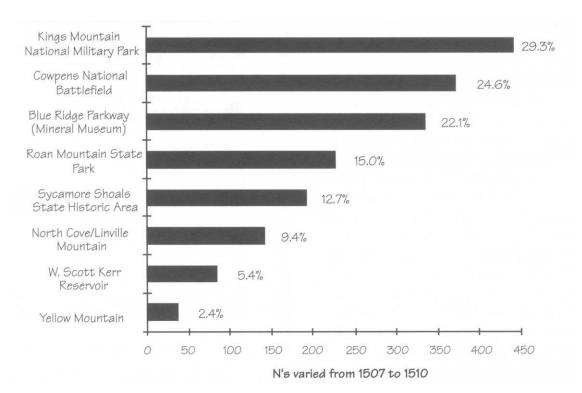


Figure 19. Use of Off-Road Trail Segments



Economic Impact

Calculation of visitors' expenditures and the resulting economic impacts generated involved several steps. The first step was to determine the actual expenditures made by the sampled visitors during their entire trips. Table 7 presents these results in its last column. Overall, the average total expenditure per person per day by Trail visitors was \$49.05. This figure includes all sampled users who responded to the expenditure questions, including those spending nothing. Expenditures were allocated equally among group members when group members shared expenses (e.g., family expenditures made by head of household) and

the number of days the trip lasted was determined by adding one to the number of nights spent away from home. Overall, 17% of visitors reported making no expenditures, and 2% spent \$200 or more per person per day. Table 7 breaks the overall average down by where the expenditures were made and by what was purchased. The first column presents the portions spent within the 15 counties in which the Trail sites are located. These counties are hereafter referred to as the "15-county Trail corridor." One third of the total expenditures was spent within this 15-county Trail corridor. This amounted to an average of \$16.00 per person per day. The average total amount spent by Trail site visitors within other parts of VA, TN, NC, and SC (i.e., within these Trail states but

Table 7. Average Expenditures/Person/Day					
Estimated Amount Spent For:	Within 15-County Trail Corridor	Within Other Parts of VA, TN, NC and SC	Outside of VA, TN, NC and SC	Total*	
Restaurants	\$3.77	\$6.18	\$1.36	\$11.29	
Lodging:					
Hotel/Motel	\$2.54	\$6.05	\$1.48	\$10.06	
Camping	\$.33	\$.21	\$.07	\$.61	
Rental Cottage/Condo	\$.36	\$.38	\$.11	\$.85	
Bed and Breakfast	\$.17	\$.29	\$.08	\$.54	
Other Lodging	\$.02	\$.21	\$0.0	\$.23	
Auto Expenses	\$2.31	\$3.69	\$.95	\$6.94	
Retail Purchases:					
At Historic Sites	\$2.99	\$2.36	\$.28	\$5.63	
All Other Retail Purchases	\$.32	\$1.15	\$.25	\$1.72	
Other Transportation:					
Airfare	\$.34	\$1.40	\$1.20	\$2.94	
Busfare, Public Transit, etc.	\$.05	\$.31	\$.21	\$.57	
Food and Beverage	\$1.17	\$1.22	\$.31	\$2.69	
Fees/Admissions	\$.76	\$1.23	\$.25	\$2.21	
Film and Developing	\$.52	\$.51	\$.29	\$1.33	
All Other Expenses	\$.26	\$.29	\$.21	\$.76	
Total*	\$16.00	\$25.58	\$7.07	\$49.05	

^{*}The sums of individual rows or columns are slightly different from the totals provided in some cases. This is due in part to rounding error and in part to the inclusion of respondents who provided total expenditures but not the type and/or location of their expenditures.

N's for individual cell calculations ranged from 1,332 to 1,350.

outside the 15 Trail counties) was \$25.58 per person per day. This was the biggest portion of the total \$49.05 at 53%. The remaining 14% of visitor expenditures were made outside of VA, TN, NC, and SC. This represented another \$7.07 per person per day on average.

Visitor expenditures were made for a wide variety of goods and services (Figure 21). Trail users spent an average of \$12.29 per person per day on lodging expenses. The was the single largest category of expenditures overall. One-quarter of the total was spent for lodging. The next largest category overall (23 %) was restaurant expenditures at \$11.29. Retail purchases, auto expenses and other transportation expenditures made up the next largest groups of expenditures.

The next step was to estimate the amount spent within the 15-county Trail corridor by visitors from outside the corridor. These figures, sometimes referred to as "new money," represent money that would not otherwise have been spent in that local area and are the basis of further economic impact analyses. Zip codes were used to identify those visitors who were residents of the 15 Trail counties and eliminate them from further economic analyses. The expenditures made in the 15-county Trail corridor by nonresidents of those counties were found to average \$17.37 per person per day as presented in the first column in Table 8. Figure 22 presents the types of pur-

I had no idea the Kings Mt. trails were connected to a larger system. Has the Sierra Club ever traveled it or featured it on local newsletters or the national magazine? Would be good! Love love love the trails - need better trail maps at Kings Mt. Thank you for your good work.

-Kings Mountain National Military Park Visitor

chases made with this new money. The two largest categories were again lodging and restaurants at \$4.17 and \$4.11 per person per day, respectively. Each of these two types of expenditures represented 24% of the total. Retail purchases and transportation expenditures were the next largest categories.

The next steps in estimating total direct economic impact involved determining the number of visitors to the sites and multiplying these figures by the average local expenditure figures for nonresidents. Attendance figures for 1995 were obtained from each of the sample sites and added to provide an estimate of total visitors. The breakdowns of visits by site are available in Table 38 Appendix C. The total visits at all the OVT sites and events examined by this study were estimated to be 1,148,832 visits in 1995. The proportion of visitors from outside the 15-county corridor determined from the questionnaire (80%) was used to esti-

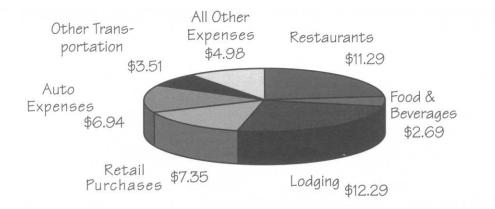


Figure 21. Average Expenditures/Person/Day

Table 8. Estimated Average Expenditures by Visitors in Trail Corridor				
Estimated Amount Spent For:	Ave. Exp./ Person/Day	Est. # of '95 Visitors from Outside Corridor ¹	Total Exp. in Corridor	
Restaurants	\$4.11	921,134	\$3,785,861	
Lodging:				
Hotel/Motel	\$3.14	и	\$2,892,361	
Camping	\$0.36	и	\$331,608	
Rental Cottage/Condo	\$0.43	и	\$396,088	
Bed and Breakfast	\$0.21	и	\$193,438	
Other Lodging	\$0.03	и	\$27,634	
Retail Purchases:				
At Historic Sites	\$3.09	и	\$2,846,304	
All Other Retail Purchases	\$0.37	и	\$340,820	
Auto Expenses	\$2.51	ш	\$2,312,046	
Other Transportation:				
Airfare	\$0.43	и	\$396,088	
Busfare, Public Transit, etc.	\$0.06	ш	\$55,268	
Food and Beverage	\$1.06	и	\$976,402	
Fees/Admissions	\$0.73	u	\$672,428	
Film and Developing	\$0.49	и	\$451,356	
All Other Expenses	\$0.26	и	\$239,495	
Total	\$17.372	921,134	\$16,000,098 ²	

¹Total visitors at all sample sites and events times .8018 (the proportion of visitors in the sample from putside the 15-county corridor).

N's for each category of expenditures ranged from 1,063 to 1,065.

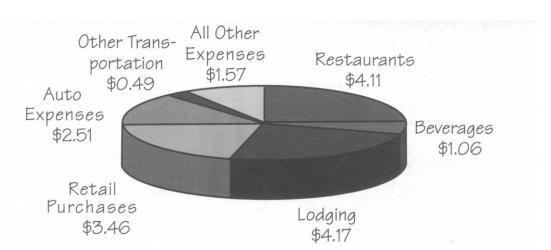


Figure 22. Average Expenditures/Person/Day by Outside Visitors

outside the 15-county corridor).

²The total provided is slightly higher than the sum of the column. This is due in part to rounding error and in part to the inclusion of respondents who provided total expenditures but not the types of their expenditures

mate that 1995 visits to OVT sites by nonresidents of the 15 Trail counties was 921,134, as shown in the third column of Table 8. This figure was multiplied by the average expenditures per person per day in each row and summed to yield the total expenditure figures presented in the final column in Table 8. The total expenditures made in the 15-county corridor by visitors from outside the corridor was estimated to be \$16,000,098. The largest portion of this total was \$3,841,129 for lodging, followed by expenditures of \$3,785,861 in restaurants and \$2,846,304 for retail purchases at historical sites.

The final step in an economic impact analysis is to estimate the additional indirect economic effects generated by visitors' direct spending. The USDA Forest Service model IMPLAN (IMpact for PLANning) was used for this purpose in this study. IMPLAN is a computerized input-output model which uses national data from 528 economic sectors and county level multipliers to estimate total economic effects (Walsh, 1986, p. 386; Taylor, Winter, Alward and Siverts, 1993). To accomplish this, visitor spending data must first be allocated to the proper economic sectors in IMPLAN through a process called "bridging."

In other words, data on the 15 expenditure categories used in the study questionnaire is

I saw a sign denoting the

Overmountain Trail, but I didn't know
what it was. I'd like to have secluded,
primitive tent camping at an historic
site like this. [At Cowpens] offer as
much detailed information as possible
about each individual who fought at the
battle sites for genealogical reasons and
to foster family pride in American history.

I knew of the existence of the Overmountain Victory N.H.T before my trip, but I was hoping to learn more about it at Kings Mt. N.M.P & the Cowpens. I'm very impressed with the trail's documentation & have saved the National Park Service brochure about the trail for future reference. I hope to return in the future to visit additional sites along the trail to increase my knowledge of Revolutionary War History.

—Cowpens National Battlefield Visitor

allocated to the appropriate economic sectors used in IMPLAN. This bridging process can be accomplished using software such as MI-REC (Micro-Implan Recreation Economic Impact Estimation System) (Stynes, D. J. & Probst, D. B., 1996). The bridging in this analysis was done using expenditure categories based on those suggested in the MI-REC system and using personal consumption expenditure data from the Bureau of Economic Analysis.

Once the direct expenditure data is bridged into the IMPLAN sectors, the software applies the appropriate county-level multipliers to each and aggregates the results to arrive at the estimate of total economic impact. IMPLAN describes economic impact in terms of total industrial output, total income, total value added, and total employment. Total industrial output is the value of all the goods and services needed to satisfy final demand. Total income includes the wages of employees and income of business owners. Total value added is total industrial output minus the costs of inputs. Total employment is the total number of jobs supported by the production of related goods and services (Brothers and Chen, 1996).

⁻Cowpens National Battlefield Visitor

In 1995, the use of the OVT sites examined in this study generated over \$22.4 million in total industrial output, \$12.4 million in total income and \$14.1 million in total value added for the 15 Trail counties. A total of 521 jobs were estimated to be supported in the Trail counties by the existence of the OVT sites. The biggest beneficiaries of this total economic impact were the eating and drinking, retail, and hotel and lodging industries. The results of the IMPLAN modeling for the OVT are presented in Table 9. Note that the 1992 IMPLAN model was used in this analysis, which means that all the figures in Table 9 have been deflated to 1992 dollars.

This study found that only one third of the sample (33.65%) listed either "Traveling part of the OVT" or "Learning more about Revolutionary War era history" as one of the reasons for their trip. Many economists would consider the remaining (two-thirds) use of the trail sites to be incidental to the existence of the OVT. Applying this more conservative percentage of the total visits to the data indicates that the Trail-related direct spending in the 15 Trail counties by nonresident visitors was approximately \$5,384,033 in 1995 and that the total economic impact generated as a result of the Trail (total industrial output) was \$7,552,709.

Table 9. Total Economic Impact of Overmountain Victory Trail Sites*				
Industry	TIO** (MM\$)	Total Income (MM\$)	Total Value Added (MM\$)	Employment (Number of jobs)
Hotels and Lodging Places	2.9888	2.0654	2.4369	97.68
Retail Trade	3.2424	1.9373	2.4286	108.79
Eating & Drinking	3.6171	1.9005	2.1538	123.33
Other Services	2.9161	2.0441	2.0771	72.67
"Finance, Insurance, & Real Estate"	2.2027	1.087	1.4027	13.84
Wholesale Trade	0.9206	0.5043	.6465	13.53
Transportation & Utilities	1.0561	0.5234	.5742	8.42
Other Amusements	0.9267	0.4652	.5043	29.25
Manufacturing (Other)	1.0601	0.4277	.4395	7.78
Auto Services	1.1311	0.3103	.3442	13.23
Construction	0.5469	0.2709	.2740	7.8
Government Enterprise	0.3817	0.243	.2431	8.71
Communication	0.2741	0.168	.1890	2.14
Apparel	0.4123	0.1733	.1753	6.11
Food Processing	0.451	0.1374	.1392	2.34
Agriculture Forestry	0.1993	0.1072	.1093	5.18
Auto Parts & Access.	0.1043	0.0284	.0298	0.62
Sporting Goods	0.0109	0.0053	.0053	0.07
Mining	0.0027	0.0014	.0018	0.02
Total	22.4449	12.4001	14.1746	521.51
* All dollar figures are in millions and based on 1992 dollars ** TIO = Total Industrial Output				

Interpreting the Results

nce the results of a survey have been tabulated and categorized, they should be analyzed to provide the most useful information possible. Information on the characteristics of the users and their visits, their experiences at the sites, their knowledge of the Trail, and their expenditures can guide managers at each site in attracting more users and improving the quality of their visits. It can also steer trailwide administration for more effective outreach and visitor satisfaction.

User Characteristics

Along the OVT, respondents were slightly more likely to be male than female. This could be explained by the fact that many of the sites commemorate and interpret military history. In fact, 60% of the visitors at the two sites most closely involved with the military aspects of the period—Kings Mountain and Cowpens—were male. The mean age of users was 48.3 years, with the single largest age group between 40 and 49. It is important to remember that the OVT sample deliberately excluded those younger than 18.

The majority of OVT users came from the four states where the OVT is located. Part of this is likely due to ease of access for nearby users, but it may also be related to the fact that the events of the Overmountain March and Battle of Kings Mountain are important local historic events as well as national ones. The Trail sites attract a large number of local users who want to learn more about local history as well as those who want to show friends and relatives the local attractions.

There were also a large number of nonlocal domestic users and a sizable segment of international users. Using the figure of 2% international users found in the sample, it is estimated that there were approximately 22,900 international users to OVT sites in 1995. More of these international users were from the United Kingdom than any other country.

Many of the demographic and trip characteristics of OVT users were remarkably similar to those found for visitors to the Nez Perce National Historic Park, which includes sites along the Nez Perce (Nee Me Poo) and Lewis and Clark National Historic Trails (Littlejohn, 1995). It is unclear to what extent these similarities are due to the historical nature of the sites in the two study areas or to the association with national historic trails.

Characteristics of Visit

There was considerable variation in how and why people visited the sites along the OVT. About two-thirds of respondents

I hope this survey doesn't throw a wrench in the works. I live in Spruce Pine, just a few minutes from the Blue Ridge Parkway Mineral Museum. I didn't take a trip at all, I just wanted a book from the gift shop. To be honest, I've never heard much about the Overmountain Victory trail, though I've seen those signs here and there. I am interested in more info. If you have any brochures that I can not get at the museum, I hope that you will send them to me.

-Blue Ridge Parkway Mineral Museum Visitor

described the members of their traveling party as "family," and the most common parry size was two. Half of the visits were day trips, but stops as part of a vacation accounted for nearly 30% of visits. Those away from home for more than one day spent a median of five nights away from home. Most overnight travelers (65%) stayed in hotels or motels; but over a third spent at least one night with friends or family, and 18% camped at least part of the time. Including Warriors Creek Campground as the sample site for the W. Scott Kerr Lake Trail segment undoubtedly resulted in the large proportion of campers.

Users had a variety of reasons for making the trip that included their stops along the OVT. The most common reasons for the trip were visiting the specific site itself and learning more about Revolutionary War history. However, only 12% listed "Traveling part of the OVT" as one of the reasons they took the trip. There are likely several factors to consider here. Many people visited the historic sites for their own merits independent of the OVT, while others visited not knowing there was an Overmountain Victory Trail linking the history and sites of the era. It is also clear that a large number of people arc including a visit to a historic site as part of a trip that was taken for some other primary purpose. All of these possibilities offer opportunities for managers to market their sites better to particular segments of the traveling public.

In addition to having many reasons for taking their trips, respondents differed in the importance of the reasons they had for actually visiting the sites they stopped at along the Trail. Of 19 different reasons examined, the most important was simply "To have a good time." The next five most important motives, however, included three related to history and learning and two involving observing and being close to nature. Although the history of the OVT is important to users, for many it is intertwined with being outdoors and enjoying

nature. This is consistent with the objective of including a variety of historic sites and, whenever possible, off-road trail segments in national historic trails. Based on the overall mean scores, there were only three motives that were unimportant in the decision to visit the sites—learning more about ancestors, escaping from work pressures, and buying things in the site's gift shop. Although these were unimportant on average, they were important to some users.

I think the program that I had the pleasure of attending was very informative. I really thought that it wouldn't hold my interest but I was wrong. I truly enjoyed the program & learning more about my history & why some things are the way they are. I think there would be more people involved if, prior to having the programs, someone could involve as many schools as possible. I think that there should be more advertisement across the nation because there are people from all walks of life that would enjoy this. I would have never gone to this if it wasn't presented where I was camping anyway, because I wouldn't have known about it.

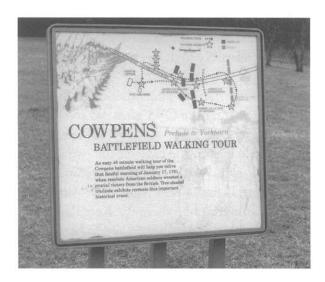
-Quaker Meadows Visitor

Site Experience

Users came a median distance of 130 miles one-way to visit the site where they were interviewed. Most stayed from one to two hours and were usually visiting for the first time. However, there was a group of frequent and loyal users. One-fifth of repeat users reported visiting five or more times in the previous two years alone.

The most interesting finding was how people actually first learned about the OVT site they visited. The most common way was through family. Very few people learned about the sites through the efforts of any of the agencies managing them. Less than 23% heard about the site from highway maps, tourbooks, guides, tourism offices, magazine articles, and the OVT brochure combined. The most frequently identified source of "official" information were signs along the highway, indicating that many people may be finding the sites by chance rather than by design.

Highway signs seem to be an important way of attracting spontaneous users. For example, a sizable number of users at Kings Mountain and Cowpens came from nearby Interstate 85 after seeing the large brown National Park Service signs along that highway. There seems to be room for improvement in marketing the OVT. Forty percent of all the comments related to the OVT or the events surrounding it noted that the respondent had been unaware of the Trail or that more information should be available about it.



Battle diagram wayside at Cowpens National Battlefield. Photo by author.

Another interesting source of initial information was "history class." Many of these people may have known about the events that occurred in the region, especially the Battle of

Kings Mountain, but they may not have known that related sites were available or that there was a trail commemorating the events.

It was encouraging to find that users were quite satisfied overall. Consistent with the importance of the history-related motives for visiting the sites, interpretive info/exhibits, movie/slide presentation, and the history itself were three of the five best liked features of the sites. However, some users were not satisfied with the level of interpretation. The most commonly mentioned feature that users least liked was not enough interpretation/information.

Trail Experience

While users tended to be aware of the historic events, far fewer knew about the OVT or the Overmountain Victory Trail Association (OVTA). Just over half of the users were aware of the Overmountain March and the Battle of Kings Mountain before they made their visit. But only 28% were aware of the national historic trail established to commemorate and interpret these events. Surprisingly, only a third had seen the trail brochure by the time their visit was completed. Similarly, the OVTA had a very low profile among users. While about 16% had attended an OVT reenactment (nearly all of which are conducted by members of the OVTA), less than 2% had marched

I think living history sites are fantastic. I had never been to one before. I went to Rocky Mount but now I'm planning to go to several others on my next trip. I would be very interested in receiving any other information you could send me on the trails & other historic sites, as well as any special events, especially for Spring and fall when I usually travel.

-Rocky Mount State Historic Site Visitor

along on the annual March and only 1% reported being OVTA members.

Most trips included only one Trail site, but the majority of users had been to two or more sites over the years. The history and sites along the Trail are interesting and apparently compelling for some users. Twenty-two percent had made at least one additional unplanned stop at an OVT site after visiting the site where they were interviewed. About three quarters (73%) reported that they were more interested in visiting other OVT sites as a result of their visit. Nearly 70% said that they would like to learn more about the OVT and Kings Mountain.

The results related to off-road trail segments need some clarification. The "off-road" segments included in OVT literature and the study questionnaire were quite diverse and included several relatively short interpretive routes near the site visitor centers. Of those examined, only the Blue Ridge Parkway Mineral Museum segment, the W. Scott Kerr segment, the Roan Mountain segment, North Cove/Linville, and Yellow Mountain segments offer backcountry walks of any significant length away from developed sites. Only users of the first two of these were included in this study.

We like camping in the Overmountain Victory Trail area, because it is usually quiet and peaceful and we love being close to nature. The facilities are good. There are great fishing areas, and other outdoor interests. We always see something interesting on each trip we take. For instance, once when my husband and I were fishing, we saw a duck with some little ones overseeing the lake in front of us. On a recent trip a Kingfisher came close to where we were fishing.

- W. Scott Kerr Reservoir Trail Segment Visitor

Interest in using off-road segments was mixed. Some people clearly came for the developed interpretation of history offered in site facilities; others came to walk in the locations where the historic events occurred; and some were most interested in the natural environment. Most came for some combination of these and other reasons.

Economic Impact

Public visitation and use of the OVT has a significant economic impact in the counties through which the Trail passes. In 1995, the use of the OVT sites examined in this study generated over \$22.4 million in total industrial output, \$12.4 million in total income and \$14.1 million in total value added for the 15 Trail counties. A total of 521 jobs were estimated to be supported in the Trail counties by the existence of these OVT sites. The biggest beneficiaries of this total economic impact were the eating and drinking, retail, and hotel and lodging industries. Visitors to the sites along the OVT spend a significant amount of money on their trips; there is a large number of nonresident visitors to these sites, and they spend at relatively high levels in the Trail counties.

It is important to remember that not everyone visiting the OVT sites did so solely or primarily because of the OVT. This was particularly true in the cases of the two offroad trail segments (i.e., Kerr Reservoir and Blue Ridge Parkway trail segments). Warriors Creek Campground (where the Kerr Reservoir trail segment is located) and the Orchard at Altapass (the only facility along the Blue Ridge Parkway trail segment) were the sampling sites for these two trail segments. This was partly because resources and volunteers were not available to hike the segments regularly enough to draw a sufficient sample of actual segment users and partly because the majority of the

users at the campground and the orchard become aware of the OVT through their visits.

Many analysts would only include expenditures of users whose purpose was to visit the object of the economic analysis—in this case the OVT. Using that approach, the economic impact due to the OVT is still substantial. One third of the sample (34%) listed either "Traveling part of the OVT" or "Learning more about Revolutionary War era history" as one of the reasons for their trip. This more conservative percentage of the totals still indicates that the trail-related direct spending in the Trail counties by nonresident users was approximately \$5,384,033 in 1995 and that total economic impact (total industrial output) was \$7,552,709.

There are other users of the OVT—and therefore additional economic impacts due to the Trail—that were not captured by this study. These include those who travel the route, but do not stop at any of the sites or segments. Perhaps they have altered their plans to enjoy the scenery and historic markers related to the route, but do not stop at the sites because they have visited them before or do not have time on that particular trip. There are also other smaller sites that are less focused on the events of the OVT, but are nonetheless related to it, that were not included in this research. Some of the visits to these sites could be legitimately attributed to the existence of the OVT, but these were beyond the scope of this study.

Results Compared by Site

The sites that make up the Overmountain Victory National Historic Trail are obviously very different from one another. They vary in size, number of visitors, managing agency, available resources, and focus on the events that are central to the OVT. This is not unusual for sites along national historic trails. On

the OVT, these differences among sites were accompanied by differences in users and use. This diversity among sites and use is and should be embraced by the National Park Service and those associated with the individual sites. Tables comparing the survey response by site are found in Appendix C.

Some users enjoy touring larger more prominent sites, while others seek the adventure of going to lesser known areas and immersing themselves in history with a more local perspective. A strength of the OVT is that it provides opportunities for both. The challenge along any long-distance trail is to provide enough common themes and images that the individual sites do contribute to a cohesive whole. This was the case for many users of the OVT, but not for all.

There were many users (72%) who were not aware of the national historic trail prior to their visits. The two primary tools currently used along the OVT to provide this cohesion are the roadside motor route signs and the OVT brochure. (No questions were directly asked about the roadside signs.) A surprisingly high proportion of users (67%) had not seen the OVT brochure even after they had left the site. There is room for improvement in communicating that the sites along the motor route are part of a larger whole.

I think it is a good plan to intersperse the Overmountain Victory information in sites that are unrelated. I would never had learned about, nor seen the site, had I not planned a trip to the N.C. Museum of Minerals on the Blue Ridge Parkway. My fourth grade son is a "rock hound" and heard about the museum through the Forsyth Gem and Mineral Club. We more or less "stumbled" into the Overmountain Victory display, but thoroughly enjoyed viewing it

⁻Blue Ridge Parkway Mineral Museum Visitor

Taking Action

nalysis of the survey findings provides important information on the aspects of trail and site management that could be improved and highlights areas of the greatest opportunity for growth.

The survey findings and the comments of the visitors tell managers they must do more to "get the word out" about the Trail itself and the OVTA. This study also lets managers know that the methodology could be readily adapted to the study of other long-distance trails and gives fair warning of difficulties that may occur.

Message for Managers

All the sites along the Trail have a dual focus. First and foremost, they exist and must operate as independent destinations; but, to varying degrees, they also see themselves as part of a related whole represented by the OVT and the events related to it. Emphasizing their common themes and working together more effectively could benefit each of the sites and the OVT overall. Emphasizing the connections among the sites could increase visits to each of the sites, especially the lesser known ones.

Even without marketing efforts encouraging users to see related sites, such interest was high—over one-fifth had made an unplanned stop along the Trail as a result of their first stop. Joint marketing efforts could also be used to recruit volunteers from among those users most interested in Revolutionary War era history. After their visits, nearly 70% of users reported wanting more information about the OVT and the Battle of Kings Mountain.

Existing information, such as the OVT brochure and other pieces, should be more available and should be used to inform users of opportunities to get more deeply involved through the OVTA and other volunteer opportunities at the Trail sites themselves. When future surveys are conducted, trail and site managers should be ready to follow up on the comments offered (see Appendix E).

One way to emphasize the connections among the sites and encourage more visits would be through an Overmountain Victory Trail "passport" program much like that used for the National Park System. This is not a new suggestion, but one that takes on added weight based on the findings of this study that awareness was low and that people are willing to add unplanned stops to their trips to see other OVT sites once they know about them.

Attention should also be given to creating thematic promotional materials to expand on the existing brochure and displays. A common message along the lines of "Walk, Ride, and Drive the Overmountain Men's Trail of History to Kings Mountain" accompanied by

Since reading about the Overmountain Historic Trail, we will probably make a stop at Kings Mt. The children have National Park Passports and it has definitely sparked their interests in visiting anywhere they can get a stamp! In the meantime, they do pay attention and learn more about their country & its history. The Passports make a great keepsake also. I think they should be marketed more aggressively - they'd be a hit.

- Cowpens National Battlefield Visitor

an eye-catching map of the motor tour route with inset visuals of the sites along the way could greatly increase interest.

Other forms of promotional and educational material should be actively explored as well. Information specific to the OVT could be added to the National Park Service home page on the World Wide Web and other Internet sites. Promotional materials could be provided to local chambers of commerce and tourism promotion organizations. Expanded media packages, including an emphasis on the National Historic Trail and the connection among the sites, could be provided to the media to capitalize better on their existing coverage of the annual reenactments. Having the route marked on North Carolina state highway maps should also be looked into. Many school-age children are learning about the OVT through school programs conducted by the OVTA during their annual reenactments. The purpose of these programs is educational, but they obviously serve a promotional function as well. The availability of this important form of information will expand in the future when OVTA completes a public school curriculum currently under development.

The variety of motives for stopping at the sites has implications for managers of national historic trails and their component sites as

During our travels, we used our AAA tour book extensively to find worthwhile attractions along our route. As we entered each state we stopped at the Tourist Information Center to gather additional ideas & sometimes change our route of travel to accommodate additional points of interest. The Overmountain Victory Trail sites are a very well kept secret—few people we visited with in campgrounds ever heard of it.

Having lived in N.C. in Asheville & Raleigh, this is the first time I knew of the Overmountain Victory National Historic Trail. I have been to many National Parks and Civil War Battle Sites and have started on the Rev War Sites. It is nice to know that our government is working on retaining these and other sites of Historical Value. Please keep up the good work. I do not mind paying a fee if it goes to keeping the site maintained.

-Cowpens National Battlefield Visitor

well. People come for more than just traditional facility-based interpretation. They are interested in learning and in being in and walking through the places where the history happened. They also want to experience 2. This mix of related desires suggests that providing a wide range of opportunities would most likely maximize the benefits people receive.

Special emphasis should be placed on interpreting the history while providing opportunities for people to be in natural environments. Obviously, off-road trail segments are important in this regard. In fact, the majority of visitors were interested in using off-road segments of the OVT. Detailed information about these opportunities should be made easily available at all the sites and through other sources. Identifying opportunities for additional off-road segments and protecting them should be a high priority for the National Park Service and the OVTA. Wherever possible, these should be planned to include connections among sites and other local trail opportunities. An excellent example of one such segment is being pursued now that would connect Cowpens and Kings Mountain and provide recreation opportunities for visitors and area residents.

⁻Kings Mountain National Military Park Visitor

I'd like to see all of the trail open to hiking/camping. Stress the historic importance of the trail—but to get people to the trail, feature as many events as you can handle, then advertise!

-Sycamore Shoals State Historic Area Visitor

Efforts should also be made to strengthen the many partners involved in managing and promoting the OVT and its sites. The Overmountain Victory Trail Association (OVTA) is an excellent, hard-working organization; but it has very limited resources and little visibility among the visiting public. Only 1% of the users were OVT members, yet nearly 70% wanted more information about the Trail and the Battle of Kings Mountain. OVTA's present focus on the annual reenactment could be broadened with the help of public and private resources to make it possible for it to become more active in disseminating information about the OVT as a whole. Membership materials available at the OVT sites and more aggressive distribution of the OVT brochure would be a start.

Further Research

One of the goals of this study was to adapt existing research methods for use in documenting uses along other long-distance trails. The basic approach used in this pilot test was straight-forward in concept and can certainly be adapted on other long-distance trails.

The strategy of using brief on-site contacts followed up by mail-in questionnaires is sound and has been used successfully in many other studies. Likewise, the questions used to gather expenditure data and the method of calculating direct spending figures from that data are effective and not difficult to adapt. The use of IMPLAN to estimate total economic impact from direct expenditure data gives excellent results and would make a good choice for

future trail studies. It takes time to master, and experienced assistance will be needed at this stage. There are, however, several important aspects of this study that would not be easy to adapt to future long-distance trail research.

The selection of sample sites for any longdistance trail research will need to be done separately and very carefully along each trail. The selection of appropriate sites is essential for the validity of overall results and will essentially be a custom sampling design for each trail examined. Some consideration should be given to limiting the sample sites to include only federal sites and certified sites and segments along other national historic trails. This is for three reasons: most national historic trails are far longer than the OVT; certified sites and segments are generally those most focused on the trail purpose; and some smaller, less trail-focused sites have difficulty allocating the resources necessary for high quality data collection.

The selection of the sites where the sample was drawn and the actual sampling at these sites caused some difficulties in this pilot test. The most difficult aspect of sample selection

The Overmountain Trail is not known in the midwest. I would recommend trying to place articles in the following Magazines which I read: AAA Home & Holiday, Chicago Tribune, Travel section, Travel & Leisure Magazine. I came to the trail more interested in the Civil War history, but came away with a great appreciation for the Revolutionary War too. I was amazed at the historic march and would like to see a 3-dimensional topographical map of the entire area to bring home the enormous barriers crossed by the determined band of patriots.

-Kings Mountain National Military Park Visitor

It would be great to create a continuous trail off road from start to finish.

Nothing was said about horses using the off-road parts of the trail, so I didn't ask. A lot of horse trail associations would use this trail if it could accommodate them. The re-enactment would be more real like. This would mean more camping areas along the way. I would pay more money for trail use for that kind of adventure. You could better see & understand what our forefathers went through to give us today's liberties!

— Cowpens National Battlefield Visitor

was how to capture a representative sample of users of the off-road trail segments. The two segments selected by trail managers and OVTA leaders were located along the Blue Ridge Parkway and in Warriors Creek Campground at W. Scott Kerr Reservoir. The original design called for volunteers and staff to walk these segments on a regular basis and select users on the trails themselves. However, the resources and volunteers needed to accomplish this were not available and it was necessary to sample users at the two sites most closely associated with these segments (the Orchard and the Campground). Many of the users at these two site were visiting with little knowledge or interest in the OVT. Although they were exposed to the trail, some of these users had undertaken their trips for unrelated reasons. In future studies, efforts should be made to sample users on the off-road segments themselves. If this is not possible, questions should be included or supplemental counts conducted on site that better identify actual segment users and thereby make it possible to more accurately allocate expenditures.

The second difficulty in this study involved the actual on-site data collection at

some of the sites. The staffs at most of the sites were extremely dedicated and professional in sampling and contacting the users to be included in the study. These sites followed the procedures carefully and provided the requested quotas of interviews on schedule. For a variety of reasons, some sites had more difficulty and did not provide the data needed. Investigators need to carefully monitor sample sites and have a backup plan in case some sites are not able or willing to follow through with data gathering requirements.

Conclusions

This study found that the Overmountain Victory National Historic Trail and the sites that comprise it are heavily used by a wide variety of users for many different reasons. Trail users are generally quite satisfied with the experiences they have at the Trail sites and many want to learn more about the Trail and the events it commemorates. In addition to the benefits received by users, the Trail sites generate tens of millions of dollars of economic impact annually on the regional economy. This research also identified areas where the OVT and its sites could work together more effectively to increase the benefits provided.

The OVT is one of 12 national historic trails in the National Trails System and one of 20 trails in the System overall. This study offers an approach to better understand the use, users, and economic benefits generated by long-distance trails. With this information, the National Park Service and its many partners can better manage these important resources to accomplish the goals for which they were established and better plan for additions to the National Trails System for the benefit of all Americans.

Part 2

Analysis of Current Literature: Economic Impact Studies

Part 2 analyzes dozens of related studies published between 1973 and 1995 as background for the OVT study described in Part 1.

Economic Impact Studies

Conomic impact analysis (frequently referred to as regional economic impact analysis) attempts to estimate the economic activity generated by the use of resources.

[T]he regional economic impacts on business output or sales, employment, net income, tax revenues, and government spending [associated with the use of a particular area] (Walsh, 1986, p. 373).

[E] conomic impact generally deals with the local or regional financial concerns of business and government attempting to show how a proposed change redistributes economic activity in the form of economic transactions, income, and employment (Peterson and Brown, 1986, p. Values-12).

Many substantial regions rely, with varying degrees of dependency, upon recreational expenditures as an important source of economic activity. In particular, spending associated with outdoor recreation often comprises a significant part of these expenditures. As a result, many regional economies have strong linkages with outdoor recreation as an important ingredient in the area's economic growth and development (Alward, 1986, p. Values-47).

[T]he net change in the host community's economy, as a result of the spending that is attributed to the special event (Turco and Kelsey, 1993, p. 34).

In other words, economic impact analysis is concerned with estimating how actual expenditures related to a particular area or event affect an identifiable regional economy. Several types of economic impacts are typically

examined in economic impact studies. Usually economic impacts are assessed by measuring what are termed "primary" and "secondary" effects.

Primary (or direct) effects are expenditures intimately related to the activity or area in question, such as the purchase of food, lodging, etc. Secondary (or indirect) effects result from the original direct expenditures.

Examples of indirect effects are increased employment, re-spending of the direct dollars in the local economy, increased tax revenues, etc. Indirect impacts often affect a larger geographic area than do the direct impacts (Alward, 1986).

Jackson, Stynes and Propst (1994) classify economic impacts as either direct, indirect, or induced effects. They consider the sum of these three to be the total effects.

The direct effects are the changes in economic activity within those economic sectors that directly receive visitor spending. Indirect effects are the changes in economic sectors that supply goods and services to those businesses and organizations directly serving the visitors. The changes in economic activity resulting from household spending of earned income are termed 'induced effects' (Jackson, Stynes, and Propst, 1994, p. 7).

Economic "multipliers" are then used to estimate the amount of indirect and/or induced activity associated with a given direct effect.

Southwick and Rockland (1990) also consider total economic impact to be the sum of direct impacts, indirect impacts, and induced impacts. They define these three levels of economic impact as follows:

Direct impact. The initial purchases by consumers.

Indirect impact. The purchases of supplies by the directly impacted businesses to produce the goods and services demanded by consumers. Indirect purchases have further indirect impacts as the suppliers to the direct businesses make purchases to produce their goods. These indirect purchases continue as suppliers "further down the line" continue to purchase materials. These indirect purchases continue for several rounds.

Induced Impact. The purchases of goods and services by households resulting from the wages paid to households by the directly and indirectly affected businesses. Induced impacts have additional indirect and induced impacts as well. (p. 8)

Propst, Stynes, Lee, and Jackson (1992) define these three levels of economic impact in much the same way:

Direct impact. The first-round effect of tourist spending (e.g., income to gasoline station owners, increase in gasoline station sales, and wages paid to gasoline station employees per dollar of tourist spending).

Indirect impact. The ripple effect of additional rounds of respending of the initial tourist dollars (e.g., the effects of purchases of additional goods and services by other firms in other sectors, such as transportation and oil refineries).

Induced impact. Further ripple effects created by employees in impacted firms spending some of their wages in other businesses (e.g., gasoline station employees spend part of their wages in

local firms whose owners and employees also spend in a given area)." (p. 8)

Similar definitions of the direct, indirect, induced, and total economic effects have been used when applying these concepts to greenways (National Park Service, 1995, p. 6-3).

Jackson (1987) makes a distinction between "economic impact" and "economic significance." He defines economic impact as the total direct and indirect impacts from expenditures by users from outside a specified region. Economic significance, on the other hand, is the total direct and indirect impacts from expenditures by all users at the recreation site

Some consider all economic impact analysis to be a measure of the "secondary effects" of the expenditures made by consumers. In other words, the effects on the regional economy of the "primary costs" to the consumers and managers (i.e., the money they spend) is a "secondary economic gain" to others in the regional economy (Walsh, 1986).

Economic impact analysis is being used more and more frequently to aid in decision making and influence public opinion.

Documenting the economic impacts of existing programs, events, or resources or forecasting the economic impacts of additions or changes in the same has proven to be a valuable tool for managers and advocates. Such analyses have improved decisions and led to a better informed and often more supportive public.

There are, however, some authors who have expressed concern over how and why economic impact analyses are used. Crompton, for example, feels that the common thinking that a city council invests money in the form of facilities or events in order to attract out-of-town users and greater economic impact is flawed since it is actually the residents' money that is being circulated. Rather, he advocates that economic impact studies should measure

the economic return to residents (Crompton, 1993, P. 9).

Finally, while this report focuses on economic benefits, it should be emphasized that there are also economic costs associated with most decisions. For example, spending money to develop trails represents a lost opportunity to spend that money elsewhere. A very popular trail may generate increased expenses, e.g., when there is more traffic congestion as people travel to its access points, etc.

Research summarized below documents the benefits of trails generally, the economic impacts of long-distance trails specifically, and the economic impacts of other types of trails. In addition, some studies attempt to forecast the economic impacts of proposed trails, and others quantify the effects of trails on nearby property values.

[I] thoroughly enjoyed my visits to Kings Mountain & Cowpens. I liked the history connected with each location and found the landscape beautiful. I hope I can go again.

-Cowpens National Battlefield Visitor

Benefits of Trails Generally

Trails, like other forms of outdoor recreation and tourism, provide many benefits to individuals and society. Driver and Brown (1986) offer the following as personal benefits of outdoor recreation:

- Personal development (attitudes, values, skills, etc.)
- Social bonding
- · Therapeutic bonding
- Improved physical health
- Stimulation and opportunity for curiosity seeking

Nostalgia

West (1986) adds the social benefits of social interaction, mental health, and family cohesiveness.

Holmes (1986) identifies the following other benefits associated with outdoor recreation:

- Life support
- · Aesthetics
- Scientific opportunities
- · Natural history
- Habitat
- Forms of philosophy and religion

Godbey, Graefe, and James (1992) carried out a nationwide study of public perceptions of the benefits of local recreation and park services in early 1992. They conducted 1,305 telephone interviews and mailed surveys to the 882 respondents who agreed to receive them. Of these, 503 (60%) surveys were returned. The researchers examined respondents perceptions of personal, household, and community benefits of "a park, playground, or open space area within walking distance of your home."

Although trails were not specifically mentioned, many of these local park areas undoubtedly included trails and greenways. The majority answered either "somewhat" or "a great deal" when asked how much they, their household, or their community as a whole benefited from local park areas. A vast array of benefits were identified by respondents, including various personal, environmental, social, and facility-activity benefits. The economic benefits that were mentioned included "brings dollars into the community" and "influence property values."

The Parks and Recreation Federation of Ontario (1992) summarized the results of over 170 different studies and reports that document the benefits of parks and recreation.

These benefits were organized into personal,

social, environmental, and economic categories. Economic benefits were identified as the following:

- Provides a preventive health service
- Contributes to more fit and productive workers
- Offers a high yield investment
- Motivates business relocation and expansion
- Reduces vandalism and criminal activity costs
- · Acts as a catalyst for tourism
- Generates investment in environmental protection in parks and recreation areas

Numerous studies were cited as examples for each category.

Trails, and the activities that occur on trails, provide the benefits associated with outdoor recreation in general, as summarized above. The National Bicycle and Pedestrian Clearinghouse (1995) identified many economic and social benefits of off-road bicycle and pedestrian facilities such as trails. These benefits include:

- User expenditures
- Increased value of nearby property
- Increased profits for nearby businesses
- Tax savings
- Close-to-home recreation
- Convenient transportation
- Health and fitness benefits
- · Environmental benefits
- · Historic preservation
- Community enhancement

A study of three rail-trails across the country found that trail users and nearby property owners believe trails provide many benefits to their communities. Trail users felt the trails were most important for contributing to health and fitness, providing aesthetic beauty,

and preserving open space. Nearby landowners considered health and fitness, recreational opportunities, available open space, and community pride the most important benefits of the trails (Moore, Graefe, Gitelson, and Porter, 1992).

A recent study of state trail administrators found many factors were motivating trail development in the states. In order of importance, they were:

- Public recreation opportunities
- Tourism and economic development,
- Health and fitness
- Aesthetic beauty
- Preserving undeveloped open space
- Community pride
- Access for disabled persons
- Public education about nature and the environment
- Traffic reduction and transportation alternatives (Moore, 1994)

Surveys conducted for the 1994 Arizona State Trails Plan found trails to be extremely popular in that state. Seventy-one percent of respondents reported using trails more now than they had five years ago. The top five benefits of trail use offered by respondents were:

- Health and fitness
- Mental benefits
- Nature study and appreciation
- Solitude/escaping
- Beauty and scenery (Arizona State Parks, 1994)

Similarly, rail-trails are considered to generate many benefits. Forsberg (1994) breaks these down into benefits to the natural community and benefits to human communities. Benefits to human communities include economic impacts.

The economic impact generated by recreation visitors while traveling to and from their

destinations as well as while participating in their recreation activities is felt by many to be an extremely important benefit of outdoor recreation in general and trails in particular. The National Park Service (1995) reviewed previous research related to the economic impacts of protecting rivers, trails and greenway corridors. Their final report notes many types of economic impacts attributable to rivers, trails. and greenways and summarizes numerous studies and examples to illustrate and substantiate each. It organizes economic impacts into the following categories:

- · Real property values
- Expenditures by residents
- Commercial uses (e.g. concessions, permittees, special events, filming and advertising).
- Agency expenditures
- Tourism
- Corporate relocation and retention
- Public cost reduction (e.g., hazard mitigation, pollution control, reduction of health care costs, etc.)

The Illinois Department of Conservation (1990) identified six principle categories of economic impacts of rail-trails:

- Commercial benefits of recreational use—direct and indirect benefits resulting from user expenditures.
- Recreational benefits and social impacts—user benefits such as recreation, mobility, etc.
- Real estate value impacts—impacts on property values.
- Environmental impacts—species diversity, mobility, impacts on agriculture, etc.
- Fiscal impacts—impacts on local tax revenues.

• Non-recreational benefits-corridor's value for fiber optic communication, pipelines, utilities, etc.

Case studies of a group of trails and scenic byways in the Great Lakes states documented numerous benefits generated by tourism to the study corridors (Bielen, Kreag, Kuehn, Riggs, and Ververs, 1995). The study sites included: the Indiana Toll Road, Northwest Ohio Greenway System, Minnesota's North Shore State Trail, Illinois and Michigan Canal National Heritage Corridor, New York's Oswego River, and the Tour DeTug.

Impacts of Long-Distance Trails

The need to estimate the economic impacts of long-distance trails was identified by an economic working group of trail managers, planners, and researchers almost 20 years ago (Birch, 1979, p. 72). There is some evidence that long-distance trails, in particular, produce significant economic benefits due to their length and, in many cases, high number of visitors.

For example, events associated with the Oregon Trail Sesquicentennial celebration in 1993 included the Official Oregon Trail Sesquicentennial Wagon Train (joined by over 10,000 people along its route and 20,000 for evening programs); a traveling musical, "Voices From The Oregon Trail;" Oregon Trail Celebration '93 (a series of community celebrations and commemorations); the Oregon Trailfest kickoff event (a two-day event in Portland involving nearly 100,000 people); "Company's Coming" (a statewide clean-up day); and "Trail's End Finale" with over 5,000 participants. Also, considerable commemorative merchandise including license plates, rifles, pins, blankets, checks, coins, traveler's journals, and wine were produced and marketed (Oregon Trail Coordinating Council, 1994).

Events of Oregon Trail Celebration '93 were coordinated by the nonprofit Oregon Trail Coordinating Council established in 1990. It was established at the request of the Governor of Oregon to "coordinate the development of the Oregon Trail as a major historical attraction and tourism destination that would provide a positive economic and cultural impact for the state and to plan the activities for the 1993 Sesquicentennial of the Oregon Trail" (Renner, 1994b).

I run a teen camp in the summers and live in Greenville SC. Would love to know more about the Overmountain Victory National Historic Trail to plan interesting trips for them. Dates of reenactments. Any special events in June-August. It would be very important to us to try and educate them some about these trails & history. Please send information as soon as possible. We start planning Summer of 1996 in about 3 weeks. Thank you.

-Rocky Mountain State Historic Site Visitor

The Council raised over \$4.5 million in federal, state, and private funds which were estimated to have leveraged another \$19,800,000 in additional revenues in the form of contributions (Oregon Trail Coordinating Council, 1994, p. 69). Preliminary estimates of visitor spending generated by the Oregon Trail Celebration '93 were set at \$47.6 million (Renner, 1994a). The Oregon Trail Interpretive Center near Baker City, OR, for example, recorded 672,555 visitors from May 23, 1992, through July 1994.

A study currently underway on the Bruce Trail in Ontario is examining use and economic impacts of this long-distance Trail (Schutt, 1994). The Bruce Trail is a 725-kilometer trail along the Niagara Escarpment joining the town of Niagara Falls with the Tobermory

Peninsula. It was opened in 1967 and is Canada's oldest long-distance trail.

Initial data collection took place from July 1 through August 31, 1994. This represents the first 2 months of a planned 12-month study. Data was collected at 34 self-registration stations set up along the Trail at sites no less than one kilometer from roads. Trail users were requested by a sign to complete a registration card and deposit it in a locked box at the registration site. On-site interviews were also conducted at the registry sites.

A total of 2,712 groups registered. The boxes were monitored periodically in order to estimate response rates. Overall, 37.5% of Trail users passing the stations were estimated to have registered. Adjusting for the response rate and the average group size of three reported on the forms, total use for the two months was estimated to be 21,696 user visits. In addition, 125 interviews were completed (response rate of 95%).

Average expenditures were \$60.98 per group per trip (\$45.38 in the local region and \$15.60 outside the region). Nearly 30% of the groups, however, had made no expenditures. The author estimated that Bruce Trail users spent \$308,705 during the summer season in 1994. Approximately 75% of this total was estimated to have been spent in the local area. (A "local impact region" was defined as locations within 10 kilometers of the Trail.) In addition, respondents reported spending an average of \$324.22 on durable goods (e.g., clothing, equipment, books, fees, and memberships) related to Bruce Trail (Schutt, 1994).

The Bureau of Land Management has estimated the use and economic impact of the Upper Missouri Wild and Scenic River and the Lewis and Clark National Historic Trail in Montana. It estimated that 75,000 people visit these two related resources each year and that their use contributes \$750,000 per year to the economies around the 149-mile river corridor (National Park Service, 1991, p. 5-6).

Two pilot sections of the Missouri River State Trail (MRST) totaling over 35 miles were opened in 1990. The MRST follows the Missouri River shoreline (the route of the Lewis and Clark National Historic Trail at that point) and is expected to be over 200 miles long eventually. During the spring of 1991, a study of businesses along the pilot sections was undertaken (Bhullar, Braschler, Gillespie, Kaylen, and Vaught, 1991). Seventy-six businesses within two miles of the Trail were identified, and representatives of the 61 (80.3%) that were open during the eight weeks of the study were interviewed.

The vast majority (81.3%) of the businesses were in favor of the Trail. Responses indicated that, even after just one season, the Trail was having a positive economic effect on many businesses. This was particularly true of the establishments serving food and beverages. Eleven of the businesses reported that the Trail had a positive or strongly positive influence in their decision to establish the business, and 17 (28%) had increased the size of their investment since the Trail had opened.

Some researchers see resource-based recreation as a little-tapped draw for international tourists. Long-distance trails are felt by many to have significant potential as attractions for international tourists. This may be particularly true of national historic trails. Magill (1992) advocates "clustering" lesser known attractions and marketing the elements jointly as a way to increase use and thus the economic benefits to nearby communities. He goes on to suggest that natural resource managers may be in the best position to lead in establishing the relationships needed among people in the tourism industry and resource management agencies to realize these gains.

Another of the many economic-related benefits produced by long-distance trails is transportation. Although not well documented at this time, the savings that might be realized by increased use of trails for transportation are staggering. Dittmar (1994) quotes Secretary of Transportation Federico Peña as saying that even a

1% improvement in the overall efficiency of America's transportation system would translate into nearly \$100 billion in saving across our economy.

A thorough review of the research found no longitudinal studies involving long-distance trails, nor any studies that made comparisons among long-distance trails.

Economic Impacts of Other Trails

The economic impacts of trails are not limited to long-distance trails, of course. According to the New York Trails Council (1994):

An organized trail system is a desirable amenity and can contribute to the economic vitality of the community. A trail can guide both visitors and residents through diverse neighborhoods, past interesting shops, enticing restaurants, and many other businesses in downtown areas. Revenue generated from trail-related recreation and sports activities provides substantial income and employment opportunities (p. 27).

The Washington State Trails Plan (Interagency Committee for Outdoor Recreation, 1991) estimated that trail users in the state of Washington have an estimated equipment investment of over \$3.4 billion which generates tax revenues of \$13.8 to \$27.6 million. The basis for these estimates was the average equipment expenditures of members of the State Trails Advisory Committee. Such expenditures are all subject to taxation and, therefore, generate tax revenues.

The 1987/1988 Arizona State Comprehensive Outdoor Recreation Plan (SCORP) Participation Study examined the recreational activities of 1,574 Arizona residents and 1,000 out-of-state residents at 84 separate locations in the state. The Study found that Arizona residents spent over \$300 million on trail recreation in 1987. Estimates for nonresidents were in excess of \$200 million (Arizona State Parks, 1989).

The economic impact of trail use in Idaho was estimated using data from two separate studies: the 1986/1987 Pacific Northwest Outdoor Recreation Survey (n=1,214) and the 1987 Idaho Leisure Travel and Recreation Study which interviewed 16,413 travelers on highways and at airports. Over 87% of the Idaho sample reported participating in hiking/walking activities, with 79.4% walking on streets and roads, 50.9% walking in parks, 38.4% day hiking on trails, and 11.7% backpacking. Forty percent of Idaho residents were found to participate in off-highway vehicle use, and 58.5% participated in nonmotorized riding, including bicycles and horses.

Participants in various trail activities were estimated to spend from \$51.12 to \$85.77 per person over a two-day period, with horseback and bicycle riders spending the most and hikers/walkers the least (pp. 87-88). Overall, trail users in Idaho were estimated to spend \$400 million dollars annually on trail-based activities other than equipment expenditures (Idaho Department of Parks and Recreation, 1993). By comparison, nonresident motor vehicle travelers in Idaho were estimated to spend an average of \$143.00 per party per visit for an annual total of \$1,344,500,000 (Hunt, Sanyal, Vlaming, and Liedner, 1993). Their expenditures ranged from zero to \$7,000, with an average of \$154 for pleasure travel parties and \$124 for business travel parties.

Several economic impact studies have examined rail-trails in particular. The most extensive study of the use and economic impacts of rail-trails was a cooperative effort of the National Park Service and Penn State University conducted by Moore, Graefe,

Gitelson, and Porter (1992). The study systematically examined both the users and nearby property owners along three rail-trails: Heritage Trail, a 26-mile trail surfaced in crushed limestone which crosses rural farmland in eastern Iowa; St. Marks Trail, a 16-mile paved trail beginning in the outskirts of Tallahassee, FL, and passing through small communities and forests nearly to the Gulf Coast; and Lafayette/Moraga Trail, a 7.6-mile paved trail 25 miles east of San Francisco, CA, which travels almost exclusively through developed suburban areas. At the time of the study, Heritage Trail was eight years old; St. Marks, two years old, and Lafayette/Moraga, fourteen vears old.

I found out about the Overmountain trail purely by accident. I never knew it existed. Our trip to the ease commenced in Philadelphia where our friends picked us up. The four of us journeyed together on a history odyssey - Liberty Bell, Independence Hall, Valley Forge, Gettysburg, Harper's Ferry, Fredricksburg, Yorktown, Williamsburg, Jamestown, Kitty Hawk, Bennet's Farm - and in Asheville to the Overmountain Trail. It was a magnificent journey through history.

-Sycamore Shoals State Historic Area Visitor

Users were systematically counted and surveyed on each Trail from March 1990 through February 1991 and then were sent follow-up mail surveys. A sample of residential landowners owning property immediately adjacent to the Trails and a sample of those owning property within one quarter mile of the Trails (one half mile in Iowa) were also surveyed by mail. Real estate professionals in communities along the Trails were interviewed by phone. Useable mail surveys were received from 1,705 Trail users and 663 property owners, which repre-

sented response rates of 79% and 66%, respectively. Interviews with 71 realtors and appraisers were also conducted.

Use of the sample Trails generated significant economic impacts. These economic benefits came from total trip-related expenditures made by Trail users and additional expenditures made by users on durable goods related to their Trail activities. Users spent an average of \$9.21, \$11.02, and \$3.97 per person per day as a result of their visits to the Heritage, St. Marks, and Lafayette/Moraga Trails, respectively. This resulted in a total annual expenditures of over \$1.2 million along each Trail: \$1,243,350 along the Heritage; \$1,873,400 along the St. Marks; and \$1,588,000 along the Lafayette/Moraga. The amount of "new money" brought into the local Trail counties annually by Trail users from outside the counties was \$630,000, \$400,000, and \$294,000 for the Heritage, St. Marks, and Lafayette/Moraga Trails, respectively.

Restaurant and auto-related expenditures were the largest categories of trip-related expenses, and users who spent at least one night in the local area were the biggest spenders. Expenditures on durable goods generated an additional \$132 to \$250 per user annually, depending on the trail. These expenditures were estimated to generate an additional local economic impact of \$523,652 along the Heritage Trail, \$746,910 along the St. Marks Trails, and \$342,172 along the Lafayette/Moraga Trail (Moore, Gitelson, and Graefe, 1994). Equipment (such as bicycles) was the largest category of durable expenditure. All figures reported in this study were estimates of expenditures without the use of multipliers.

The study found that levels of economic impact varied considerably across the three study rail-trails. This was due principally to the fact that the Lafayette/Moraga Trail was used almost exclusively for short trips by nearby residents, while the other two Trails attract-

Kings Mountain and Cowpens were on our original schedule as were Guilford Courthouse and several Civil War locations. We were fortunate to visit Kings Mountain on the battle anniversary date. We enjoyed both Kings Mountain and Cowpens very much.

-Kings Mountain National Military Park Visitor

ed more users from beyond their local neighborhoods. The authors concluded that if economic benefits are an important community objective, attracting out-of-town users and getting many of them to make overnight stays is important.

A series of trail studies in Minnesota by the Department of Natural Resources from 1988 to 1990 included questions to measure trail users' expenditures in the surrounding areas. Each study surveyed users on the trail between late May and early September. Expected user expenditures ranged from an average of \$.43 to \$9.71 per person per day across the seven trails studied. Average expected expenditures tended to be higher along trails where users traveled farther to get to the trail. Multiplying the expected expenditures per person per day by the estimated annual visits yields annual direct economic impact estimates of between \$17,845 and \$375,800 along each trail.

A study of the Sugar River Trail near New Glarus, WI, concluded that Trail users spent nearly \$430,000 in 1985 (Lawton, 1986). The Sugar River Trail is a 23.5-mile bicycle trail managed by a nonprofit corporation and offers such services as a user shuttle service and bicycle rentals. In 1985, users spent an average of \$9.04 per person at Sugar River Trail. In addition, out-of-state users spent over twice as much as Wisconsin residents. Expenditure data was gathered through voluntary user surveys conducted from 1979 to 1985 that included the question, "Would you mind telling us

approximately how much money you spent along the Trail?"

A 1973 study of the Elroy-Sparta Trail, a bicycle trail in Wisconsin, concluded that 72 businesses in five communities realized added gross sales of \$295,100 as a result of trail use (Blank, 1987). A 1988 study of this Trail found that users spent \$14.88 per person per day for trail-related expenses. The total annual economic impact of the Elroy-Sparta Trail was estimated to be \$1,257,000. Economic data was gathered as part of on-site interviews with 1,125 parties using the Trail during July and August of 1988. Users were asked to, "Estimate the total amount of money your party will spend on this trip in this area." (Schwecke, Sprehn, and Hamilton, 1989).

We once tried to find the trail near Burbank to hike it up to Yellow Mt. But couldn't find it. Would like to receive a brochure showing hikable sections and how to find the trail heads.

—Blue Ridge Parkway Mineral Museum Visitor

The Minnesota Department of Natural Resources analyzed survey data gathered on six of its rail-trails from 1980 through 1988 and found that trip-related expenditures varied greatly depending upon which trail was visited and how far users traveled to get to the trails. Users who traveled less than 25 miles to get to the trails spent an average of \$.61 to \$2.86 per day, depending upon the trail visited. Those traveling 25 miles and farther spent up to \$53.20 per day on average (Regnier, 1989).

In 1989, the USDA Forest Service conducted a comprehensive study of a representative sample of 19 Illinois bicycle trails, some of which were rail-trails (Gobster, 1990). The trails studied ranged in length from .75 to 55 miles and included many urban and suburban settings. Thirty-four hundred users were surveyed during their trips on weekends from

April through October. Expenditure data was gathered by asking, "How much money will this trip cost you? Include the money it took to get to the trail, money spent on the trail, and the cost of getting back." On average, users spent \$7.95 per person per trip. Over half the users reported having no expenses, and 2% spent over \$50. Horseback riders spent the most. When they were removed from the sample, the average expenditures dropped to \$2.89 per person per trip.

An economic impact analysis was conducted on the North Central Rail Trail (NCRT) in Baltimore County, MD, in 1993 (PKF Consulting, 1994). Created in 1984, the NCRT is a 20-mile trail from Asheville, MD, (about 15 miles from downtown Baltimore) to the Pennsylvania border. Data for this study was collected in three separate surveys. The first was a Trail user survey distributed on the Trail or in parking lots. A total of 199 of these surveys were returned for a response rate of 16.23%. The second survey examined property owners along the Trail. Questionnaires were returned by 465 (26.7%) of the owners sampled. The third survey involved interviews with local businesses. The direct, indirect and induced economic impacts of the rail-trail were estimated using an input-output economic model developed by the USDA Forest Service called IMPLAN.

Several different aspects of economic impact were considered. A total of \$303,750 in tax revenue resulted from the Trail in 1993, including \$171,885 in state sales tax via goods sold, \$132,257 in state income tax via jobs supported, and \$72,742 in Baltimore County personal income tax surtaxes. The Trail was estimated to have created/supported 262 jobs statewide. The value of goods purchased because of the Trail in 1993 was \$3,380,013. Seventy percent of Trail users were found to have purchased "hard goods" (e.g., bicycles, supplies, clothing, film, etc.) in the last year, and 57% of property owners had purchased

goods for use on the Trail. Combined, 61% of users spent an average of \$203 per person on goods for use on the Trail in 1993. This yielded an estimate of \$1,773,246 of goods purchased and \$88,662 in state taxes generated (p. IV-43 to 45). An additional \$1,556,551 in expenditures on "soft goods" sales were estimated for 1993 with an associated state tax revenue of \$73,158 (p. IV-45). For comparison purposes, the 1993 Trail budget was \$191,893. Over 93% of those surveyed felt that the NCRT was a good use of state funds, and 68% felt their home's proximity to the Trail would be a positive selling point if they were to try to sell their home.

Mowen (1994) examined recreation use and its economic impacts in the Mount Rogers National Recreation Area (MRNRA) in southwest Virginia. The study examined and compared two different groups of trail users. One was a sample of rail-trail users drawn on a portion of the 34 miles long Virginia Creeper Trail (VCT) in the MRNRA, and the other consisted of users of other trails in the MRNRA. The general trail user sample was made up of MRNRA users who reported that a trail activity was their most important activicy in the MRNRA (134 of 528 MRNRA)

Sycamore Shoals Historic Site was a pleasant suprise. It was well planned and presented the information very well. I had read in the brochure it was a natural hiking trail and my wife and I happened to spend an afternoon in Elizabethton and wanted to take a walk. As a former history teacher I was absolutely delighted with what I found inside. I think you need to publicize it better. If I had known what was there I would have made a special trip. As it was, I discovered it by accident.

-Sycamore Shoals State Historic Area Visitor

respondents). The data was collected during daylight hours from May through October, 1993 using on-site interviews and mail-back questionnaires. A sample size of 235 was obtained (66% response rate from VCT and 62% response rate from MRNRA).

I attended a reenactment at Sycamore Shoals about 2 years ago and really enjoyed it. More events of this type would probably draw greater numbers of visitors to the parks.

-Sycamore Shoals State Historic Area Visitor

Few differences were found between the groups with respect to sociodemographics and opinions about the trails. There were differences in use characteristics and expenditures, however. Rail-trail users tended to be day users who traveled shorter distances, participated in trail activities for fewer hours and in smaller groups, and spent more on hotel accommodations and restaurants than general trail users.

Expenditures between the two groups were compared using per person per day figures. The assumption was made that the day before and after an overnight visit were spent on the trail (i.e., a figure of one was added to average nights spent in the area to calculate number of days of trail use).

It was estimated that VCT users spent an average of \$49.20 per person per day while general MRNRA users spent \$31.30 per person per day. VCT users spent significantly more than did general MRNRA trail users on restaurants and hotels/motels. Approximately 72% of VCT users were day users compared to 18.7% of MRNRA users. A strong interaction between trail type and activity type was noted, however, with 80.2% of VCT users being bicyclists and 60.4% of MRNRA users being hikers. Only 9.4% of VCT users were riding horses compared to 29.1% of general MRNRA who did so. Overall, hikers, horseback riders,

and bicycle riders spent \$39.24, \$23.44, and \$50.37, respectively. The authors suggests that the economic base of local communities could be improved by attracting more non-local rail-trail users and encouraging them to stay longer in the region. They also suggest promoting the VCT to more distant markets.

Snowmobile trails have been found to generate particularly high levels of economic impact. These high rates seem to be due in part to expenditures on the purchase and operation of the snow machines themselves and partly to a relatively high proportion of snowmobile users who use motel lodging as opposed to campgrounds.

For example, a study of snowmobiling in Vermont during the 1994-1995 season found that the sport generates extensive economic impacts (McElvany, 1995). Data was gathered from 397 Vermont Association of Snow Travelers (VAST) members and a census of 44 authorized snowmobile dealers and 3 custom snowmobile builders in the state. The study found a total of \$165,252,770 of economic

Get the word out! I'd never heard of your trail before you sent me this! And I did Cowpens! Why not a display here? I'm your target audience. This spring I drove the length of the Blue Ridge Parkway - Skyline Drive to the far side of Great Smoky Mtns. Pk. I also drove part of the Natchez [Trace] Trail this trip. I stop at exhibits and I camp usually. Why aren't you in AAA? Or are you just new? Where can I get your brochure? Somehow I missed it at Cowpens, and along the 15 or so miles of your trail I drove between Cowpens and I-85. I do recall seeing some kind of sign, and wondering what it meant...for about 3 seconds.

-Cowpens National Battlefield Visitor

impact attributable to snowmobiling in Vermont during that season. This estimate included fuel purchases for snowmobiles and groomers; purchases of snowmobiles, trailers, options and accessories; parts and labor purchases from dealers; tow vehicle and gasoline purchases; purchases of lodging, meals, snacks, beverages, registration and memberships; purchases of real estate for snowmobiling; and snowmobile related tax revenues. The total estimate above is after application of an economic multiplier of 2.

The economic impact of snowmobiling resulting from the Trans Ontario Provincial (TOP) Trail System in northern Ontario has been estimated to be approximately \$4.5 million (Canadian) from destination snowmobilers and \$4.7 million (Canadian) from resident excursion trips (NordicGroup International, 1990 as cited in Parks and Recreation Federation of Ontario, 1992, p. 70). According to Deeg (1993), such trails do offer the potential for tremendous economic impact, "if we know how to plan them, design and build them, and integrate them with our existing community infrastructures, and finally how to successfully market and promote them" (p. 2).

Surveys of snowmobile users were conducted during two consecutive years in the Black Hills of South Dakota (Madden, 1988, 1989). Interviews, parking area census information, and analyses of guest logs were used to gather data. A total of 224 survey forms were completed in 1988 and 122 in 1989. In 1988, average daily expenditures were estimated to be

South Dakota residents	\$33.00 - \$61.00
Wyoming residents	\$19.00 - \$40.00
Other nonresidents	\$66.00 - \$72.00

Total seasonal expenditure estimates ranged from \$ 1,011,000 to \$1,464,000, based upon a three-month season. The total statewide snowmobile expenditure estimate

was \$25.7 million, representing use of approximately 23 state trails. Each trail was estimated to generate approximately \$1.1 million in total expenditures. This study estimated that the recreational use of snowmobiles in and around Lawrence County, SD, accounted for a total economic impact of approximately \$18.5 million for the county. The follow-up study in 1989 found similar results. Average daily expenditures were

South Dakota residents	\$42.00 - \$53.00
Wyoming residents	\$29.00 - \$48.00
Other nonresidents	\$66 00 - \$76 00

Total weekly expenditures were estimated to range from \$117,991 to \$144,447 for the survey period. Total monthly expenditures ranged from \$505,675 to \$619,187 and the total seasonal expenditures were estimated to range from \$1.51 million to \$1.86 million, based upon a three-month season.

The Michigan Department of Natural Resources (1991) conducted a case-study analysis of the impacts of off-highway vehicle use at Silver Lake State Park. They concluded that businesses such as restaurants, service stations, bars, motels, private campgrounds, and private vendors of goods and services can all be expected to locate in areas adjacent to newly developed recreation areas. The report also indicated that property values can be expected to appreciate in areas near newly developed recreation sites.

Blank (1991) contends that trail development can become a "triggering event" to stimulate the growth of tourism (p. 12). In turn, tourism can become a mainstay of a viable community economy. It can reverse negative trends of population out-migration and economic depression and help communities stabilize and diversify their economics. He believes that the economic impact provided by trail development is dependent, in part, upon local

support of the project, and local actions to meet user demands.

Although many studies have found that the economic impacts of trails are significant, these benefits may not be generally well known to the public. For example, in a nation-wide study of public perceptions of the benefits of local recreation and park services, economic benefits were mentioned less than any other type. According to the authors, "This would seem to indicate that attempts to convince the public of the economic benefits of local park and recreation services may be misguided, since such a tiny base of the public currently recognizes such benefits" (Godbey, Graefe, and James, 1992, p. 3).

Forecasting Economic Impacts

An additional group of trail-related economic impact studies has attempted to predict the likely economic impacts of proposed trails or trails under development. The most recent one of these was conducted by Florida State University (1994). This study examined the socioeconomic impacts and location alternatives for reopening the Georgia, Florida and Alabama (GF&A or "Gopher, Frog & Alligator") rail corridor as a multi-use recreational trail. The proposed Trail is 52 miles long and extends from Tallahassee to the Gulf Coast. The study considered a "service area" of a 30-minute drive from the proposed Trail.

Many of the use and economic impact estimates were based on analysis of extensive survey data gathered on the nearby St. Marks Trail by Moore, et al. (1992). Thirty local merchants were interviewed as well. All interviewed business owners supported the development of the Trail. Total use of the GF&A Rail-Trail was projected to be between 160,000 and 220,000 annual visits, with 81% being bicyclists and 13% walkers, joggers, and runners. The authors estimated that 15% of the users

of the new Trail would be tourists. The term "tourist" for this study was defined as a non-resident of the three "local" counties traveling to the study area for a day or overnight visit for outdoor recreation or vacation, excluding business travel. The "local" county was defined as the three counties through which the Trail would pass.

The total annual economic impact from trip-related expenditures (e.g., meals, lodging, transportation. etc.) was projected to be \$1,527,114. Of this, \$913,114 was attributed to local resident spending and another \$614,001 to tourists. Annual clothing, equipment, and supply purchases related to Trail use was expected to be another \$1,484,720 annually. The total economic impact projected from Trail development was, therefore, forecast to be \$3,011,834 annually. All of these figures were based on an estimate of 160,000 visits per year and after application of an economic multiplier of 1.58 (Florida State University, 1994).

Madden (1990) used expenditure findings from four previous trail-related economic impact studies (reviewed elsewhere in this report) to forecast the economic impacts of a proposed rail-trail in the Black Hills of South Dakota. The total user volume was projected to be 50,000 users per year of which non-locals were expected to comprise between 50-90%. Yearly economic impact was then forecast to range from \$312,500 to \$800,000. The overall average expenditures were expected to be \$650,000 per year.

Information from three previous studies of existing rail-trails (reviewed elsewhere in this report) were used to predict the economic impact of the Katy-Missouri River Trail (Blank, 1987). The author used two techniques to predict economic impacts. He determined the average user sales per mile to be approximately \$20,100 on the other trails and multiplied this figure by the length of the proposed Trail to arrive at a total estimate of spending of \$4,000,000 for the Katy Trail. By

segmenting the Trail and making assumptions about different compositions and levels of use on different sections, he produced an alternative prediction of total estimated Trail-related user sales figure of \$6,200,000 (pp. 6-7). Using this higher figure, it was estimated that Trail use would produce government tax revenues of \$960,000

Swan (1991) examined the economic implications of three alternative uses for a rail-road corridor in Oregon. For each alternative, the author estimated start-up and development costs, recurring operation and maintenance costs, revenues, and county taxes and then applied appropriate economic multipliers using IMPLAN. All three of the proposed alternatives of the corridor were forecast to produce revenues for the Klamath County area at the end of the first year of operation. Total county revenue figures under each alternative were estimated to be as follows:

Adjacent Landowner Use Scenario (\$125,000)

Trail Development Scenario (\$635.000)

Excursion Railroad Scenario (\$715.000)(p. 7)

Of the three proposed uses, conversion to Trail Development had the lowest estimated start-up and development cost (\$55,000 versus \$618,000 for the Adjacent Landowner Use Scenario and \$2.6 million for the Excursion Railroad). The Trail Development Scenario also generated the highest estimated county tax revenues (\$5,400 versus \$2,600 and \$3,300, respectively). It was further estimated that the Trail construction would generate 19.5 jobs in its first year (for construction and start-up), while the Adjacent Landowner Use Scenario would generate none, and the Excursion Railroad would generate 12 jobs.

Ohnoutka (1994) conducted case studies of two existing rail-trails (the Elroy-Sparta Trail in Wisconsin and the Youghiogheny River Trail in Southwestern Pennsylvania) to evaluate strategies to maximize the economic impact of the North Bend Rail-Trail. The North Bend Trail is a 60.57 mile rail-trail in Wood County, West Virginia, begun in 1989 and still under development at the time of the study. He concluded that four factors that should be considered and managed to capitalize on the economic opportunities afforded by rail-trails. They are

- Marketing and promoting the trail (e.g., creating a niche, target marketing, and promotional materials),
- Trail services (e.g., trailheads, businesses, and signage),
- Development of additional attractions (e.g., cultural events/festivals, side trails, and historical preservation),
- Community promotion (e.g., slogans, brochures, and hospitality) (p. 46)

He considered the economic potential of the North Bend Trail to be high and recommended a series of actions based on these factors to maximize the economic impact of the trail. McClung and Suter (1992) estimated the total annual economic potential of the North Bend Trail to be \$4,874,000 (\$2,821,000 direct and \$2,053,000 indirect) if fully developed.

Effects on Property Values

Like other parks and public open space areas, trails may affect nearby property values. A few studies have examined this particular category of economic impact. Moore, et al. (1992) surveyed property owners regarding the effects of three rail-trails on the values of their properties adjacent to and within one-half mile of the trail corridors. Their key findings included the following:

 The vast majority of adjacent and nearby landowners were trail users and visited the trails frequently.

- Landowners along all three trails reported that their proximity to the trails had not adversely affected the desirability or values of their properties. Along the suburban Lafayette/Moraga Trail, the majority of owners felt the presence of the Trail would make their properties sell more easily and at increased values.
- Of those who purchased property along the trails after the trails had been constructed, the majority reported that the trails either had no effect on the property's appeal or added to its appeal.
- The vast majority of real estate professionals interviewed felt the trails had no negative effect on property sales and no effect on property values adjacent to or near the trails. However, those who felt the trails increased property values outnumbered those reporting decreased values. This positive effect was most pronounced on the suburban Lafayette/Moraga Trail and for nearby, as opposed to adjacent, property. (Moore, et al., pp. ii-iii)

A study of landowners along three greenway trails in the Denver area was carried out in 1994 (Alexander, 1994). Each trail was less than two miles long and ran mainly through residential areas. The study used telephone interviews of 169 residents adjacent to or within one block of the trails, interviews of 11 real estate agents, and analyses of real estate advertisements in the Denver Post.

Thirty-five percent of the residents who lived adjacent to the trails felt their location would increase the selling price of their homes, and 46% felt it would make their homes easier to sell. Only a few (4%) felt it would decrease their selling price or (8%) make their homes more difficult to sell. Residents who lived within one block of the trails responded simi-

larly. Thirty-three percent felt their location would increase the selling price of their homes, and 36% felt it would make their homes easier to sell. Five percent felt it would decrease their selling price or (3%) would make their homes more difficult to sell. The study concluded that:

Urban trails are regarded by real estate agents as an amenity that helps to attract buyers and to sell property. Single family homes, townhomes, apartments, and condominiums are regularly advertised as being on or near a trail or greenway. Trails and greenways are considered lifestyle enhancements and usually included in the sales package for a property. (Alexander 1994, p. 6)

One study of two Minnesota rail-trails found that landowner concerns prior to trail development were greater than the subsequent problems actually experienced (Mazour, 1988). Although the vast majority of owners had not experienced major problems with the trails, loss of privacy, trespass, litter, and access to their properties were found to be of "some concern" for a quarter to a third of the landowners surveyed. In terms of how the trails affected their property values, 87% of owners believed that the trails either increased the value of their properties or had not affected them at all.

Interviews with 10 real estate agents and appraisers indicated that trails were a selling point for suburban residential property, hobby farms, farmland proposed for development, and some kinds of small town commercial property; but had no effect or a slightly negative effect on agricultural land and small town residential property. The number of landowners who reported being initially concerned that trail development would lower property values was found to be higher than the number who still held this view after the trails were established.

A study of 170 adjacent landowners along two pilot sections of the Missouri River State Trail found that levels of landowner support increased after the Trail was established (Bhullar, Braschler, Gillespie, Kaylen, and Vaught, 1991). Before the Trail was opened, 31.3% of respondents were in favor of the Trail, and 43.3% opposed. After one year of operation, 41.1% were in favor, and 34.2% opposed.

In 1987, the Seattle Engineering Department conducted a study of the effects of the Burke-Gilman Trail on nearby property values and crime rates. The Burke-Gilman Trail is a 12.1 mile bicycle and pedestrian route, of which 9.9 miles are within the city limits of Seattle. The results of the study showed that property near but not immediately adjacent to the Trail sold for an average of 6% more than comparable property elsewhere and that property immediately adjacent to the Trail sold for up to one-half of one percent more. Homes immediately adjacent to the Trail actually had lower rates of burglary and vandalism than the neighborhood average (City of Seattle, 1987).

The Minnesota Department of Natural Resources (1980) conducted surveys of landowner attitudes along two proposed rail-trails and compared them to landowners' attitudes and experiences along two existing trails. They found that landowners along the existing trails were more positive and had experienced fewer problems than the landowners along the proposed trails were anticipating.

The effects of the Lafayette/Moraga Trail on adjacent property owners adjacent were examined as part of a 1978 study (East Bay Regional Park District, 1978). It found that 92% of adjacent owners used the Trail and that 90% were either "very" or "somewhat" satisfied with it.

While 48% felt the Lafayette/Moraga Trail had little or no effect on their property values, 36% felt the Trail had increased the value of

their property. The majority of those surveyed reported that living next to the Trail was better than they had expected it to be, and 56% of those who moved to homes along the Trail after it had been built reported that they had considered the Trail a plus when making their decision to buy. Eighty-five percent felt the Trail had been a worthwhile expense of park money, and the most commonly requested improvement by the adjacent owners was "lengthen trail."

Summary Tables

The benefits of trails and trail use seem to be well worth documenting. Although many studies have found that the economic and other benefits of trails are substantial, these benefits may not be generally recognized by the general public or appreciated by most trail users. Trail proponents and managers should accept the challenge of documenting the entire range of important benefits that trails seem to provide and educating users and the public at large about their significance. Only with accurate information and an appreciation of the

benefits generated can voters and other decision makers choose the best alternatives among completing land and resource uses and make the best choices about trail development and management.

Table 10 includes brief summaries of the economic impact studies reviewed for this report that are most relevant to trails and trail-related activities. They are organized into two groups: "Economic Impact Studies of Trails and Trail-Related Activities" (Table 10) and "Forecasts of Economic Impacts Related to Proposed Trails" (Table 10a). The entries are arranged within each category in chronological order starting with the most recent.

Note that inclusion of a study does not imply that its methods were rigorous or that its results are accurate. While some were done with sophisticated methods and rigorous analyses, others were much more casual and should be used cautiously. Also note that the results are not necessarily comparable across studies. Some use different units (e.g., expenditures per person per day versus expenditures per group per trip) and results have not been converted to 1995 dollars.

Concerning the trail, I think that much effort should be made to make sure that it was moved off the highways. The safety of all concerned should drive this effort. [keep it near the actual trail but off the road]. Also, concerning the trail much effort should be made to insure that the trail is legally usable now and for future generations through easements, purchase, etc. In some areas the trail needs to be marked better. Historic sites should be purchased and preserved and more fully tied into the trail. The OVTA, NPS, State Parks, local communities, local special interest groups and whatever State and Federal Agencies need to join together and unify efforts to preserve the trail, the historic sites, and the scenic sites before it is too late. Already, many areas that were once barren fields or open vistas have suddenly developed subdivisions, business facilities, and in some instances chaotic messes of garbage, or bulldozed trees that block passage and views. If action is not taken quickly the people of the corridor and the peoples of our nation will have a great loss.

—Sycamore Shoals State Historic Area Visitor

Table 10: Economic Impact Studies of Trails And Trail Activities				
Study Focus	Author(s)	Year	Sample	Findings
Snowmobiling in Vermont	McElvany	1995	397 VAST members, 44 dealers, 3 builders	\$165,252,770 impact in Vermont during 1994-1995 season
Virginia Creeper Rail-Trail, Virginia	Mowen	1994	101 rail-trail users	Expenditures of \$49.20/person/day
Mount Rodgers National Recreation Area Trails, VA.	Mowen	1994	134 general trail users	Expenditures of \$31.30/person/day
North Central Rail-Trail, Maryland	PKF Consulting	1994	199 trail users; additional interviews with local businesses	Value of goods purchased due to trail was \$3,380,013 in 1993; Trail created/supported 262 jobs statewide
Oregon Trail Sesquicentennial Celebration	Renner	1994a	Unspecified	Preliminary estimates of visitor spending set at \$47.6 million for Sesquicentennial Celebration
Bruce Trail, Ontario, Canada	Schutt	1994	2,712 trail user registration cards and 125 interviews	\$60.98/group/trip for estimated \$308,705 total direct expenditures for summer season; additional \$324.22/group on durable expenditures related to trail
Trail-related recreation in Idaho	Idaho Dept. of Parks & Recreation	1993	1,214 Pacific NW residents; 16,413 randomly selected Idaho travelers	\$400 million estimated annual expenditures on trail based activities in Idaho (including equipment purchases)
Heritage Trail, Iowa	Moore, Graefe, Gitelson, & Porter	1992	329 trail users	\$9.21/person/day & \$1.24 million annually in trip expenditures; \$523,652 annual durable goods expenditures
St. Marks Trail, Florida	Moore, Graefe, Gitelson, & Porter	1992	600 trail users	\$11.02/person/day and \$1.87 million annually in trip expenditures; \$746,910 annual durable goods expenditures
Lafayette/Moraga Trail, California	Moore, Graefe, Gitelson, & Porter	1992	776 trail users	\$3.97/person/day and \$1.59 million annually in trip expenditures; \$342,172 annual durable goods expenditures
Washington State Trails	Interagency Committee for Outdoor Recreation	1991	Washington State Trails Advisory Committee members	Estimated equipment investment of over \$3.4 billion by trail users in the state of Washington. Estimated tax evenue of \$13.8 to \$27.6 million
Luce Line State Trail, Minnesota	MN. Dept. of Natural Resources	1991a	Unspecified number of user interviews	\$.43/person on day of interviews
Root River State Trail, Minnesota	MN. Dept. of Natural Resources	1991b	Unspecified number of user interviews	\$9.71/person on day of interview
Sakatah Singing Hills State Trail	MN. Dept. of Natural Resources	1991c	Unspecified number of user interviews	\$4.00/person on day of interview

Douglas State Trail, Minnesota	MN. Dept. of Natural Resources	1990a	Unspecified number of user interviews	\$1.90/person on day of interview
Heartland State Trail, Minnesota	MN. Dept. of Natural Resources	1990b	Unspecified number of user interviews	\$7.94/person on day of interview
Munger Trail, Minnesota	MN. Dept. of Natural Resources	1990c	Unspecified number of user interviews	\$8.38/person on day of interview
19 bicycle trails, Illinois	Gobster	1990	3,400 trail users	\$7.95/person/trip overall; \$2.89/person/trip after dropping horseback users
Trans Ontario Provincial Trail System	Nordic Group Int'1 (Cited in Parks & Recreation Federation of Ontario, 1992)	1990	Destination snowmobilers and resident snowmobilers	Economic impact was \$4.5 million from destination snowmobilers and \$4.7 million from resident excursions
Elroy-Sparta Trail, Wisconsin	Schwecke, Sprehn, & Hamilton	1989	Interviews with 1,125 trail using parties	\$14.88/person/day; Annual impact of \$1,257,000
Rail-Trails in Minnesota	Regnier	1989	Unspecified number of users on 6 trails (1980 to 1988)	\$.61 /person/day to \$53.20/person/day depending on trail and state of residence
Trail-related activities in Arizona	Arizona State Parks	1989	1,574 Arizona residents & 1,000 Out-of-state residents	\$300 million spent on trail recreation by Arizona residents in 1987; \$200 million spent on trail recreation by non-residents
Black Hills snowmobile use, South Dakota	Madden	1989	122 snowmobilers	Average daily expenditures of \$29 to \$76.00 depending on state of residence; Total seasonal (3 months) expenditures of \$1.51 to \$1.86 Million
Black Hills snowmobile use, South Dakota	Madden	1988	224 snowmobilers	Average daily expenditures of \$19 to \$40.00 to \$72.00 depending on state of residence; Total seasonal (3 months) expenditures of \$ 1.01 to \$1.46 Million
Munger Trail, Minnesota	MN. Dept. of Natural Resources	1988	Unspecified number of user interviews	\$4.21/person on day of interview
Elroy-Sparta Trail, Wisconsin	Blank	1987	Business records	72 businesses in 5 communities realized gross added sales of \$295, 100 in 1973
Upper Missouri Wild and Scenic River & the Lewis and Clark National Historic Trail in Montana	Bureau of Land Mgmt (As cited in National Park Service, 1991)	1987	Unspecified	\$750,000 annual contribution to the economics of the areas around the 149-mile river corridor
Sugar River Trail, Wisconsin	Lawton	1986	566 trail users	\$9.04/person on average in 1985 with total impact of \$429,400

	Table 10a. Forecasts	of Econ	omic Impacts Related to Pr	oposed Trails
Study Focus	Author(s)	Year	Basis	Projected Economic Impact
Gopher, Frog & Alligator Rail-Trail, Florida	Florida State University	1994	160,000 annual visits	Total economic impact projected to be \$3,011,834 annually (\$1,527,114 in trip expenditures and \$1,484,720 in durable goods purchases)
North Bend Rail-Trail, West Virginia	McClung & Suter	1992	Projected Rail-Trail Users	Estimated total economic impact of \$4,874,000 if trail fully developed
Rail-trail proposal in Oregon	Swan	1991	Comparison with other	Estimated County revenue of \$635,000 at end of first year use alternatives
Rail-trail proposal in Black Hills, South Dakota	Madden	1990	50,000 annual visits	Overall expenditures estimated at \$650,000 annually
Katy-Missouri River Trail, rail-trail in Missouri	Blank	1987	\$20,100/mile in user expenditures	Estimated expenditures of \$4.0 to \$6.2 million annually

Conclusions

Although not without their costs, trails have been found to provide a wide variety of benefits. Users, nearby property owners, and neighboring communities all enjoy various benefits from trails and trail use. These benefits can include public recreation opportunities, tourism and economic development, health and fitness, aesthetic beauty, preserving undeveloped open space, community pride, access for disabled persons, public education about nature and the environment, traffic reduction, transportation alternatives, and others. Trail planners, managers, and advocates should not lose sight of this multiplicity of benefits in their desire to document and communicate the economic benefits of trails. Trail benefits can most effectively be presented as a package that include economic impacts but does not present economic benefits in isolation.

The economic impacts of trails and trail use are varied and can be substantial. Past research indicates that these economic benefits can be of several types, e.g., increased user expenditures, increased tax revenues, increased nearby property values, purchases of trail-related equipment, corporate relocations, job creation, reduced health costs, and others. Past studies also show that the economic effects of trails can be quite significant—often measured in the tens or even hundreds of millions of dollars.

There are, however, gaps in the present literature regarding the economic impacts of trails. First, what factors affect the types and levels of benefits that trails provide? Past studies indicate that factors such as length of stay, distance traveled to get to the trail, type of lodging used, and trail activity may affect user expenditures; but few studies have examined

these factors explicitly. We do not have a good understanding of the relative importance of these factors or of other factors that likely influence user preferences, behavior, and experiences. Other possibly important factors which have received very little attention include trail type, trail length, and available amenities (both on the trail and in nearby communities). Research to date has tended to document or predict levels of economic impact related to trails and not to examine how various designs or management decisions might influence the types or levels of the various benefits provided.

Second, there are very few studies that examine the use or benefits of long-distance trails. It is quite possible that user preferences and behavior related to long-distance trails and among different types of long-distance trails are different than those along other trails. It is true that the planners and managers of long-distance trails often face different challenges and have different constraints and resources than those available along other trails. At present, however, long-distance trail planners and managers have little user information to rely upon when making their decisions.

I would also explore linkages with other NPS sites that are related in theme: Guilford Courthouse, Fort Moultrie, Camden, and Ninety-Six. A thematic focus could be the Revolutionary War in the Southern States (many people are totally unaware of the significance of the Southern campaigns). Perhaps you could even link to the Colonial NHP in Virginia to close the loop. How about a "trail" (actually a driving trail) that links all the sites together?

⁻Kings Mountain National Military Park Visitor

Measuring Trail Use

n understanding of who uses trails and how they use them is essential for effective trail management. The following discussion summarizes current literature reviewed that was used to build the survey method for the Overmountain Victory National Historic Trail.

Estimating economic impacts, for example, requires an accurate estimate of total trail use. At some point, an estimate of average individual or party expenditures must be multiplied by an estimate of the total number of users, visits, or parties that have visited the area or attended the event. The time, effort, and money spent on accurately measuring how much users spend will have been largely wasted if total use is not estimated accurately as well.

Information on Use and Users

Research indicates that trails are very popular, and their use is expected to continue to increase (Krumpe and Lucas 1986). For example, rail-trails were used for recreation over 27 million times in 1988 ("Rails-to-trails fever sweeps nation!," 1989). The managers of 51 different rail-trails estimated the annual use on their trails to range from a low of 1,800 user days per year for a 7.5-mile trail in Illinois to a high of 1,000,000 user days per year on the 44.5-mile Washington and Old Dominion Trail in Northern Virginia (Rails-to-Trails Conservancy, 1988). Rail-trail mileage in Minnesota increased from 70 to 156 miles between 1980 and 1988, and use correspondingly increased from 81,000 to 217,000 visits during the same period (Regnier, 1989). Moore, et al. (1992) estimated annual use of

Reenactors prepare for the next leg of the March, McDonell House, Quaker Meadows. Photo by author.

135,000, 170,000, and 400,000 visits on three rail-trails in Iowa, Florida, and California, respectively.

Several other studies have examined the use and users of specific rail-trails. For instance, a 1988 study of the Elroy-Sparta Trail in Wisconsin found that 49% of users came from out-of-state. The average distance traveled to get to the Trail was 228 miles. Thirty-three percent of users were under 18 years of age, and almost half of all users were repeat visitors. On average, users were found to spend 1.43 nights in the area and travel in groups of 4.19 people (Schwecke, et al., 1989).

A study of the 7.6-mile Lafayette/Moraga Trail in California in 1978 estimated annual use there at 116,000 visits (East Bay Regional Park District, 1978). The most common age category was 31–49; the most common travel method used to get to the Trail was by car; 44% planned to use the Trail for less than half an hour; and 84% came from three miles away or closer to use the Trail.



A statewide study of 19 of 31 official bicycle trails (including several rail-trails) was conducted in Illinois (Gobster, 1990). This study found that the trails tended to serve local and regional users who visited frequently (40% visited "virtually every week"). Forty-two percent were female. and the largest proportion of users (30%) were in the 25–34 age category. They were found to be well educated. and 55% had incomes of \$40,000 or more.

A study of Capital Area Greenway system users in Raleigh, N.C. found that the typical user was a white female between 16 and 34 years old. Overall, users were well-educated and had above average incomes (Furuseth and Altman, 1991).

A related study (Furuseth and Altman, 1990) comparing the Capital Area Greenway system with a neighborhood greenway in Charlotte, N.C., found a similar population of users. That study also found that the majority of users of each trail had traveled five miles or less to access the trails. Interestingly, while younger users were the most common, those over 55 visited most frequently.

Techniques for Estimating Trail Use

Knudson identifies five kinds of estimates traditionally used to determine levels of use for parks and trails:

- · Pure guess
- Observational estimates by administrators
- Growing (seldom retreating) statistic based on rough comparison from year to year (often a variation on Class 1)
- Sampling procedure, either using direct counts of people or counts of a related phenomenon
- Pure count of some user data (1980, p. 399)

Yuan, Maiorano, and Yuan (1995) review and describe the following methods of gathering visitor use information:

- Indirect nonstatistical methods (e.g. secondary data)traffic counters
- Personal observation
- Traffic counters with personal observation
- · Cameras, traffic counters with camera
- Registration with personal observation
- Registration with traffic counters, registration with camera
- User surveys
- · Mandatory permits
- Fee receipts
- · Other indirect counts
- Remote sensing (e.g., aircraft, helicopter, or balloon over flights)

Measuring use on trails has been and continues to be problematic. This is especially true on heavily used urban greenway trails which can be accessed at many points and where users often pass the same point more than once during the same outing. Estimating use on long-distance trails can be even more challenging due to vast distances, multiple entrances and exits, widely varying use levels on different sections, and different use patterns at trail nodes versus trail sections in the case of national historic trails.

Techniques that have been tried with varying degrees of success have included a user count at samples of trailheads, unmanned voluntary trail registers, self-issued mandatory permits, mandatory permits, and electronic counters. User compliance rates and therefore accuracy for some of these techniques have ranged from 0% to 89% depending upon season, length of trip, type of area, and type of user (Krumpe and Lucas, 1986).

Moore, et al. (1992) used a labor-intensive technique for estimating use on rail-trails and

greenways. As part of a larger study, they employed interviewers to travel the entire lengths of three study trails approximately twice per week for one year. These interviewers also conducted counts which were used as the basis for extrapolating total annual visits.

The Minnesota Department of Natural Resources has used a method of estimating use that is based on sample counts. Data is collected by observers stationed at trail access points for two-hour periods to count and interview trail users. There are 58 "observation periods" throughout a 16-week survey season. The day, time-of-day, and entrance point are randomly chosen for each observation period. At the end of the survey season, user counts are averaged. This average is then multiplied by the number of two-hour blocks per day, number of days per season, and the number of access points to derive a figure for usage. Data is typically collected between 8 a.m. and 8 p.m. (Minnesota Department of Natural Resources, 1988).

Madden and Love (1982) recommended an approach to park planning and problem solving using direct observation, interviews, and questionnaires. They advocated general observations, trace measures, activity mapping, counts, and tracking. Counts were proposed as a means to determine visitor density, distributions of activities, or types of users (p. 33). They suggested "counting data collection sheets," stop watches, hand counters and vehicle counters with sampling periods varying by location and needs (e.g., 10-minute segments every hour from 8 a.m. to 6 p.m.) (p. 34). They also proposed counting users with timelapse photography and gave advice on how to do so (p. 46).

The USDA Forest Service evaluated numerous trail traffic counters and recommended active infra-red systems over seismic counters and passive infra-red units (O'Rourke, 1994).

Calls for improved methods for measuring use have been far more common than recom-

mended techniques. "Accurate and cost-effective ways to measure trail use should be developed. Research on measuring use was started almost two decades ago, but effective and efficient methods are still wanting" (Krumpe and Lucas, 1986, Management-152). Better ways of measuring use has been listed as an important research need by wilderness managers as well (Washburne and Cole, 1983). In his proceedings of a conference convening researchers and trail planners and managers interested in the Appalachian National Scenic Trail (AT), Birch (1979) notes "Trail use estimates which include variations in use impacts over time and by geographic location" was identified as a high priority issue by the Economic Working Group (p. 72). Two of the three most important policy-relevant research topics proposed by the Resource Protection Working Group related to accurately measuring use along the long-distance trail. They were

Description of the types, characteristics, and relative abundance, by trail segment, of the various users of the AT

Development of a simple and statistically sound system for enumerating public use, in both temporal and spatial configurations, of the AT (p. 104)

Stynes (1986) identified similar problems and concerns associated with our current ability to forecast. He noted that although quantitative techniques dominated from 1965 to 1975, qualitative techniques are now receiving more attention. These approaches have the advantage of involving the decision makers more directly.

Conclusions

Applying the approaches used in past economic impact studies to the special case of long-distance trails reveals two related methodological issues that are particularly challenging when attempting to estimate economic impacts.

The first is defining who actually is a trail user. Since visiting trails is often only one of many purposes for a recreational trip to such areas, care must be used in attempting to identify the portion of users and economic impact that is actually attributable to the existence of the trails. This is particularly challenging on national historic trails which consist of a motor route and various related sites. Stopping cars on the motor route to determine who is actually "using" the trail is not practical, so a sample of trail-related sites needs to be selected where trail users can be intercepted. If possible, questions should be used that differentiate users who are visiting the site because of the trail from users who are there for reasons unrelated to the trail

The second methodological issue is measuring, or at least estimating, total trail use. An accurate estimate of use is an essential element in accurately estimating the total economic impact of any trail. However, no efficient and

effective means of accurately estimating longdistance trail use currently exists. It is still extremely difficult to address the issue of multiple access points on trails or to account properly for people who pass the same point more than once in a single trail trip. If multiple counters are used on a long-distance trail, it is difficult to account for long-distance users who are counted by more than one counter.

The best option for national scenic trails appears to be use of the best counting devices available (e.g., active infra-red counters in most backcountry situations) with on-site calibrations conducted by staff or volunteers. On most national historic trails, estimates of total use will need to at least start with the visitation figures of the trail-related sites along the route. Alternative methods that provide more accurate estimates at a reasonable cost are needed. In the meantime, managers and researchers should use the most accurate use estimates available while working to provide better figures in the future.

Measuring Economic Impacts

esigning an economic impact study requires careful planning in order to obtain results that will be reasonably accurate. Consideration must be given to both the spatial aspects of an economy (i.e., where the gains accrue) and the structural aspects of the economy (i.e., to what class of businesses the gains accrue) (Alward, 1986). The local impact area must be optimally defined. Careful consideration must also be given to how and when to collect expenditure data. Finally, the multiplier for estimating indirect expenditures must be selected. The ideas summarized below were used to develop the economic impact components of the OVT study.

Planning an Economic Impact Study

Economic impact analysis can be accomplished in ways that range from obtaining simple anecdotal information to sophisticated, large-scale empirical studies. For example, Ryan (1993) identifies economic impacts as an important benefit of rail-traits and recommends that trail advocates and planners "talk with local business people and community residents to get a sense of how a trail might benefit the area economically" (p. 30).

The National Park Service (1991) provides the following advice in regard to gathering and using information relating to the economic impacts of tourism involving rivers and trails:

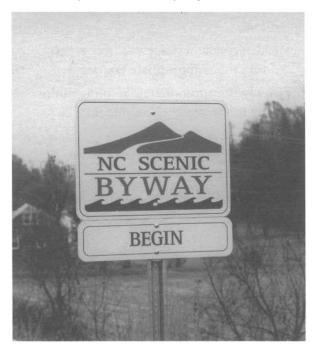
- Quote examples
- Find out whether any studies have been done in your area

Scenic byway sign used in North Carolina. Many segments of the OVT motor route in NC are scenic byways. Photo by author.

- Determine the influence of natural/cultural resources on travel trends
- Get to know the users
- Determine the level of visitor draw of your resource
- Estimate where expenditures are going
- Estimate corresponding expenditures attributable to your resource
- Project impacts from changes in visitation
- Estimate total impacts
- Commission your own study
- Use input-output models
- Promote your resource to the tourism industry (pp. 5-14 to 5-19)

Walsh (1986), advocates a comprehensive approach to estimating regional economic impact which involves three basic steps:

 Designate the boundaries of the region (county or multi-county regions are



- best since data is most often available on a county basis).
- Estimate direct expenditures.
- Apply multipliers. Use ones developed through input-output analysis from an economy similar to the one under consideration (Walsh, 1986, p. 387).

Turco and Kelsey (1993) list nine steps to determine the economic impact of special events:

- Determine the study's scope.
- Determine the sources of interest (usually the participants, spectators, sponsors, and businesses). Define the "local area." Determine what information is desired.
- Develop the data collection strategy and instrument, e.g., interviews, mail survey, or expenditure diary.
- Collect and analyze data.
- Calculate direct impact, tax revenues and total economic impact.
- Develop visitor group units.
- Determine nonresident and/or resident spending patterns—expenditures by type of user for each category of expenditure.
- Calculate tax revenues—direct expenditure times appropriate tax rate.
- Apply the appropriate economic multiplier to the direct economic impact total.
- Calculate return on investment (p. 34-36).

In their study of the economic impact of U.S. Army Corps of Engineers Project (CE) areas, Jackson, Stynes and Propst (1994) used the following formulas:

Recreation visits x per visit spending = total spending

- Direct economic effects = total spending x "capture rate" (The "capture rate" estimates the portion of spending that does not "leak out" of the local economy. For the purposes of their study, the local area was defined as being within 30 miles of the CE project.)
- Direct effects x multipliers = total effects (p. 3)

Bergstrom, Cordell, Ashley, English, Klinko, Watson, and Alcorn, (1989) followed four steps in calculating the economic impacts of state parks in North Carolina. These steps were

- Define local impact region
- Calculate regional expenditures per person per trip
- Calculate total annual expenditures calculated (mean expenditures times total visits made by nonresidents of the local impact region)
- Apply expenditure data to IMPLAN model to account for direct, indirect, and induced effects of the spending

The following steps are recommended by Jackson (1987) for setting up and conducting economic impact study:

- Define the specific questions to be answered by the study
- Define the impact region to be studied
- Define the total population of users to be included in expenditure surveys
- Stratify recreation areas according to the types of visitors using them
- Conduct expenditure surveys on a sample of users from each strata
- Develop expenditure profiles for each user group of interest
- Construct input/output models for all projects included in the study
- Report the result

Defining the Local Impact Area

The geographic area to be considered "depends on the type of park decision, its magnitude, and the size of the relevant regional economy associated with a particular site" (Walsh, 1986, p. 377). "Little is lost by defining functional economic areas to include combinations of two to six entire counties" (p. 377). Defining the impact area as a county or group of counties is desirable because inputoutput models such as IMPLAN use county level data in their calculations.

Steven and Rose (1985) propose a multitiered model of the spatial distribution of economic impacts. From the nearest to the farthest from the site where the recreation actually takes place, these "impact areas" are the: recreation site, support area, travel corridors, consumer residence area, and extended area. Various types of purchases occur in each of the first four areas. The impacts that occur in the "extended area" are due to the fact that many of the products purchased may be produced far from any of the areas where the recreation visitor travels.

Data Gathering Options

There are many ways to collect the data from which economic impacts can be estimated. The most basic decision is whether to use primary or secondary data. While primary data is gathered expressly for the purpose at hand, secondary data is gathered as part of some previous study or from some other source. The trail-related expenditure figures presented in this report and other "off the shelf" spending figures and multipliers could be used to estimate expenditures and economic impacts of other trails. Such secondary analyses are only valid, however, if the secondary data is high in quality and from an area where spending patterns are comparable. Since most secondary

data was gathered for other purposes, this is often not the case. However, studies using secondary data and analyses can be very useful and far less expensive to conduct. The National Park Service "Money Generation Model" (MGM) is a straight forward method to estimate total economic impact using worksheets and statewide multipliers that could be applied to trails. Spending estimates derived from either primary or secondary data can be used in the MGM.

If appropriate secondary data is not available, several options exist for gathering primary data. Hirner, Weaver, Colton and Gillespie (1986) offer advice to planners and communities regarding tourism development and measuring user expenditures. They suggest the following methods for gathering expenditure data:

Diaries. Diaries are forms, typically given to users before their visits, on which they record an ongoing record of their expenditures for the duration of their visit/trip. The main advantage of a diary approach is that recall problems are minimized. Diaries are particularly useful if very detailed expenditure information is needed. The principal disadvantages of using diaries are that response rates are often low since keeping the diary can be burdensome. The act of recording expenses may also change purchasing behavior. It is also possible that those most likely to be willing to keep diaries may have different characteristics (and therefore spending patters) from those unwilling to do so.

Exit interviews. This technique involves intercepting and interviewing users as they are leaving the site/event. The main advantage of exit interviews is that they generally yield higher response rates than diaries. One disad-

vantage is increased recall problems. People will remember best for the expenditures made on the day they were interviewed, and purchasing behavior may be different on that day than on other days of their trips.

Mail surveys at home. This approach involves sending mail questionnaires to users after they have returned to their homes. This method allows more detailed questions to be asked. It also yields better response rates than diaries, but worse than exit interviews. Recall problems for respondents is the principal disadvantage (p. 56).

One study comparing the recall mail questionnaire method with the diary method found that the questionnaire yielded a response rate of 85% while only 66% of the diaries were returned and only 50% of the diaries were useable (Guadagnolo, 1989). Interestingly, 5% of the diaries were actually returned prior to the event, indicating that some respondents had misunderstood or ignored the instructions to record actual rather than estimated expenditures. Although the diary method appeared to offer greater accuracy for some expenditure categories, it resulted in an under reporting of large purchases.

There is evidence that using questionnaires sent to users after their trips also tend to

We liked some of the campgrounds that we saw, we enjoyed the scenery. We did not see as much as we wanted to, but are planning to go back. We spent most of our day visit at Kerr Scott Lake, which we enjoyed very much. We would like to find out more about Overmountain Victory National Historic Trail, and the historic sites along it.

—Blue Ridge Parkway Trail Segment (Orchard at Altapass) Visitor

underestimate actual expenditures (Frechtling, 1987). Some trail studies have combined exit interviews and mail surveys and been able to asked detailed expenditure questions and achieve response rates at or near 80% (Moore, et al., 1992).

Turco and Kelsey (1993) discuss three important issues related to measuring economic impact. The first is non-response bias. They suggest that this may be a problem when the response rate is lower than 55%. The second problem is recall bias. They report that users tend to underestimate expenditures as length of recall period increases and suggest using onsite interviews or surveys conducted within one week of the visit. The third problem is "expenditure switching." In other words, whether resident spending is new spending or spending that would have occurred in the area on some other purchase if the event had not occurred. They suggest asking locals a question to determine whether the money they spent would have been spent in the community anyway (p. 37).

Using Multipliers

Regional economic multipliers are used to estimate the additional indirect effects of the direct expenditures as the money users spend is re-spent by others throughout the regional economy (Walsh, 1986). Walsh defines the multiplier as the "total effects (direct plus indirect) divided by the direct effects" (p. 377). For example, \$100 spent in a particular economy would actually generate \$200 of total economic impact in an area if the appropriate multiplier was two.

In effect, money spent by a recreation visitor in a local restaurant benefits more than the restaurant owner. The owner uses some of the money to purchase supplies and buy wholesale products for preparing the meals. When the purchases for items such as these are made

within the region, the regional economy benefits a second time (and generally more) from the same initial purchase. Likewise, the restaurant owner uses some of the money she receives from the recreation visitor to pay her employees. The local economy benefits again when these employees spends some of their wages to purchase local goods and services for themselves. When the secondary spending occurs outside the region, the money is said to have "leaked out" of the regional economy and generates no additional economic impact there. "The value-added portion of recreation dollars is spent and re-spent through approximately 12 rounds, at which time the effect approaches zero" (p. 392).

Regional economic multipliers for recreation (also called "output" or "sales multipliers") range from 1.5 to 2.6 and average about 2.0 (Walsh, 1986 p. 379). The size of the multiplier is affected by two primary factors - the size of the geographic area under consideration and the "industry" or economic sector in which the expenditures are made. As the geographic area increases, the portion of the expenditures that leaks out in each round decreases; and the size of the multiplier goes up. Likewise, if purchases are made in sectors of the economy that buy large amounts of their inputs from outside the area (like the automotive industry), a large proportion of the expenditures quickly leak out of the region; and multipliers are lower.

Multipliers are estimated using "input-output analysis" where the inputs are generally the direct spending of consumers and the outputs are the effects on production throughout the regional economy. This technique is a means of "mapping the interconnections among various lines of businesses. The essential idea is that part of the output of one business becomes input to another" (Walsh, 1986, p. 383). In other words, this analysis measures the extent to which the industries in the regional economy are interconnected in producing the final products that consumers purchase. The USDA Forest Service economic model IMPLAN (IMpact for PLANing) is an example of a computerized input-output model which uses national data from 528 economic sectors and county-level multipliers (p. 386).

Multipliers are frequently misused, however. Crompton (1993) argues that economic impact analyses must be done with integrity to remain credible and that multipliers are a frequent source of confusion and misuse. This is a particular problem where there is pressure from sponsors to inflate the impact figures. He identifies eight sources of error through misunderstanding or misrepresentation of the multiplier effect.

Using sales instead of household income multipliers. Sales multipliers are generally higher, but people are interested in how expenditures will affect their household income and employment. Household income multipliers should be used.

Misrepresenting employment multipliers. Employment multipliers assume total utilization of existing labor force. In reality, many of the new jobs pre-

After visiting the one site I think in the future I would like to visit more of the sites, when we have a longer period to spend time at the sites. Also, this was our first trip to N.C. and was just a short trip to enjoy everything that we would have liked to visit. Also, at one of the visitors centers west of Shelby it was a very pleasant stop. The people were so friendly and helpful with information and in the future I'm sure we will visit again with more time to see the state.

-Cowpens National Battlefield Visitor

dicted do not materialize—especially for festivals and events. Employment multipliers are not reliable.

Calculating the multiplier coefficient. Many use "ratio" calculated multipliers, which are artificially higher than the more appropriate "normal" calculated ones

Including local spectators. Only non-residents "whose primary motivation for visiting is to attend the recreation event—or who stay longer and spend more because of it, should be included" (p. 11-12). Economic impact refers only to new money. Locals' money is only recycling in the economy. Many are now using the term "economic surge" to refer to all spending by locals and visitors; but it is a meaningless term used in an attempt to generate higher numbers.

Failing to exclude "time-switchers" and "casuals." "Time-switchers" were planning to come to the area anyway and changed the time of their visit to attend the event. "Casuals" came to the area for other reasons but attended the event. Both should be excluded. Only the time that they may have extended their stays as a result of the event should be included.

Using "fudged" multiplier coefficients. Multipliers should not be borrowed. They should be estimated using IMPLAN or similar input-output models.

Omitting opportunity costs. "User expenditure multipliers are at best average" (p. 13). Other possible uses for the money invested in events should be considered to determine its real benefits.

Measuring benefits only and omitting costs. Costs such as traffic congestion, increased police protection costs, increased prices to local residents, etc., should be included. Then the study becomes a benefit-cost analysis, which makes it easier to compare investment options (p. 10).

Conclusions

The literature shows that there are a wide variety of techniques available for estimating economic impacts, each with its own advantages and disadvantages. At the most basic level all techniques estimate average user spending, multiply this figure by the number of users, then apply multipliers to estimate secondary economic effects.

The various approaches range from using existing secondary data to using worksheet approaches, such as the Money Generation Model, to collecting detailed primary data and using computerized input-output models such as IMPLAN. Generally, the more accurate and detailed the information needed, the more expensive and time-consuming the data gathering technique.

Clearly, the techniques should be chosen after considering the accuracy and detail needed, and the resources available. When the accuracy and detail of primary data collection is needed, the best approach appears to be a combination of brief on-site interviews followed quickly by a more detailed questionnaire mailed to the same subjects. This strategy helps assure reasonably high response rates and high quality data, while minimizing recall problems and burdens on the trail users. It also has the important advantage of measuring actual expenditures after they have occurred, rather than asking users to speculate about future spending.

Appendices

A. On-Site Questionnaire	76
B. Mail-in Questionnaire	79
C. Results Compared by Site	92
D. Contact Persons	108
E. Visitor Comments	110

These appendices are provided so those interested in conducting an economic impact study of a long-distance trail can adapt the tools used by the authors to their particular needs and build on the experience and information gained in this study.

A. On-Site Questionnaire

ON-SITE INTERVIEW FORM OVERMOUNTAIN VICTORY NATIONAL HISTORIC TRAIL SURVEY

The managers of the Overmountain Victory National Historic Trail and the historic sites along its route are interested in how people use the trail and what they think about it. Please take a few minutes and answer the following questions.

1.	About how many miles is it from your home to this site? One-way miles
2.	About <i>how long</i> did it take you to travel from your home to this site?
	Hours OR Minutes
	Including yourself, <i>how many</i> people are in your group here today? (Please include yourself and write <i>the mbers</i> in the spaces provided)
	Number of AdultsNumber of Children (under 18)
IF	ALONE, PLEASE GO TO #5
4.	Which of the following <i>best</i> describes the people who came with you? (Please check <i>one</i>).
	Family Friends Family and Friends Business Associates
	Organized Group (school, tour, etc.) I visited alone Other (Please specify)
5.	Which of the following best describes your visit to this site? (Please check one)
	A day visit A visit which is part of a weekend trip A visit which is part of a vacation Other (Please specify)
6.	Managers and planners can better serve you if they understand your entire visit and experience. Therefore, we would very much like to send you a follow-up survey to complete at your convenience. Would you be willing to give us your name and address so we can mail you a follow-up survey? Your identity and responses will be kept strictly confidential and the mailing list will be destroyed as soon as study mailings are completed.
N	NAME
A	ADDRESS
	ZIB CODE

TO BE COMPLETED BY INTERVIEWER

OBSERVE AND RECORD THE FOLLOWING FOR *EACH* USER SELECTED (EVEN REFUSALS):

Intervie	ew Site (Check or	ne)								
	Blue Ridg	e Parkway Mineral M	⁄luseum							
	Blue Ridg	e Parkway Trail Segr	ment							
	Caldwell	County Heritage Mus	eum							
	Cowpens	National Battlefield								
	Fort Defia	ince								
	Kings Mo	untain National Milit	ary Par	k						
	Old Burke	e County Courthouse								
	Old Wilke	es Jail (Wilkesboro, N	NC)							
	Rocky Mo	ount State Historic Si	te							
	Sycamore	Shoals State Historic	Area							
	W. Scott I	Kerr Reservoir Trail S	Segmen	t						
	W. Scott I	Kerr Reservoir Visito	r Cente	r						
	Other (Ple	ease specify)		
Gender	(Circle one)	Male	Fei	male						
Date _		Day-of-week (Circl	e one)	SU	M	T	W	TR	F	ST
Time p	eriod when interv	view took place (Circ	le one):							
	6-9	9-NOON	NC	OON-3		3-6		6-9 P	M	
Was th	is visit during an	Overmountain Victor	ry Trail	"Reena	ctment	event?	" (Circ	le one)		
	No	Yes								
Intervie	ewer name				<u>-</u>					
		In	terview	er comn	nents (if anv)·				
		***	11							

B. Mail-in Questionnaire



1995-1996 OVERMOUNTAIN VICTORY NATIONAL HISTORIC TRAIL **SURVEY**

Thank you for agreeing to participate in this survey about the Overmountain Victory Trail and the historic sites along its route. The results of this study will help managers and planners serve the public better and plan for future developments.

Your participation in this survey is voluntary. There are no penalties for not answering some or all of the questions. Since each randomly selected person will represent many other trail users who were not surveyed, however, your cooperation is extremely important. All your responses will be kept completely confidential.

Since this is a follow-up to the short survey you completed at one of the trail sites, several questions refer to the particular trip you took to that site. Other questions relate to your entire trip and use of related sites along the Overmountain route. Please read the instructions at the beginning of each section.

PLEASE NOTE: It is very important that the person who is listed on the address label fill out this survey without getting advice from others.

OMB# 10240181; Expires 12/31/98-Public reporting burden for this collection of information is estimated to average 13 minutes per response, including the time for reading instructions and completing and mailing the survey instrument. Send comments regarding this burden estimate or my other aspect of this collection of information, including suggestions for reducing this burden to:

Long-Distance Trails, NPS P.O. Box 37127

and the Washington, D.C. 20013-7127

Office of Information and Regulatory Affairs Office of Management and Budget

Washington, D.C. 20503

PART A. YOUR VISIT TO THE SITE WHERE YOU WERE INTERVIEWED In this section we would like to learn more about your visit to the historic site, visitor center, or trail segment where *you were interviewed*. Please answer these questions in terms of your visit to that site only.

۱.	Approximately how long were you at the site where you were interviewed? (Please be specific)
	Hours OR Minutes
2.	Was this your <i>first</i> visit to this site? (Please check one) No Yes
	If "No," approximately how many times have you visited this site during the last two years?
	Times visited here during last 2 years.
3.	How did you <i>first</i> hear about this site? (Please check <i>one</i>) FamilyRelativesFriendsNeighborsOvermountain Victory Trail brochureState highway mapState tourism officeLocal tourism officeLocal tourism officeMagazine stories/articlesNewspaper stories/articles
	Sign along the highway Previous experience with area Other (Please specify)

4. The following statements are about your visit to this site. We would like to know how much you AGREE or DISAGREE with each statement. Please circle the appropriate number for each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I thoroughly enjoyed my visit to this site	1	2	3	4	5
My visit was not as enjoyable as I expected it to be	1	2	3	4	5
My visit was well worth the money I spent to take it	1	2	3	4	5
I cannot imagine a better visit	1	2	3	4	5
I was disappointed with some aspects of my visit	1	2	3	4	5
I would like to visit this site again	1	2	3	4	5

5. What things did you like *best* about this site?

6. What things did you like *least* about this site?

7. Below are some statements which describe reasons why people might visit a site like the one where you were interviewed. Please *circle the number* that best describes how important each was to you when you decided to visit this site.

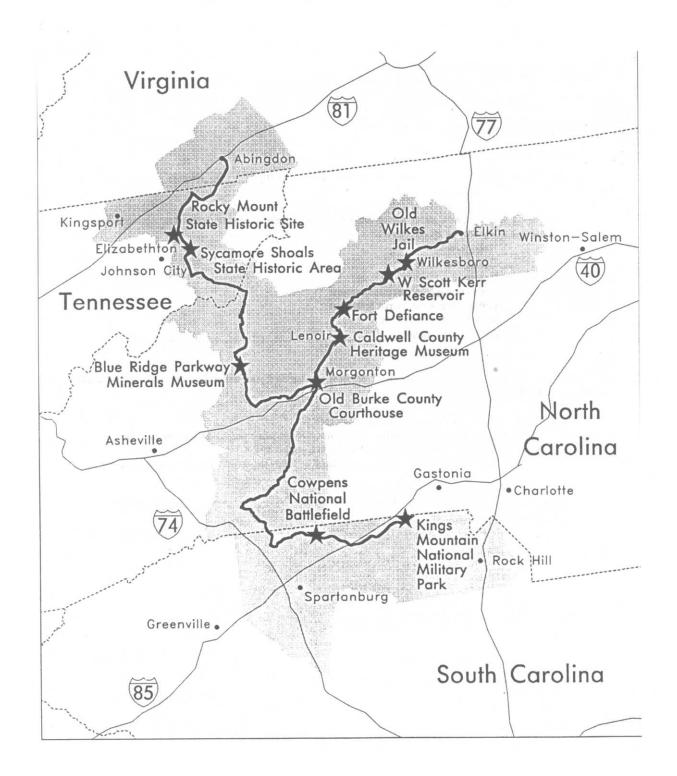
	NOT AT ALL IMPORTANT				EXTREMELY IMPORTANT		
Reason:							
To learn more about Revolutionary War							
era history	1	2	3	4	5	6	7
To learn more about the Overmountain							
Men's march to Kings Mountain	1	2	3	4	5	6	7
To learn more about state history	1	2	3	4	5	6	7
To learn more about my ancestors	1	2	3	4	5	6	7
To see where history happened	1	2	3	4	5	6	7
To teach others about history	1	2	3	4	5	6	7
To develop my knowledge	1	2	3	4	5	6	7
To observe the beauty of nature	1	2	3	4	5	6	7
To feel close to nature	1	2	3	4	5	6	7
To be away from crowds	1	2	3	4	5	6	7
To find quiet places	1	2	3	4	5	6	7
To relieve my tensions	1	2	3	4	5	6	7
To escape from work pressures	1	2	3	4	5	6	7
To tell others about it at home	1	2	3	4	5	6	7
To have a good time	1	2	3	4	5	6	7
To get some exercise	1	2	3	4	5	6	7
To get some fresh air	1	2	3	4	5	6	7
To do things with other people	1	2	3	4	5	6	7
To buy things in the gift shop	1	2	3	4	5	6	7
Other? (specify))	1	2	3	4	5	6	7

8.	The site where you were interviewed commemorates part of the march of the overmountain men to defeat
	British and loyalist troops at the battle of Kings Mountain in 1780. Were you aware of this historic event
	before your visit to this site? (Please check one)

No	Yes

The site where you officially designated commemorate the of the Overmoun	ted "trail" is a e march of the	actually a series e overmountain	of historic sites, to men to the battle	rail segments, a of Kings Mount	nd a marked mo ain in 1780. We	otor route that ere you aware
No	Yes					
10. How did your v Victory Trail or			erest in visiting of ry? (Circle <i>one</i> no		ted with the Ov	ermountain
MUCH LESS INTERESTED NOW						MUCH MORE INTERESTED NOW
1	2	3	4	5	6	7
PART B. YOUR EN overall trip you took these questions in terms	Yes UTIRE TRIP A which includ	AWAY FROM I	the historic site w	ction we would l	ike to learn mon	re about the
When you decide	ed to take this	trip, which of th	ne following were	among your rea	asons? (Check a	all that apply)
Visiting	g the site when	re you were inte	rviewed			
Learnin	g more about	Revolutionary	War era history			
Travell	ing part of the	e Overmountain	Victory Trail			
None o	f the above w	ere reasons I de	cided to take this	trip		

2.	What was your <i>primary</i> reason for taking this trip?
3.	Did this trip include an overnight stay away from home?
	No (IF "NO" , GO TO #4)
	Yes
	a. How many nights were you away from home during this trip? Nights
	b. During your trip, <i>how many nights</i> did you use each of the following types of accommodations? (Please write <i>number</i> in space provided.) Hotel/motel Campground Resort Rental cottage/cabin/condominium Bed and breakfast/tourist home/inn With friends or relatives Other (Please specify)
	On this trip, which of the following best describes how you handled your expenses from the time you left home till you returned there? (check one)
	I paid all of my <i>own expenses</i> and no one else's. My group <i>shared</i> some or all expenses (members made some purchases <i>for one another</i>) Someone else paid all my expenses (if so, go to question #6). My group had <i>no</i> expenses associated with this trip at all (if so, go to question #6).



5. In the spaces below, please list the estimated expenditures made as a result of **YOUR ENTIRE TRIP**. If you paid all of your *own expenses* and no one else's, report only the amounts *you* actually spent in each category. If your group *shared* some or all expenses (members made some purchases *for one another*), please report your estimates of the amounts spent by the *entire group* in each category.

Please include *all* the expenses associated *with that particular trip* from your preparations before leaving home until your return home. Please indicate where the expenditures took place by recording the amounts in the appropriate columns. Refer to the map on the preceding page to help determine what is included in the "Trail Corridor." The "Trail Corridor" refers to the shaded area on the map which includes all the counties where the trail is located.

AMOUNT SPENT:

	Within	
Within	Other Parts	Outside of
Shaded Trail	of VA, TN,	VA, TN, NC
Corridor	NC and SC	and SC

ESTIMATED AMOUNT SPENT FOR:

- a. Restaurants (including fast food, sit down, etc.)
- b. Food and beverage in retail stores
- c. Lodging expenses:

hotel/motel camping rental cottages and condominiums bed and breakfast/tourist home/inn other

- d. Retail purchases *during* trip souvenirs, literature, etc. from historic sites all other retail purchases
- e. Auto expenses (gas, oil, repairs, parking, etc.)
- f. Other transportation costs:

airfare busfare, public transit, taxis, etc.

- g. Film and developing
- h. Fees for admissions and entertainment
- i. All other expenses *for this trip* (licenses, rental fees, etc.) please specify

6.	DURING THIS TRIP. (Please check <i>all</i> that apply)	th the Overmountain Victory Trail you visited
	Blue Ridge Parkway Mineral Museum	Old Burke County Courthouse
	Caldwell County Heritage Museum	Old Wilkes Jail (Wilkesboro, NC)
	Cowpens National Battlefield	Rocky Mount State Historic Site
	Fort Defiance	Sycamore Shoals State Historic Area
	Kings Mountain National Military Park	W. Scott Kerr Reservoir Visitor Center
	Other (Please specify)
yo	ART C. YOUR PAST USE OF THE OVERMOUNTAIN Vour past use of the Overmountain Victory Trail and the sites Please indicate which of the following sites associated with VISITED. (Please check <i>all</i> that apply)	s associated with it.
	Blue Ridge Parkway Mineral Museum	Old Burke County Courthouse
	Caldwell County Heritage Museum	Old Wilkes Jail (Wilkesboro, NC)
	Cowpens National Battlefield	Rocky Mount State Historic Site
	Fort Defiance	Sycamore Shoals State Historic Area
	Kings Mountain National Military Park	W. Scott Kerr Reservoir Visitor Center
	Other (Please specify)
2.	Every year along the trail. there are numerous events com their march to Kings Mountain, and the battle there. These worn in the 1780s who explain the history of the period. I	e events feature people dressed in clothing like that
	No Yes	
	If "yes," about how many of these events have you at	tended along this trail in the last two years?
	Events in <i>last 2 years</i>	

3.	Have you seen the	e Overmounta	ain Victory Tra	il brochure?			
	No		Yes				
4.	Have you ever ma September and O	_		eers who reenact th	ne Overmountai	n Victory Tra	il march during
	No		Yes				
5.	Would you be int Kings Mountain,		_	ut the gathering of	the Overmount	tain Men, their	r march to
	No		Yes				
6.	Are you a member	of the Overn	nountain Victor	ry Trail Association	n?		
	No	_	Yes				
7.		hich of the fo		Trail are off-road ants of the off-road l			
	Blue R	idge Parkwa	y Trail Segmen	t			
	W. Sco	ott Kerr Rese	rvoir Trail Segr	ment			
	Trail a	round Kings	Mountain				
	Trail a	round Cowpe	ens National Ba	ttlefield			
	Trail to	o Sycamore S	hoal at the Stat	e Historic Area			
	Roan M	Mountain Stat	te Park Trail Se	gment			
	Yellow	v Mountain T	rail Segment in	Cherokee Nationa	l Forest		
	North	Cove/Linville	e Mountain Tra	il Segment in Pisga	h National For	est	
	I have	used none of	the off-road tra	ail segments			
8.	How interested ar (Circle <i>one</i> numb		g off-road segn	nents of the historic	route for walk	ing or other tr	ail activities?
	NOT AT ALL NTERESTED						VERY INTERESTED
	1	2	3	4	5	6	7

understand the characteristics of the users of the Overmountain Victory Trail and the sites along it. All answers are confidential and will be reported only as overall averages. ____ Female 1. What is your gender? (Check one) Male 2. What is the highest year of formal schooling you have completed? (Please *check* one) 0-4 years ____ 5-8 years ____ Some high school ____ Technical school instead of high school ____ Completed high school (12 years) Post-high school business school/technical school ____1-3 years of college ____ Completed college ____ Advanced degree 3. Which of the following best describes *your* present *occupation*? (Please check *one*) Managerial or professional specialty ____ Technical, sales or administrative support ____ Service occupation ____ Farming, forestry or fishing ____ Precision production, craft or repair occupation ____ Operator, fabricator or laborer ____ Homemaker Retired ____ Student ____ Other (Please specify _____ 4. Which of the following best describes your total *household* income in 1994? ____ Less than \$5,000 ____ \$5,000 to \$9,999 ____ \$10,000 to \$14,999 ____ \$15,000 to \$24,999 ____ \$25,000 to \$34,999 ____ \$35,000 to \$49,999 ____ \$50,000 to \$74,999 ____ \$75,000 to \$99,999 \$100,000 or more 5. What is your age? _____ Years

PART D. ABOUT YOU In this section we are interested in visitor information that will help us to better

Please use the space provided below for any <i>additional comments</i> you would like to make about the Overmountain Victory National Historic Trail, the historic sites along it, or for any suggestions you might have for improving the trail or its management.
Thank you for your help!
Please send us this completed questionnaire in the self-addressed envelope provided. No stamp is needed. Just drop it in any convenient mailbox.

C. Results Compared by Site

Il the preceding results were presented for all the OVT sites combined in an attempt to characterize the visitors, use and economic impacts of the National Historic Trail as a whole. The individual sites examined in this study were, however, quite different. This section highlights some of the similarities and differences in the results from the various sample sites. The tables that summarize the results by site are included from page 38 to 52.

There were variations among the sites in terms of user characteristics. The two National Park Service battlefield units (Kings Mountain and Cowpens), the Corps of Engineers sites at Kerr Reservoir, and Old Burke had higher proportions of males than the overall average. The only notable difference in terms of age were the older visitors found at the Blue Ridge Parkway Trail Segment (Orchard at Altapass). Not surprisingly, each site attracted a large number of visitors from its home state, although Kings Mountain and Cowpens were far more commonly visited by international travelers. The Orchard at Altapass had a higher proportion of visitors in organized groups and the highest median group size. This was probably due in part to groups visiting from nearby campgrounds for National Park Service interpretive programs.

There were some notable differences across sites in terms of users' trips as well. Although day trips predominated at nearly all the sites, vacationers made up 20% or more of the visitors at the two sampled Trail segments and the Mineral Museum. The Blue Ridge Parkway and the Kerr Reservoir campground were apparently more popular vacation destinations than the other OVT sites. Visitors to the two Trail segments were also more likely to list

"traveling part of the OVT" as one of the reasons for their trip. A large proportion of visitors from each site were spending at least one night away from home except those visiting the Wataugans drama and Fort Defiance. Consistent with its primary purpose as an organized campground, Kerr Reservoir site visitors tended to be spending more nights away from home than those visiting other sites. Kerr Reservoir users and those at the Blue Ridge Parkway Trail segment were far more likely than others to be camping. People traveled the farthest on average to reach Rocky Mount, the Mineral Museum, and Cowpens. They stayed the shortest periods of time at the Mineral Museum. This is consistent with long trips in connection with the Blue Ridge Parkway, but short stays at this relatively small site. While the most frequent way visitors had first heard of most of the sites was "family," there were three sites where highway signs were the most common first source of information-Cowpens, Rocky Mount, and the Mineral Museum.

In terms of site experiences, the most important reasons for visiting each site varied. "To see where history happened," "to have a good time," "To develop my knowledge," and "To observe the beauty of nature" were the most important motives. Over 83% of the visitors to Cowpens, Rocky Mount, and Old Burke were there for the first time. The highest proportion of repeat visitors were found at *The Wataugans* drama and the Orchard at Altapass. The visitors to all the sites were quite satisfied with their trips overall. Each of the sites received an average rating over 4 on a 5-point scale where 5 indicated the highest possible level of satisfaction.

There were also considerable differences across the sample sites in terms of visitors' experience with the OVT. Attendees at The Wataugans were the most aware of the historic march and battle. This is likely due to the high proportion of return visits to this event. Over half the visitors to Kings Mountain, Sycamore Shoals, Cowpens, Blue Ridge Parkway Trail Segment, and Fort Defiance also reported that they had been aware of the March and Battle before their visits. The visitors that were least aware of the OVT were those visiting the Mineral Museum. At most sites, fewer visitors had been aware of the OVT than they had of the historic events. Interestingly, at the Blue Ridge Parkway Trail segment and the Kerr Reservoir Visitor Center, more visitors had been aware of the OVT than the historic events themselves. This may be due to some visitors seeing highway signs for the OVT before really understanding the events it commemorates.

A surprisingly small percentage of the visitors reported having seen the OVT brochure. In fact, only at the Kerr Reservoir Trail segment had over half the visitors seen it. The majority of users at each site desired more information on the OVT. This was particularly true at the Mineral Museum and Old Wilkes Jail where over 80% reported wanting more information on the OVT. Visitors to the Blue

Ridge Parkway Trail Segment (Orchard at Altapass) were the most interested, on average, in using the off-road segments, while Rocky Mount visitors were the least interested.

Visitor expenditures and economic impact varied among the sites. Blue Ridge Parkway Mineral Museum visitors spent the most on their trips on average and had the highest average expenditures within the 15-county Trail corridor. The Mineral Museum was also the most heavily visited site in 1995 followed by Kings Mountain, Sycamore Shoals, the Kerr Reservoir Trail Segment (Warrior Creek Campground) and Cowpens. The amount of direct expenditures made in the corridor by visitors from outside the corridor (i.e., "new money") was highest for the Mineral Museum followed by Sycamore Shoals.

Tables of Results by Site

The 28 tables in the following pages take the key study results and break them down by sample site. Please pay particular attention to the sample sizes reported in the last column in each table and be cautious in interpreting those with small samples. Three sites, Caldwell County Heritage Museum, Quaker Meadows, and Mountaineer Days were combined to form the "other" category because of particularly small samples for each of these three sites.

Site	Female (%)	Male (%)	N
Kings Mtn.	39.4	60.6	647
Sycamore Shoals	48.9	51.1	542
Cowpens	40.0	60.0	595
Rocky Mount	52.7	47.3	275
BRP Mineral Museum	44.1	55.9	256
BRP Trail Segment	51.2	48.8	41
W. Scott Kerr Visitor Center	34.2	65.8	79
W. Scott Kerr Trail Segment	22.3	77.7	94
Old Wilkes Jail	44.2	55.8	86
Old Burke County Courthouse	39.6	60.4	53
Fort Defiance	66.7	33.3	30
Wataugans	48.3	51.7	60
Other	52.6	47.4	57
Overall	43.5	56.5	2815

				2. Visitor						
Site	Under 20 (%)	20-29 (%)	30-39 (%)	40-49 (%)	50-59 (%)	60-69 (%)	70-79 (%)	80 & over (%)	Mean (%)	N
Kings Mtn.	1.3	9.9	19.9	27.3	13.6	19.1	8.1	.8	48.3	382
Sycamore Shoals	1.4	9.9	16.4	28.4	16.2	19.9	7.5	.3	48.7	292
Cowpens	1.1	6.7	20.1	27.8	19.2	14.5	9.2	1.4	48.9	359
Rocky Mount	.7	6.0	28.7	28.0	18.7	14.0	3.2	.7	45.9	150
BRP Mineral Museum	.7	8.6	24.5	27.8	21.2	9.9	7.3	0.0	46.4	151
BRP Trail Segment	0.0	3.6	0.0	14.3	17.8	32.2	21.4	10.7	62.9	28
W. Scott Kerr Visitor Center	0.0	7.5	17.5	25.0	15.0	30.0	5.0	0.0	50.4	40
W. Scott Kerr Trail Segment	0.0	14.3	17.1	34.3	31.4	2.9	0.0	0.0	43.9	35
Old Wilkes Jail	2.5	12.5	20.0	7.5	27.5	25.0	5.0	0.0	49.2	40
Old Burke County Courthouse	0.0	16.7	23.3	16.7	13.3	23.3	6.7	0.0	46.3	30
Fort Defiance	0.0	5.6	33.3	27.7	16.7	16.7	0.0	0.0	45.6	18
Wataugans	6.1	0.0	21.2	21.2	36.4	12.1	3.0	0.0	47.8	33
Other	3.6	3.6	25.0	21.4	21.4	10.7	14.3	0.0	49.5	28
Overall	1.2	8.5	20.4	26.7	18.0	16.9	7.5	.8	48.3	1586

	1						
Site	Not Completed High School (%)	Completed High School (%)	Business/Technical School (%)	Some College (%)	Completed College (%)	Advanced Degree (%)	N
Kings Mtn.	3.9	12.8	8.5	20.0	28.7	26.1	390
Sycamore Shoals	1.6	14.6	10.7	19.5	31.2	22.4	308
Cowpens	2.6	13.1	9.7	20.2	30.1	24.3	382
Rocky Mount	5.1	17.0	11.3	17.6	24.5	24.5	159
BRP Mineral Museum	1.3	15.4	8.4	24.5	25.2	25.2	155
BRP Trail Segment	0.0	27.6	3.5	24.1	31.0	13.8	29
W. Scott Kerr Visitor Center	2.4	24.4	7.3	29.3	22.0	14.6	41
W. Scott Kerr Trail Segment	9.1	21.2	24.2	9.1	15.2	21.2	33
Old Wilkes Jail	9.3	30.2	13.9	14.0	9.3	23.3	43
Old Burke County Courthouse	8.8	20.6	2.9	23.5	11.8	32.4	34
Fort Defiance	5.5	16.7	0.0	11.1	50.0	16.7	18
Wataugans	10.5	29.0	0.0	26.3	18.4	15.8	38
Other	3.5	20.7	6.9	27.6	31.0	10.3	29
Overall	3.8	15.7	9.0	20.3	27.6	23.6	1659

Site	<\$15,000	\$15,000 -	\$25,000 -	\$35,000 -	\$50,000 -	\$75,000 -	\$100,000	N
	(%)	24,999 (%)	34,999 (%)	49,999 (%)	74,999 (%)	99,999 (%)	or more (%)	
Kings Mtn.	6.8	9.9	14.1	24.3	26.5	9.9	8.5	354
Sycamore Shoals	10.2	14.4	18.9	24.5	20.7	8.1	3.2	285
Cowpens	5.5	8.2	12.7	23.3	29.4	10.9	10.0	330
Rocky Mount	5.8	10.9	14.5	24.6	23.9	14.5	5.8	138
BRP Mineral Museum	5.9	11.0	17.6	22.1	22.8	9.6	11.0	136
BRP Trail Segment	4.4	21.7	8.7	34.7	21.7	4.4	4.4	23
W. Scott Kerr Visitor Center	10.8	10.8	21.7	27.0	18.9	5.4	5.4	37
W. Scott Kerr Trail Segment	3.2	25.8	22.6	16.1	19.4	9.7	3.2	31
Old Wilkes Jail	13.2	13.2	21.0	26.3	15.7	5.3	5.3	38
Old Burke County Courthouse	13.8	6.9	13.8	27.6	20.7	6.9	10.3	29
Fort Defiance	6.3	12.5	18.7	25.0	31.2	6.3	0.0	16
Wataugans	2.9	22.8	11.4	25.7	31.4	2.9	2.9	35
Other	7.4	14.8	22.3	25.9	14.8	3.7	11.1	27
Overall	7.2	11.6	15.7	24.2	24.6	9.5	7.2	1479

Table 15. U.S. Visitors										
Site	NC(%)	TN(%)	SC(%)	FL(%)	GA(%)	VA(%)	CA(%)	TX(%)	Other(%)	N
Kings Mtn.	36.5	2.1	24.1	5.5	6.5	2.8	2.2	2.1	18.2	631
Sycamore Shoals	8.8	51.5	1.5	5.2	2.3	5.8	2.3	2.6	20.0	534
Cowpens	20.4	1.2	26.5	7.6	7.4	3.3	3.6	2.6	27.4	577
Rocky Mount	8.9	36.4	2.2	8.5	3.0	6.7	1.5	1.9	30.9	269
BRP Mineral Museum	48.0	6.4	10.0	10.4	1.2	3.2	1.2	2.4	17.2	250
BRP Trail Segment	77.5	0.0	5.0	12.5	0.0	2.5	0.0	0.0	2.5	40
W. Scott Kerr Visitor Center	74.7	0.0	2.5	13.9	0.0	2.5	0.0	0.0	6.4	79
W. Scott Kerr Trail Segment	91.4	1.1	1.1	2.2	0.0	3.2	0.0	0.0	1.0	93
Old Wilkes Jail	66.3	2.3	3.5	4.6	2.3	0.0	1.2	4.6	15.2	86
Old Burke County Courthouse	59.6	1.9	3.8	1.9	1.9	1.9	5.8	0.0	23.2	52
Fort Defiance	80.1	3.3	0.0	6.7	3.3	3.3	0.0	0.0	3.3	30
Wataugans	3.3	86.7	0.0	0.0	0.0	3.3	0.0	1.7	5.0	60
Other	91.2	0.0	3.5	3.5	0.0	0.0	0.0	0.0	1.8	58
Overall	31.9	16.9	12.9	6.6	4.0	3.8	2.1	2.1	19.7	2759

Table 16. International Visitors											
Site	United Kingdom (%)	Canada (%)	Germany (%)	France (%)	Australia (%)	Other (%)	N				
Kings Mtn.	60.0	13.3	0.0	6.7	0.0	20.0	15				
Sycamore Shoals	62.5	12.5	0.0	0.0	0.0	25.0	8				
Cowpens	44.4	33.3	16.7	0.0	5.6	0.0	18				
Rocky Mount	16.7	16.7	16.7	16.7	16.7	16.5	6				
BRP Mineral Museum	33.2	16.7	16.7	16.7	0.0	16.7	6				
BRP Trail Segment	100.0	0.0	0.0	0.0	0.0	0.0	1				
W. Scott Kerr Visitor Center	0.0	0.0	0.0	0.0	0.0	0.0	0				
W. Scott Kerr Trail Segment	0.0	100.0	0.0	0.0	0.0	0.0	1				
Old Wilkes Jail	0.0	0.0	0.0	0.0	0.0	0.0	0				
Old Burke County Courthouse	100.0	0.0	0.0	0.0	0.0	0.0	1				
Fort Defiance	0.0	0.0	0.0	0.0	0.0	0.0	0				
Wataugans	0.0	0.0	0.0	0.0	0.0	0.0	0				
Other	0.0	0.0	0.0	0.0	0.0	0.0	0				
Overall	48.1	21.4	8.9	5.4	3.6	12.6	56				

		Table 17	. User Groups				
Site	Family	Alone	Friends	Family & Friends	Organized Group	Business Associates	N
	(%)	(%)	(%)	(%)	(%)	(%)	
Kings Mtn.	67.9	10.1	11.5	5.4	3.8	1.3	633
Sycamore Shoals	57.4	20.6	11.3	4.5	3.4	2.8	530
Cowpens	68.4	15.3	9.8	4.1	1.2	1.2	582
Rocky Mount	71.9	9.3	8.1	6.3	4.4	0.0	270
BRP Mineral Museum	74.4	5.1	12.2	5.5	2.8	0.0	254
BRP Trail Segment	35.9	10.3	7.7	7.7	33.3	5.1	39
W. Scott Kerr Visitor Center	53.8	9.0	12.8	14.1	6.4	3.9	78
W. Scott Kerr Trail Segment	65.2	2.2	16.8	12.4	3.4	0.0	89
Old Wilkes Jail	55.4	14.5	6.0	6.0	16.9	1.2	83
Old Burke County Courthouse	69.2	21.2	9.6	0.0	0.0	0.0	52
Fort Defiance	65.5	3.5	10.3	0.0	20.7	0.0	29
Wataugans	78.4	3.3	5.0	8.3	3.3	1.7	60
Other	47.4	14.0	21.1	17.5	0.0	0.0	57
Overall	65.5	12.6	10.9	5.7	4.0	1.3	2756

			Table 18	8. Group S	Size					
Site	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	8 or more (%)	Median	N
Kings Mtn.	9.9	43.6	15.1	16.2	5.6	4.0	1.4	4.2	2	643
Sycamore Shoals	20.6	38.4	13.0	12.8	4.3	4.6	1.1	5.2	2	539
Cowpens	15.2	49.7	13.6	13.0	3.7	2.0	1.0	1.8	2	594
Rocky Mount	9.9	43.2	15.0	17.9	5.1	2.6	1.1	5.2	2	273
BRP Mineral Museum	5.1	45.7	13.4	20.1	6.7	4.3	1.6	3.1	2	254
BRP Trail Segment	10.3	17.9	15.4	12.8	5.1	2.6	0.0	35.9	4	39
W. Scott Kerr Visitor Center	9.0	34.6	12.8	20.5	10.3	5.1	0.0	7.7	3	78
W. Scott Kerr Trail Segment	2.2	43.3	15.6	23.3	2.2	5.6	0.0	7.8	3	90
Old Wilkes Jail	14.5	43.4	10.8	9.6	2.4	2.4	0.0	16.9	2	83
Old Burke County Courthouse	21.1	53.8	13.5	5.8	5.8	0.0	0.0	0.0	2	52
Fort Defiance	3.3	26.7	23.3	20.0	6.7	0.0	0.0	20.0	3	30
Wataugans	3.3	40.0	28.3	11.7	11.7	0.0	1.7	3.3	3	60
Other	14.0	31.6	21.0	19.4	0.0	3.5	3.5	7.0	3	57
Overall	12.6	43.1	14.5	15.3	4.9	3.4	1.1	5.1	2	2792

	Tabl	e 19. Nature of Visit			
Site	Day Trip (%)	Part of a Vacation(%)	Part of Weekend Trip(%)	Other (%)	N
Kings Mtn.	55.8	14.4	25.6	4.2	645
Sycamore Shoals	56.1	12.7	24.9	6.3	542
Cowpens	41.9	14.1	37.4	6.6	589
Rocky Mount	50.0	11.7	33.9	4.4	274
BRP Mineral Museum	28.5	24.6	44.9	2.0	256
BRP Trail Segment	56.1	19.5	22.0	2.4	41
W. Scott Kerr Visitor Center	50.6	8.9	29.1	11.4	79
W. Scott Kerr Trail Segment	35.1	44.7	14.9	5.3	94
Old Wilkes Jail	62.4	8.2	27.1	2.3	85
Old Burke County Courthouse	50.9	5.7	32.1	11.3	53
Fort Defiance	83.3	3.4	13.3	0.0	30
Wataugans	88.3	6.7	5.0	0.0	60
Other	83.9	5.4	3.6	7.1	56
Overall	50.7	29.4	14.8	5.1	2804

	Tal	ble 20. Reasons for Trip			
Site	Visiting Site Where Interviewed	Learning Revolutionary War Era History	Traveling Part of OVT	Other	N
10 10	(%)	(%)	(%)	(%)	
Kings Mtn.	42.3	41.1	15.1	39.8	397
Sycamore Shoals	30.7	28.4	13.5	56.4	303
Cowpens	32.0	37.8	10.7	53.4	384
Rocky Mount	31.5	15.7	5.7	61.6	159
BRP Mineral Museum	19.4	8.4	8.4	75.5	155
BRP Trail Segment	51.7	17.2	31.0	37.9	29
W. Scott Kerr Visitor Center	36.6	4.9	12.2	58.5	41
W. Scott Kerr Trail Segment	37.1	0.0	20.0	51.4	35
Old Wilkes Jail	39.1	21.7	13.0	47.8	46
Old Burke County Courthouse	29.0	19.4	6.5	58.1	31
Fort Defiance	68.4	36.8	10.5	21.1	19
Wataugans	59.5	59.5	5.4	18.9	37
Other	71.4	42.9	14.3	25.0	28
Overall*	35.0	29.8	12.1	51.7	1664
*Percentages do not total 100% be	cause respondents could ir	ndicate more than one answer.			

Site	Yes(%)	No(%)	N
Kings Mtn.	54.9	45.1	397
Sycamore Shoals	59.8	40.2	311
Cowpens	66.1	33.9	386
Rocky Mount	61.3	38.7	160
BRP Mineral Museum	76.3	23.7	160
BRP Trail Segment	46.4	53.6	28
W. Scott Kerr Visitor Center	53.7	46.3	41
W. Scott Kerr Trail Segment	70.6	29.4	34
Old Wilkes Jail	51.1	48.9	47
Old Burke County Courthouse	52.9	47.1	34
Fort Defiance	11.1	88.9	18
Wataugans	15.4	84.6	39
Other	14.3	85.7	28
Overall	58.9	41.1	1683

	Table 2	22. Number of	Nights Away F	rom Home			
Site	1(%)	2(%)	3-7(%)	8-14(%)	>14(%)	Median	N
Kings Mtn.	12.9	16.6	30.9	20.3	19.3	5	217
Sycamore Shoals	10.3	25.0	34.2	19.6	10.9	4	184
Cowpens	10.4	11.9	37.8	25.9	14.0	6	251
Rocky Mount	5.1	8.2	51.5	22.7	12.5	6	97
BRP Mineral Museum	9.9	24.0	40.5	19.0	6.6	4	121
BRP Trail Segment	7.7	30.8	30.8	15.4	15.3	4	13
W. Scott Kerr Visitor Center	4.8	14.3	33.3	14.3	33.3	7	21
W. Scott Kerr Trail Segment	29.2	45.7	16.7	4.2	4.2	2	24
Old Wilkes Jail	21.7	17.4	17.4	21.7	21.8	3	23
Old Burke County Courthouse	0.0	5.9	64.7	11.8	17.6	5	17
Fort Defiance	50.0	50.0	0.0	0.0	0.0	2	2
Wataugans	16.7	16.7	33.3	0.0	33.3	6	6
Other	50.0	25.0	0.0	0.0	25.0	2	4
Overall	11.0	17.9	36.3	20.7	14.1	5	980

Site	Hotel/ Motel	Friends or Relatives	Camp- Ground	Rental Condo/ Cottage/Cabin	Bed & Breakfast	Resort	Other	N
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
Kings Mtn.	48.7	28.8	13.8	4.7	1.3	1.0	1.7	218
Sycamore Shoals	50.2	26.6	7.2	6.0	2.4	4.0	3.6	186
Cowpens	53.5	26.7	8.4	1.7	5.0	2.8	1.9	255
Rocky Mount	48.9	29.8	9.9	3.8	3.8	1.5	2.3	98
BRP Mineral Museum	44.5	15.2	14.1	12.8	7.9	1.2	4.3	122
BRP Trail Segment	20.0	6.7	46.6	13.3	6.7	0.0	6.7	13
W. Scott Kerr Visitor Center	13.6	13.6	72.8	0.0	0.0	0.0	0.0	22
W. Scott Kerr Trail Segment	7.4	7.4	85.2	0.0	0.0	0.0	0.0	24
Old Wilkes Jail	53.6	25.0	14.3	0.0	0.0	0.0	7.1	24
Old Burke County Courthouse	53.8	34.7	0.0	0.0	3.8	0.0	7.7	18
Fort Defiance	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2
Wataugans	55.6	44.4	0.0	0.0	0.0	0.0	0.0	6
Other	25.0	0.0	75.0	0.0	0.0	0.0	0.0	4
Overall*	64.9	34.1	17.9	6.4	4.8	2.7	3.6	992

			Table 2	24. Miles	Travele	d					
Site	10 or less (%)	11- 50 (%)	51- 100 (%)	101- 200 (%)	201- 300 (%)	301- 400 (%)	401- 500 (%)	501- 1000 (%)	>1000	Median	N
Kings Mtn.	4.3	34.2	14.1	9.7	5.1	4.6	3.9	14.4	9.7	100	647
Sycamore Shoals	19.4	17.3	6.8	10.5	8.3	8.5	6.5	14.0	8.7	180	542
Cowpens	2.0	21.9	14.8	10.6	6.4	5.4	7.2	20.0	11.7	220	595
Rocky Mount	12.0	19.3	9.8	6.9	5.8	7.6	6.9	21.8	9.9	250	275
BRP Mineral Museum	1.6	9.0	14.1	23.8	11.7	8.6	4.3	18.7	8.2	230	256
BRP Trail Segment	36.6	14.6	12.2	7.3	4.9	2.4	2.4	17.2	2.4	20	41
W. Scott Kerr Visitor Center	8.9	32.9	17.7	8.9	8.9	2.5	1.3	17.7	1.2	60	79
W. Scott Kerr Trail Segment	13.8	50.0	24.5	4.3	1.1	0.0	0.0	6.3	0.0	35	94
Old Wilkes Jail	19.8	19.7	18.6	10.5	2.3	2.3	10.5	9.3	7.0	62.5	86
Old Burke County Courthouse	35.9	5.6	9.5	9.4	5.7	3.8	11.3	11.3	7.5	100	53
Fort Defiance	20.0	43.3	16.7	6.7	3.3	0.0	0.0	6.7	3.3	28	30
Wataugans	45.0	36.7	6.7	5.0	0.0	0.0	0.0	3.3	3.3	14.5	60
Other	75.4	15.8	1.8	1.8	1.8	0.0	0.0	3.4	0.0	5	57
Overall	11.7	23.6	12.5	10.6	6.4	5.7	5.3	15.6	8.6	130	2815

		Tab	le 25. Lengtl	n of Stay				
Site	30 Minutes or Less (%)	31 Mins. to 1 Hour (%)	61 Mins. to 2 Hours (%)	121 Mins. to 3 Hours (%)	181 Mins. to 4 Hours (%)	Over 4 Hours (%)	Median (Minutes)	N
Kings Mtn.	8.3	20.7	44.9	18.4	4.3	3.4	120	396
Sycamore Shoals	11.2	28.9	35.7	10.0	8.0	6.2	90	311
Cowpens	9.7	28.1	44.2	13.9	2.9	1.2	90	373
Rocky Mount	3.9	12.3	47.1	24.5	10.3	1.9	120	155
BRP Mineral Museum	41.7	43.6	8.3	1.9	1.9	2.6	45	156
BRP Trail Segment	6.9	17.2	41.4	17.2	13.8	3.5	120	29
W. Scott Kerr Visitor Center	41.0	25.6	15.4	7.7	2.6	7.7	60	39
W. Scott Kerr Trail Segment	27.3	6.1	9.1	12.1	6.1	39.3	180	33
Old Wilkes Jail	21.4	33.3	30.9	14.4	0.0	0.0	60	42
Old Burke County Courthouse	27.3	45.5	21.2	3.0	0.0	3.0	60	33
Fort Defiance	0.0	5.3	73.7	10.5	10.5	0.0	120	19
Wataugans	0.0	7.9	65.8	21.1	5.2	0.0	120	38
Other	11.1	22.2	37.1	7.4	18.5	3.7	120	27
Overall	13.5	25.4	38.2	13.8	5.3	3.8	90	1651

Site	Family	Highway Sign	Previous Experi- ence With Area	More Than 1 Source Listed	State High- way Map	Other	N
	(%)	(%)	(%)	(%)	(%)	(%)	
Kings Mtn.	31.2	14.0	13.7	9.0	8.0	24.1	400
Sycamore Shoals	28.1	17.9	16.0	9.3	3.5	25.2	313
Cowpens	11.9	28.3	8.0	9.8	12.1	29.9	388
Rocky Mount	19.2	27.3	8.7	10.6	2.5	31.7	161
BRP Mineral Museum	12.6	35.2	13.8	13.8	6.3	18.3	159
BRP Trail Segment	31.0	13.8	17.2	3.4	0.0	34.6	29
W. Scott Kerr Visitor Center	32.5	25.0	20.0	2.5	2.5	17.5	40
W. Scott Kerr Trail Segment	29.4	17.6	20.6	11.8	5.9	14.7	34
Old Wilkes Jail	22.7	11.4	15.9	18.2	0.0	31.8	44
Old Burke County Courthouse	23.5	14.7	17.6	20.6	2.9	20.7	34
Fort Defiance	31.6	15.8	10.5	15.8	0.0	26.3	19
Wataugans	28.2	12.8	25.6	12.8	0.0	20.6	39
Other	35.7	0.0	21.4	10.7	0.0	32.2	28
Overall	22.9	21.3	13.2	10.3	6.4	25.9	1688

Site	Have a Good Time (µ)	See Where History Happened (µ)	Develop My Knowledge (µ)	Observe the Beauty of Nature (µ)	Learn More About Rev. Era History (µ)	Feel Close to Nature (µ)	Learn More About State History (µ)	N's
Kings Mtn.	5.66	5.87	5.61	5.69	5.63	5.30	4.67	381-391
Sycamore Shoals	5.53	5.63	5.69	5.53	5.12	5.18	5.02	285-294
Cowpens	5.58	6.12	5.87	5.23	5.82	4.64	4.54	357-378
Rocky Mount	5.83	5.78	5.62	5.23	4.44	4.61	5.29	148-158
BRP Mineral Museum	5.82	4.31	5.32	5.89	3.43	5.31	4.49	141-151
BRP Trail Segment	5.92	4.73	5.00	6.15	4.62	5.88	4.60	25-26
W. Scott Kerr Visitor Center	5.98	3.79	4.55	5.78	3.41	5.62	3.74	38-40
W. Scott Kerr Trail Segment	6.41	3.67	3.63	6.29	3.00	6.06	3.09	32-35
Old Wilkes Jail	5.60	5.64	5.70	4.16	4.32	4.03	4.98	37-42
Old Burke County Courthouse	5.58	5.96	6.07	5.12	5.27	4.69	5.44	26-27
Fort Defiance	5.50	6.44	6.05	5.95	4.89	4.94	5.35	17-19
Wataugans	5.80	5.97	5.89	5.28	5.56	4.72	5.92	35-36
Other	5.48	5.58	5.33	4.88	5.29	4.84	5.19	25-28
Overall	5.68	5.62	5.60	5.49	5.10	5.03	4.76	1561-1612

	Table 28. First Visit to Sit	е		
Site	Yes(%)	No(%)	N	
Kings Mtn.	59.9	40.1	399	
Sycamore Shoals	61.4	38.6	316	
Cowpens	84.2	15.8	386	
Rocky Mount	83.5	16.5	158	
BRP Mineral Museum	64.8	35.2	159	
BRP Trail Segment	37.9	62.1	29	
W. Scott Kerr Visitor Center	69.1	30.9	42	
W. Scott Kerr Trail Segment	55.9	44.1	34	
Old Wilkes Jail	79.6	20.4	44	
Old Burke County Courthouse	88.2	11.8	34	
Fort Defiance	57.9	42.1	19	
Wataugans	23.1	76.9	39	
Other	25.0	75.0	28	
Overall	67.8	32.2	1687	

	-	Table 29. Re	peat Visits i	n Last Two	Years			
Site	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 or More (%)	Median	N
Kings Mtn.	21.4	13.2	31.4	13.8	5.0	15.2	2	159
Sycamore Shoals	9.2	10.9	21.0	13.4	11.8	33.7	3	119
Cowpens	20.7	12.1	32.8	13.8	6.9	13.7	2	58
Rocky Mount	24.0	12.0	44.0	12.0	4.0	4.0	2	25
BRP Mineral Museum	24.1	13.0	35.2	7.4	7.4	12.9	2	54
BRP Trail Segment	5.6	0.0	38.9	16.7	16.7	22.1	3	18
W. Scott Kerr Visitor Center	15.4	7.7	7.7	30.8	0.0	38.4	3	13
W. Scott Kerr Trail Segment	0.0	0.0	13.3	13.3	26.7	46.7	4	15
Old Wilkes Jail	0.0	0.0	55.6	11.1	22.2	11.1	2	9
Old Burke County Courthouse	25.0	25.0	50.0	0.0	0.0	0.0	1	4
Fort Defiance	25.0	25.0	25.0	12.5	12.5	0.0	2	8
Wataugans	13.3	16.7	20.0	16.7	13.3	20.0	2	30
Other	4.8	4.8	52.4	9.5	4.8	23.7	2	21
Overall	16.3	11.4	30.0	13.3	8.6	20.4	2	533

Table 30. Enjoyed Visit									
Site	Strongly agree 5 (%)	Agree 4 (%)	Neutral 3 (%)	Disagree 2 (%)	Strongly disagree 1 (%)	Mean	N		
Kings Mtn.	49.0	46.2	4.3	0.0	.5	4.4	400		
Sycamore Shoals	39.0	54.0	6.7	.3	0.0	4.3	313		
Cowpens	42.6	49.4	6.5	.5	1.0	4.3	385		
Rocky Mount	61.7	32.7	5.0	0.0	.6	4.5	159		
BRP Mineral Museum	34.2	55.7	7.6	1.9	.6	4.2	158		
BRP Trail Segment	51.7	48.3	0.0	0.0	0.0	4.5	29		
W. Scott Kerr Visitor Center	45.2	50.0	4.8	0.0	0.0	4.4	42		
W. Scott Kerr Trail Segment	32.4	50.0	11.8	2.9	2.9	4.1	34		
Old Wilkes Jail	45.4	47.7	4.6	0.0	2.3	4.3	44		
Old Burke County Courthouse	41.2	58.8	0.0	0.0	0.0	4.4	34		
Fort Defiance	73.7	26.3	0.0	0.0	0.0	4.7	19		
Wataugans	56.4	35.9	2.6	0.0	5.1	4.4	39		
Other	32.1	60.7	3.6	0.0	3.6	4.2	28		
Overall	45.0	48.3	5.5	.4	.8	4.4	1684		

Table 31. Aware of OVT Events and OVT								
Site	Aware of Historic March and Battle? (%)	N	Aware National Historic Trail? (%)	N				
Kings Mtn.	64.7	394	26.0	396				
Sycamore Shoals	50.7	306	34.8	310				
Cowpens	54.6	379	21.4	384				
Rocky Mount	32.3	155	17.0	159				
BRP Mineral Museum	24.2	153	20.0	155				
BRP Trail Segment	51.9	27	62.1	29				
W. Scott Kerr Visitor Center	30.0	40	31.7	41				
W. Scott Kerr Trail Segment	39.4	33	28.6	35				
Old Wilkes Jail	45.2	42	29.6	44				
Old Burke County Courthouse	46.7	30	25.8	31				
Fort Defiance	61.1	18	68.4	19				
Wataugans	78.4	37	62.2	37				
Other	85.2	27	85.7	28				
Overall	51.1	1641	28.4	1668				

Site	Seen OVT Brochure (%)	N	Desire More Info. on OVT (%)	N
Kings Mtn.	36.4	390	67.4	380
Sycamore Shoals	44.3	309	66.5	304
Cowpens	31.6	377	73.0	370
Rocky Mount	19.4	155	66.2	157
BRP Mineral Museum	20.4	152	62.4	149
BRP Trail Segment	32.1	28	84.6	26
W. Scott Kerr Visitor Center	41.5	41	62.5	40
W. Scott Kerr Trail Segment	51.4	35	48.6	35
Old Wilkes Jail	9.8	41	80.5	41
Old Burke County Courthouse	30.3	33	78.1	32
Fort Defiance	27.8	18	76.5	17
Wataugans	33.3	36	72.2	36
Other	46.4	28	75.0	28
Overall	33.3	1643	68.5	1615

Table 33. Involvement in OVTA							
Site	Ever Attended Reenactment? (%)	N	Ever Marched in Reenactment? (%)	N	OVTA Member? (%)	N	
Kings Mtn.	15.9	396	1.5	394	0.5	391	
Sycamore Shoals	21.3	310	4.2	309	2.3	310	
Cowpens	9.4	382	0.0	379	1.1	378	
Rocky Mount	14.0	157	1.9	158	0.0	157	
BRP Mineral Museum	9.5	158	.7	153	0.7	153	
BRP Trail Segment	35.7	28	3.5	29	3.5	29	
W. Scott Kerr Visitor Center	7.5	40	2.4	41	0.0	41	
W. Scott Kerr Trail Segment	14.3	35	2.9	35	0.0	35	
Old Wilkes Jail	4.4	46	0.0	42	0.0	42	
Old Burke County Courthouse	6.1	33	0.0	33	0.0	33	
Fort Defiance	21.1	19	0.0	18	0.0	18	
Wataugans	48.7	37	2.7	37	0.0	38	
Other	63.0	27	0.0	28	3.6	28	
Overall	15.8	1668	1.6	1656	1.0	1653	

Site	Yes (%)	No (%)	N
Kings Mtn.	24.8	75.2	395
Sycamore Shoals	22.6	77.4	305
Cowpens	25.6	74.4	386
Rocky Mount	14.6	85.4	157
BRP Mineral Museum	11.8	88.2	153
BRP Trail Segment	23.1	76.9	26
W. Scott Kerr Visitor Center	22.5	77.5	40
W. Scott Kerr Trail Segment	22.9	77.1	35
Old Wilkes Jail	24.4	75.6	45
Old Burke County Courthouse	12.9	87.1	31
Fort Defiance	15.8	84.2	19
Wataugans	24.3	75.7	37
Other	7.1	92.9	28
Overall	21.7	78.3	1657

	Table	e 55. IIILE	rest iii vi	Siting Ot	her OVT	ones			
Site	Much More Interested-1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	Much Less Interested-7 (%)	mean	N
Kings Mtn.	25.5	28.3	25.0	16.9	2.3	1.0	1.0	2.49	396
Sycamore Shoals	25.2	20.7	28.5	19.3	4.6	.7	1.0	2.63	305
Cowpens	30.8	29.3	21.9	13.8	2.4	1.3	.5	2.33	383
Rocky Mount	19.6	24.1	22.1	28.5	3.2	1.9	.6	2.80	158
BRP Mineral Museum	13.1	20.9	20.3	35.3	6.5	1.3	2.6	3.16	153
BRP Trail Segment	35.7	14.3	32.2	10.7	7.1	0.0	0.0	2.39	28
W. Scott Kerr Visitor Center	12.8	5.1	35.9	33.4	5.1	2.6	5.1	3.41	39
W. Scott Kerr Trail Segment	22.9	17.1	17.1	22.9	11.4	8.6	0.0	3.09	35
Old Wilkes Jail	25.6	13.9	16.3	32.6	9.3	2.3	0.0	2.93	43
Old Burke County Courthouse	32.2	22.6	9.7	25.8	9.7	0.0	0.0	2.58	31
Fort Defiance	33.3	16.7	22.2	27.8	0.0	0.0	0.0	2.44	18
Wataugans	25.0	36.1	8.3	22.2	2.8	0.0	5.6	2.64	36
Other	11.1	25.9	33.4	18.5	11.1	0.0	0.0	2.93	27
Overall	24.8	24.5	23.7	20.7	4.0	1.3	1.0	2.63	1652

	Table	e 36. Inte	erest in C	off-Road	Trail Segr	nents			
Site	Not at all Interested-1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	Very Interested-7 (%)	Mean	N
Kings Mtn.	10.8	6.7	7.7	17.2	13.8	21.5	22.3	4.7	390
Sycamore Shoals	11.8	6.9	10.1	17.7	18.4	16.1	19.0	4.5	305
Cowpens	11.9	7.5	6.7	14.8	18.1	14.8	26.2	4.7	371
Rocky Mount	20.8	11.7	6.5	15.5	19.5	13.0	13.0	3.9	154
BRP Mineral Museum	13.8	6.6	9.2	19.7	17.1	13.8	19.8	4.4	152
BRP Trail Segment	3.4	0.0	3.4	13.8	31.1	20.7	27.6	5.4	29
W. Scott Kerr Visitor Center	17.1	4.9	9.7	17.1	17.1	14.6	19.5	4.3	41
W. Scott Kerr Trail Segment	5.9	11.8	2.9	17.6	20.6	14.7	26.5	4.9	34
Old Wilkes Jail	9.5	14.3	16.7	21.4	7.2	9.5	21.4	4.2	42
Old Burke County Courthouse	21.2	3.0	9.1	21.2	12.1	9.1	24.3	4.2	33
Fort Defiance	18.7	6.3	6.3	18.7	18.7	18.7	12.6	4.2	16
Wataugans	23.7	7.9	2.6	18.4	15.8	18.4	13.2	4.0	38
Other	10.7	7.1	0.0	28.6	10.7	32.2	10.7	4.6	28
Overall	12.9	7.5	7.8	17.2	16.8	16.7	21.1	4.5	1633

Site	Within 15-County Trail Corridor	Within Other Parts of VA, TN, NC & SC	Outside of VA, TN, NC & SC	Overall* Average	N
Kings Mtn.	\$10.73	\$29.92	\$8.16	\$49.38	334
Sycamore Shoals	20.58	18.55	5.01	44.57	240
Cowpens	14.52	31.78	13.10	59.26	305
Rocky Mount	17.44	29.77	5.92	54.52	123
BRP Mineral Museum	27.41	33.24	3.74	64.39	136
BRP Trail Segment	8.97	8.77	.26	18.00	24
W. Scott Kerr Visitor Center	10.43	11.61	1.34	23.37	32
W. Scott Kerr Trail Segment	18.30	9.37	.09	27.77	27
Old Wilkes Jail	7.65	10.28	.46	21.94	35
Old Burke County Courthouse	21.32	11.71	8.85	41.88	25
Fort Defiance	6.32	10.16	0.0	16.48	16
Wataugans	19.06	15.88	4.13	37.97	30
Caldwell County Heritage Museum	.50	0.00	0.0	.50	4
Mountaineer Days	10.97	4.38	0.0	15.34	8
Quaker Meadows	14.25	5.88	0.0	20.13	11
Overall Average	\$16.00	\$25.58	\$7.07	\$49.05	1350

^{*}The sums of individual rows or columns are slightly different from the totals provided in some cases. This is due in part to rounding error and in part to the inclusion of respondents who provided total expenditures but not the type and/or location of their expenditures.

Table 38. Expenditures in Each Site's County
by Outside Visitors

Site	Average Expenditures Per Person per Day	N	Total Visits in 1995	% of Site's Visitors from Outside Site's Home Counties*	Estimated 1995 Non County Visits	Estimate of 1995 New Money
Kings Mtn.*	\$10.75	299	229,746	90.0%	206,771	\$2,222,788
Sycamore Shoals	22.48	209	228,685	86.2%	197,126	4,431,393
Cowpens	14.71	298	158,175	98.7%	156,119	2,296,511
Rocky Mount	19.06	104	40,276	90.5%	36,450	694,737
BRP Mineral Museum	27.51	135	239,689	99.9%	239,449	6,587,242
BRP Trail Segment*	10.56	12	45,000	56.1%	25,245	266,587
W. Scott Kerr Visitor Center	12.80	26	6,000	77.2%	4,632	59,290
W. Scott Kerr Trail Segment	21.71	19	186,391	69.1%	128,796	2,796,162
Old Wilkes Jail	10.65	21	4,250	72.1%	3,064	32,631
Old Burke County Courthouse	27.12	18	2,542	64.2%	1,632	44,260
Fort Defiance	9.91	10	1,400	53.3%	746	7,393
Wataugans	24.87	21	2,265	65.0%	1,472	36,609
Caldwell County Heritage Museum	0.00	0	3,876	9.1%	353	0
Mountaineer Days	16.75	1	300	20.0%	60	1,005
Quaker Meadows	26.82	4	237	43.7%	104	2,789
Overall	İ		1,148,832		1,002,019	

^{*}Kings Mountain National Military Park and the Blue Ridge Parkway trail segment each are located in two counties. Both counties were included for analyses involving these two sites.

D. Contact Persons

National Park Service

Steven Elkinton, Program Leader National Trails System Programming National Park Service - 2230 1849 C Street, NW Washington, D.C. 20240 (202) 565-1177 (202) 565-1204 (FAX)

Richard Sussman National Park Service, Planning and Compliance Southeast Regional Office 75 Spring Street, SW Atlanta, GA 30303 (404) 331-5465

North Carolina State University

Roger L. Moore, Associate Professor Department of Parks, Recreation and Tourism Management Box 8004 North Carolina State University Raleigh, North Carolina 27695 (919) 515-3698 (919) 515-3687 (FAX)

Overmountain Victory Trail Association

R. G. Abshur, President Overmountain Victory Trail Association c/o W. Scott Kerr Reservoir P.O. Box 182 Wilkesboro, NC 28697-0182 (910) 921-3390 (w)

Overmountain Victory National Historic Trail Sites

Blue Ridge parkway Mineral Museum

Jill Hawk, Chief Blue Ridge Parkway, Museum of North Carolina Minerals 200 BB&T Building One Pack Square Asheville, NC 28801 (704) 765-6082

Caldwell County Heritage Museum

Bill Stronach Caldwell County Heritage Museum P.O. Box 2165 Lenoir, NC 28645 (704) 758-4004

Cowpens National Battlefield

J. Farrell Saunders, Superintendent Pat Ruff, Chief Ranger Cowpens National Battlefield P.O. Box 308 Chesnee, SC 29323 (864) 461-2828 (864) 461-7077 (FAX)

Fort Defiance

Trish Gryder Fort Defiance P.O. Box 686 Lenoir, NC 28645 (704) 754-0951 (w)

Kings Mountain National Military Park

Mike Loveless, Superintendent

Christopher Revels, Chief Ranger Kings Mountain National Military Park P.O. Box 40 Kings Mountain, NC 28086 (864) 936-7921 (864) 936-7922 (FAX)

Old Burke County Courthouse

Francis Manderson, Executive Director Historic Burke Old Burke County Courthouse P.O. Box 195 Morganton, NC 28655 (704) 437-4104 (w)

Old Wilkes Jail

Joan Baity, Executive Director Old Wilkes, Inc. P.O. Box 1311 Wilkesboro, NC 28697 (910) 667-3712

Orchard at Altapass (Blue Ridge Parkway Trail Segment)

Bill Carson, Business Manager The Orchard at Altapass P.O. Box 256 Little Switzerland, NC 28749 (704) 765-9531

Rocky Mount Museum and State Historic Site

Norman Burns, Executive Director Rocky Mount Museum 200 Hyder Hill Road Piney Flats, TN 37686-4630 (615) 538-7396

Sycamore Shoals State Historic Area

Herb Roberts, Superintendent Sycamore Shoals State Historic Area 1651 West Elk Avenue Elizabethton, TN 37643 (615) 543-5808

W. Scott Kerr Reservoir

R. G. Abshur W. Scott Kerr Reservoir P.O. Box 182 Wilkesboro, NC 28697-0182 (910) 921-3390

E. Visitor Comments

The last page of the mail-back questionnaire provided space for respondents to offer comments or suggestions about the OVT or the site they had visited. Of the 1,734 questionnaire returned, 469 (27%) provided comments. One hundred fifty-three of these comments were selected and transcribed and are presented by site below. For the larger sites, only comments that referred to the OVT or the OVTA reenactments are presented. For smaller sites, a random selection of other comments were included as well.

Kings Mountain National Military Park

I had no idea the Kings Mt. trails were connected to a larger system. Has the Sierra Club ever traveled it or featured it on local newsletters or the national magazine? Would be good! Love love love the trails - need better trail maps @ Kings Mt. Thank you for your good work.

Put more displays and information (talks etc.) at Kings Mt. Park. The movie was pretty lame. Reminded us of junior high school, Kind of boring. Get a new film. Use re-enactors to make it interesting and fun! Have a question and answer time with a knowledgeable person.

We would like to visit the other sites now that we know about them. We are interested in history (Civil War & Rev War) but that was not the purpose of our visit. However we decided to take the time to watch the film. After visiting many Nat. Parks out west, we consider yours equal to them.

My visit to King's Mountain peeked my interest to visit Cowpens Battlefield. I visited Cowpens a few weeks later. The trip to Cowpens was equally enjoyable.

Are there not other sites - Ramseur Mill or other battlefield sites that should be included in this Overmountain Victory National Historic Trail?

Availability of golf carts or the sort for those of us who can't walk the trails. I would appreciate being informed of reenactments (possibly a schedule of) at the various sites.

We may try the Overmountain Trail this fall.

I have been very happy visiting Kings Mt. Park. I hope to learn more about the Overmountain Men's march to Kings Mt.

I would love to know about any reenactments of battles or special occasions or daily life in the future.

Suggest information on the Overmountain Victory National Historic Trail be part of a basic information packages/vacation planners sent out by state involved.

We enjoyed our visit to the site and also to other historic parts of the region i.e. Civil War Sites as well as Revolutionary War battlefields. Guides in Cowpens and Camden were very helpful and hospitable but we were irritated and amused by the heavy bias to the rebels. Don't be offended but as British visitors from Scotland we found some of the literature on Revolutionary War sites to be very much over the top and slanted towards "jingoism" in the extreme. All Continentals were "heroes", their victories were "brilliant" and any British victory was really a defeat - really! No heroes on the Loyalist side, no strategic successes, no brave men, no graves for the British. Why is there such an imbalance? Real life is not like that! After all George Washington's mother was a loyalist! At least in our country we give credit to all sides and try to understand all points of view. We like the US and have visited it many times but please be more objective in your telling of history - its not just good & bad guys.

I enjoyed my visit very much and will not miss an opportunity to visit other sites on the Victory trail.

I would be interested in becoming more aware of the Overmountain Victory National Historic Trail. This particular survey seems to be the most expressive awareness that's ever been made available to me. I'm sure information exists somewhere but somehow I have been unaware of it. Except perhaps in tidbits by way of the film at King's Mountain. I'm just

unsure of Associations etc. that further any information or advertisement. We were aware of Kings Mt. battlefield only after we got there, by way of the Highway 161 sign, but not before.

Please change the format of the park brochure. To someone who visits many NPS sites, such as myself, the appearance of a lesser-quality brochure raises questions as to the relative importance of that particular site. I would like to see complete standardization of brochures throughout the Park system. (Overmountain Victory Trail brochure is excellent; I recommend following this format for the Park brochure). I would also explore linkages with other NPS sites that are related in theme: Guilford Courthouse, Fort Moultrie, Camden, and Ninety-Six. A thematic focus could be the Revolutionary War in the Southern States (many people are totally unaware of the significance of the Southern campaigns). Perhaps you could even link to the Colonial NHP in Virginia to close the loop. How about a "trail" (actually a driving trail) that links all the sites together?

We will visit other sites now.

The area is not in top notch repair. It has shown its age since the last time I was there, 10 years ago. I would like to know more about the marches!

Next year I plan to walk the trail from Sycamore Shoals to Kings Mountain.

I would be interested in what requirements your organization has and what support you could provide to a military history group conducting as detailed terrain walk of the King's Mountain site. This terrain walk would last up to nine hours and cover all aspects of the historic fight.

King's Mountain and Cowpens were on our original schedule as were Guilford Courthouse and several Civil War locations. We were fortunate to visit King's Mountain on the battle anniversary date. We enjoyed both King's Mountain and Cowpens very much. We also visited Alamance and became acquainted with the "Regulators" and the affair at Alamance.

My wife and I now plan to visit some of the Overmountain Victory National Historic Trail sites.

Better public education program to inform people about the Overmountain trail.

We live only 15 miles away from Kings Mt. State Park and we enjoy going. The Living History Farm was such a nice addition. The kids really enjoy it. I always check the newspapers to see when they are having the reenactments. The only suggestion that I have is to please try to do some of these activities during the weekdays. They are always on Saturday and Sunday and teachers are not able to take their classes on these days.

Please consider inclusion of the site of the battle of Ramsour's Mill in Lincolnton, N.C. This battle preceded that of King's Mountain by 3 1/2 months, was similar in scope, and may have significantly affected the outcome at King's Mountain.

The sites need more exposure. If I had seen or heard about these sites on public radio or T.V. I would have made a point of visiting as we pass by this area every two years or so.

I had never heard of the Overmountain Trail and, in fact, this questionnaire did more to increase my awareness of it than did the visit to Kings Mt.

During our travels, we used our AAA tour book extensively to find worthwhile attractions along our route. As we entered each state we stopped at the Tourist Information Center to gather additional ideas & sometimes change our route of travel to accommodate additional points of interest. The Overmountain Victory Trail sites are a very well kept secret few people we visited with in campgrounds ever heard of it.

The Overmountain Trail is not known in the midwest. I would recommend trying to place articles in the following Magazines which I read: AAA Home & Holiday, Chicago Tribune Travel section, Travel & Leisure Magazine. I came to the trail more interested in the Civil War history, but came away with a great appreciation for the Revolutionary War too. I was amazed at the historic march and would like to see a 3 dimensional Topographical map of the entire map to bring home the enormous barriers crossed by the determined band of patriots.

Guided tours of battlefields would be nice - not just a film and a pamphlet. More period reenactors, weapons demonstrations, more artifacts on display & for study. Give Kings Mountain an electric map like Cowpens. Get the state more

involved in this American History - more signs, more advertisements more reenactment -just more interactions! Enjoyed the trip immensely!

Here in the west I have never heard anything about the Overmountain Victory National Historic Trail in my periodical or newspaper. Perhaps you should try a little harder to let us westerners know about it via travel or historical periodicals & papers.

We enjoyed it and will probably check out some of the other sites of the Overmountain Victory Trail.

Sycamore Shoals State Historic Area

I'd like to see all the trail possible open to hiking/camping. Stress the historic importance of the trail. But to get people to the trail, feature as many events as you can handle - then - advertise

I'd like to see the purchase, restoration, and preservation of as much of the original route as possible. I would be willing to make a financial contribution to that goal.

While I applaud the efforts of the OVTA and the attention and concern the group brings to the trail. I must confess that I have been horrified by the lack of attention the group gives to the authenticity of their clothing and preservation. As a reenactor I understand the difficulty and expense of obtaining accurate reproductions, but it can be done. Furthermore, I understand that several top-notch reenactors have attempted to help them and have been rebuffed. I wonder if it might be possible to set some standards within the organization? It would be very simple to suggest that those that dress out do it properly or refrain. I can see all the difficulty of dealing with a volunteer group, but this is an issue which angers me. Thanks for listening.

We were not informed of the trail or areas connected with it. We would have visited other sites if we had known.

The area is so beautiful but it's an area that is not discussed enough in school or marked so any visitors realize its historical or even there. This was a wonderful surprise we accidentally discovered when relatives told us to stop and see a play. Tourists passing through Elizabethton get the impression that it is part of the Sycamore Shoals Hospital for rehab or their patients, when actually it's a State Park.

We first saw the sign for Sycamore Shoals when passing the park in Elizabethton. We also noted a plaque on an over-hanging rock along side TN highway 143 near Roan Mt. State Park, and asked the friends who own the home we rented about it. They explained it was an overnight stop on the Overmountain Victory Trail (for the Overmountain Men) and suggested we visit Sycamore Shoals.

Please link to Nat'l Register and state historical sites associated with where the Kings Mt. men volunteered from.

Great places to visit. Public should be better informed of the trail and sites.

I became interested through reading Cameron Judd's books. It seems as though it is pretty organized & I'm interested in making the trek in 1996. I need enough info to be able to plan clothes (period), logistics etc.

We will visit the entire trail. We take Sunday trips. We try not to stay overnight but we're not beyond that. We're interested in any info that is available.

This trail needs to be promoted throughout U.S. I live in Maryland. I know Valley Forge, Yorktown, etc. These battles in South Carolina deserve more importance in the scheme of things. Saratoga, Bunker Hill - They are right up there with these. When will there be an aircraft carrier "Cowpens"?

I feel that the trail, the OVTA & the importance of the Battle itself need more exposure on the National level. Network television would be one example. The significance of the Battle of Kings Mountain needs to be especially emphasized during the September-October March. Without the public having a clear understanding of the meaning of the Battle and the way it influences their lives today, the re-enactors are reduced to the status of so many dancing chickens. These men in funny clothes walk around, fire guns & put on a show. That's all it is to the uninformed.

Enjoyed the video on Overmountain Men. Also the Park Ranger we had the opportunity to talk with was very informative and helpful.

Concerning the trail, I think that much effort should be made to make sure that it was moved off the highways. The safety of all concerned should drive this effort. [keep it near the actual trail but off the road]. Also, concerning the trail much effort should be made to insure that the trail is legally usable now and for future generations through easements, purchase, etc. In some areas the trail needs to be marked better. Historic sites should be purchased and preserved and more fully tied into the trail. The OVTA, NPS, State Parks, local communities, local special interest groups and whatever State and Federal Agencies need to join together and unify efforts to preserve the trail, the historic sites, and the scenic sites before it is too late. Already, many areas that were once barren fields or open vistas have suddenly developed subdivisions, business facilities, and in some instances chaotic messes of garbage, or bulldozed trees that block passage and views. If action is not taken quickly the people of the corridor and the peoples of our nation will have a great loss.

I found out about the Overmountain trail purely by accident. I never knew it existed. Our trip to the east commenced in Philadelphia where our friends picked us up. The four of us journeyed together on a history odyssey - Liberty Bell, Independence Hall, Valley Forge, Gettysburg, Harper's Ferry, Fredricksburg, Yorktown, Williamsburg, Jamestown, Kitty Hawk, Bennet's Farm - and in Asheville to the Overmountain trail. It was a magnificent journey through history.

I was disappointed in the trip this year. Maybe my expectations were set to high. I came a few years ago, with a school group, and we actually got to see the people cross the creek and shoot their guns. They did a skit and when it was over, some of the "Overmountain Men" sat and talked with us and it made the whole trip enjoyable. This year when we went, there were only 4 - 5 "Overmountain Men" and they didn't even talk much. It was cold and they were inside a shelter, around a fire. I may return with a school group sometime.

I attended a reenactment at Sycamore Shoals about 2 years ago and really enjoyed it. More events of this type would probably draw greater numbers of visitors to the parks.

I attended a staff meeting at Sycamore Shoals State Natural Area but did not have a great deal of time to look at exhibits or read literature. After the staff meeting, I did have free time to drive to trail segments in Roan Mountain State Park. The views and trees greatly interested me in the park and National Forest.

Sycamore Shoals Historic Site was a pleasant surprise. It was well planned and presented the information very well. I had read in the brochure it was a natural hiking trail and my wife and I happened to spend an afternoon in Elizabethton and wanted to take a walk. As a former history teacher I was absolutely delighted with what I found inside. I think you need to publicize it better. If I had known what was there I would have made a special trip. As it was, I discovered it by accident.

I participate in 18th C. Living history events - so naturally I visit many sites in NC, TN, SC, & VA. Sycamore Shoals is one of my favorites, after Fort Defiance. I am a member of that Board of Directors.

It would be most helpful to me if you would make available names & war records of Overmountain Men. DAR could use these. I'm looking for records on Leonard Hart to join Tenn. DAR.. A reasonable fee would be acceptable & save me a lot of time & frustrations. I know his name is listed but DAR does not accept local historians as authentic. I have 4 granddaughters I'd like to get registered in DAR.

Try and get employees interested in the history of the area (sites). Use volunteers, other than when there is a re-enactment. Volunteers who are willing to just be at the site to talk about the site, area history related to the period, etc. More detailed brochure on each site, even if there is a slight fee. Or a booklet with history with photo's of site. Patches for sale of each site of the Overmountain Victory National Historic Trail.

I do now & have always enjoyed all of the times I have been to sites along the trail & can think of nothing that would improve it for me.

Was not aware of the formal trail. Would like to see more about it, including advertising or articles in travel press. My travel plans included these specific sites because they were in the AAA Guide. Had I known of the trail, I would have considered my plans and possibly followed the entire trail. Send info and I will consider it in the future.

I would hope to visit other sites as time goes on.

Cowpens National Battlefield

I would like to know more about the reenactment and victory marches. I also would like information about becoming a member of the Overmountain Victory Trail Association. Finally, I think you should put more information about the offi-

cers at the battle (books, pictures, etc.) which can be purchased so that one can learn more if he chooses. I really enjoy my visits to Cowpens and Kings Mountain. They are excellent places to visit.

Our stop for lunch at Cowpens was a nice break during our trip. We have planned to visit other sites along the Overmountain Victory Trail, as well as revisit Cowpens, when the weather is cooler.

I am interested in the trail that recreates the Southern Campaign; I would like to lead a youth cycling trip to retrace the American Army.

Get the word out! I'd never heard of your trail before you sent me this! And I did Cowpens! Why not a display here? I'm your target audience. This spring I drove the length of the Blue Ridge Parkway - Skyline Drive to the far side of Great Smoky Mtns. Pk. I also drove part of the Natches Trail this trip. I stop at exhibits and I camp usually. Why aren't you in AAA? Or are you just new? Where can I get your brochure? Somehow I missed it at Cowpens, and along the 15 or so miles of your trail I drove between Cowpens and I-85. I do recall seeing some kind of sign, and wondering what it meant... for about 3 seconds.

Overall I felt the trail was well marked and maintained. The staff was also very friendly.

I have lived in Spt. County for 14 years, I know about Cowpens, and Kings Mountain, but never knew of the trail.

Getting into a re-enactment of a battle. The march there. I've seen many Civil War programs & a couple Revolution reenactments. I would like to be involved in a assoc.

If I lived closer to this national historic trail I would definitely visit more segments. Due to the fact; however, that some day, I plan on moving back in that general area. When I do I'll be out on the trails, under the stars. Additionally, I am a history major, so naturally, historic sites and events attract me.

I will visit more of the historic sites on the Overmountain National Historic Trail in the future.

The site I went to and any other sites have been pretty boring. I'm not sure how to improve it except to do more than have a field and a sign.

I don't know if you do this or not, but I think it would be very helpful if you would send out brochures/information about the historical sites in the area to schools within the site. Information could include tours, picnic areas, services offered, fees, etc. This would be helpful to teachers in planning field trips for their students. More information on the Overmountain Victory Trail Association is needed. I was not aware of this.

I would be interested in an Overmountain Victory Trail Brochure. I was unaware of where Cowpens Battlefield was located until I spotted it by chance on a map while attending a convention in Asheville. My great, great uncle mentions Cowpens in a letter to his niece. Was disappointed we couldn't walk the battlefield due to flooding from Tropical Storm Jerry. Was very pleased with the selection of books offered for sale and forward some valuable leads in tracing my ancestors. Would have visited Kings Mountain, Ninety-Six and Rocky Mount if we hadn't been limited for time. Will have to make a return visit.

It would be great to create a continuous trail off road from start to finish. Nothing was said about horses using the off-road parts of the trail, so I didn't ask. A lot of horse trail associations would use this trail if it could accommodate them. The re-enactment would be more real like. This would mean more camping areas along the way. I would pay more money for trail use for that kind of adventure. You could better see & understand what our forefathers went through to give us today's liberties!

Now that I know that it is there I would like to visit the whole trail, and see the many different sites along the way.

After visiting the one site I think in the future I would like to visit more of the sites, when we have a longer period to spend time at the sites. Also, this was our first trip to N.C. and was just a short trip to enjoy everything that we would have liked to visit. Also, at one of the Visitors Centers west of Shelby it was a very pleasant stop. The people were so friendly and helpful with information and in the future I'm sure we will visit again with more time to see the state.

I knew of the existence of the Overmountain Victory N.H.T. before my trip, but I was hoping to learn more about it at King's Mt. N.M.P. & the Cowpens. I'm very impressed with the trail's documentation & have saved the National Park Service brochure about the trail for future reference. I hope to return in the future to visit additional sites along the trail to increase my knowledge of Revolutionary War History.

I was surprised at the lack of monuments etc. at Cowpens. We visited Guilford Courthouse, and it was what I expected of a National Parks Battlefield. (Though it was a tactical defeat, and Cowpens was a victory.) With the importance of the Partisans defeating loyalist and the regulars under Tarleton, I was expecting more commemoration of their experience. However, I would like more information about the Overmountain Victory Trail Association. Advertising at each site the fact that there are other sites connected or if there is info making it more visible! We look forward to seeing other sites very soon. Happy to help.

This was our first knowledge of the Overmountain Victory National Historic Trail. We will definitely be visiting more sites in the future now that we are aware of some.

Was not aware of Overmountain Men's match to Kings Mountain until I received this survey. Historic Trail should be presented at site to encourage interest in other (total) locations.

Finding out about Overmountain Victory Trail is VERY Difficult. Revolutionary War history appears to be very provincial. Although the sites are run by the US gov't, there does not appear to be any coherent view of the war. From NJ-living within 5 miles of Morristown National Historic Park [Ford Mansion (Washington's headquarters) and Jocky Hollow] I see nothing to interest me in other sites. The same was true at Cowpens and Kings Mountain. However, I did pick up a book which mentioned Lloyd Smith of the Morristown, NJ area and a library (!) at the Morristown site. We went on this trip because my ancestors apparently took part in the battle. These sites should be natural sites with visitors from all over.

I had not heard of the Overmountain Trail before. We were passing by and stopped in. We did not see very much of it. Therefore I can not give a good report of it.

Would have liked to have visited more of the sites but had a schedule to keep - may well plan another trip specifically to visit more sites along the trail.

Having lived in N.C. in Asheville & Raleigh, this is the first time I knew of the Overmountain Victory National Historic Trail. I have been to many National Parks and Civil War Battle Sites and have started on the Rev War Sites. It is nice to know that our government is working on retaining these and other sites of Historical Value. Please keep up the good work. I do not mind paying a fee if it goes to keeping the site maintained.

Thoroughly enjoyed my visits to Kings Mountain & Cowpens. I liked the history connected with each location and found the landscape beautiful. I hope I can go again.

The Historic Trail is a good idea, but it lacks complete access to the public. The sites on the Trail were not known to myself until receiving this survey, and I have been to Cowpens Nat. Batt. 4 times and Kings Mt. NB 2 times. I suggest that you create a map in each visitor center's area with brochures of each site underneath. Also how do the sites relate to each other? That is besides being on the route to Kings Mt.

Actually, we're going to the Olympics next year and have decided to incorporate the Trail into our drive.

I saw a sign denoting the Overmountain Trail, but I didn't know what it was. I'd like to have secluded, primitive tent camping at an historic site like this. (Cowpens) Offer as much detailed information as possible about each individual who fought at the battle sites for genealogical reasons and to foster family pride in American history.

We enjoyed the short visit to Cowpens, but unfortunately got there too close to closing time, and could only see museum portal. Was in a lovely area and we plan on going back someday. Enjoyed our King Mt. trip 3 yrs. ago very much and was interested to learn of all the historic sites in NC & SC pertaining to the march.

I cannot comment on what I have not seen. I can say, however, that if the rest of the Victory National Historic Trail is like the Cowpens National Battlefield, a lot of work is needed. I and my family appreciate the park system(s). Please do not take the tone of my answers as condemnation of all parks. Perhaps its just that Cowpens does not meet up with our usual expectations.

Very interesting. Good work in preserving the sites of our nation's history.

I was surprised at how few people in Spartanburg knew anything about Cowpens or even where it was located. I'm sure you've had articles in the local newspaper in the past, but perhaps it's time to plan another publicity campaign. I'm not sure how much the approach of focusing on the "Overmountain" men is working. It didn't appeal to me, perhaps

because I am not from the area. However, it would not hurt to have a broader appeal to appreciate the people who died for our freedoms.

Not enough general advertising of total historic route. Need to make available descriptions of what is physically at each site.

Since reading about the Overmountain Historic Trail; we will probably make a stop at Kings Mt. The children have National Park Passports and it has definitely sparked their interests in visiting anywhere they can get a stamp! In the meantime, they do pay attention and learn more about their country & its history. The Passports make a great keepsake also. I think they should be marketed more aggressively - they'd be a hit.

I am an assistant Scoutmaster. I would enjoy learning more of the trail segments on the OVNHT. The Cowpens site is very well maintained. It rained prior to my arrival and so was not crowded. The signs were very helpful but the battlefield layout was somewhat confusing until the very end. I had left my wallet at home so was unable to see the video. I'm sure it would have made things more clear. All in all it was an enjoyable experience.

I was not aware at the time of the extent of the system.

Rocky Mount State Historic Site

I run a teen camp in the summers and live in Greenville SC. Would love to know more about the Overmountain Victory National Historic Trail to plan interesting trips for them. Dates of reenactments. Any special events in June - August. It would be very important to us to try and educate them some about these trails & history. Please send information as soon as possible. We start planning Summer of 1996 in about 3 weeks. Thank you.

The method of history presentation at Rocky Mount was very unique and really made the facts come alive. It was much more interesting and informative than the usual straight stating the same. We enjoyed it so much we plan to visit again during the winter for the contrast.

Before receiving the survey, I was unaware of the connection of Rocky Mt. with the Overmountain Victory National Historic Trail. I am interested in learning more.

Basically I don't know anything about the trail. We just stopped at Rocky Mount because it sounded interesting as part of Tennessee history. Probably will never be visiting that part of the country again.

I really enjoyed my trip to the site and the area. I was impressed with the completeness of the site. We plan to visit Sycamore Shoals during our next outing. My suggestion: change the manner of presentation on the actual tour. I personally felt the historical presentation would have been more enjoyable with less "acting" on the part of the guides. You have a great historical program. Thanks.

Although I don't use the trail or visit the sites a lot, I do go to some of them for different reasons on different occasions. I feel very strongly about preserving history, and the places these events took place, and to see any part of the Overmountain Victory Trail, or the places along the trail be lost for whatever reason, would sadden me deeply.

While on my visit to Rocky Mount I had no idea it was part of the Overmountain trail. This questionnaire comes as a complete surprise and I'm afraid I've been no service to you all. This visit was uneventful. I do remember visiting Rocky Mount when it was much more interesting. Frankly I did not learn anything at all on the second visit nor did I recapture the interest of my first visit. The office staff was very cordial but the actors use too much humor and not enough knowledge of the site. It must have been an "off" day for Rocky Mount. Maybe they should close on Sundays.

I think living history sites are fantastic. I had never been to one before. I went to Rocky Mount but now I'm planning to go to several others on my next trip. I would be very interested in receiving any other information you could send me on the trails & other historic sites, as well as any special events, especially for Spring and fall when I usually travel.

I would like some info. on Overmountain Victory Trail Assoc. & The Frontier's men Assoc. When I was growing up my family and I were involved with the Dramas. I moved away 8 yrs. ago & have recently moved back to TN. My family and I are interested in continuing the History & Dramas. We homeschool and I feel like these experiences will greatly enhance our school. Thank you for providing wonderful historic places to visit!

Blue Ridge Parkway Mineral Museum Visitor Center

Trail needs more exposure in a number of publications, such as Blue Ridge Parkway map. Perhaps consider printing a short paragraph in the map published by N.P.S., reinforcing another map of the areas of interest or brochure, etc.

We love North Carolina, even though we missed all the Overmountain sites except the mineral museum. We visited Smoky Mt. Park, Oconaluftee Village, Biltmore Estate, Old Salem, Duke U. Chapel, UNC Solar Energy Display home, Outer Banks, Kitty Hawk, Cape Hatteras, Roanoke, Ocracoke, and many other sites. We loved it all. But its just as hot as it was hack home! Except in the mountains - love that cool!

As additional comments, may I say that in the 1950's, my wife and I participated in outdoor dramas in the Kings Mountain area at the amphitheater - commemorating the battle of Kings Mountain and events of the era. My wife, son and I lived in Kings Mountain, N.C. from 1950 until 1954 - then moved to Shelby, N.C., this city, as I understand, was named after Isaac Shelby. There is great and valuable historical matters attributed to the Revolutionary period - and I would like to see more done to preserve this and to make more people aware of it. Thank you.

I believe that there should be bicycle paths for those so inclined as the bicycles get onto the roads & it is very hazardous to all. I truly hope the government continues their support of our history and its territories. We need history to remind us of our blessings. If the parks were not protected these treasures would have disappeared long ago.

I have no idea what the "Trail" is about. There was nothing at the Gem Museum that caught my eye related to the "Trail." If this is an important attraction more needs to be done to promote it. Remember that I am a native North Carolinian & I didn't know.

I hope this survey doesn't throw a wrench in the works. I live in Spruce Pine, just a few minutes from the Blue Ridge Parkway Mineral Museum. I didn't take a trip at all, I just wanted a book from the gift shop. To be honest, I've never heard much about the Overmountain Victory trail, though I've seen those signs here and there. I am interested in more info. If you have any brochures that I can not get at the museum, I hope that you will send them to me.

Have your historical sites stay open until dusk. During the summer 5 p.m. is to early to close!

Unfortunately, we were at the end of our trip & we came this time for the Biltmore Estate in Asheville. We had no idea about the trails or the historic sites. Had we known in advance about the Revolutionary War Reenactment, we would have made the time to come & see the trail & sites. Thank you.

I would like advance notice of the events so I can participate. Id like to include my family, my junior Girl Scout troop and our local children of the Am. Revolution & DAR. I would also like to find out how I can get an authentic costume. My ancestors fought in the Am. Rev. War in NJ and NY. I am interested in learning more about the history of NC.

Keep up the good work. We need to have more trails connected to historic sites. I would suggest thinking about improving the trail markings.

Up until our visit to the Minerals Museum, we had never heard of the Overmountain Victory Trail. It would be useful to have pamphlets at each of the sites explaining. None were offered to us.

I thoroughly enjoyed my visit in the mountains and at the mineral museum. By any means, the historical sites and museums need to financed and maintained. Advertisement does wonders to allow people throughout the nation to visit and inform themselves of the history. The whole park is fantastic.

Identify and locate the Overmountain Victory Historical Trail on the N.C. road maps.

I think it is a good plan to intersperse the Overmountain Victory information in sites that are unrelated. I would never had learned about, nor seen the site, had I not planned a trip to the N.C. Museum of Minerals on the Blue Ridge Parkway. My fourth grade son is a "rock hound" and heard about the museum through the Forsyth Gem and Mineral Club. We more or less "stumbled" into the Overmountain Victory display but thoroughly enjoyed viewing it.

I visited the museum not knowing it was part of the Overmountain Victory Trail. I saw no mention of it at the museum or it did not catch my attention.

I was very impressed with the facility in which we stopped by accident (mainly for the restrooms) but found very interesting segments of history, along with collections and other various things - books, brochures, tapes, etc. available at this site. Wish there had been more stops like this one on the route in which we were taken.

We once tried to find the trail near Burbank to hike it up to Yellow Mt. but couldn't find it. Would like to receive a brochure showing hikable sections and how to find the trail heads.

Blue Ridge Parkway Trail Segment (Orchard at Altapass)

Until I visited the apple orchard and heard stories by the owner Bill and the ranger I was totally unaware of the history that took place in the area. Your survey has made me even more aware of events that transpired here. Obviously, as you well know, this part of the country needs to publicize itself alongside the historical events that are taught in schools and people know and identify with nationally. Take a blurb in the AAA book and other travel type magazines historical journals. Good Luck.

I think the trails and the events associated with it is a good thing and would like to walk more of the trail if time permits.

We have truly enjoyed the park rangers that have told the history of the Overmountain Men. We would enjoy seeing the volunteers, but our timing for vacation has never worked out. We have always enjoyed hiking. Hope to some of the trails in the next few years.

The only knowledge I had about the trail was what I learned about at the Orchard at Altapass and from this questionnair. I know about the Overmountain Men from seeing the "Horn in the West" outdoor drama in Boone several years ago. More publicity or advertising about the trail would be helpful and educational.

I would like to help with the re-enactments. I am a former history teacher. There is not a group near my home.

W. Scott Kerr Reservoir Visitor Center

I am in awe of how much can be done by a dedicated group of volunteers. I understand why some of those associated with the "Over the Mountain" trail would like to have the trail adopted as part of the National Park Service but I am afraid that if it were the quality of the trail would decline.

We liked some of the campgrounds that we saw, we enjoyed the scenery. We didn't see as much as we wanted to, but are planning to go back. We spent most of our day visit at Kerr Scott Lake, which we enjoyed very much. We would like to find out more about Overmountain Victory National Historic Trail, and the historic sites along it.

W. Scott Kerr Reservoir Trail Segment

I know more about the trail now than I did from visiting the site (Kerr). I had no idea it was of any historic significance.

My wife who teaches at Granite Falls Middle School plans to take students to Fort Defiance during the re-enactment. She plans to walk the trail with students with the volunteers. We know Bill Stonach, as we have a Veterans History Committee of which he and I are members. My kids and I walked the trail around the cape and part of the Yadkin River. We enjoyed the wildlife and scenery.

We like camping in the Overmountain Victory Trail area, because it is usually quiet and peaceful and we love being close to nature. The facilities are good. There are great fishing areas, and other outdoor interests. We always see something interesting on each trip we take. For instance, once when my husband and I were fishing, we saw a duck with some little ones overseeing the lake in front of us. On a recent trip a Kingfisher came close to where we were fishing.

The only suggestion would be for volunteers to maintain the trails more.

Since the actual crossing was flooded by the reservoir @ W. Kerr Scott, I can see no reason to associate trails at Kerr Scott with the Overmountain Victory March. I see no historical significance in the Kerr Scott Segment. I would appreciate an indicator of the exertion required to complete the trail segments. I suggest the US Forest Service system which rates the trails as strenuous to easy.

Old Wilkes Jail

During my trip, no one told me anything about the Historic Trail. I never realized it was there until receiving this questionnaire.

I think these places and trails are needed, used and important. I'm more of an in-building person. I had an ancestor or more to fight at Kings Mt. but have never read up on it or been to it, just ride by the area on my way to somewhere.

It was most enjoyable, never knew how much history exists in this area.

The day I visited the site I was interested in the place Tom Dooley was jailed, and we proceeded along the route past W. Kerr Scott Reservoir to the location of the grave of Tom Dooley. Our visit did not relate to the Historic Trail.

Old Burke County Courthouse

I thoroughly enjoyed the Historic Old Burke Court House and the information and displays inside. The curator/worker was kind and helpful. I will be back. My great grandfather is on the confederate war memorial out front of the courthouse and one of my relatives may have been a Rev. War Patriot and/or one of the "Overmountain Men".

My husband and I were interested in learning more about the American Revolution We are both teachers in a junior high school in Pennsylvania. Driving from S.C. to N.C. to visit relatives, we visited the Star Fort at 96, then decided to visit King's Mountain and Cowpens. At Cowpens we picked up the Overmountain Victory Trail brochure, but frankly, found it very confusing. While visiting relatives in Morganton, we stopped at the local tourism office and were told about the display at Old Burke County Courthouse. At dinner in a Morganton restaurant we spoke with a gentleman who takes part in the reenactments. After visiting the court house and talking with the participant, then observing the trail signs, we finally understood the concept of the trail and we hope to visit more of the sites on a return trip.

Somehow I would like to know more about the King's Mountain Reenactments. Thanks so much.

Please send me information about the trail.

More literature about the Overmountain Victory Trail is needed in SE North Carolina. The distribution in this area of the state is weak and the area is rich in Revolutionary history - i.e. Moore's Creek, Brunswick Towne, and Fort Johnston.

Fort Defiance

Some of the markers for the Overmountain Tail are hard to see while driving. Perhaps larger or more brightly colored signs would do.

I think the schools should use these sites more for study or field trips. The kids of Caldwell Co. have so much history available to them, so why not use it? Most of the field trips are to other places in other counties and some are not that much education. The teachers should receive some information about these locations and be using all of our history right here in ou county.

I live 2 miles from Ft. Defiance and visit at least yearly. At some point, I would like to see some of the other sites, but my visits to Ft. Defiance have had no relation to the OVT

My husband and I truly enjoyed Fort Defiance. I could not suggest any additions for the site. However, I am very interested in our state and history.

Our visit to Ft. Defiance was terrific. The enactors were very friendly. They obviously enjoyed talking about a subject which we were interested in.

Wataugans (Outdoor Drama at Sycamore Shoals State Historic Area)

We visited the site for the drama, "The Wataugans". It was an enjoyable experience except for a problem with the sound system. Part of the speaking parts could not be heard. However, this will not prevent me returning to see it again another year.

Would be interested in more re-enactment's of the daily life & culture of "ordinary people" (settlers etc.) instead of battles only. Enjoyed re-enactment in Rocky Mount & "Dance Scene" of the Wataugan play for this reason.

I think the show performed at Sycamore Shoals of the Wataugans should be a little more realistic. For instance, at least real Indians (American Indians) could have been used, & although I understand most of the performers weren't pro-

fessionals they needed to practice longer on their script to sound more professional. As many people that come to see that program the least that could be done is a more realistic program.

Mountaineer Days (Kings Mountain, NC)

If my legs were in better condition I would love to tour all the sites. It is Important for our future generations to see these sites - Keep up the good work!

We enjoy the activities at the state & national park. (K.M.) Also at Crowders Mt. State Park. Wish it could have been named Kings Mountain somehow since it is beside the K.M. pinnacle -which is not Crowders Mt. I have always taken my children and their friends to the K.M. park and to activities that involve re-enactment of the times and the history.

I may not be totally representative of visitors to the site as I live in Kings Mountain and visit the KM National Military Park regularly. I do enjoy it and I appreciate the history that is associated with this area. It would be nice to have more "outsiders" to the Mountaineer Days Celebration.

Quaker Meadows

I think the program that I had the pleasure of attending was very informative. I really thought that it wouldn't hold my interest but I was wrong. I truly enjoyed the program & learning more about my history & why some things are the way they are. I think there would be more people involved if, prior to having the programs, someone could involve as many schools as possible. I think that there should be more advertisement across the nation because there are people from all walks of life that would enjoy this. I would have never gone to this if it wasn't presented where I was camping anyway, because I wouldn't have known about it.

Bibliographic References

- Alexander, L. T 1994. The effect of greenways on property values and public safety. Denver, CO: The Conservation Fund and Colorado State Parks.
- Alward, G. S. 1986. Local and regional economic impacts of outdoor recreation development. In *The President's Commission on Americans Outdoors, A literature review* (pp. Values 47-57). Washington, DC: U.S. Government Printing Office.
- Arizona State Parks. 1989. 1989 State comprehensive out-door recreation plan. Phoenix: Arizona State Parks.
- Arizona State Parks. 1994. 1994 Arizona state trails plan. Phoenix: Arizona State Parks, State Trails Program.
- Babbie, Earl. 1995. The practice of social research (7th ed.). Belmont, CA: Wadsworth Publishing Company.
- Bergstrom, J. C., Cordell, H. K., Ashley, G. A., English,
 D., Klinko, D. K., Watson, A. E., and Alcorn, B.
 1989. Economic effects of state parks on local economies in North Carolina. In *Proceedings: 1989 Southeastern Recreation Research Conference*. Vol. 11, 91-96. Ed. K. R. Zera.
- Bergstrom, J. C., Cordell, H. K., Watson, A. E., and Ashley, G. A. 1990. Economic impacts of state parks on state economics in the South. *Southern Journal of Agricultural Economics*, 22(2).
- Bhullar, H., Braschler, C., Gillespie, G., Kaylen, M., and Vaught, D. 1991. Missouri state river trail study. University of Missouri–Columbia and Missouri Department of Natural Resources.
- Bielen, M., Kreag, G., Kuehn, D., Riggs, N., and Ververs, D. 1995. Scenic byways, trails, and corridors and their impacts. Unpublished fact sheet produced by the Great Lakes Sea Grant Network and the Coastal Land Use Committee.
- Birch, W R., Jr., ed. 1979. Long distance trails: The Appalachian Trail as a guide to future research and management needs. New Haven, CT: Yale University.
- Blank, U. 1987. The economic impact of the proposed Missouri River Trail. Unpublished.
- Blank, U. 1991. Trails as economic development tools.

 Paper presented at the Third National Rails-to-Trails

- Conservancy National Conference, Baltimore, MD. June 19-22, 1991.
- Boge, G. and Boge, M. H. 1993. *Paving Over The Past*. Island Press: Washington, DC.
- Brabec, E. and Zehner, A. 1990. The economics of community character preservation: An annotated bibliography. Washington, DC: Government Finance Officers Association and Scenic America.
- Brothers, G. and Chen, R. J. C. 1996. 1995 Economic impact of travel to the Blue Ridge Parkway, North Carolina. Raleigh, NC: North Carolina State University, Department of Parks, Recreation and Tourism Management.
- City of Seattle. 1987. Evaluation of the Burke-Gilman Trail's effect on property values and crime. Seattle, Washington: Seattle Engineering Department, Office of Planning.
- Crompton, J. L. 1993. Economic impact analysis: Myths and misapplications. *Trends*, 30(4), 9-13.
- Dave, D. and Evans, M. 1994. Travel patterns and behaviors of visitors to the Southern Highland region of the United States. Boone, NC: Appalachian State University, Center for Business Research.
- Davis, B. 1996. What's a trail really worth? *Western Horseman*, February, 137-139.
- Deeg, B. 1993. Community trail economics. Paper present at the 1993 National Recreation and Parks Congress. San Jose, CA, October 22, 1993.
- Dillman, Don A. 1978. *Main and telephone surveys— The total design method*. New York: John Wiley and Sons, pp. 180-190.
- Dittmar, H. 1994. It's the economy stupid!. *Progress*, October, 4(8), 1. Newsletter of the Surface Transportation Policy Project. Washington, DC.
- Driver, B. L. and Brown, P. J. 1986. Probable personal benefits of outdoor recreation. In *The President's Commission on Americans Outdoors, A literature review* (pp. Values 63-70). Washington, DC: U.S. Government Printing Office.

- East Bay Regional Park District 1978. A trails study: Neighbor and user viewpoints/maintenance summary. Oakland, CA: East Bay Regional Park District.
- Florida State University. 1994. Socioeconomic analysis and location study for the Gopher, Frog, and Alligator (GF&A) Rail-Trail. Tallahassee, FL: Florida State University, Department of Urban and Regional Planning.
- Forsberg, M. 1994. Rails to Trails. *NEBRASKAland*, 72(5), 44-55.
- Frechtling, D. C. 1987. Assessing the impacts of travel and tourism—Measuring economic benefits. In *Travel, Tourism, and Hospitality Research*, pp. 333-352. Eds. J. R. Brent and Charles R. Goeldner. New York: John Wiley and Sons.
- Frick, G. E. and Ching, C. T. K. 1970. Generation of local income from users of a rural public park. *Journal of Leisure Research*, 2(4), 260-263.
- Furuseth, O. J. and Altman, R. E. 1990. Greenway use and users: An examination of Raleigh and Charlotte greenways. *Carolina Planning*, 16(2), 37-42
- Furuseth, O. J. and Altman, R. E. 1991. Who's on the greenway: socioeconomic, demographic, and locational characteristics of greenway users. *Environmental Management*, 15(3), 329-336.
- Gobster, P. 1990. The Illinois statewide trail user study.
 Chicago: USDA Forest Service, North Central
 Forest Experiment Station. Available from: Rails-to-Trails Conservancy, Illinois Chapter, 313 W. Cook
 Street, Springfield, IL.
- Godbey, G., Graefe, A., and James, S. W. 1992. The benefits of local recreation and park services: A nationwide study of the perceptions of the American public. Washington, DC: The National Recreation and Park Association.
- Guadagnolo, F. B. 1989. A comparison of recall and diary methodologies in the collection of expenditure data. In *Proceeding of the 1989 Northeastern Recreation Research Symposium* (pp. 125-128).
 Broomall, PA: USDA Forest Service, Northeastern Forest Experiment Station, General Technical Report NE-132.
- Hawthorne, D., French, B. W., Caneday, L., and Gorin,D. 1990. Crosstimbers: Management alternatives.Oklahoma City, OK: Tourism and RecreationDepartment.

- Hirner, D. K., Weaver, G., Colton, C. W., and
 Gillespie, G. A. 1986. *Guidelines for tourism development*. Washington, DC: U.S. Department of
 Commerce, Travel and Tourism Administration.
- Holmes, R. III 1986. Beyond recreational value: The greater outdoors preservation-related and environmental benefits. In *The President's Commission on Americans Outdoors, A literature review* (pp. Values 103-113). Washington, DC: U.S. Government Printing Office.
- Hunt, J. D., Sanyal, N., Vlaming, J., and Liedner, S. P.1993. Nonresident motor vehicle travel in Idaho.Moscow, ID: University Of Idaho, Department of Resource Recreation and Tourism.
- Idaho Department of Parks and Recreation. 1993. *Idaho Trails Plan 1993*. Boise, ID: Idaho Department of Parks and Recreation.
- Illinois Department of Conservation 1990. *Economic* and tax implications of rail-trail systems. Springfield, IL: Illinois Department of Conservation.
- Interagency Committee for Outdoor Recreation. 1991.
 Washington state trails plan: Policy and action document. Tumwater, WA: Interagency Committee for Outdoor Recreation.
- Jackson, R. S. 1987. Measurement of economic impacts associated with recreational use of Corps projects. In Proceedings of the 1987 Southeastern Recreation Research Conference, 91-96. Ed. J. D. Absher. Athens, GA: The University of Georgia.
- Jackson, R. S., Stynes, D. J., and Propst, D. B. 1994. An assessment of the national economic effects of the U.S. Army Corps of Engineers recreation program. (Misc. Paper R-94-2). Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.
- Keiner, S. T. 1985. The contribution of outdoor recreation to state economic development. Washington, DC: Council of State Planning Agencies.
- Kline, C. 1995. A comparison of demographic profiles of North Carolina historical site visitors segmented by focus of site. Unpublished master's thesis, North Carolina State University.
- Knudson, D. M. 1980. *Outdoor recreation*. New York: Macmillan.
- Krumpe, E. E. and Lucas, R. C. 1986. Research on recreation trails and trail users. In *The President's Commission on Americans Outdoors, A literature*

- *review* (pp. Management 151-163). Washington, DC: U.S. Government Printing Office.
- Lawton, K. 1986. The economic impact of bike trails: A case study of the Sugar River Trail. Unpublished manuscript. New Glarus, WI: Sugar River State Trail Corp.
- Leisure Industry Report 1995. Leisure/recreation spending was \$371.2 billion in 1994; 1993 total was \$340 billion. *Leisure Industry Report*, no. 4, spring.
- Littlejohn, M. 1995. Visitor services project: Nez Perce National Historical Park. Moscow, ID: University of Idaho Visitor Services Project and National Park Service Cooperative Park Studies Unit.
- Madden, M. K. 1988. Demographic and economic characteristics of snowmobile recreation in the Black Hills. University of South Dakota, Department of Economics.
- Madden, M. K. 1989. Demographic and economic characteristics of snowmobile recreation in the Black Hills. University of South Dakota, Department of Economics.
- Madden, M. K. 1990. Analysis of use patterns and economic impacts of the Black Hills rail to trail project. University of South Dakota.
- Madden, K. and Love, K. 1982. User analysis: An approach to park planning and management. Washington, DC: American Society of Landscape Architects.
- Magill, A. W. 1992. Natural resource managers: Their role in international tourism and rural development.
 Paper presented at the Chief's Interagency
 Conference on Tourism, Park City, Utah, September 21-24, 1992. Riverside, CA: USDA Forest Service,
 Pacific Southwest Research Station.
- Makens, J. C. 1987. The importance of U.S. historic sites as visitor attractions. *Journal of Travel Research*, 25(3): 8-12.
- Mazour, L. 1988. Converted railroad trails: The impact on adjacent property. Unpublished master's thesis. Kansas State University.
- McClung, G. W. and Suter, R. L. 1992. Strategic resource assessment of the potential economic contribution of the North Bend Rail-Trail to the West Union area. Morgantown, West Virginia: West Virginia University Center for Economic Research.

- McElvany, N. D. 1995. Snowmobiling in Vermont: An economic impact study and snowmobile user survey. Johnson, VT: Johnson State College and Montpelier, VT: Vermont Association of Snow Travelers.
- Mettleider, J. F. and Leitch, J. A. 1984. Economic contribution of state parks to the North Dakota economy. Agricultural Report No 194. Fargo, ND: North Dakota State University.
- Michigan Department of Natural Resources. 1991.

 Southeast Michigan off-road vehicle report. Lansing,
 MI: Michigan Department of Natural Resources,
 Recreation Division, Recreation Services Branch.
- Minnesota Department of Natural Resources 1980.

 Living along trails: What people expect and find. St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1988).

 Munger State Trail survey results summary
 (Hinckley to Moose Lake segment). St. Paul, MN:
 Minnesota Department of Natural Resources, Trails
 and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1990a.

 Douglas State Trail survey results summary. St. Paul,
 MN: Minnesota Department of Natural Resources,
 Trails and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1990b. Heartland State Trail survey results summary. St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1990c.

 Munger State Trail survey results summary (Carlton to West Duluth segment). St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1991a. Luce Line State Trail 1990 summer survey results summary. St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.
- Minnesota Department of Natural Resources. 1991b.
 Root River State Trail 1990 summer survey results summary. St. Paul, MN: Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.

- Minnesota Department of Natural Resources. 1991c.
 Sakatah Singing Hills State Trail 1990 summer survey results summary. St. Paul, MN: Minnesota
 Department of Natural Resources, Trails and
 Waterways Unit. Unpublished paper.
- Moisey, N. and Yuan, M. 1992. Economic significance and characteristics of select wildland-attracted visitors to Montana. In *The Economic Value of Wilderness: Proceedings of the Conference*. (General Technical Report SE-78, pp. 181-185). Asheville, NC: USDA Forest Service, Southeastern Forest Experiment Station.
- Moore, R. L., Graefe, A. R., Gitelson, R. J., and Porter,
 E. 1992. The impacts of rail-trails: A study of the users and property owners from three trails. Washington,
 DC: Rivers and Trails Conservation Program,
 National Park Service.
- Moore, R. L. 1994. State trail programs: A survey of state trail administrators. Denver, CO: The National Association of State Trail Administrators.
- Moore, R. L., Gitelson, R. J. and Graefe, A. R. 1994. The economic impacts of tail-trails. *Journal of Park and Recreation Administration*, 12,(2), 63-72.
- Mowen, A. J. 1994. Differences between rail-trail users and general trail users of the Mount Rogers National Recreation Area. Unpublished master's thesis, Virginia Polytechnic Institute and State University.
- National Bicycle and Pedestrian Clearinghouse 1995.

 The economic and social benefits of off-road bicycle and pedestrian facilities. Technical Assistance Series, Number 2, September, 1995. Washington, DC: National Bicycle and Pedestrian Clearinghouse.
- National Park Service 1989. Economic impact profile: Golden Gate National Recreation Area. San Francisco, CA: National Park Service.
- National Park Service. 1991. *Economic impacts of protecting rivers, trails and greenway corridors: A resource book.* San Francisco: National Park Service Rivers, Trails and Conservation Assistance Program.
- National Park Service. 1993. National *trails system map* and guide. Washington, DC: National Park Service, Department of Land Management, and USDA Forest Service.
- National Park Service 1995. Economic impacts of protecting rivers, trails and greenway corridors: A resource

- *book.* 4th ed. San Francisco: National Park Service Rivers, Trails and Conservation Assistance Program.
- National Park Service 1996. Funding measure allows all park facilities to reopen through September 30. Site visit 2/6/96 to http://woodstock.rmro.nps.gov/pub_aff/reopen.htm.
- Nelson, C. M. 1988. Michigan state forest campers, hikers, and cross-country skiers: Executive summary of 1987-1988 research. East Lansing, Michigan: Michigan State University.
- New Hampshire Department of Transportation. 1990. New Hampshire's scenic byways: Economic impacts. (Publication No. FHWA-ED-90-047 HEP-23/11-90(1M)QE. Washington, DC: Federal Highway Administration.
- New York State Trails Council. 1994. SCORP-1994 (Preliminary Draft). Albany, NY: New York State Trails Council.
- Ohnoutka, L. 1994. A strategy to maximize the economic impact of the North Bend Rail-Trail. Unpublished master's thesis, University of Oklahoma, Economic Development Institute.
- Oregon Department of Transportation. 1990. Scenic byways development on the Oregon coast: Economic benefits and user preferences. (Publication No. FHWA-ED-90-034 HEP-23/11-90(1M)QE). Washington, DC: Federal Highway Administration.
- Oregon Trail Coordinating Council 1994. *Oregon Trail Coordinating Council sesquicentennial report*.

 Portland, OR: Oregon Trail Coordinating Council.
- O'Rourke, D. 1994. *Trail traffic counters for forest Sservice trail monitoring*. Missoula, MT: USDA Forest Service, Technology and Development Program, 2300-Recreation, 9423-2823-MTDC.
- Parks and Recreation Federation of Ontario 1992. *The* benefits of parks and recreation: A catalogue. North York, Ontario: Parks and Recreation Federation of Ontario.
- Peterson, G. L. and Brown, T. C. 1986. The economic benefits of outdoor recreation. In *The President's Commission on Americans Outdoors, A literature review* (pp. Values 11-18. Washington, DC: U.S. Government Printing Office.
- PKF Consulting. 1994. Analysis of economic impacts of the Northern Central Rail Trail. Annapolis, MD: Maryland Greenways Commission.

- Power, T. M. 1992. The economics of wildland preservation: The view from the local economy. In *The Economic Value of Wilderness: Proceedings of the Conference*. General Technical Report SE-78, pp. 175-179. Asheville, NC: USDA Forest Service, Southeastern Forest Experiment Station.
- President's Commission on Americans Outdoors. 1987.

 Americans outdoors: The legacy, the challenge.

 Washington, D. C.: Island Press.
- Propst, D. B., Stynes, D. J., Lee, J. H., and Jackson,
 Scott. R. 1992. Development of spending profiles
 for recreation visitors to Corps of Engineers projects
 (Technical Report R-92-4). Vicksburg, MS: U.S.
 Army Engineers Waterways Experiment Station.
- Rails-to-Trails Conservancy, 1988. A guide to America's rail-trails. Washington, DC: Rails-to-Trails Conservancy.
- Rails-to-trails fever sweeps nation! *Rails-to-Trails*Conservancy Trailblazer, January-March 1989. pp. 1, 4.
- Regnier, C. 1989. Minnesota off-road bike trail use: 1980-1988. Saint Paul, MN; Minnesota Department of Natural Resources, Trails and Waterways Unit. Unpublished paper.
- Renner, J. 1994a. Making a case for the economic benefits of historic and heritage tourism. Paper presented at the 12 National Trails Symposium. Anchorage, AK, September 28–October 1, 1994.
- Renner, J. 1994b. The Oregon Trail: The role states and non-profits play in promoting and protecting trails. Paper presented at the 12 National Trails Symposium. Anchorage, AK, September 28–October 1, 1994.
- Ryan, K. L. ed. 1993. *Trails for the twenty-first century*. Washington, DC: Island Press.
- Rypkerna, D. D. 1994. The economic effect of National Register listing. *Cultural Resources Management*, 17(2). Washington, DC: U.S. Department of the Interior, National Park Service, Cultural Resources.
- Satterfield, A. 1994. Narrow pleasure boats ply the quiet canals of Britain. *Raleigh News and Observer*, September 25, p. H5.
- Schutt, A. 1994. The Bruce Trail: An initial study of summer users. Peterborough, Ontario: Trent University, Frost Centre. Unpublished report.
- Schwecke, T., Sprehn, D., and Hamilton, S. 1989. A look at the visitors on Wisconsin's Elroy-Sparta Bike

- Trail. Madison, Wisconsin: University of Wisconsin Cooperative Extension Service.
- Siderelis, C. and Moore, R. L. 1995. Outdoor recreation net benefits of rail-trails. *Journal of Leisure Research*, 27(4), 344-359.
- Soden, D. L. 1995. Community perceptions of national parks as economic partners. *Journal of Park and Recreation Administration*, 13(2), 11-28.
- Southeastern Research Institute, Inc. 1990. A case study of the economic impact of the Blue Ridge Parkway (Publication no. FHWA-ED-90-043 HEP-23/11-90(1M)QE). Washington, DC: U.S. Department of Transportation, Federal Highway Administration.
- Southwick, R. I. and Rockland, D. B. 1990. How to conduct an economic impact analysis. Alexandria, VA: The Sport Fishing Institute.
- Steven, B. and Rose, A. Z. 1985. Regional input-output methods for tourism impact analysis. In *Assessing the economic impacts of recreation and tourism*. Ed. D. Probst. Asheville, NC: USDA Forest Service, Southeastern Forest Experiment Station.
- Strauss, C. H. and Lord, B. E. 1988. Structure and location of user expenditures originating from Pennsylvania state parks. Paper presented at The Southeastern Recreation Research Symposium, Asheville, NC., February.
- Strauss, C. H., Lord, B. E., and Grado, S. C. 1994. Economic impact of travel and tourism in south-western Pennsylvania: The regional report–1993. Hollidaysburg, PA: Southwestern Pennsylvania Heritage Preservation Commission.
- Stynes, D. J. 1986. Recreation forecasting methods. In *The President's Commission on Americans Outdoors, A literature review* (pp. Demand 33-49). Washington, DC: U.S. Government Printing Office.
- Stynes, D. J. and Probst, D. B. 1996. Micro-Implan recreation economic impact estimation system: Users' manual. Lansing, MI: Michigan State University, Department of Park, Recreation and Tourism Resources.
- Sullivan, J., Patterson, M., and Williams, D. 1993.
 Shenandoah National Park: Economic impacts and visitor perceptions, 1992 (Technical Report NPS/MARSHEN/NRTR-93/055). Luray, VA:
 Department of Forestry, Virginia Polytechnic Institute and State University and National Park Service, U.S. Department of the Interior.

- Swan, L. 1991. Preliminary economic impact analysis:

 Three alternative uses of the Oregon, California, and
 Eastern Railway Company right-of-way between
 Klamath Falls and Bly, Oregon. Klamath Falls, OR:
 USDA Forest Service, Winema National Forest,
 Pacific Northwest Region.
- Swanson, E. W. 1969. Travel and the national parks: An economic study. Washington, DC.: National Park Service
- Taylor, D. T. Fletcher, R. R., and Clabaugh, T. 1993. A comparison of characteristics, regional expenditures, and economic impact of visitors to historical sites with other recreational visitors. *Journal of Travel Research*, Summer, 1993, 30-35.
- Taylor, C., Winter, S., Alward, G., and Siverts, E. 1993.Micro IMPLAN User's Guide. USDA ForestService, Land Management Planning Group.
- Propst, D. B., Stynes, D. J., Lee, J. H., and Jackson, S.
 R. 1992. Development of spending profiles for recreation visitors to Corps of Engineers projects.
 (Technical Report R-92-4). Vicksburg, MS: U.S.
 Army Corps of Engineers Waterways Experiment Station.
- Turco, D. and Kelsey, C. 1993. Measuring the economics of special events. *Parks and Recreation* (28)12, December 1993, 33-37.
- U.S. Travel Data Center. 1990. The economic impact of travel on scenic byways (Publication no. FHWA-ED-90-023 HEP-23/11-90(1M)QE). Washington, DC:
 U.S. Department of Transportation, Federal Highway Administration.
- Urban Institute. 1990. *Economic impacts of scenic byways* (Publication no. FHWA-ED-90-040 HEP-23/11-90(1M)QE). Washington, DC: U.S. Department of Transportation, Federal Highway Administration.

- Walsh, R. G. 1986. *Recreation economic decisions:*Comparing benefits and costs. State College, PA:
 Venture Publishing.
- Washburne, R. F. and Cole, D. N. 1983. Problems and practices in wilderness management: A survey of managers (Research Paper INT-142). Ogden, UT: USDA Forest Service, Intermountain Forest and Range Experiment Station.
- Weaver, L. A. and Hammitt, W. E. 1987. Economics of a recreation visit: Before, during, and future costs. In *Proceedings of the 1987 Southeastern Recreation Research Conference*, pp. 77-90. Ed. J. D. Absher. Athens, GA: The University of Georgia.
- West, P. 1986. Social benefits of outdoor recreation:
 Sociological perspectives and implications for planning and policy. In *The President's Commission on Americans Outdoors, A literature review* (pp. Values 93-102). Washington, DC: U.S. Government Printing Office.
- Williams, R. A. 1981. The regional impact of the Blue Ridge Parkway in Virginia. Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Williams, R. A. and Knoeber, C. R. 1981. Economic impacts of the Blue Ridge Parkway in Virginia and North Carolina. Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Yuan, S., Maiorano, B., and Yuan, M. 1995. Techniques and equipment for gathering visitor use data on recreation sites (2300-Recreation, August 1995, 9523-2838-MTDC). Missoula, MT: United States Department of Agriculture, U.S. Forest Service, Missoula Technology and Development Program.

Index

American Revolution 1, 9 Annecidata 69 Annual household income 15, Figure 4, Table 14 Appalachian National Scenic Trail 1, 67 Average expenditures 25 Average expenditures per person 28, Figures 21-22 Tables 7, 37 Average expenditures per person 28, Figures 21-22 Tables 7, 37 Average obtail expenditure 25 Battle of Kings Mountain ii, viii, 6, 7, 9, 10, 21, 31, 33, 33, 39 Benefits 45-47 Blue Ridge Parkway Mineral Museum 7, 34, 35, 92-93, Tables 1, 11-38 Blue Ridge Parkway Trail Segment 8, 92-93 Tables 1, 11-38 Blue Ridge Parkway Trail Segment 8, 92-93 Bruce Trail 8 Bureau of Land Management 8, 92-93 Bruce Trail 8 Bureau of Land Management 9, 93, Tables 1, 37-38 California National Historic Trail 1 Canada vii Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail 1 Canada vii Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail 1 Continental Divide National Seenic Trail 1 Continental Divide National Senic Trail 2 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Data collection. See also Overmountain Victory National Historic Trail 5 Extimate See Data collection 5 Extinative See Data collection 15 Extinative See Data collection 15 Extinative See Data collec	Actual expenditures	43, 74	Non-response bias	72
Anecdotal 69 Annual household income 15, Figure 4, Table 14 Appalachian National Scenic Trail 1, 67 Average expenditures 25 Average expenditures 25 Average expenditures 25 Battle of Kings Mountain ii, viii, 6, 7, 9, 10, 21, 31, 33, 37, 39 Benefits 545-47 Benefit-cost analysis 674 Blue Ridge Parkway Mineral Museum 7, 34, 35, 92-93, 45, 80, 92-93 Blue Ridge Parkway Trail Segment 8, 92-93 Benec Trail 8Burea of Land Management 8, 92-93 Benec Trail 9, 93, 7ables 1, 37-38 California National Historic Trail 12 Canada viii Capital Area Greenway 6, 66 C'Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail 11 Corps of Engineers 9, 92 Counters. See Measuring trail use 6, 67, 72 National Historic Trail 10 Data collection. See also Overmountain Victory National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Diaries 7, 71-72 Exit interviews 7, 17-72 Expenditures 12, 74, 75 Expenditure 25 Direct effects (impacts) 7, 71-72 Expenditure 10 Corps of Engineers 10 Corps of Engineers 11 Data collection. See also Overmountain Victory National Historic Trail 11 Data collection. See also Overmountain Victory National Historic Trail 11 Data collection. See also Overmountain Victory National Pattlefield 1, 9, 11, 23, 31, 33, 38, 15, 54 92-93, Tables 1, 11-38 Exployment. See Jobs Estimate 12 Estimate 12 Expenditure 12, 74 Exit interviews 7, 17-72 Exit interviews 2, 40, 67 Expenditure categories 22 Extense Capital categories 12, 24, 47 Exit interviews 2, 40, 67 Expenditure categories 22 Exit interviews. See Data collection 12, 90 Exit interviews. See Data collection 12, 90 Expenditure categories 22 Expenditure septemating 12, 40 Exit field sites. See Data collection 12,	Adjacent and nearby landowners	57	On-site contacts	12, 39, 40
Annual household income 15, Figure 4, Table 14 Appalachian National Scenic Trail 1, 67 Appalachian National Scenic Trail 1, 67 Average expenditures per person 28, Figures 21-22 Average expenditure per person 28, Figures 21-22 Average total expenditure 25 Battle of Kings Mountain ii, viii, 6, 7, 9, 10, 21, 31, 33, 37, 39 Benefits 45-47 Blue Ridge Parkway Mineral Museum 7, 34, 35, 92-93, Tables 1, 11-38 Bilde Ridge Parkway Frail Segment 8, 92-93 Bridging 28 Bruce Trail 48 Burke-Gilman Trail 59 Burea of Land Management 48 Burke-Gilman Trail 50 Calidwell County Heritage Museum 9, 93, Tables 1, 37-38 California National Historic Trail 1 Canada vii Capital Area Greenway 666 Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail 1 Corps of Engineers 9, 92 Continental Divide National Secnic Trail 1 Corps of Engineers 9, 92 Counters. See Measuring trail use 66-67 Counters. See Measuring trail use 7, 34, 35, 92-93, Tables 1, 11-38 Corps of Engineers 9, 92 Counters. See Measuring trail use 7, 34, 35, 92-93, Tables 1, 11-38 Corps of Engineers 9, 92 Counters. See Measuring trail use 8 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 8, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail 51 Data collection. See also Overmountain Victory National Historic Trail 51 Diaries 71-72, Appendix A Interviews 71-72, 4, 66 Casuals' 71-72, Appendix A Interviews 71-72, 4, 67 Cettified sites. See Otermountain Victory National Historic Trail 51 Data collection. See also Overmountain Victory National Historic Trail 51 Diaries 71-72, Appendix A Interviews 71-72, 4, 70, 72 Exit inte	American Revolution	1, 9	Primary data	5, 71, 74
Appalachian National Scenic Trail	Anecdotal	69	Questionnaires	12, 28, 39, 52, 67, 72
Average expenditures 25	Annual household income	15, Figure 4, Table 14	Quota	12, 40
Average expenditures per person Average total expenditure Average total expenditure Battle of Kings Mountain ii, viii, 6, 7, 9, 10, 21, 31, 33, 37, 39 Benefits Ables 1, 11-38 Blue Ridge Parkway Mineral Museum Tables 1, 11-38 Blue Ridge Parkway Mineral Museum Tables 1, 11-38 Blue Ridge Parkway Trail Segment Blue Ridge Parkway Trail Segment Bridging Tables 1, 11-38 Bridging Bridging Tables 1, 11-38 Bridging Bridging Tables 1, 11-38 Bridging Tables 1, 37-38 Average total expenditures per person Tables 1, 37-38 Average total expenditure Tables 1, 37-38 Tables 1, 37-38 Average total expenditure Tables 1,	Appalachian National Scenic Trail	1,67	Recall problems	72, 74
Average total expenditure	Average expenditures	25	Secondary data	71
Diaries 71-72 Direct effects (impacts) 5, 43-44, 70-72	Average expenditures per person	28, Figures 21-22	Techniques for estimating trail	use 66-67
Direct effects (impacts) 5, 43-44, 70-72		Tables 7, 37	Volunteers	
Direct expenditures (spending) viii, 5, 26, 28, 29, 35 33, 37, 39 39, 47-59, 69-70, 72-73, 93 39, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-74, 94 20, 47-59, 69-70, 72-7	Average total expenditure	25	Diaries	
33, 37, 39 39, 47-59, 69-70, 72-73, 93				
Direct observation	Battle of Kings Mountain ii.	viii, 6, 7, 9, 10, 21, 31,		
Benefit-cost analysis 74 Blue Ridge Parkway Mineral Museum 7, 34, 35, 92-93 Tables 1, 11-38 Economic costs 45 Economic costs Economic costs 45 Economic costs Economic costs 45 Economic costs Economic costs Economic costs Economic costs Economic pack Possible 9, 94 Pos				, 47-59, 69-70, 72-73, 93
Blue Ridge Parkway Mineral Museum Tables 1, 11-38 Blue Ridge Parkway Trail Segment R, 92-93 Tables 1, 11-38 Bridging Ridging Ridge Parkway Trail Segment Tables 1, 11-38 Bridging Ridging Ridge Parkway Trail Segment Tables 1, 11-38 Bridging Ridge Parkway Trail Segment Ray-2-93 Tables 1, 11-38 Bridging Ridge Parkway Trail Segment Ray-2-93 Romein impact analysis (regional economic impact analysis (regional economic impact analysis (regional economic impact) Viii, 5, 13, 25-29, 34-35, 55-75, 75 Romein Park Ay-65, 67-70, 74 Economic impact Ray-3-8, 51, 54, 25-29, 34-35, 55-75, 75 Romein Park Ay-65, 67-70, 74 Row-rage expenditures per person Resurting Parks and Monuments Association Romein Ray-8-8 Economic impact analysis (regional economic impact) Viii, 5, 13, 25-29, 34-35, 55-75, 75 Row-rage expenditures per person Row-rage expenditures Parks and Monuments Association Romein Ray-Ray-Ay-35, 55-75, 75 Row-rage expenditures per person Row-rage expenditures Parks and Monuments Association Romein Ray-Ray-Ay-35, 55-75, 75 Row-rage expenditures per person Row-rage expenditures per person Row-rage expenditures Parks and Monuments Association Romein Ray-Ray-Ay-35, 55-75, 75 Row-rage expenditures per person Row-rage expenditures per person Row-rage expenditures per person Row-rage expenditures Parks and Monuments Association Romein Ray-Ray-Ay-35, 55-75, 75 Row-rage expenditures per person Row-rage expenditures Parks and Monuments Association Row-rage expenditure per person Row-rage expenditure per person Row-rage expenditure ser person Row-rage expenditure per person Row-rage expenditure ser person Row-rage expenditure ser person Row-ra			Direct observation	67
Tables 1, 11-38 Economic costs 45				
Economic impact analysis (regional economic impact malysis (regional economic impact) viii, 5, 13, 25-29, 34-35, 54-70, 74	Blue Ridge Parkway Mineral Museur			
Tables 1, 11-38 economic impact viii				
Bridging 28 43-63 (literature review), 65, 67-70, 74	Blue Ridge Parkway Trail Segment	· · · · · · · · · · · · · · · · · · ·		
Bruce Trail 48 Bureau of Land Management Economic impact viii, 5, 13, 25-29, 34-35, 55-57, 59 Bureau of Land Management 48 Burke-Gilman Trail 58 Figures 21-22, Tables 7, 8, 37, 38 Burke-Gilman Trail 58 Average expenditures per person 28, Figures 21-22, Tables 7, 8, 37, 38 Caldwell County Heritage Museum 9, 93, Tables 1, 37-38 Average total expenditure 25 California National Historic Trail 1 Estimation System (MI-REC) 28 Capital Area Greenway 66 Estimated effects (impacts) 5, 43-44, 70, 72 Certified sites. See Overmountain Victory National Historic Trail IMPLAN 28, 52, 56, Table 9 Characteristics of visit. See Overmountain Victory National Historic Trail 1 25-county Trail corridor 25-26, 29, 34 Continental Divide National Scenic Trail 1 15-county Trail corridor 25-26, 29, 34 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Visitor expenditures 25, 26, Tables 8, 34 Data collection. See also Overmountain Victory Economic sectors 28, 43-44, 73 25 Patti interviews 71-72, Appendix A Exit interviews. See Jobs Estimates <td></td> <td>•</td> <td>* '</td> <td></td>		•	* '	
Bureau of Land Management Burke-Gilman Trail Burke-Gurale Average total expenditure Burke-Gurale Steiman Impact Burke-Gurale Average total expenditure per person Burke-Gurale Average to the fest (impac				
Burke-Gilman Trail 58 Caldwell County Heritage Museum 9, 93, Caldwell County Heritage Museum 9, 93, California National Historic Trail 1 Estimation System (MI-REC) 28 Canada vii Direct effects (impacts) 5, 43-44, 70, 72 Capital Area Greenway 66 Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail 1 1			•	
Average total expenditure 25 Caldwell County Heritage Museum 9, 93, Tables 1, 37-38 California National Historic Trail 1 1 Estimation System (MI-REC) 28 Canada vii Direct effects (impacts) 5, 43-44, 70, 72 Capital Area Greenway 66 Casuals' 74 Certified sites. See Overmountain Victory National Historic Trail INPLAN 28, 52, 56, Table 9 Historic Trail INPLAN 28, 52, 56, Table 9 Historic Trail INPLAN 28, 52, 56, Table 9 Indirect effects (impacts) 28, 43-44, 70, 72 Characteristics of visit. See Overmountain Victory Induced effects (impacts) 28, 43-44, 70, 72 Continental Divide National Scenic Trail 1 Jobs 28, 34 Corps of Engineers 9, 92 Measuring economic impact 69-74 Counters. See Measuring trail use New money 26 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Diaries 71-72 Exit interviews 71-72, Appendix A Interviews. See Data collection Interviews 24, 67, 67 Exit interviews. See Data collection Interviews 24, 67, 67 Expenditure categories 28				
Caldwell County Heritage Museum Tables 1, 37-38 Tables 1, 37-38 Tables 1, 37-38 Tables 1, 37-38 Canada Capital Area Greenway Getail Are	Burke-Gılman Trail	58		
Tables 1, 37-38 California National Historic Trail Canada California National Historic Trail Canada Capital Area Greenway Capital Area Greenway Cettified sites. See Overmountain Victory National Historic Trail Characteristics of visit. See Overmountain Victory National Historic Trail Continental Divide National Scenic Trail Counters. See Measuring trail use Cowpens National Battlefield Cowpens National Battlefield Data collection. See also Overmountain Victory National Historic Trail Data collection. See also Overmountain Victory National Historic Trail Continental Divide National See of Trail Counters. See Measuring trail use Cowpens National Battlefield Data collection. See also Overmountain Victory National Historic Trail Continental Divide National Battlefield Data collection. See also Overmountain Victory National Historic Trail Data collection. See also Overmountain Victory National Historic Trail Diaries T1-72 Exit interviews T1-72, Appendix A Interviewers Interviews Lexit interviews. See Data collection Interviews Lexit interviews. See Data collection Extinates Sestimates See Data collection Micro-Implan Recreation Economic Impact Estimates Gefects (impacts) S, 43-44, 70, 72 Estimates Gefects (impacts) See, 47-59 (specific studies), 69-70, 72-74 Induced effects (impacts) Induced effects (impacts) See, 52, 56, Table 9 See, 52, 56, Table 9 See, 70, 72 See, 72, 70, 72 See, 72, 72 See, 73, 74 See, 70, 72 See, 74 See, 70, 72 See, 74 See, 70, 72 See, 74 See,		0.02		
California National Historic Trail 1 Direct effects (impacts) 5, 43-44, 70, 72 Capital Area Greenway 66 Estimated effects 47-59 (specific studies), 69-70, 72-74 Certified sites. See Overmountain Victory National Historic Trail Indirect effects (impacts) 28, 52, 56, Table 9 **Mational Historic Trail Induced effects (impacts) 28, 43-44, 70, 72 Compose of Engineers 9, 92 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries 71-72 Exit interviews 71-72, Appendix A Interviews 71-72, Appendix A Interviews 71-72, Appendix A Interviews 72, 40, 67 Estimation System (MI-REC) Diaries 1, 34-44, 70, 72 Estimated effects (impacts) 47-59 (specific studies), 69-70, 72-74 Estimated effects (impacts) 28, 52, 56, Table 9 Indirect effects (impacts) 28, 52, 56, Table 9 Indirect effects (impacts) 28, 43-44, 70, 72 Induced effects (impacts) 28, 43	Caldwell County Heritage Museum			
Canada vii Direct effects (impacts) 5, 43-44, 70, 72 Capital Area Greenway 66 Casuals" 74 Certified sites. See Overmountain Victory National Historic Trail Indirect effects (impacts) 28, 52, 56, Table 9 Historic Trail Indirect effects (impacts) 15-county Trail corridor 25-26, 29, 34 Continental Divide National Scenic Trail Indirect effects (impacts) 15-county Trail corridor 25-26, 29, 34 Compens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries 71-72 Exit interviews 71-72, Appendix A Interviews 71-72, Appendix A Interviews 12, 40, 67 Expenditure categories 5, 47-59 (specific studies), 47-59 (specific studies), 66-74 Estimated effects (impacts) 47-59 (specific studies), 69-70, 72-74 Estimated effects (impacts) 18, 47-59 (specific studies), 69-70, 72-74 Endured effects (impacts) 28, 43-44, 70, 72 Induced effects (impacts) 28, 43-44			-	_
Capital Area Greenway Capital Area Greenway Casuals" 74 Certified sites. See Overmountain Victory National Historic Trail Characteristics of visit. See Overmountain Victory National Historic Trail Continental Divide National Scenic Trail Comps of Engineers Cowpens National Battlefield Tight 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries Tight 92-93, Tables 1, 11-72 Exit interviews Tight 92-94, 67 Estimated effects 47-59 (specific studies), 69-70, 72-74 1MPLAN 28, 52, 56, Table 9 28, 43-44, 70, 72 1nduced effects (impacts) 15-county Trail corridor 16-county Trail corridor 15-county Trail corridor 16-county Trail corridor 15-county Trail corridor 15-county Trail		_		
"Casuals" 74 Certified sites. See Overmountain Victory National Historic Trail Induced effects (impacts) 28, 43-44, 70, 72 Characteristics of visit. See Overmountain Victory Induced effects (impacts) 28, 43-44, 70, 72 Characteristics of visit. See Overmountain Victory Induced effects (impacts) 28, 43-44, 70, 72 Characteristics of visit. See Overmountain Victory Induced effects (impacts) 28, 43-44, 52, 70 National Historic Trail 1 Jobs 28, 34 Corps of Engineers 9, 92 Measuring economic impact 69-74 Counters. See Measuring trail use New money 26 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Exit interviews 71-72, Appendix A Interviews 12, 67 Interviewers 12, 67 Interviews 2, 40, 67 Expenditure categories 28				
Certified sites. See Overmountain Victory National Historic Trail Characteristics of visit. See Overmountain Victory National Historic Trail Continental Divide National Scenic Trail Compens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries Patients TimpLAN 28, 52, 56, Table 9 28, 43-44, 70, 72 28, 43-44, 72, 70 15-county Trail corridor 25-26, 29, 34 28, 34-44, 52, 70 25-26, 29, 34 26-74 25-26, 29, 34 26-74 26-74 26-74 26-74 27-74 28-74 29-74			Estimated effects	
Historic Trail Characteristics of visit. See Overmountain Victory National Historic Trail Continental Divide National Scenic Trail Corps of Engineers New money Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, S1,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries Exit interviews 12, 40, 67 Induced effects (impacts) 15-county Trail corridor 25-26, 29, 34 16-county Trail corridor 15-county Trail corridor 25-26, 29, 34 16-county Trail corridor 25-26, 29, 34 16-county Trail corridor 16-county Trail corridor 16-county Trail corridor 25-26, 29, 34 16-county Trail corridor 16-county			IMDI ANI	· ·
Characteristics of visit. See Overmountain Victory National Historic Trail Continental Divide National Scenic Trail Corps of Engineers See Measuring trail use Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries Exit interviews 71-72, Appendix A Induced effects (impacts) 15-county Trail corridor 25-26, 29, 34 Measuring economic impact 69-74 New money 26 New money 25, 26, Tables 8, 38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Estimates 13, 68 Existing literature 28, 24, 34-44, 73 Estimates 13, 68 Existing literature 28, 43-44, 73 Exit interviews. See Data collection Expenditure categories 28, 43-44, 52, 70 15-county Trail corridor 25-26, 29, 34 169-74 New money 26 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Estimates 13, 68 Existing literature 2, Part 2 Exit interviews. See Data collection Expenditure categories		tory National		
National Historic Trail15-county Trail corridor25-26, 29, 34Continental Divide National Scenic Trail1Jobs28, 34Corps of Engineers9, 92Measuring economic impact69-74Counters. See Measuring trail useNew money26Cowpens National Battlefield1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38Visitor expenditures25, 26, Tables 8, 38Economic sectors28, 43-44, 73Education level15, Figure 3, Table 13Data collection. See also Overmountain VictoryElroy-Sparta Trail52, 56, 65National Historic TrailEmployment. See JobsDiaries71-72Estimates13, 68Exit interviews71-72, Appendix AExisting literature2, Part 2Interviewers12, 67Exit interviews. See Data collectionInterviews2, 40, 67Expenditure categories28		ntain Victory		
Continental Divide National Scenic Trail 1 Jobs 28, 34 Corps of Engineers 9, 92 Measuring economic impact 69-74 Counters. See Measuring trail use New money 26 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Exit interviews 71-72, Appendix A Interviews 12, 67 Interviewers 12, 67 Exit interviews. See Data collection Interviews 2, 40, 67 Expenditure categories 28		niain viciory		
Corps of Engineers 9, 92 Measuring economic impact 69-74 Counters. See Measuring trail use New money 26 Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Exit interviews 71-72, Appendix A Existing literature 2, Part 2 Interviewers 12, 67 Exit interviews. See Data collection Interviews 2, 40, 67 Expenditure categories 28		rail 1	-	
Counters. See Measuring trail use Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Data collection. See also Overmountain Victory National Historic Trail Diaries Exit interviews 71-72, Appendix A Interviews 12, 67 Interviews New money 26 New money 25, 26, Tables 8, 38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Employment. See Jobs Estimates 13, 68 Existing literature 2, Part 2 Exit interviews. See Data collection Expenditure categories 28				
Cowpens National Battlefield 1, 9, 11, 23, 31, 33, 38, 51,54 92-93, Tables 1, 11-38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Exit interviews 71-72, Appendix A Interviews 12, 67 Exit interviews. See Data collection Interviews 2, 40, 67 Expenditure categories 28),)2		
51,54 92-93, Tables 1, 11-38 Economic sectors 28, 43-44, 73 Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Diaries 71-72 Estimates 13, 68 Exit interviews 71-72, Appendix A Existing literature 2, Part 2 Interviews 2, 40, 67 Expenditure categories 28	9	1 9 11 23 31 33 38	-	
Education level 15, Figure 3, Table 13 Data collection. See also Overmountain Victory Elroy-Sparta Trail 52, 56, 65 National Historic Trail Employment. See Jobs Diaries 71-72 Estimates 13, 68 Exit interviews 71-72, Appendix A Existing literature 2, Part 2 Interviewers 12, 67 Exit interviews. See Data collection Interviews 2, 40, 67 Expenditure categories 28	-		-	
Data collection. See also Overmountain Victory National Historic Trail Diaries Exit interviews 71-72, Appendix A Interviews 12, 67 Interviews 2, 40, 67 Elroy-Sparta Trail 52, 56, 65 Employment. See Jobs Estimates 13, 68 Existing literature 2, Part 2 Exit interviews. See Data collection Expenditure categories 28	31,31	72 75, Tubles 1, 11 50		
National Historic TrailEmployment. See JobsDiaries71-72Estimates13, 68Exit interviews71-72, Appendix AExisting literature2, Part 2Interviewers12, 67Exit interviews. See Data collectionInterviews2, 40, 67Expenditure categories28	Data collection See also Overmounto	uin Victory		
Diaries71-72Estimates13, 68Exit interviews71-72, Appendix AExisting literature2, Part 2Interviewers12, 67Exit interviews. See Data collectionInterviews2, 40, 67Expenditure categories28		,		52, 50, 05
Exit interviews 71-72, Appendix A Existing literature 2, Part 2 Interviewers 12, 67 Exit interviews. See Data collection Interviews 2, 40, 67 Expenditure categories 28		71-72	2 2	13, 68
Interviewers12, 67Exit interviews. See Data collectionInterviews2, 40, 67Expenditure categories28				
Interviews 2, 40, 67 Expenditure categories 28			•	
		· ·		
72, Appendix B	Mail surveys (questionnaires)	2, 12, 50, 51, 66,	"Expenditure switching"	72
Money Generation Model 71, 74	Money Generation Model			

15-county Trail corridor	viii, 25-26, 29, 34, 93	Mail surveys. See Data collection	
Florida National Scenic Trail	1	Measuring economic impacts	69-74
Fort Defiance	6, 9, 92-93, Tables 1, 11-38	Direct expenditures	70
Fort Watauga	7	IMPLAN	70-71
		Local impact area	69, 71
Georgia, Florida and Alabama	rail corridor 55	Multipliers	70, 72
Gillespie Gap	7	Return on investment	70
Great Britain	vii	Special events	70
Group size	17, Figure 6, Table 18	Measuring trail use	
		Economic impacts	65
Heritage Trail	50	Multiple access points	68
Highway sign	viii, 6, 18, 33, 35	On national historic trails	68
Historic Burke. See Old Burke	County Courthouse	On national scenic trails	68
		Qualitative techniques	67
Ice Age National Scenic Trail	1	Quantitative techniques	67
Idaho Leisure Travel and Recre		Techniques for estimating	66-67
Iditarod National Historic Trail		Trail user, defining	68
Impact area	69, 71	Total trail use	65,68
IMPLAN viii, 13, 28	3-29, 39, 52, 56, 70-71, 73-74,	Methodology	37
	Table 9	Michigan Department of Natural Resource	
Indirect counts. See Measuring		Micro-Implan Recreation Economic Impa	
Indirect expenditures (spending		System (MI-REC)	28
Indirect impact (effect)	5, 13, 28, 43-44, 52, 57,	Minnesota Department of Natural Resour	
	70, 72		58, 67
Indirect nonstatistical methods	_	Missouri River State Trail	49, 58
Techniques for estimating		Money Generation Model	71, 74
Induced impact (effect)	43-44, 57, 70, 72	Mormon Pioneer National Historic Trail	1
Industrial output	viii, 28	Motives. See Reasons for trip	
Input-output analysis (models)		Motor tour route	38, 68
	5, 31, 49, 92, Table 3, 16, See	Mount Rogers National Recreation Area	53
Canada, Great Britain		Mountaineer Days	93, Tables 1, 36-37
Interpretation	vii, 33	Multiple access points	68
Interviewers. See also Measuri		•	3, 69, 70, 71, 72-74
Interviews	2, 67	IMPLAN	72, 74
Investment	70	Indirect effects, estimate of	72
		Input-output analysis	73-74
	32, 34, 41, 47, 71-72, Table 9	Local economy	72
Joint marketing	37	Multiplier coefficients	74
Juan Bautista de Anza Nationa	l Historic Trail 1	Regional economy	72
Katy-Missouri River Trail	56	Nature of visit 17	, Figure 7, Table 19
Kerr Reservoir. See W. Scott K	err Reservoir Trail segment	Natchez Trace National Scenic Trail	1
Kings Mountain National Milit	-	National Park Passports	37
_	38, 51, 92-93, Tables 1, 11–38	*	7, 8, 10, 21, 33, 35,
, , ,	, , , , ,		38, 40, 50, 69, 71
Lafayette/Moraga Trail	50, 57-58, 65	National Park Service battlefield units	92
Landowners	50	National Park Service home page	38
Least liked features	20	National Trails System	vii, 1, 40
Length of stay	18, Figure 12, Table 25	National Historic Trails	1 (list), 49, 68
Lewis and Clark National History		National Scenic Trails	1 (list), 68
Local economy 73		Natural settings	viii
Local impact area. See Measuring economic impacts		New money viii, 26, 51, 74, 93	
Local impact region	48	Nez Perce (Nee-Me-Poo) National Histor	
Long-distance trails	66	Non-response bias	72

Nonresident users. See Nonresident visitors		Best liked features	Table 5
Noresident visitors 34, 35		Least liked features	Table 6
North Bend Rail-Trail 57		Supplemental sampling 10	
North Carolina. See Overmountain Victory National		Trail experience	21-25, 33-34
Historic Trail		Reenactment	22
North Carolina State University	1	Off-road trail segment	ts 22-25, Figure 19
North Central Rail Trail	52	User characteristics	15, 31
North Country National Scenic Tr		Overmountain Victory Trail Association (OVTA) viii,	
North Cove/Linville	34	6, 21-2	2, 33, 34, 37-39, Table 31-33
Observational estimates. See Meas	suring trail use	Pacific Crest National Scenic Tr	rail 1
Off-road trail segments 9, 22-23, 32, 34, Table 36		Pacific Northwest Outdoor Recreation Survey 50	
Old Burke County Courthouse	9, 92, Tables 1, 11-38	Passport program	37
Historic Burke	9	Permits. See Measuring trail us	e
Quaker Meadows Plantation 9, 93,		Personal observation. See Measuring trail use	
	Tables 1, 37-38	Pony Express National Historic	
Old Wilkes Jail	8, 93, Tables 1, 11-38	Potomac Heritage National Scen	
Old Wilkes, Inc.	8	Primary effects. See Direct effect	
On-site data collection	11, 40	Primary data collection	5, 71, 74
On-site contacts	12, 39	Primary site. See Overmountain	Victory
Orchard at Altapass	34, 40, 92	National Historic Trail	
Oregon National Historic Trail	1	Property values	45, 57-59
Oregon Trail Sesquicentennial	47-48	Public perceptions	45
Overmountain March	viii, 7-10, 21, 31, 33	Pure count. See Measuring trail	use
Overmountain Men	6-7, 9		
Overmountain Victory National Historic Trail (OVT)		Quaker Meadows	93, Tables 1, 37-38
	, 1, 5, 37, 38, 40. 65, 92-93	Quaker Meadows Plantation	9, 93, Tables 1, 37-38
Certified sites	7	Qualitative techniques	67
Characteristics of visit	15-18, 31-32	Quantitative techniques Questionnaires. See Data collect	67
	Off-road trail segments 32		etion
Data collection	7, 12	Quota. See Data collection	
Data analysis	13	D - 11 4 11 -	46 50 52 57 65 60
Estimates IMPLAN	13 13	Rail-trails	46, 50, 53, 57, 65, 69
		Reasons for trip 17, 32 Figure 8, Table 20	
Economic impact (regional e	-	Reasons for site visit	20, 32, Table 4
23-29, 34-33, 93, Location	Appendix C, Tables 37-38	Recall problems Reenactment	72, 74 viii, 10, 22, 39
North Carolina	2.6		
South Carolina	2, 6 2, 6	Regional economic impact analysis.	
Tennessee	2, 6	See Economic impact anal Regional economy	43, 73
Virginia	6	Remote sensing. See Measuring	
_	13, Table 1, Appendix A, B	Repeat visits	Figure 14, Table 29
Quota of interviews	11	-	viii, 6-7, 9, 17, 32, 35, 37, 39
Reasons for trip	17, 32 Figure 8, Table 20	Roadside motor route signs. See	
Reasons for site visit	20, 32, Table 4	Roan Mountain	34
Regional economic impact	viii	Rocky Mount Museum and Stat	
Sample sites	6 (list), 7-10		92-93, Tables 1, 11-38
Primary sites	10-11 (defined), Table 1	Historical Association	7
Secondary sites	11 (defined), Table 1		
Tertiary sites	11 (defined), Table 1	Sample counts	67
Sample sizes and response rates Table 1		Sample selection	39
Sampling times 11		Sample sites. See Overmountain Victory	
Site experience	viii, 18-21	National Historic Trail	
Reasons for visiting site		Sampling	

Sampling locations	2, 39	Tourist spending	44
Sample size	2, 10-11, 40	Traffic counters. See Measuring trail us	se
Sampling techniques	2, 39	Trail experience	21-24, 33-34
Sampling times	11	Trail of Tears National Historic Trail	1
Sampling procedure. See Meas	suring trail use	Trail registers. See Measuring trail use	
Santa Fe National Historic Trail		Trail use. See Measuring trail use	
Satisfied	33	Trail user, defining	68
Secondary data	71	Trans Ontario Provincial Trail System	54
Secondary economic effects. S	ee Indirect impact		
Secondary sites. See Overmountain Victory National		U.S. Army Corps of Engineers	8, 70
Historic Trail		U.S. Federal Office of Management and Budget 5	
Secondary expenditures (spending). See Indirect		Upper Missouri Wild and Scenic River 48	
expenditures		Urban greenway trails	66
Selma to Montgomery Nationa	al Historic Trail 1	U.S. visitors	15, Tables 2, 15
Sesquicentennial of the Orego	n Trail 48	USDA Forest Service	viii, 52, 67, 73
Site experience	18-21, 32-33	User characteristics. See Overmountain	Victory
Snowmobile trails	54-55	National Historic Trail	
South Carolina. See Overmour	ntain Victory National	User count. See Measuring trail use	
Historic Trail		User groups 15-1	17, Figure, 5, Table 17
Spatial aspects of an economy	69	User surveys. See Data collection	
Special events	70	User preferences	63
St. Marks Trail	50, 55		
Structural aspects of the econo	omy 69	Virginia. See Overmountain Victory Na	ıtional
Sugar River Trail	51	Historic Trail	
Supplemental sampling. See Overmountain Victory		Virginia Creeper Trail	53
National Historic Trail		Visitor age	15, Figure 2, Table 12
Surveys. See Data collection		Visitor (user) expenditures vii,	11, 25-29, 46-47, 51,
Sycamore Shoals State Histori	c Area 7,10, 53, 93,		63, 71, 93
	Tables 1, 11-38	Visitor gender	15, Table 11
		Visitor records	10
Tennessee. See Overmountain	Victory National	Visitor satisfaction	31, 33
Historic Trail		Visitor experience	93
Techniques for estimating trail	use 66-67	Volunteers	12
Tertiary sites. See Overmounta	ain Victory National		
Historic Trail		W. Scott Kerr Reservoir Trail segment	9, 32, 34, 40,
The Orchard at Altapass	8	9.	2, 93, Tables 1, 11-38
The Wataugans	7, 10, 92-93, Tables 1, 11-38	Visitor Center	8, 93, Tables 1, 11-38
"Time-switchers"	74	Warriors Creek Campground	32, 34, 40
Tory Oak	8	Washington and Old Dominion Trail	65
Total economic impact	viii, 5, 25-29, 34-35, 39,	Washington State Trails Plan	49
	43-44, 56	Watauga River	7
Total employment. See jobs		Wataugans. See The Wataugans	
Total income	viii, 28, 29, 34	William Lenoir	9
Total industrial output	28, 34, 35		
Total value added	viii, 28, 34, 73	Yellow Mountain	34
Tourism	33 38 45 47 55 69 71	Youghiogheny River Trail	56

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes.

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

March 1998

Editor: Janice C. McCoy, Alexandria, VA

Graphic Design: Freeman Publishing Services, Alexandria, VA