

Measurement of the Economic Vitality of The Blue Ridge National Heritage Area

Section III

An Analysis of Secondary Data and Economic Impact

A joint project conducted by:

Dr. Michael Evans

Dr. Dinesh Davé

Dr. James Stoddard

The John A. Walker College of Business
Appalachian State University
Boone, NC 28608

and

Dr. Inhyuck “Steve” Ha
College of Business and
Institute for the Economy and the Future
Western Carolina University
Cullowhee, NC 28723



This material is based upon work supported in whole or in part by the Blue Ridge
National Heritage Area

Winter 2006

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government.

Measurement of the Economic Vitality of The Blue Ridge National Heritage Area

Section III

An Analysis of Secondary Data and Economic Impact

Executive Summary

- **According to the Sales Activity Index, the grand total for the entire heritage region was only 88.5 which indicates limited economic vitality compared to all U.S. counties (=100.0), especially in tourism terms.**
- **Watauga County had the highest Sales Activity Index at 133 while Polk County had the lowest index at 35.6. Six counties in our study had a sales activity index over 100; these were Cherokee, Clay, Buncombe, Henderson, Surry, and Watauga. The other nineteen counties were below 100. The Smoky Mountain Host region had the highest score at 96.6; the Blue Ridge Host had the lowest at 87.5.**
- **According to the Travel Industry Association of America's figures for 2004, travel and tourism is approximately a \$2 billion industry in the Blue Ridge Heritage Area.**
- **Using the ASU-WCU model, regional general retail sales totaled \$13.524 billion in 2004. Lodging sales were \$418.7 million; restaurant sales were another \$418.5 million, and all other tourism related retail, entertainment, recreation, transportation, etc. was \$1.109 billion for a total of \$1.947 billion.**
- **According to the primary data research in this 2005 study the average spending per day, per person was approximately \$90.24. This applies to both part-time and overnight visitors. There were 21.5 million total estimated "visits" (not individual "visitors") to the BRNHA in 2004.**
- **On average, 14.4 percent of total retail sales were generated by tourism.**
- **There are many industry firms that do not choose to affiliate with the host groups across the region at this point in time.**

- **Of the \$2 billion dollars which were been spent on direct tourism in the region, the majority were spent in the Blue Ridge Host region; that region generated over \$1.1 billion in direct tourism dollars. The High Country Host was second with \$466 million, and Smoky Mountain was third with \$329 million. The Blue Ridge Host region generated over \$550 million secondary dollars, while High Country generated \$205 million and Smoky Mountain \$135 million.**
- **When primary and secondary impacts are combined, the travel and tourism industry generated over \$2.8 billion for Blue Ridge National Heritage Area's regional economy - over \$1.9 billion in direct spending and almost \$900 million in secondary expenditures. The Blue Ridge Host contributed a total of \$1.7 billion to the total, while High Country generated over \$671 million and Smoky Mountain almost \$465 million.**
- **In terms of direct jobs created, over 35,000 primary jobs were created by the travel and tourism industry in the BRNHA. The Blue Ridge Host saw the generation of almost 21,000 primary impact jobs, while almost 9,000 were generated in the High Country Host region and almost 6,000 in the Smoky Mountain Host area. Meanwhile, over 10,500 secondary impact jobs were also created. Over 6,300 jobs were created in Blue Ridge Host, over 2,500 in High Country Host, and almost 1,700 in Smoky Mountain Host. In total, the industry generated almost 46,000 jobs in the BRNHA. In the Blue Ridge Host area, a total of 27,000 primary and secondary jobs were created. Over 11,000 jobs were generated in the High Country Host area, and 7,400 in the Smoky Mountain Host area.**

Economic Vitality – Secondary Data Impact

The objective of this section was to use various secondary statistics to assess the economic vitality of the Blue Ridge National Heritage Area (BRNHA) as a whole. The BRNHA consists of Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Surry, Swain, Transylvania, Watauga, Wilkes, Yadkin, and Yancey Counties in the Blue Ridge Mountains of Western North Carolina.

The appendices reflect data taken from several different sources, including the Survey of Buying Power; the US Travel Data Center – TEIM Model; Smith Travel Lodging Industry Research; the Tax Research Division of the North Carolina Department of Revenue; and the Travel Industry Association of America’s Travel Scope Research.

Retail Sales Analysis – Table 1

Table 1 shows retail sales data for each county for the years 2004 and 2005, taken from the Survey of Buying Power (SBP) (Sales and Marketing Management, Survey of Buying Power; 2005, 2004). The authors re-checked this data against that collected by the Tax Research Division of the North Carolina Department of Revenue. This table provides a county-by-county sales index ratio and a sales index percentage change from 2004 to 2005, based on population and retail revenue data.

The sales activity index (SAI) of the Survey of Buying Power measures the extent to which people come into an area to shop (“in-shopping”) or the extent to which residents leave an area to shop elsewhere (“out-shopping”). In one sense it is a measure

of tourism spending activity, or the lack thereof. Sales activity is computed in the following manner: the proportion of US retail sales in the area is divided by the proportion of US population in the area, and the result is multiplied by 100. For the United States as a whole, the SAI is 100 [percentage of US retail sales (100) divided by percentage of US population (100) = 1; multiplied by 100 = 100]. Therefore an area which has an SAI of greater than 100 exhibits in-shopping, while an area with an SAI of less than 100 exhibits out-shopping.

Our study indicates that only six counties in the BRNHA had sales indices of over 100. These were Cherokee, Clay, Buncombe, Henderson, Surry and Watauga. The other 19 were under 100. Of the three Host Group regions, the Smoky Mountain Host area had the highest score of 96.6, and the Blue Ridge Host the lowest at 87.5. The index for the entire BRNHA was only 88.5, which indicates limited economic vitality, especially in sales to tourists. Watauga County had the highest index at 133. Polk County was the lowest at 35.6.

TEIM Total Economic Impact – Table 2

According to the Travel Industry Association of America's County Tourism Statistics, in 2004 tourism was approximately a \$2 billion industry in the BRNHA. The data set is called TEIM and provides estimates on per county expenditures, payroll, employment, taxes and population. The TEIM uses a "top down" approach in which several key variables such as lodging sales, general retail sales, private and public transportation are used to estimate the total economic impact of tourism in a region. The TEIM does not provide visitation data or information about who visits the area.

ASU-WCU Total Economic Impact – Table 3

The ASU-WCU tourism impact model was developed to check the validity of the TEIM model by comparing the same 3 types of “core” industry statistics. That is, the authors considered lodging sales data, restaurant sales data, and a combined attraction/retail sales data estimate. This model did not consider actual transportation data, but applies a “bottom up” approach by using estimates of per capita spending on a per day basis, which ultimately provides an estimate of total visitation to the region. This data was obtained by the primary data collection efforts of this study. The lodging industry sales data was obtained through the State of North Carolina, and the restaurant sales data was obtained from the SBP (Survey of Buying Power).

The ASU-WCU model used actual lodging revenue for 2004 provided by the Tax Research Division of the State of North Carolina. From the lodging industry base we took 35% of each county’s restaurant sales as provided by the SBP. Research by the National Restaurant Association indicates that that 35% of US restaurant industry revenue is derived from tourism. Therefore, lodging and restaurant revenue provided 43% of the travel dollar expenditures estimate. Finally, based on these estimates, 57% of the tourism dollar is spent on attractions, entertainment, retail, transportation and other miscellaneous expenditures. The ASU-WCU estimate of total 2004 tourism expenditures was about \$1.947 billion, very close to the \$2 billion TEIM estimate. Therefore, we assume the county by county data contained in the TEIM is valid, reliable, and a very good estimate of the economic vitality of the BRNHA.

Total BRNHA retail sales were \$13.524 billion in 2004. Lodging sales were \$418.7 million; restaurant sales were \$418.5 million; and all other tourism-related retail,

entertainment, recreation, transportation, etc. amounted to \$1.109 billion, yielding the total of \$1.947 billion in tourism-related revenues.

Visitation – Table 4

Based on average daily spending by tourists in 2004, the study estimates the number of visitors in the entire region and county by county. According to this research, the average daily spending per person was approximately \$90. This was true for both day trippers and overnight visitors. Therefore, dividing the total tourism-related revenue by the average daily expenditure per person, we arrive at the total number of “visits” (not “people”) – about 21.5 million. This is very similar to the number of “visits” measured by the Blue Ridge Parkway. Figure 4 also shows per capita tourism impact for each county.

Total Retail Sales & Tourism – Table 5

County retail sales are also presented as a percentage of total tourism revenue. The average percentage for all counties of total retail sales generated by tourism was 14.4%.

Attractions & Hospitality Firms Marketed By Host Groups – Table 6

The authors did a content analysis of the tourism industry firms listed in the fall of 2005 on the websites of the three host groups, plus the Asheville CVB. The grand total was 1,317 tourism firms, including 401 restaurants, 481 lodging firms, and 421 attractions.

- Smoky Mountain Hosts listed 30 attractions, 58 restaurants, and 137 lodging firms for a total of 225 tourism entities.
- Blue Ridge Hosts listed 30 attractions, 6 restaurants, and 78 lodging firms for a total of 114 tourism entities.
- High Country Hosts (Surry and Yadkin Counties not included) listed 30 attractions, 58 restaurants, and 137 lodging firms for a total of 225 tourism entities.
- Asheville CVB listed 421 attractions, 318 restaurants, and 132 lodging firms for a total of 871 tourism entities.

Smith Travel - Lodging Industry Analysis

Some data in the appendices section on the status of the regional lodging industry in 2004 was obtained from Smith Travel Research (STR). STR has complete lodging industry data on 11 of the 25 BRNHA counties: Buncombe, Burke, Haywood, Henderson, Macon, McDowell, Rutherford, Surry, Swain, Watauga, and Yadkin.

STR 2004 data included room supply (census), room demand, room revenue, number of properties, and number of rooms. It also included room revenue, average daily rates (ADR), and average revenue per room (revPAR). The county data also includes the names of establishments and their opening dates.

The low overall 2004 ADR was in the \$60 range. The off-season (winter) occupancy rate was in the 50% range; however, the summer and fall rate was much higher. The data indicates that most of the properties have fewer than 100 rooms, are independent, and are not “flagged” as economy/budget brand properties. The Travel Industry Association of America’s Travel Scope study for North Carolina indicates that “hotel/motel/B&B” amounted to 44% of the total lodging choices in the region. Private homes represented 40% of the total; RV parks and campgrounds, 4%; condo/timeshares, 6%; and miscellaneous, 6%. The region does have an abundance of second homes that

are frequently rented out. Many real estate firms offer full property management services for regional tourists.

Table 1: Survey of Buying Power Data

Region/Counties	2004	2004	2004	2005	2005	2005	04-'05
	Population ('000)	Total Retail Sales ('000)	Sales Index	Population ('000)	Total Retail Sales ('000)	Sales Index	Sales Index % Change
Smoky Mountain Host							
Cherokee	25.2	\$359,882	111.2	25.5	402,452.00	110.7	-0.47246
Clay	9.4	\$129,068	106.9	9.5	144,554.00	106.8	-0.12984
Graham	8.1	\$65,563	63.0	8	72,444.00	63.5	0.72915
Haywood	55.3	\$723,740	101.9	56.1	783,646.00	98	-3.85563
Jackson	34.1	\$436,547	99.7	34.9	471,644.00	94.8	-4.92049
Macon	31.3	\$428,551	106.6	31.7	469,923.00	104	-2.47176
Swain	13.3	\$121,654	71.2	13.3	119,534.00	63.1	-11.42527
Total	176.7	\$2,265,005	99.8	179	2,464,197.00	96.6	-3.23914
Blue Ridge Host							
Buncombe	214.5	\$3,021,535	109.7	216	3,215,048.00	104.4	-4.83979
Burke	89.7	\$813,675	70.6	90.1	837,355.00	65.2	-7.71220
Henderson	94.7	\$1,435,958	118.1	96	1,615,469.00	118.1	0.00308
Madison	20.2	\$110,027	42.4	19.9	124,207.00	43.8	3.24795
McDowell	43.2	\$399,937	72.1	43.1	431,170.00	70.2	-2.63912
Mitchell	15.8	\$185,637	91.5	15.9	194,741.00	85.9	-6.12695
Polk	19.1	\$89,584	36.5	19	96,372.00	35.6	-2.54410
Rutherford	63.3	\$695,436	85.6	63.9	696,425.00	76.5	-10.59471
Transylvania	29.6	\$247,187	65.0	29.4	271,194.00	64.7	-0.52233
Yancy	18	\$145,903	63.1	18.2	144,511.00	55.7	-11.76951
Total	608.1	\$7,144,879	91.5	611.5	7,626,492.00	87.5	-4.38118
High Country Host (Plus Two Counties)							
Alleghany	10.9	\$87,263	62.4	11	91,586.00	58.4	-6.33778
Ashe	25	\$273,556	85.2	25.4	286,527.00	79.2	-7.06610
Avery	17.8	\$180,843	79.1	17.8	194,870.00	76.8	-2.94124
Caldwell	79.1	\$702,603	69.2	79.2	734,014.00	65.0	-6.04172
Surry	72.8	\$980,668	104.9	72.8	1,044,668.00	100.7	-4.01706
Watauga	42.8	\$762,656	138.8	42.8	812,894.00	133.2	-4.02137
Wilkes	67.3	\$837,013	96.9	67.6	843,818.00	87.6	-9.56382
Yadkin	38	\$289,858	59.4	37.8	333,119.00	61.8	4.02602
Total	353.7	\$4,114,460	90.6	354.4	4,341,496.00	86.0	-5.07603
Grand Total of Regions	1138.5	\$13,524,344	92.5	1144.9	\$14,432,185.0	88.5	-4.34332
United States	Population Year 2004	Retail Sales Year 2004 (mil)		Population Year 2005	Retail Sales Year 2005 (mil)		
	292,937	\$3,761,221,939		295,140	\$4,206,052,995		

Table 2: TEIM Model

Region	Population ('000)	TEIM Tourism Impact by TIA (mil.)	Tourism Impact per Capita	Tourism Payroll (mil.)	Tourism Employment ('000)
Smoky Mountain Host Region/Counties					
Cherokee	25.2	\$32.37	\$1,284.52	\$5.92	0.37
Clay	9.4	\$10.07	\$1,071.28	\$1.30	0.07
Graham	8.1	\$19.86	\$2,451.85	\$4.11	0.28
Haywood	55.3	\$98.13	\$1,774.50	\$22.68	1.4
Jackson	34.1	\$55.97	\$1,641.35	\$10.97	0.64
Macon	31.3	\$92.66	\$2,960.38	\$19.20	1.08
Swain (Data may include casino revenue)	13.3	\$214.50	\$16,127.82	\$72.64	3.4
Total	176.7	\$523.56	\$2,962.99	\$136.82	7.24
Blue Ridge Host Region/Counties					
Buncombe	214.5	\$538.61	\$2,511.00	\$141.19	8.48
Burke	89.7	\$62.39	\$695.54	\$10.82	0.66
Henderson	94.7	\$174.08	\$1,838.23	\$37.04	2.16
Madison	20.2	\$21.30	\$1,054.46	\$4.91	0.28
McDowell	43.2	\$34.31	\$794.21	\$6.10	0.38
Mitchell	15.8	\$16.91	\$1,070.25	\$3.06	0.18
Polk	19.1	\$15.58	\$815.71	\$2.66	0.17
Rutherford	63.3	\$107.19	\$1,693.36	\$18.19	1.15
Transylvania	29.6	\$64.80	\$2,189.19	\$13.98	0.8
Yancy	18	\$22.16	\$1,231.11	\$4.41	0.23
Total	608.1	\$1,057.33	\$1,738.74	\$242.36	14.49
High Country Host Region/Counties (Plus Two Counties)					
Alleghany	10.9	\$15.40	\$1,412.84	\$3.27	0.17
Ashe	25	\$33.19	\$1,327.60	\$5.74	0.37
Avery	17.8	\$82.20	\$4,617.98	\$22.62	1.33
Caldwell	79.1	\$38.21	\$483.06	\$6.71	0.37
Surry	72.8	\$66.65	\$915.52	\$11.50	0.67
Watauga	42.8	\$159.86	\$3,735.05	\$41.21	2.58
Wilkes	67.3	\$50.65	\$752.60	\$8.76	0.54
Yadkin	38	\$26.95	\$709.21	\$5.48	0.37
Total	353.7	\$473.11	\$1,337.60	\$105.29	6.4
Grand Total of Region	1,138.5	\$2,054.00	\$1,804.13	\$484.47	28.13

Table 3: ASU-WCU Economic Impact Model

Region/COUNTIES	Total Lodg. Sales	Total Rest. Sales	Adj. Tourism Rest. Sales*	Lodg & Rest Sales	Ent., Rec., Retail, Trans., Sales ***	ASU-WCU Tourism Impact
Smoky Mountain Host						
Cherokee	\$4,566,126	\$23,983,000	\$8,394,050	\$12,960,176	\$17,179,768	\$30,139,944
Clay	\$519,419	\$7,458,000	\$2,610,300	\$3,129,719	\$4,148,697	\$7,278,416
Graham	\$4,624,137	\$2,449,000	\$857,150	\$5,481,287	\$7,265,892	\$12,747,179
Haywood	\$24,350,445	\$67,625,000	\$23,668,750	\$48,019,195	\$63,653,352	\$111,672,547
Jackson	\$10,644,917	\$51,425,000	\$17,998,750	\$28,643,667	\$37,969,512	\$66,613,179
Macon	\$10,159,528	\$35,545,000	\$12,440,750	\$22,600,278	\$29,958,508	\$52,558,786
Swain	\$11,152,137	\$27,399,000	\$9,589,650	\$20,741,787	\$27,494,927	\$48,236,714
Total	\$66,016,709	\$215,884,000	\$75,559,400	\$141,576,109	\$187,670,656	\$329,246,765
Blue Ridge Host						
Buncombe	\$194,311,364	\$324,035,000	\$113,412,250	\$307,723,614	\$407,912,698	\$715,636,312
Burke	\$5,122,697	\$95,380,000	\$33,383,000	\$38,505,697	\$51,042,436	\$89,548,133
Henderson	\$31,592,945	\$118,533,000	\$41,486,550	\$73,079,495	\$96,872,819	\$169,952,314
Madison	\$1,679,190	\$6,487,000	\$2,270,450	\$3,949,640	\$5,235,569	\$9,185,209
McDowell	\$3,579,171	\$33,918,000	\$11,871,300	\$15,450,471	\$20,480,857	\$35,931,328
Mitchell	\$2,132,208	\$7,861,000	\$2,751,350	\$4,883,558	\$6,473,554	\$11,357,112
Polk	\$2,669,266	\$14,952,000	\$5,233,200	\$7,902,466	\$10,475,362	\$18,377,828
Rutherford	\$10,342,436	\$37,464,000	\$13,112,400	\$23,454,836	\$31,091,294	\$54,546,130
Transylvania	\$8,433,323	\$21,247,000	\$7,436,450	\$15,869,773	\$21,036,676	\$36,906,449
Yancy	\$1,340,815	\$8,455,000	\$2,959,250	\$4,300,065	\$5,700,086	\$10,000,151
Total	\$261,203,415	\$668,332,000	\$233,916,200	\$495,119,615	\$656,321,350	\$1,151,440,965
High Country Host (Plus Two Counties)						
Alleghany	\$843,847	\$12,428,000	\$4,349,800	\$5,193,647	\$6,884,602	\$12,078,249
Ashe	\$4,962,256	\$15,381,000	\$5,383,350	\$10,345,606	\$13,713,943	\$24,059,549
Avery	\$17,103,233	\$15,429,000	\$5,400,150	\$22,503,383	\$29,830,066	\$52,333,449
Caldwell	\$1,329,136	\$62,157,000	\$21,754,950	\$23,084,086	\$30,599,835	\$53,683,921
Surry	\$8,344,990	\$53,872,000	\$18,855,200	\$27,200,190	\$36,056,066	\$63,256,256
Watauga	\$43,610,394	\$67,276,000	\$23,546,600	\$67,156,994	\$89,022,062	\$156,179,056
Wilkes	\$9,022,000	\$56,715,000	\$19,850,250	\$28,872,250	\$38,272,517	\$67,144,767
Yadkin	\$6,317,833	\$28,307,000	\$9,907,450	\$16,225,283	\$21,507,933	\$37,733,216
Total	\$91,533,689	\$311,565,000	\$109,047,750	\$200,581,439	\$265,887,024	\$466,468,463
Grand Total of Regions	\$418,753,813	\$1,195,781,000	\$418,523,350	\$837,277,163	\$1,109,879,030	\$1,947,156,193

* = Adjusted Tourism Restaurant Sales = (0.35 x Total Restaurant Sales) (National Restaurant Association)

** = (Total Lodging Sales) + (Adjusted Restaurant Sales)

*** = 57% of Total Tourism Sales

Table 4: ASU-WCU Visitation based on Economic Impact and Visitor Spending of \$90.24

Region/Counties	Population ('000)	ASU-WCU Tourism Impact	Visits Based on Per Capita Spending **	Tourism Impact per Capita
Smoky Mountain Host				
Cherokee	25.2	\$30,139,944	333,998	\$1,196
Clay	9.4	\$7,278,416	80,656	\$774
Graham	8.1	\$12,747,179	141,259	\$1,574
Haywood	55.3	\$111,672,547	1,237,506	\$2,019
Jackson	34.1	\$66,613,179	738,178	\$1,953
Macon	31.3	\$52,558,786	582,433	\$1,679
Swain *	13.3	\$48,236,714	534,538	\$3,627
Total	176.7	\$329,246,765	3,648,568	\$1,863
Blue Ridge Host				
Buncombe	214.5	\$715,636,312	7,930,367	\$3,336
Burke	89.7	\$89,548,133	992,333	\$998
Henderson	94.7	\$169,952,314	1,883,337	\$1,795
Madison	20.2	\$9,185,209	101,786	\$455
McDowell	43.2	\$35,931,328	398,175	\$832
Mitchell	15.8	\$11,357,112	125,855	\$719
Polk	19.1	\$18,377,828	203,655	\$962
Rutherford	63.3	\$54,546,130	604,456	\$862
Transylvania	29.6	\$36,906,449	408,981	\$1,247
Yancy	18	\$10,000,151	110,817	\$556
Total	608.1	\$1,151,440,965	12,759,762	\$1,894
High Country Host (Plus Two Counties)				
Alleghany	10.9	\$12,078,249	133,846	\$1,108
Ashe	25	\$24,059,549	266,617	\$962
Avery	17.8	\$52,333,449	579,936	\$2,940
Caldwell	79.1	\$53,683,921	594,902	\$679
Surry	72.8	\$63,256,256	700,978	\$869
Watauga	42.8	\$156,179,056	1,730,708	\$3,649
Wilkes	67.3	\$67,144,767	744,069	\$998
Yadkin	38	\$37,733,216	418,143	\$993
Total	353.7	\$466,468,463	5,169,198	\$1,319
Grand Total of Regions	1138.5	\$1,947,156,193	21,577,529	\$1,710

* = Swain County without casino revenue

** = Based on \$90.24 weighted average of DayTrippers & Overnight Spending

Table 5: ASU-WCU Tourism Impact as Percent of Retail Sales

Region/Counties	ASU-WCU Tourism Impact	Total Retail Sales ('000)	ASU-WCU as % of Retail Sales
Smoky Mountain Host			
Cherokee	\$30,139,944	\$359,882	8.37%
Clay	\$7,278,416	\$129,068	5.64%
Graham	\$12,747,179	\$65,563	19.44%
Haywood	\$111,672,547	\$723,740	15.43%
Jackson	\$66,613,179	\$436,547	15.26%
Macon	\$52,558,786	\$428,551	12.26%
Swain *	\$48,236,714	\$121,654	39.65%
Total	\$329,246,765	\$2,265,005	14.54%
Blue Ridge Host			
Buncombe	\$715,636,312	\$3,021,535	23.68%
Burke	\$89,548,133	\$813,675	11.01%
Henderson	\$169,952,314	\$1,435,958	11.84%
Madison	\$9,185,209	\$110,027	8.35%
McDowell	\$35,931,328	\$399,937	8.98%
Mitchell	\$11,357,112	\$185,637	6.12%
Polk	\$18,377,828	\$89,584	20.51%
Rutherford	\$54,546,130	\$695,436	7.84%
Transylvania	\$36,906,449	\$247,187	14.93%
Yancy	\$10,000,151	\$145,903	6.85%
Total	\$1,151,440,965	\$7,144,879	16.12%
High Country Host (Plus Two Counties)			
Alleghany	\$12,078,249	\$87,263	13.84%
Ashe	\$24,059,549	\$273,556	8.80%
Avery	\$52,333,449	\$180,843	28.94%
Caldwell	\$53,683,921	\$702,603	7.64%
Surry	\$63,256,256	\$980,668	6.45%
Watauga	\$156,179,056	\$762,656	20.48%
Wilkes	\$67,144,767	\$837,013	8.02%
Yadkin	\$37,733,216	\$289,858	13.02%
Total	\$466,468,463	\$4,114,460	11.34%
Grand Total of Regions	\$1,947,156,193	\$13,524,344	14.40%

Table 6: Tourism Firms in Region

Region	Number of Restaurants	Number of Lodging Firms	Number of Attractions	Total Tourism Firms
Smoky Mountain Host Region/Counties	58	137	30	225
Blue Ridge Host Region/Counties	6	78	30	114
High Country Host Region/Counties (Plus Two Counties)	19	134	8	161
Asheville Convention & Visitors Bureau	318	132	421	817
Grand Total of Regions (Plus Asheville)	401	481	489	1317

Note: All the above data was available on the website of the host group 2004

Economic Impact Analysis

This section presents both the primary and secondary economic impacts of travel and tourism within the Blue Ridge National Heritage Area (BRNHA), which are measured in terms of dollars generated and jobs created. To estimate the total economic impact of the travel and tourism industry on the 25 BRNHA counties, we used the IMPLAN software modeling system and database (Impact analysis for PLANning, Minnesota IMPLAN Group, 2002). The IMPLAN system is an economic development tool that applies multipliers and performs input-output analysis to estimate how spending economically affects a local community or region. Many economic impact studies use IMPLAN as a major analysis tool (Arik and Nsiah, 2004; Livingston, 2001; Baker et al, 2000; Rische, 2000).¹

The basic framework of this study was the regional economic area composed of the 25 counties that make up the Blue Ridge National Heritage Area – over 10,000 square miles in area, and home to more than one million residents. The BRNHA includes the area commonly referred to as the AdvantageWest region, plus the counties of Surry and Yadkin. During the initial spending phase, dollar figures for goods and services purchased within the BRNHA’s regional impact area were entered into an IMPLAN-generated model constructed for the 25 counties.

¹ There are other analysis tools, such as Regional Economic Models, Inc. (REMI) and the Regional Input-Output Modeling System (RIMS II). In North Carolina, Luger (2000) used REMI for the analysis of the entire University of North Carolina system, while UNC-Greensboro used RIMS II for its own economic impact study (2004), and Walden (2001) used IMPLAN for the economic impact study of the North Carolina State University.

The IMPLAN model identified the direct dollars spent on goods and services that are available within the regional or local economy. It then traces then secondary impact dollars spent by using input-output analysis. Indirect effects are secondary impacts that result from businesses that make expenditures in order to replenish goods and improve services that have been purchased by direct (initial) impact expenditures. Induced effects are secondary impacts that result from an increase in household spending by either a) new employees who are hired, or b) current employees paid to work longer hours, to provide the goods and services being purchased.

Estimates of secondary impacts are based on a multiplier effect, which is an economic principle widely used to calculate spending that takes place as a result of a “ripple” effect. The concept is that every dollar received by business owners and employees is re-spent, thereby multiplying the initial sales and generating revenues in other sectors of the local economy. The IMPLAN model estimates the magnitude of both primary and secondary impacts for each industry, which are the so-called “multipliers.”² It should be noted that a portion of the direct and secondary dollar spending goes for goods and services purchased outside of the local community as well as taxes. Money used to purchase items that are not available in the local economy and money used to pay state and federal taxes leave the local economy, and therefore do not continue to circulate in the local economy.

² For example, a multiplier of 1.7 means that one dollar of direct spending generates an additional 43 cents in the first round. The 43 cents generates 18 cents in the second round. The 18 cents generates 6 cents in the third round. The 6 cents generates 2 cents in the fourth round and so on. Adding all the effects up, we can estimate the overall secondary impact as 70 cents.

In the rest of this section, we discuss the primary and secondary impacts of travel and tourism within the Blue Ridge National Heritage Area in terms of dollars spent and employment generated,

Dollars Spent in Local Economy

In studying the primary and secondary impacts of the travel and tourism industry in the BRNHA, we studied each of three host regions individually as well as cumulatively³. This allowed us to understand the complete impact the industry has had on Western North Carolina as well as the separate effect within each host group area. Our findings are outlined in Table 7 below.

Table 7: Output Impact of Blue Ridge Heritage Tourism

Region	Blue Ridge National Heritage Area ¹		
	Primary Impact	Secondary Impact	Total Impact
Blue Ridge Host	\$1,151,440,965	\$550,012,152	\$1,701,453,117
High Country Host	\$466,468,463	\$205,186,792	\$671,655,255
Smoky Mountain Host	\$329,246,765	\$135,415,957	\$464,662,722
Total	\$1,947,156,193	\$890,614,901	\$2,837,771,094

Source: Authors' estimation using IMPLAN Pro 2002

¹ It consists of 25 Western North Carolina Counties

In terms of total dollars spent, almost \$2 billion has been spent in direct tourism dollars in the BRNHA. The majority of these dollars have been spent within the Blue Ridge host area; it generated over \$1.1 billion in direct tourism dollars. The High

³ Surry and Yadkin counties are included in the High Country Host region.

Country host was second with \$466 million and Smoky Mountain was third with \$329 million.

The three host groups rank similarly in terms of secondary impact dollars generated. The Blue Ridge host area generated over \$550 million secondary dollars while High Country generated \$205 million and Smoky Mountain \$135 million. When primary and secondary impacts are combined, travel and tourism generated over \$2.8 billion for the BRNHA's regional economy: over \$1.9 billion in direct spending and almost \$900 million in secondary expenditures. The Blue Ridge host contributed a total of \$1.7 billion of the total, while High Country generated over \$671 million and Smoky Mountain almost \$465 million.

Employment Created

In addition to the dollars generated by the travel and tourism industry in the BRNHA, it also generated tens of thousands of jobs in the region. As was the case with dollars generated, both primary and secondary impact jobs were created. Primary impact jobs would be those that sell and provide the goods and services that generate direct dollars. Secondary impact jobs are those derived from the indirect and induced secondary effects. Also, as above, the Blue Ridge host had the greatest impact followed by High Country and Smoky Mountain. Table 8 illustrates our findings.

Table 8: Employment Impact of Blue Ridge Heritage Tourism

Region	Blue Ridge National Heritage Area ¹		
	Primary Impact	Secondary Impact	Total Impact
Blue Ridge Host	20,825	6,320	27,145
High Country Host	8,830	2,532	11,362
Smoky Mountain Host	5,714	1,693	7,407
Total	35,369	10,545	45,914

Source: Authors' estimation using IMPLAN Pro 2002

¹ It consists of 25 Western North Carolina Counties

In terms of direct jobs, over 35,000 primary jobs were created. The Blue Ridge Host saw the generation of almost 21,000 primary impact jobs, while almost 9,000 were generated within High Country and almost 6,000 within Smoky Mountain. Meanwhile, over 10,500 secondary impact jobs were also created. Over 6,300 jobs were created within Blue Ridge, over 2,500 at High Country, and almost 1,700 in Smoky Mountain.

In total, the industry generated almost 46,000 jobs in the BRNHA. Within the Blue Ridge Host area, a total of 27,000 primary and secondary jobs were created; in the High Country, over 11,000; and in Smoky Mountain, 7,400. Therefore, combined, travel and tourism has contributed over \$2.8 billion and almost 46,000 jobs to the Blue Ridge National Heritage Area.

References

- Arik, Murat and Christian Nsiah. 2004. *Measuring the Economic Impact of Middle Tennessee State University*. Murfreesboro, Tennessee: Middle Tennessee State University.
- Baker, David, et al. 2000. *Economic Impact Study 1998-99 - Portland State University*. Portland, Oregon. Portland State University.
- Livingston, Guy. 2001. *The Economic Impact of the University of West Florida on the Northwest Florida Economy*. Pensacola, Florida: University of West Florida.
- Luger, Michael, et al. 2001. *The Economic Impact of the UNC System on the State of North Carolina*. Kenan Institute, Chapel Hill, University of North Carolina.
- Minnesota IMPLAN Group, Inc. 2000. *IMPLAN Professional Software 2.0; User Guide, Analysis Guide, and Data Guide, 2nd Edition*. Stillwater, Minnesota: MIG, Inc..
- Rishe, Patrick. 2000. *The Economic Impact of Washington University on the St. Louis Metropolitan Statistical Area*. St. Louis, Missouri. Washington University.
- Sales and Marketing Management. 2005, 2004. *Survey of Buying Power*. New York: VNU Business Publications.
- U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditures in 2002, Report 974: <http://www.bls.gov/cex/csxann02.pdf>
- Walden, Michael. 2001. *The Net Economic Impact of North Carolina State University on the State of North Carolina, the Triangle Region, and Wake County*. North Carolina State University.