





**REPORT:** 

# THE IMPACT OF

Chestnut Mountain Nature Park
on Haywood and Buncombe Counties,
North Carolina

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# CHESTNUT MOUNTAIN NATURE PARK IMPACT

\$473,247.60

Federal taxes

\$507,312.27

State & local taxes

\$7,046,516.64

impact on Haywood & Buncombe Counties

# Mountain Bike Trail User Demographics

- 55% make \$100k or more per year
- Average group size: 2.523 people
- Average stay duration: 3.34 nights

\$1,789,527.88

impact on Haywood County

13k visits per year

**Average Visitor's Per Trip Spending** 

\$80.25

Daytrippers to Haywood County Staying overnight in Haywood County

\$1078.55

Staying overnight in Buncombe County

million

**Environmental Value** 

- Aesthetic value
- Air quality improvements
- Erosion control
- Water filtration

An online survey was solicited through chesntutmountainnaturepark.com, via CMNP's social media accounts, and via in-person yard signs placed around the property (N = 316). The survey link was open September 2022 until September 2024 and gathered responses throughout the development process at CMNP, from the original bike park hub, known as "Berm Park", to the now over 10 miles of single-track, mountain bike trails. Of the 316 respondents, a subset of respondents (n=135) reported that they had traveled "farther than one hour" to mountain bike at CMNP and were thus deemed non-local visitors. In this report visitors are defined as those traveling from at least one-hour away. The primary goal was to determine the impact of external spending within Haywood County, which warranted excluding local spending from the economic impact analysis. Non-local visitor spending was also analyzed to include Haywood and Buncombe County, sometimes referred to as the "Asheville MSA" in this report.

Research Conducted by the University of Tennessee at Chattanooga.

## **PROJECT OVERVIEW**

In collaboration with the Town of Canton, North Carolina and Mr. Nick Scheuer, Blue Ridge Planning, LLC., the University of Tennessee at Chattanooga presents the following economic and visitor behavior report. The purpose of this project is to showcase and quantify the economic impact and visitor behaviors resultant of the development and implementation of 450- acre Chestnut Mountain Nature Park (CMNP).

This report outlines the direct and indirect economic effects of this municipal park on Haywood County, NC and the surrounding area. Direct impact in this evaluation represents real, or actual, money spent at local dining, retail, grocery, lodging, fuel, etc. establishments by non-local visitors. Indirect impact reflects the residual effect of initial expenditures made by visitors as it circulates through the economy in the form of increased wages, taxes, and increased spending from inter-related industries. The total impact, then, is calculated by aggregating the direct and indirect effects of visitors to Haywood County and the surrounding region.

# **Haywood County**

Haywood County, nestled in the scenic mountains of Western North Carolina, is home to approximately 63,000 residents, with a median age of 47.8, reflecting a slightly older demographic than the state average. The county's economy, while historically influenced by manufacturing, is increasingly diversifying, with a growing emphasis on tourism, outdoor recreation, and healthcare. The median household income for the county is around \$61,000.



Photo from chestnutmountainnaturepark.com

The town of Canton, the primary municipality affected by CMNP, is a community of about 4,400 people located in eastern Haywood County, roughly 17 miles west of Asheville. Canton has a median age of 36.3 and a median household income of approximately \$64,000. Although maintaining a rich industrial history, the town has endured recent economic challenges following the closure of the Pactiv Evergreen paper mill. In response, Canton is actively pursuing economic diversification strategies, with a strong focus on leveraging its natural assets for outdoor recreation and tourism, of which CMNP is a key component.



Photo from Google

The development of CMNP was and continues to be a strategic effort to attract visitors and new businesses, playing a vital role in the town's economic revitalization and future growth.

#### **Brief Review of Literature**

The prevailing literature suggests that mountain biking participation continues to grow in popularity (Trust for Public Land, 2025; Pennsylvania Environmental Council, 2024; Statista, 2023). The observed increase in outdoor recreation activity is easily correlated with the COVID-19 pandemic, explaining the rise of independent outdoor recreation pursuits. Given the unprecedented surge in mountain bike sales and trail usage during the pandemic (Forbes, 2020), mountain biking provides a compelling case study to explore the intersection of economic stimulus, social development, and environmental impact linked to outdoor recreation investment.

Cherrington (2024) explains that mountain biking can foster social and community cohesion by providing opportunities for shared experiences, group activities, and the development and formation of social networks. Many small, rural towns have recognized the capacity mountain biking offers as a tool for enhancing social cohesion as well as economic upturn (Bruning & Lamont, 2021). Further supporting this perspective, Zwart and Hines (2022) found that although mountain biking tends to be perceived as an individual activity, participants frequently report strong social motivations and enjoy group rides, post-ride gatherings at "cultural hubs", and appreciate sense of belonging with a [mountain bike] community.

#### Methods

An online survey was solicited through chesntutmountainnaturepark.com, via CMNP's social media accounts, and via in-person yard signs placed around the property (N = 316). The survey link was open September 2022 until September 2024 and gathered responses throughout the development process at CMNP, from the original bike park hub, known

as "Berm Park", to the now over 10 miles of single-track, mountain bike trails.

Of the 316 respondents, a subset of respondents (n=135) reported that they had traveled "farther than one hour" to mountain bike at CMNP and were thus deemed nonlocal visitors. As Buning and Lamont (2021) reason, accurately distinguishing local users from non-local visitors is critical to ensure valid economic impact estimates. In response, this report defined visitors as those traveling more than one hour, consistent with commonly used distance thresholds in tourism impact research. Visitors are often categorized as traveling from 50 miles farther from their home location. As many people prefer or are able to conceptualize "time" better than "distance", visitors are defined as those traveling from at least one-hour away. The primary goal was to determine the impact of external spending within Haywood County, which warranted excluding local spending from the economic impact analysis. Non-local visitor spending was also analyzed to include Haywood and Buncombe County, referred to as the "Asheville MSA" in this report.



**Photo from Nick Scheuer** 

In addition to primary data collection methods, cell phone tracking software (placer.ai) was used to compare our data set and potentially provide further understanding regarding visitors. The cell tracking software reports 54% of visitors were from within 50 miles of the park (placer.ai) in comparison to our primary data collection finding 57% or respondents were "locals".

Park visitation numbers are a conservative estimate of 13,000 annual mountain bike visitors from Sept 26, 2023 – Sept 26, 2024. These numbers were gathered from on-site trail counters compared with industry leading cellular tracking data (Placer.ai). Each data collection source took care to separate mountain bikers from hikers (e.g. trail counter placement on biking only paths and cell tracking time and geolocation parameters aimed to target bike riders specifically).

## **DESCRIPTIVES AND TRAVEL INFORMATION**

## **Trail User Demographic Findings**

Roughly three-fifths (57%) of respondents were 'local residents', defined by those traveling less than one hour from their home to visit. In this first demographic analysis, both locals and visitors were included to provide a broad scope of visitor description.

Of the entire sample, survey respondents were 65% male, 31% female, 1% nonbinary, or 3% preferred not to say or did not answer the question. The average age was 42.7 years old. The average group size was 2.52 people per party (this includes children). The average local respondent has visited the park 3-5 times prior.

Respondents' education level varied but skewed higher with 2% some high school, 17% high school degree, 30% associates degree, 33% bachelors, 18% graduate and/or terminal degree. Respondents also had high reported income with a median household income between \$100k-\$150k per year with 55% of respondents making \$100k or more annually. These findings are consistent with previous study descriptions of annual income amongst mountain bikers in the Southeastern U.S. region (Bailey & Chandler, 2022).

# Non-Local (Visiting) Trail User Demographic Findings

There are no significant differences in demographic information for this non-local visitor only group. Gender was slightly different with 71% male and 26% female. Percentages for nonbinary or preferred not to say or did not answer remained the same. Average age was 41 years old. Average group size was 2.56 people per party and the average visitor has been to the park 1-3 times before.

Non-local visitors held slightly higher education levels with 22% holding graduate and/or terminal degrees. 58% of visitors make over \$100k. Visitors spent an average of 3.34 nights per trip. Lodging options by percentage for Haywood County are 15% hotels, 44% vacation rentals, 24% camping, 17% other lodging types. Lodging options by percentage for the Asheville MSA are 10% hotels, 44% vacation rentals, 12% camping, 34% other lodging types. The following figures depict an image of non-local visitor area of origin, or where CMNP visitors live. These visuals are of the conterminous United States (Fig.1) and a more regional Southeastern United States image (Fig. 2).







# **VISITORS ORIGIN OF TRAVEL**

Figure 1. National Visitor Home Area Image

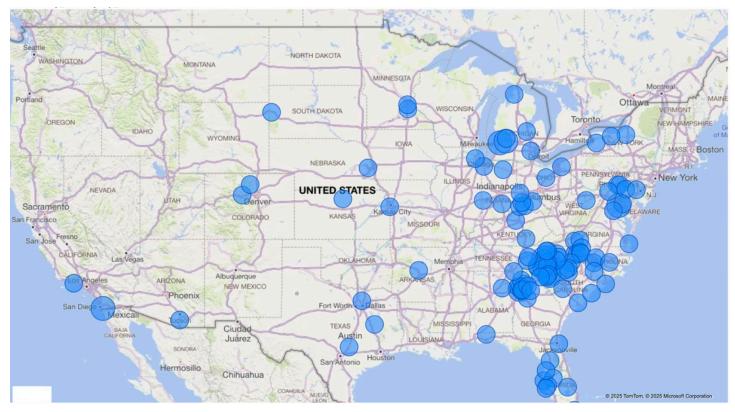
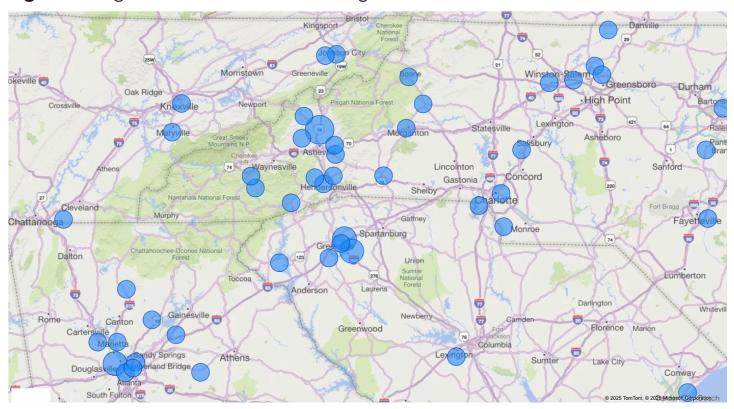


Figure 2. Regional Visitor Home Area Image



# **ECONOMIC ANALYSIS**

The following outlines the economic impacts CMNP has on Haywood and Buncombe counties. It includes direct spending as well as indirect and induced effects. Total Economic Impact is the result of what are non-linear "ripple effects" generated from the direct spending of visitors to a county or area. Tables 1-3 outline direct visitor spending in three groups including non-local daytrip visitors to Haywood County, overnight non-local visitors to Haywood County, and overnight non-local visitors to Buncombe County. To improve comparability and capture a full picture of visitor spending, this study includes a detailed breakdown of categories such as food and beverage, lodging, outdoor recreation services, and fuel. This follows the recommendation of Buning and Lamont (2021) for greater granularity and mutual exclusivity in expenditure categories.

In Tables 4 and 5, the direct, indirect, and induced effects are outlined. **Direct Effect** represents the initial spending made by non-local visitors to the region. **Indirect Effects** include the marginal money remaining (non-leaked) in the area resulting from local businesses spending more on employment and materials because of increased or added

business. **Induced Effects** are comprised of additional spending by local employees because of increased income/hours due to the activity.

These effects impact the area in various ways. First, through **employment**, defined as the number of full-year, full-time jobs supported by visitors. Second, **labor income encapsulates** the added income for current full-time, full-year employees. Third, **total value** reflects the profits after accounting for employment, taxes, and other everyday business expenses. Lastly, **output** is the total sales and revenue from the activity, in this case, mountain biking at CMNP.

Expenditure data were collected for the discrete variables in Tables 1–3 and analyzed using IMPLAN economic impact software. IMPLAN enables the modeling of local economic impacts by applying sector-specific multipliers to estimate the ripple effects of visitor spending throughout the regional economy. Inputting spending totals into IMPLAN's regionalized input-output framework allowed for quantification of not only of the direct effects of spending, but also the associated indirect and induced impacts across Haywood and Buncombe counties.

**Table 1.** Average Expenditure per Discrete Category for Non-local Daytrip Visitors to Haywood County

	Average Spending	Total Spending
Fast food	\$2.23	\$3,241.08
Sit-down/Carry-out	\$29.54	\$42,933.44
Groceries	\$5.00	\$7,267.00
Fuel	\$27.86	\$40,491.72
Outdoor recreation, rental gear, bike shops, etc.	\$9.86	\$14,330.52
Retail (non-food)	\$3.43	\$4,985.16
Hotels & resorts	N/A	N/A

Table 1. Continued

	Average Spending	Total Spending
Vacation rentals	N/A	N/A
Camping	N/A	N/A
Other	\$2.43	\$3,531.76
TOTAL DIRECT IMPACT	\$80.25	\$116,780.69

**Table 2.** Average Expenditure per Discrete Category for Non-local Overnight Visitors in Haywood County

	Average Spending	g	Total Spending	
Fast food	\$22.79		\$31,849.03	
Sit-down/Carry-out	\$164.12		\$229,357.70	
Groceries	\$160.18		\$148,386.55	
Fuel	\$84.71		\$118,382.23	
Transportation	\$38.24		\$53,440.40	
Outdoor recreation, rental gear, bike shops, etc.	\$113.74		\$158,951.65	
Retail (non-food)	\$40.74		\$56,934.15	
Hotels & resorts	\$43.38		\$60,623.55	
Vacation rentals	\$456.32	\$493.32 *	\$637,707.2	\$689,414.70**
Camping	\$45.74		\$63,921.65	
Other	\$14.71		\$20,557.23	
TOTAL DIRECT IMPACT	\$1078.55		\$1,507,273.63	

<sup>\*</sup>Per trip lodging average.

**Table 3.** Average Expenditure per Discrete Category for Non-local Overnight Visitors in Buncombe County.

	Average Spending	Total Spending
Fast food	\$14.92	\$40,867.37
Sit-down/Carry-out	\$166.21	\$455,265.81
Groceries	\$157.71	\$431,983.46
Fuel	\$102.12	\$279,716.89
Transportation	\$28.79	\$78,858.69
Outdoor recreation, rental gear, bike shops, etc.	\$154.84	\$424,122.24

<sup>\*\*</sup>Total spending made by out-of-town visitors across all lodging categories.

Table 3. Continued

Retail (non-food)	\$58.48		\$160,182.57	
Hotels & resorts	\$80.91		\$221,620.58	
Vacation rentals	\$571.05	\$677.55*	\$1,564,163.06	\$1,855,877.21**
Camping	\$13.64		\$37,361.32	
Other	\$14.85		\$40,675.64	
TOTAL DIRECT IMPACT	\$1,375.47	_	\$3,767,549.88	

<sup>\*</sup>Per trip lodging average.

# **DIRECT, INDIRECT, & INDUCED IMPACTS**

Table 4. Economic Indicators by Impact Haywood & Buncombe Counties

	Employment	Labor Income	Value Added	Output
Direct	32.75	\$1,189,165.17	\$4,191,452.04	\$5,292,571.47
Indirect	5.71	\$289,362.57	\$467,535.80	\$949,830.85
Induced	4.79	\$248,862.27	\$491,392.09	\$804,112.32
Totals	43.25 Jobs	\$1,727,390.01	\$5,150,379.91	\$7,046,516.64

**Table 5.** Economic Indicators by Impact Haywood County

	Employment	Labor Income	Value Added	Output
Direct	11.24	\$353,528.34	\$1,016,507.43	\$1,414,834.03
Indirect	1.42	\$58,880.81	\$92,594.76	\$213,110.43
Induced	1.04	\$43,463.24	\$99,035.04	\$161,583.43
Totals	13.70 Jobs	\$455,880.39	\$1,208,137.23	\$1,789,527.88

Table 4 and 5 outline the total of the direct, indirect, and induced effects for Employment, Employee Compensation (or "Total Labor Income"), and the Total Value Added for Haywood County and Haywood and Buncombe Counties combined. Total Value Added is defined as the sum of employee compensation (EC), plus the proprietor income (PI), plus taxes on production and imports (TOPI), plus other property income (OPI), expressed as: EC+PI+TOPI+OPI. Disaggregating Total Value Added into labor income, capital income, and taxes on production provides a clearer understand of how much economic value is created locally through wages, profits, and public revenues. This breakdown serves as a key indicator for assessing the economic significance of industries and the broader health of the regional economy.

<sup>\*\*</sup>Total spending made by out-of-town visitors across all lodging categories.

# **TOP INDUSTRIES IMPACTED**

**Table 6.** Top 10 Industries Impacted in Haywood County

	Total Employment (Jobs)	Total Labor Income	Total Value Added	Total Output
Tenant occupied housing	2.44	\$15,979.25	\$624,396.90	\$691,526.61
Full-service restaurants/bars	3.41	\$92,810.10	\$154,352.45	\$306,608.03
Amusement/recreation activities	2.46	\$84,701.33	\$132,223.94	\$201,952.20
Other real estate	.37	\$2,427.84	\$23,794.08	\$66,349.88
Limited-service restaurants (Fast food)	.51	\$13,696.95	\$24,965.73	\$55,645.20
Retail food and beverage stores (grocers, etc.)	.62	\$18,685.48	\$36,193.53	\$53,558.72
Transit and ground passenger transportation	1.32	\$11,670.21	\$12,956.51	\$53,244.97
Retail - gasoline	.25	\$10,661.09	\$28,525.21	\$39,433.56
Owner-occupied housing*	0	\$0	\$30,422.54	\$34,482.58
Retail stores (clothing, accessories, etc.)	.35	\$5,925.45	\$15,363.25	\$34,261.38

**Table 7.** Top 10 Industries Impacted in Buncombe and Haywood Counties

·				
	Total Employment (Jobs)	Total Labor Income	Total Value Added	Total Output
Tenant-occupied housing	9.84	\$84,894.37	\$3,107,587.49	\$3,377,896.74
Full-service restaurants/bars	7.86	\$254,214.09	\$414,402.50	\$765,280.65
Amusement/recreation activities	8.31	\$214,299.95	\$364,123.17	\$599,770.59
Other real estate	1.10	\$10,234.42	\$84,771.35	\$210,709.91
Retail food and beverage stores (grocers, etc.)	2.09	\$67,952.20	\$130,728.04	\$189,736.10
Transit and ground passenger transportation	2.68	\$31,003.40	\$53,496.76	\$135,221.05
Owner-occupied housing*	0	\$0	\$106,331.16	\$120,521.59
Retail stores (clothing, accessories, etc.)	1.01	\$27,810.05	\$64,497.12	\$119,269.27
Limited-service restaurants (Fast food)	.99	\$28,782.06	\$51,941.19	\$111,921.78
Labor and civic organizations	.94	\$29,081.53	\$44,019.90	\$90,103.94

Table 7 outlines the total of the direct, indirect, and induced effects for Employment, Employee Compensation, or "Total Labor Income", and the Total Value Added for Haywood and Buncombe counties combined. Calculations are the same as Table 5.

\*"Owner-Occupied Housing" represents the imputed rental value of homes lived in by their owners. While no rent is exchanged, this value reflects the economic contribution of housing services provided to homeowners themselves. This sector does not generate employment or labor income as it is not a business activity, but it does contribute to the area's Gross Regional Product (GRP) through property income and taxes.

# **Tax Impact**

The development and use of CMNP has a variety of impacts on tax revenue as well.

One area to begin this discussion is the tax-based revenue generated for the local Tourism Development Authority (TDA) or comparable Destination Marketing Organization (DMO). For example, 6% of the hotel and lodging tax is distributed to Buncombe County TDA. The Haywood County TDA receives 4% of hotel and lodging tax. From these data CMNP has an impact on county hotel and lodging tax revenue for the total of \$73,439.93 for Buncombe County and \$53,905.23 for Haywood County. Meaning that \$2,156.21 (Haywood) and \$4,406.39 (Buncombe) generated for the TDA funnels directly into destination marketing and tourism-based capital projects.

The following tables outline the induced local, state, and federal tax impacts of the development and use of CMNP.

# STATE AND LOCAL TAX

**Table 8.** Annual Induced Local (C) and State (S) Impacts for Haywood and Buncombe Counties

	Tax on Production and Imports	Personal Tax/ Households	Enterprises/ Corporations
Sales Tax	\$207,427.58 (S) \$65,871.85 (C)		
Property Tax	\$143,856.59 (C)		
Motor Vehicle License	\$3,950.05 (S) \$101.98 (C)		
Severance Tax	\$15.25 (S)		
Other Taxes	\$15,712.74 \$9,713.92 (C)		
Corporate Profits Tax			\$17,980.93 (S)
Income Tax		\$39,761.43 (S)	

Table 8. Continued

Motor Vehicles License		\$1,245.57 (S) \$25.15 (C)	
Property Tax		\$1,061.43 (C)	
Other Tax (Hunt/Fish)		\$587.81 (S)	
Total State and Local Tax	\$227,105.62 (S) \$219,544.33(C)	\$41,594.81 (S) \$1,086.58 (C)	\$17,980.93 (S)
Grand Total			\$286,681.36 (S) \$220,630.91 (C)

Table 9. Annual Induced Local (C) and State (S) Impacts for Haywood County

	Tax on Production and Imports	Personal Tax/ Households	Enterprises/ Corporations
Sales Tax	\$45,696.04 (S) \$20,957.69 (C)		
Property Tax	\$51,291.89 (C)		
Motor Vehicle License	\$893.05 (S) \$6.90 (C)		
Severance Tax	\$3.45 (S)		
Other Taxes	\$3,552.43 (S) \$3,783.40 (C)		
Corporate Profits Tax			\$3,799.10 (S)
Income Tax		\$10,941.38 (S)	
Motor Vehicles License		\$322.84 (S) \$1.85 (C)	
Property Tax		\$459.31 (C)	
Other Tax (Hunt/Fish)		\$156.31 (S)	
Total State and Local Tax	\$50,144.97 (S) \$76,039.88 (C)	\$11,420.53 (S) \$461.16 (C)	\$3,799.10 (S)
Grand Total			\$65,364.60 (S) \$76,501.04 (C)







# **FEDERAL TAX IMPACT**

Table 10. Annual Induced Federal Tax Impacts Haywood and Buncombe Counties

	Employee Compensation	Tax on Production and Imports	Personal Tax/ Households	Enterprises/ Corporations
Social Insurance Tax- Employee Contribution	\$108,265.23			
Social Insurance Tax- Employer Contribution	\$74,901.70			
Excise Taxes		\$8,082.77		
Custom Duty		\$7,125.03		
Corporate Profits Tax				\$129,453.83
Income Tax			\$145,419.04	
Total Federal Tax	\$368,658.62	\$24,349.98	\$145,419.04	\$129,453.83
<b>Grand Total</b>				\$473,247.60

Table 11. Annual Induced Federal Tax Impacts Haywood County

	Employee Compensation	Tax on Production and Imports	Personal Tax/ Households	Enterprises/ Corporations
Social Insurance Tax- Employee Contribution	\$32,806.19			
Social Insurance Tax- Employer Contribution	\$24,458.88			
Excise Taxes		\$1,536.61		
Custom Duty		\$1,354.53		
Corporate Profits Tax				\$27,351.65
Income Tax			\$42,190.06	
Total Federal Tax	\$57,265.07	\$2,891.14	\$42,190.06	\$27,351.65
<b>Grand Total</b>				\$129,697.92

# **ENVIRONMENTAL SUSTAINABILITY AND IMPACT**

In addition to its economic and recreational benefits, CMNP provides substantial annual environmental value through its 450-acres of conserved and forested land. These ecosystem services contribute directly to the region's sustainability, environmental health, and quality of life. Forests are critical for maintaining air and water quality, preventing erosion, and enhancing the visual and ecological character of a region. Based on established valuation studies, the Federal Emergency Management Agency (FEMA, 2022) states that forested land, like CMNP, contributes the following estimated annual environmental benefits:

- Aesthetic value: \$1,477 per acre/year
- Air quality improvements: \$711 per acre/ year
- Erosion control: \$1,672 per acre/year
- Water filtration: \$435 per acre/year

When applied across CMNP's 450 acres, these values translate to:

- \$664,650 per year in aesthetic value
- \$319,950 per year in air quality benefits
- \$752,400 per year in erosion control
- \$195,750 per year in water filtration

\$1.93 million in environmental value annually, reinforcing its importance not only as a recreational resource but also as a natural climate buffer, public health asset, and ecological infrastructure. These services help reduce costs related to stormwater management, air pollution mitigation, and landscape degradation, representing long-term sustainability value for Haywood County and the surrounding region in a time where continued weather-based events are expected.

## **EXPENSES**

There are expenses associated with the development and continued maintenance of CMNP. Initial development and construction costs of this property were approximately \$1.2 million; however, this does not include costs absorbed by the municipality such as in-kind labor from personnel, administrative costs, marketing and promotion, etc. Additionally, the Town of Canton has an ongoing maintenance relationship with the contracted trail building company for routine yearly maintenance.

# **SUMMARY AND RECOMMENDATIONS**

CMNP opened to the public on April 23, 2022, with a community event where just over 2,000 people attended over the course of the day. Since opening, cell phone tracking data estimate that the park has hosted over 40,000 visitors (placer.ai). The economic impact data above presents compelling support for the continued investment in this public space. At the time of reporting, CMNP has been closed for ten months following the destructive impact of Hurricane Helene in Western NC and Eastern TN. Based on the available data, the closure is estimated to have cost Haywood County

roughly \$1,256,061 in direct, indirect, and induced economic effects. For the combined region of Haywood and Buncombe County (Asheville MSA), the estimated loss totals \$5,872,097. While the scope of the damage associated with this storm and the strain on both human and financial resources in the rebuilding effort is acknowledged and understood, these findings provide strong support for the urgent restoration and reopening of outdoor recreation spaces after damage. The following recommendations are presented in support of that effort:

#### Recommendations

- Prioritize rapid restoration and reopening of CMNP.
- CMNP sits in an area that has been impacted by several generational weather events in the last several years. We recommend the development of a public-private fund for rapid response trail maintenance and long-term infrastructure resilience (e.g., drainage, erosion control, vegetation buffers, and trail restoration).
- Data within this report may be used for future grant applications, tourism development initiatives, and policymaking efforts to justify support for CMNP and similar projects.
- Promote local business partnerships to maximize spillover benefits. We encourage the activation
  of outdoor oriented business networks (e.g. trail/bike-friendly lodging, bike shops, and food
  service) to market experiences, offer discounts, boost local engagement, and demonstrate clear
  community support and interaction.







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