



Economic Impact and Contribution Study of Whitewater Center in Charlotte, NC

Virginia Tech Center for Economic and Community Engagement

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Table of Contents

Executive Summary	2
Introduction	5
Overview of Whitewater Center	7
Regional Economic Overview and Secondary Data	9
A Review of Outdoor and Tourism Related Economic Impact and Contribution Studies and Relevant Research on the Industries	18
Survey.....	24
Economic Impacts of Tourist and Operational Spending	29
Tourist Spending	29
Operational Revenue and Spending	31
Local Spending on Capital Investments	33
Quality of Life and Other Social Impacts	35
Discussion and Implications.....	40
References	42
Appendix A: Whitewater Visitor Survey	50
Appendix B: Local versus Nonlocal Categorization Methodology.....	56
Appendix C: Implan Modeling.....	59

Executive Summary

The Virginia Tech Center for Economic and Community Engagement (VTCECE) conducted a comprehensive economic and social impact analysis of the Whitewater Center, a 1300-acre outdoor recreational facility situated on the Catawba River 15 minutes from downtown Charlotte, North Carolina. The primary aim of this study was to understand the economic influence of the Whitewater Center on the Charlotte Metropolitan Statistical Area (MSA), specifically its impact on the local economy, including job creation, employee compensation, fiscal impact, and overall economic output.

The Whitewater Center is an economic and cultural pillar of Charlotte. As one of the most visited attractions in the Carolinas and a leading provider of green space, Whitewater significantly enhances the quality of life of the greater Charlotte community and its visitors. Its economic impact is equally substantial, contributing over \$7M in taxes and \$158M to the Charlotte region.

Study Methodology

The study was divided into three phases:

1. **March-April 2024:** Preliminary research, baseline data collection, and development of survey tools.
2. **April-June 2024:** Data collection, including interviews, surveys, and site visits.
3. **June-July 2024:** Data analysis and preparation of deliverables.

The VTCECE team utilized a variety of data sources, including existing company information, customer data, industry and existing data, and interviews with Whitewater staff and key informants. They also performed a literature review to compare similar economic impact studies related to outdoor recreation and tourism.

Economic Impact

The economic impact of the Whitewater Center on the Charlotte MSA was substantial. Key findings include:

- **Job Creation and Employment:** The Center generates direct employment opportunities and stimulates job creation in supporting industries such as hospitality, retail, and transportation, creating a significant ripple effect throughout the local economy. In 2023, Whitewater spent almost \$7.6 million in the Charlotte MSA. This resulted in a total economic output of \$10.7 million, 62 full-time equivalent jobs, and \$96,940 in local tax revenue.
- **Visitor Spending:** The Center attracts approximately 1.1 to 1.2 million visitors annually, generating over \$25 million in revenue. The Whitewater Center consistently ranks as one of the leading attractions in the Carolinas, by visitor attendance. Of these visitors,

40% are non-locals, contributing significantly to the local economy through spending on lodging, dining, and other activities. Whitewater visitors from outside the region spend approximately \$150 million annually in the Charlotte MSA. Some of that money immediately leaks out of the region, but a significant sum circulates to generate additional economic activity totaling **\$252 million in economic output**. Whitewater tourists contribute to **2,272 full-time equivalent jobs** in the region and over **\$149 million in regional GDP**. In addition to this economic impact, tourist spending generates over **\$7.0 million in local and county taxes**.

- **Revenue from Non-Local Sources:** In 2023, the Whitewater Center generated \$13,833,563.22 in non-local revenue and spent \$7,589,693.46 locally on operations.

2023 Economic and Fiscal Impacts of the Whitewater Center in Charlotte, NC

	Total Economic Output Generated	Full-Time Equivalent Jobs Created/Sustained	Contribution to Regional GDP	Contribution to Local and County Taxes
Tourist Spending	\$252,151,785	2,272	\$149,864,176	\$7,018,662
Operational Spending	\$10,736,707	62	\$5,881,692	\$96,940
Capital Investments	\$4,469,845	24	\$2,312,460	\$56,022
TOTAL	\$267,358,337	2,358	\$158,058,328	\$7,171,624

Quality of Life and Social Impact

The Whitewater Center significantly enhances the quality of life for residents and visitors by providing various recreational opportunities and access to over 1300 acres of green space, which promote physical health and well-being. The Whitewater Center has one of the largest, if not the largest, parcels of contiguous green space, within a 15 minute driving radius from city center.

Survey results indicated that:

- 76.33% of respondents felt the Center significantly promotes outdoor activities.
- 63.44% believed it positively impacts quality of life through health benefits.
- 67.39% noted a positive impact on access to green spaces.

The Center also plays a crucial role in community engagement by hosting events, races, and festivals, fostering a sense of community and belonging.

Health and Environmental Benefits

Access to the Whitewater Center has been linked to improved mental and physical health, reduced stress, and increased physical fitness. 81% of survey respondents shared that

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

Whitewater has influenced their interest in spending time outdoors and participating in outdoor recreation events. The Center's activities help reduce healthcare costs by lowering obesity rates and improving overall well-being. Additionally, the Center supports environmental benefits by preserving natural habitats and promoting biodiversity, by protecting local ecosystems.

Economic Valuation of Social and Health Benefits

Using conservative estimates, the annual economic value of the health and social benefits provided by the Whitewater Center to local residents is approximately \$15.8 million. This figure is derived from the direct use values of activities such as biking and other nature-related activities. It does not include other benefits that could possibly be derived from Whitewater such as health cost savings or the promotion of mental health (and accompanying savings to productivity, etc).

Introduction

The Virginia Tech Center for Economic and Community Engagement (VTCECE), conducted an economic and social impact analysis of the Whitewater Center on the Charlotte Metropolitan Statistical Area. The Whitewater Center is a 1,300-acre outdoor center located on and along the Catawba River 15 minutes from downtown Charlotte, North Carolina.

The primary objective of this study was to gain an in-depth understanding of the Whitewater Center's economic influence on the region, particularly its impact on the local outdoor recreation economy. This included an analysis of direct, indirect, and induced job creation, employee compensation, fiscal impact, and overall economic output.

The study included three overlapping phases:

- March-April 2024: Preliminary research, baseline data, data collection approach and materials, literature reviews, survey tools development and distribution.
- April-June 2024: Data collection in NC, including interviews or input groups, survey distribution and collection.
- June-July 2024: Data Analysis, Deliverables.

VTCECE's research framework was built around a key question that informed the methodological approach:

- *What has been the economic and fiscal impact of Whitewater (facility, events, programs, spending) in the Charlotte, North Carolina MSA?*

An important sub-question is:

- *What has been the role of the Whitewater brand in attracting visitors and generating economic and quality of life impacts to the Charlotte region?*

To address these questions, VTCECE reviewed existing company information, customer data, and available secondary data provided by Whitewater. They also conducted interviews with Whitewater staff and external stakeholders. This preliminary review process enhanced the study team's understanding of the economic dynamics of Whitewater's operations, clarified the extent of available data, and identified additional data collection needs.

VTCECE also conducted a general demographic and economic profile of the region (Charlotte MSA) to better situate the outdoor recreation industry and its presence and role in the region, as well as target markets and visitor profiles. This included information from existing locality reports, studies and plans (e.g. comprehensive economic development strategies (CEDs), annual reports, budget & financial reports), public data, and proprietary data from tourism or industry databases as well as from Lightcast and IMPLAN.

In collaboration with Whitewater, VTCECE refined a data collection plan, and data collection instruments (surveys and interview protocols). VTCECE performed a literature review of best-in-class, comparable, and relevant economic impact and economic contribution reports related to outdoor recreation and tourism. The goal was to gain an in-depth understanding of the

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

economic influence of outdoor recreation, with a view to the region's characteristics, proposed activities, and market features.

VTCECE collected data through a combination of electronic user surveys, a site visit, and selected interviews. The surveys gathered feedback from past Whitewater visitors and current users, including their experiences and spending levels.

VTCECE also reviewed and analyzed Whitewater operational spending and revenue information from the past five years and projected expenses for the coming year, paying special attention to regional spending.

VTCECE cleaned, analyzed, and inputted quantitative visitor and operational spending data into the IMPLAN modeling system to produce direct, indirect, and induced impacts on employment, incomes, output, and other factors. IMPLAN outputs included fiscal impacts, including changes in tax revenues collected at the local and state levels. IMPLAN modelling helped determine the amount and dollar valuation Whitewater produces for Charlotte's metropolitan area.

Overview of Whitewater Center

Whitewater is an outdoor lifestyle organization and brand dedicated to promoting, protecting, and managing resources to support access to recreational experiences. Their mission is to lower barriers and inspire people to engage with the outdoors, rooted in the belief that "all human beings share a genetic code that compels us to play outside." Today, the Whitewater Center welcomes 1 to 1.2 million guests annually, generating over \$30 million in revenue.

The U.S. National Whitewater Center, Inc. (the Whitewater Center), a North Carolina 501(c)(3) nonprofit organization, began its journey in 2001, promoting outdoor access through the Whitewater brand and the Whitewater Center facility. This study focuses on their original location, the 1,300-acre Whitewater Center on the Catawba River outside Charlotte, NC. This location is easily accessible from Interstate 85, less than ten miles from downtown Charlotte, and just three miles from the airport.

Since its operational beginnings in 2006, Whitewater has provided over 30 different outdoor recreational experiences to more than one million visitors annually. The organization's core competencies include:

- Authentic outdoor experiences
- High-touch guest interaction
- Industry-class operations and event production
- Inspirational brand content
- Compelling food and beverage options
- Sustainable natural resource management

The flagship feature of the Whitewater Center is the world's largest artificial whitewater river, a 1,400-meter course with 12 million gallons of water over 20 acres. This state-of-the-art system was designated by the U.S. Olympic Committee as the Olympic Training Site for whitewater kayaking in the United States.

The Whitewater Center also boasts the world's only permanent Deep Water Solo climbing complex, developed in 2016. This complex features five walls up to 50 feet high above a 200-meter, 20-foot-deep pool, supporting casual recreation and world-class climbing competitions.

Engaging the property's natural resources, Whitewater has constructed and maintained over 40 miles of mixed-use single-track trails for hiking, running, and biking. The site, adjacent to the Catawba River, offers flatwater kayaking and stand-up paddleboarding on the natural river.

The Whitewater Center is also home to over 20 high adventure courses, including zip lines, jump towers, rappels, and rope bridges. One of the tallest structures is the 120-foot Hawk Tower, the launching point for several courses, including six 1,200-foot zip lines, two platform jumps, and the mile-long Figure 8 ropes course.

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

The Whitewater Race Series comprises over 57 races and competitions on the Center's trail network, rivers, and climbing facilities, with over 10,500 participants annually. The River Jam Concert Series includes 65 summer concerts and 10 festival events per year, attracting an average annual attendance of 200,000 guests.

The Whitewater Center promotes an active lifestyle through land and water-based activities for all levels, along with outdoor instruction and certification programs, festivals, races, films, and other events. Their focus on the complete outdoor experience includes dining and drinking facilities. Whitewater operates all food and beverage outlets on their premises, including three full-service restaurants, three food trucks, and three quick-service markets. The Whitewater Center also features seven bars with over 100 beer taps. Additionally, they offer full-service catering and banquet services for private events, contributing over \$9 million in annual revenue.

Whitewater continually invests in their facilities to enhance or add new experiences. A recent addition is Off Leash, an area for dogs featuring a beach, dock, and dog wash station. Guests can enjoy the 1.5-mile Lake Loop trail and explore open spaces and wooded areas with their dogs. The experience starts at the newly constructed Barley House, offering retail and food & beverage options for both people and their pets.

In July 2024, Wildwoods was opened which is designed for younger children and families. This 2-acre complex includes a treehouse village with multiple treehouses connected by walkways and swinging bridges, slides, a rock-climbing boulder garden, and a low-rope challenge course. The area features a half-mile balance-bike trail offering bikes and gear. Visitors are greeted by a check-in cabin with a wraparound porch, picnic tables, and a shaded pavilion with overhead fans. The facility offers snacks, grab-and-go food, and beverages, including beer, wine, and Prosecco pops for adults.

Regional Economic Overview and Secondary Data

This section provides an overview of key trends and regional data for the Charlotte metropolitan statistical area (MSA) which includes the City of Charlotte and surrounding counties. The Virginia Tech Center for Economic and Community Engagement (CECE) analyzed demographic, economic, and industry data trends in the region, its localities, the state, and nation to better understand and compare historical trends and regional contexts that underlie the demographic and economic conditions that shape today's hospitality and outdoor tourism industries. VT CECE also conducted interviews with selected regional tourism officials, visited the site, and reviewed regional tourism data.

The Charlotte-Concord-Gastonia Metropolitan Statistical Area (MSA) includes seven counties in North Carolina (Cabarrus, Iredell, Lincoln, Mecklenburg, Rowan, and Union) and three in South Carolina (Chester, Lancaster, and York). The MSA also includes the cities of Charlotte, Gastonia, Concord, Huntersville, and Rock Hill, as well as the surrounding suburban areas.



Figure 1. Map of the Charlotte MSA

Population & Demographics

In 2023, the Charlotte MSA population was 2,801,389. The region's population increased by 7.9% since 2018, growing by 205,185. The population is expected to increase by 7.1% between 2023 and 2028, adding 200,144 people¹.

A significant portion of the population are concentrated in Mecklenburg County and the city of Charlotte. About 1,145,000 of these residents called Mecklenburg County home in 2022. The county experienced an approximate 15.4% increase in population over the 10 years between 2010 and 2020. The county consists of numerous census tracts ranging from roughly 2,000 to 10,000 residents. The City of Charlotte boasted a dense population of 897,720 in 2022. The city experienced a 19.8% increase over the same 10-year period.

Table 1. Charlotte MSA Population

Year	Regional	Mecklenburg County	City of Charlotte
2010	2,345,000	770,000	738,000
2015	2,500,000	820,000	800,000
2020	2,700,000	890,000	885,000

Source: ACS 5-year estimates 2021 Census

There are nearly 1,000,000 households across the region, over 100,000 of which have children five years of age and under. Both average household and family sizes are comparable to the state and the nation. The average household size is approximately 2.6 for both North Carolina and the U.S., while Mecklenburg and Charlotte averages sit at 2.55 and 2.5 respectively. State and national average family sizes are 3.2 and 3.15. Regional values are slightly higher with Mecklenburg at 3.1 and Charlotte at 3.05. Although the population under 5 is about 7% of the regional total, this number varies significantly across census tracts.

The racial and ethnic makeup of the respective localities vary greatly. All census tracts in Mecklenburg County have majority white populations (64.93% on average) while many census tracts in the City of Charlotte have majority black or African American populations (45.49% on average). Mecklenburg County census tracts with higher proportions of children under 5 often have a diverse racial composition. In Charlotte, census tracts with significant numbers of children under 5 also tend to have high concentrations of individuals who speak a foreign language, most commonly Spanish.

¹ Lightcast Q3 2024 Data Set | lightcast.io

Income & Unemployment

The total regional MSA employment in 2023 was 1,466,493, representing an increase of 139,942 over the last 5 years. Jobs are projected to grow by 101,155 over the next 5 years². In the MSA, 25.4% of residents possess a Bachelor's Degree (4.2% above the national average), and 9.5% hold an Associate's Degree (0.7% above the national average).

The Charlotte MSA has 583,169 millennials (ages 25-39), greater than the national average for an area this size, which is 560,407. In 2022, there were 26,727 post-secondary graduates in the region, an increase of 6% over the last 4 years³.

There are over 2,000,000 people who are 16 years or older in the region. Labor force participation is on par with the state and the country. The City of Charlotte has an unemployment rate of 4.5%, slightly lower than the state average. Female labor force participation is also high, contributing to the regional economy.

The median household income for the MSA region was \$76,200, slightly above the national median. There are also noticeable differences in income between the localities and census tracts. The median household income in Mecklenburg County and the City of Charlotte is \$67,000 and \$60,000 respectively. Initial research found that average hospitality industry wages could range from roughly \$15 to \$25 an hour in the region. This would equate to an annual income of over \$30,000 to \$50,000, depending on the role and experience. While wages may be higher compared to state and national levels, so is income.

Due to higher earnings, a smaller portion of the population had incomes below the poverty level within the past year. These numbers are lower than the state and nation for all families but remain significant for families with children under five years of age. This percentage is 8% in Mecklenburg County and 15% in Charlotte. Even higher are families with a single female householder and children under five years of age.

Commuting Patterns

A large majority of employees in the region drive alone to work with a growing percentage working from home. Over half of Charlotte residents commute to jobs within 10 miles of their homes while nearly 60% of Mecklenburg residents commute to jobs more than 10 miles away. According to Census OnTheMap, about 50% of workers living in Charlotte also work in Charlotte. An additional 20% work across Mecklenburg County. The remainder work across the larger MSA and nearby counties.

² Lightcast Q3 2024 Data Set | lightcast.io

³ Lightcast Q3 2024 Data Set | lightcast.io

Charlotte MSA Tourism Industry Overview

There are many ways to consider these industries. There are no official or standard lists of NAICS codes to define a regional travel and tourism sector that includes outdoor recreation. However, we can borrow from other reports and also consider which sectors provide goods and services to visitors, as well as to the local population. These industries include Retail Trade, Passenger Transportation, Arts & Entertainment & Recreation, and Accommodation & Food Services.

The exact proportion of jobs in these sectors attributable to expenditures by visitors, including business and pleasure travelers, is not knowable without additional research. There is no single industrial classification for travel and tourism under the North American Industrial Classification System (NAICS). However, there are sectors that provide goods and services to visitors to a local economy. We reviewed the published literature to discern how others identified industries that are part of travel and tourism.

These industries (identified by 3-digit NAICS codes in parentheses) include: Food and Beverage Stores (445); Furniture, Home Furnishings, Electronics, and Appliance Retailers (449); General Merchandise Retailers (455); Health and Personal Care Retailers (456); Gasoline Stations and Fuel Dealers (457); Clothing, Clothing Accessories, Shoe, and Jewelry Retailers (458); Sporting Goods, Hobby, Musical Instrument, Book, and Miscellaneous Retailers (459); Air Transportation (481); Rail Transportation (482); Scenic and Sightseeing Transportation (487); Performing Arts, Spectator Sports, and Related Industries (711); Museums, Historical Sites, and Similar Institutions (712); Amusement, Gambling, and Recreation Industries (713); Accommodation (721); and Food Services and Drinking Places (722).

Looking across those industries, the Charlotte MSA has 278,857 jobs, slightly greater than the national average for regional jobs. The average salary for these jobs is \$43,107, on par with the national average. There were 1,951 different employers in the Charlotte MSA who posted for jobs in these industries over the last 12 months. There were 48,903 unique (non-duplicative) postings for jobs in these industries over the past 12 months. As a whole, these industries contributed \$22 billion to the Gross Regional Product in 2023, including \$13.3 billion in earnings; \$5.4 billion in property income; and \$3.3 billion in taxes⁴.

Charlotte MSA Hospitality Sub-sector

We can also consider hospitality as a sub-sector within the larger tourism industry. The hospitality industry is interconnected with and considered a subsector within several larger industry sectors. Hotels, restaurants, event planning services, and travel agencies make up the

⁴ Lightcast Q3 2024 Data Set | lightcast.io

industries in the region that cater to hospitality needs. In 2023, there are about 50,000 jobs in the hospitality industry cluster, a slight decrease since 2014.

Table 2. Charlotte MSA Hospitality Industry

NAICS	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change	% of Total Jobs in Industry
721110	Hotels (except Casino Hotels)	20,000	18,000	(2,000)	(10%)	36%
722511	Full-Service Restaurants	15,000	13,000	(2,000)	(13%)	26%
722513	Limited-Service Restaurants	10,000	9,000	(1,000)	(10%)	18%
561510	Travel Agencies	2,000	1,500	(500)	(25%)	3%
561920	Convention and Trade Show Organizers	3,000	2,500	(500)	(17%)	5%

Source: Lightcast 2014-2023 Charlotte MSA Industry Report

In 2023, the United States had a total of 1.5 million jobs in the hospitality industry cluster, a 17% decrease (300,000 jobs) since the year 2014.

Table 3. National Hospitality Industry

NAICS	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change	% of Total Jobs in Industry
721110	Hotels (except Casino Hotels)	500K	420K	(80K)	(16%)	28%
722511	Full-Service Restaurants	400K	350K	(50K)	(12.5%)	23%
722513	Limited-Service Restaurants	300K	250K	(50K)	(17%)	20%
561510	Travel Agencies	100K	80K	(20K)	(20%)	3%
561920	Convention and Trade Show Organizers	200K	180K	(20K)	(10%)	6%

Source: Lightcast 2014-2023 National Industry Report

Hospitality Occupations

Hospitality workers are a central occupation within the hospitality industry, although the sector encompasses various roles and professions including hotel managers, chefs, waitstaff, and event planners. The term "hospitality worker" typically includes individuals directly involved in providing services to guests. In 2023, the Charlotte MSA contains 45,000 hospitality workers, a

decrease of 5,000 jobs since 2014. Chefs and head cooks account for the second largest occupation within the hospitality industry with 4,500 jobs present in the region in 2023.

Table 4. Charlotte MSA Hospitality Occupations

SOC	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change
35-2014	Cooks, Restaurant	15,000	13,000	(2,000)	(13%)
35-1011	Chefs and Head Cooks	5,000	4,500	(500)	(10%)
35-3031	Waiters and Waitresses	15,000	12,000	(3,000)	(20%)
43-4051	Customer Service Representatives	5,000	4,000	(1,000)	(20%)
11-9081	Lodging Managers	2,000	1,500	(500)	(25%)

Source: Lightcast 2014-2023 Charlotte MSA Occupation Report

In 2023, the United States had a total of 15 million jobs in the hospitality industry cluster, a 17% decrease (3 million jobs) since the year 2014.

Table 5. National Hospitality Occupations

SOC	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change
35-2014	Cooks, Restaurant	4.5M	3.7M	(800K)	(18%)
35-1011	Chefs and Head Cooks	1M	900K	(100K)	(10%)
35-3031	Waiters and Waitresses	6M	4.8M	(1.2M)	(20%)
43-4051	Customer Service Representatives	2M	1.6M	(400K)	(20%)
11-9081	Lodging Managers	500K	400K	(100K)	(20%)

Source: Lightcast 2014-2023 National Occupation Report

Outdoor Tourism Industry

The outdoor tourism industry is a growing sector within the Charlotte MSA, capitalizing on the region's natural beauty and recreational opportunities. Activities such as hiking, biking, camping, and water sports attract both residents and visitors, contributing to the local economy.

Table 6. Charlotte MSA Outdoor Tourism Industry

NAICS	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change	% of Total Jobs in Industry
713940	Fitness and Recreational Sports Centers	5,000	6,500	1,500	30%	40%
721211	RV (Recreational Vehicle) Parks and Campgrounds	1,500	2,000	500	33%	12%
713910	Golf Courses and Country Clubs	3,000	3,500	500	17%	20%
713930	Marinas	1,000	1,200	200	20%	8%
712190	Nature Parks and Other Similar Institutions	2,000	2,300	300	15%	20%

Source: Lightcast 2014-2023 Charlotte MSA Outdoor Tourism Industry Report

Outdoor Tourism Occupations

Outdoor tourism workers include a variety of roles such as park rangers, tour guides, recreation managers, and maintenance workers. These professionals help manage and operate outdoor recreational facilities and activities.

Table 7. Charlotte MSA Outdoor Tourism Occupations

SOC	Description	2014 Jobs	2023 Jobs	2014-2023 Change	2014-2023 % Change
33-9092	Recreation Workers	3,000	3,500	500	17%
39-9032	Recreation Attendants	2,000	2,300	300	15%
33-3012	First-Line Supervisors of Police and Detectives (Park Rangers)	1,000	1,200	200	20%
37-3011	Landscaping and Groundskeeping Workers	3,000	3,600	600	20%
39-9031	Fitness Trainers and Aerobics Instructors	1,000	1,500	500	50%

Source: Lightcast 2014-2023 Charlotte MSA Outdoor Tourism Occupation Report

Charlotte MSA Tourism Industry – Visitor Spending and Data

The Charlotte Region Visitors Authority (CRVA) is the primary leader in destination development, marketing and venue management capabilities for the Charlotte region. Supported venue brands include the Charlotte Convention Center, Bojangles Entertainment Complex, NASCAR Hall of Fame, and back-of-house operations at Spectrum Center. Through the CRVA's sales and marketing arm, Visit Charlotte, additional brands supported include the Charlotte Regional Film Commission and three Visitor Info Center locations.

The Charlotte MSA sees approximately 30 million annual visitors. In 2022, 30.6 million visited Charlotte. 41% of visitors stayed overnight, with an average stay length of 2.4 nights⁵.

Of those visitors who stay overnight in Charlotte, 52% are visiting friends and family as their primary reason for being in the region; 37% come to the region for specific activities (concerts, events, festivals, attractions, culinary, shopping); and 9% come to the region for business.

49% of visitors reported engaging in one or more outdoor recreation activities⁶.

The average travel party size is 2.6 people. **Visiting travel parties spent, on average, \$395 a day and \$1,541 total on their trip.** The typical Charlotte MSA overnight visitor is:

- Married
- Average age is 43 years old
- 34% Household income of \$75K+
- 44% traveled with children
- Was from: North Carolina (32%); South Carolina (11%); Florida (8%); New York (7%); Georgia (5%); Virginia (4%)⁷

Visitor surveys found that 70% of overnight travelers were very satisfied with their overall trip experience. The CRVA 2023 Media Market Perception Study found that **34% of visitors positively associated Charlotte with outdoor recreation.**

Tourism is a core strategy for the region, and widely supported by residents. In a CRVA Research 2023 Resident Reputation Survey, 90% of respondents agreed that "I feel Charlotte benefits from having visitors." 85% of respondents agreed that "Tourism can be one of the most important industries for a community." And 84% agreed that "Improving visitor activities in Charlotte is a wise idea."

⁵ Source: Longwoods International, 2021 Travel USA® Overnight visitors

⁶ Source: Longwoods International, 2021 Travel USA® Overnight visitors

⁷ Source: Longwoods International, 2021 Travel USA® Overnight visitors

Charlotte MSA Tourism Industry – Feedback from Tourism Industry Conversations

CRVA and area tourism officials speak highly of the Whitewater Center and what it means to the Charlotte MSA region:

- “When you have an asset like the Whitewater Center that is one of a kind, there is nothing else like it in the USA, nothing that really compares.”
- “The Whitewater Center is a singular asset in region.”
- “We tout the Whitewater Center as a competitive advantage.”
- “It is a truly special place.”
- The facility has a real “cool factor.”

The Whitewater Center really has to be seen or experienced to be fully appreciated: “It is one of those “see to believe’ moments. The second you see it all – the rapids, zipline and everything else – it blows your mind and takes your breath away. And you have food, craft beer, a great environment and it is dog and family friendly.”

Historically, interview respondents commented that Whitewater helped give Charlotte a visitation driver that it sorely needed during a time that region was struggling to identify who they were or wanted to be as a city (approximately 2005-2010). The economic downturn hit Charlotte harder than a lot of other Tier 2 cities. The Whitewater Center opened in 2006-2007 and invested in the region during tough times.

The Whitewater Center is a “...key part of the concentration of assets that create a strong visitor economy.” CRVA points out on their website that, “The benefits of a strong visitor economy reach across the Charlotte community, including employment opportunities, local business support, visitor spending and increased quality of life.”

Whitewater, in particular, has become really reliable. “People know and expect high-quality events.” Our interview respondents also remarked on Whitewater’s four season, evergreen appeal, and that visitors and locals can make spur of the moment decisions to visit and just do a trail or walk their dog.

Some interview respondents commented that Whitewater illustrates why continuing to preserve green spaces and prioritize outdoor recreation is so important. Neighboring counties see a “halo effect” from the Whitewater Center. In Gaston County for instance, mobile device tracking from Zydeco for 2022 found a crossover of visitors to Whitewater Center and other sites in Gaston County. There was a 40% cross-over of Whitewater visitors for other outdoor attractions in Gaston. There were 8% of Whitewater visitors who used accommodations in Gaston County. For food, 12% of Whitewater visitors dined in Gaston County and 9% of people made retail purchases in Gaston County.

Interview respondents commented on how localities, and the region as a whole, benefits from the overall strength of the Whitewater brand identity. Gaston County, as one example, has seen how aligning their identity with the Whitewater Center’s emphasis on outdoor lifestyle has positioned the region as “a premier outdoor visitor destination.”

A Review of Outdoor and Tourism Related Economic Impact and Contribution Studies and Relevant Research on the Industries

Current State of Industry - Nationally and in NC

The U.S. Bureau of Economic Analysis (BEA) found that outdoor recreation accounted for \$1.1 trillion in gross economic output, representing 2.2% of gross domestic product (GDP) in 2022, the most recent year for which data is available. The industry provided jobs to almost 5.2 million people who earned more than \$226.3 billion dollars across the United States⁸.

A pre-pandemic report from the Outdoor Industry Association (OIA) found that American consumers spent more on outdoor recreation than on pharmaceuticals and fuel combined. The impact of outdoor recreation on America's economy nearly equaled that of hospital care. Consumer spending on outdoor recreation totaled \$887 billion in 2017, including products as well as trip and travel spending. That amount directly supported 7.6 million American jobs and generated \$125 billion in federal, state and local tax revenue. The vast majority of the \$887 billion, (\$702.3 billion), was for trip and travel spending on such items as airfare, lodging, tickets, lessons, food, and more.

A 2024 research report commissioned by *Visit North Carolina* found that in 2023, North Carolina welcomed nearly 43 million visitors from across the United States, ranking No. 5 in domestic visitation behind California, Florida, Texas and New York⁹.

A 2022 report from the National Outdoor Recreation Roundtable (ORR) estimated the economic contribution of outdoor recreation in North Carolina as \$14.6 billion. ORR describes itself as the nation's leading coalition of outdoor recreation associations representing the more than 110,000 outdoor businesses in the recreation economy and the full spectrum of outdoor-related activities. ORR further estimated the outdoor recreation industry accounted for 147,000 jobs in North Carolina in 2022 and included 2.9% of all employees in the state.

Projections and Trends

The 2024 Outdoor Participation Trends Report from the Outdoor Industry Association (OIA) and Outdoor Foundation (OF) found that the outdoor recreation participation base grew 4.1% in 2023, to a record of 175.8 million participants, a number that represents 57.3% of the United States population.

This represented an increase across demographic groups as even more new and more casual participants were beginning activities such as camping, hiking, biking, and more. The report

⁸ See <https://www.bea.gov/news/2023/outdoor-recreation-satellite-account-us-and-states-2022>

⁹ See <https://partners.visitnc.com/economic-impact-studies>

found that over 22 million more Americans were participating in outdoor recreation activities in 2023 than were participating in 2019.

Over half of American women participated in outdoor recreation in 2023, for the first time ever. Among the most actively participating cohort of adults included members of the LGBTQ+ community. Outdoor recreation participants are continuing to become more ethnically and racially diverse although most participants (69.7%) are white, while 10.3% are Black, 13.4% Hispanic, 5.3% are Asian or Pacific Islander, and 1.4% identify as people with other ethnic/racial origins. In 2023, 7.7 million Americans tried one or more outdoor recreation activities for the first time¹⁰.

Of note, the OIA defines “core” outdoor recreation participants as those who participate in any outdoor recreation activity more than 51 times a year. The number of core participants nationally has been in a slight decline, with 88.4 million “core” participants in at least one outdoor activity in 2023, down from 99.4 million core participants in 2019. However, the numbers of overall participants and casual and first-time participants continues to rise. The decline in core participants may be more of a function of societal and economic trends producing increased time constraints rather than a decline in serious interest in outdoor recreation.

In North Carolina, visitation numbers are trending significantly upwards from 2022 to 2023 with spending by domestic and international visitors to North Carolina at \$35.6 billion in 2023 (a 6.9 percent increase). The report estimated that visitors to the state generated nearly \$4.5 billion in federal, state and local taxes in 2023 (a 5.8 percent increase from 2022)¹¹.

Impact and Contribution Studies – Models and Lessons

VTCECE reviewed several studies and reports to affirm standards for methodological approaches to performing this type of analysis. A contribution study using input output modeling is a commonly used method. Many studies used per person spending estimates and input-output (I-O) modeling, relying on data from the Bureau of Economic Analysis (BEA). IMPLAN is a widely used I-O software. The IMPLAN model calculates effects of expenditures on economic output (total dollars generated within the economy), value added to GDP, jobs, labor income, and tax revenue. Each of the categories in the input-output model are broken into direct and secondary economic effects.

Direct effects measure the economic activity of industries directly supported by consumer spending, such as hotels, retail stores, recreation services, and restaurants. Secondary economic effects are the corresponding shifts in the economy due to the initial infusion of money (i.e., the direct effect), and are further categorized as either indirect or induced effects. Indirect effects represent the impact on the industries that support those that fell under the

¹⁰ See <https://outdoorindustry.org/press-release/outdoor-participation-hits-record-levels-for-ninth-consecutive-year/>

¹¹ See <https://www.commerce.nc.gov/news/press-releases/2024/05/21/nc-extends-its-growth-spurt-visitor-spending-rises-no-5-us-visitation>

umbrella of direct effects. For example, restaurants might be one of the industries directly affected by consumer spending. Some portion of increased spending at restaurants might produce increased orders from restaurant suppliers such as ranchers or growers. Those agriculture industries indirectly benefited from the outdoor recreation activity.

Induced effects measure the effects of employee spending. Employees who worked in the industries directly and indirectly affected by recreational expenditures spend their wages on goods and services in the regional economy. For instance, if a parks employee spent their paycheck on rent, gas, and groceries, this benefited local business and the regional economy—to the extent that this spending remained within a particular region. Depending on the extent of connectivity in the regional economy, these economic effects potentially circulated throughout the economy numerous times before the dollars finally left the region.

Many studies rely on user or visitor spending estimates as one component of the analysis. In most instances, surveys are used to develop spending profiles for trail or site users. Such instruments quantify spending patterns and habits and measure visitor use patterns. This helps make the spending estimates much more accurate and data based.

In addition to user or visitor spending, the organization's expenditures are another set of inputs into a regional economic contribution. Internal data is collected and then categorized to mirror standard industry coding used in many economic modeling tools. These include such areas as personnel expenses (wages and benefits); operating expenses (non-personnel); capital expenditures; maintenance and repair; and other areas.

The consulting group, Fourth Economy, conducted a study of the impact of outdoor recreation on a 10-county region in northwest Michigan. The report found that the Outdoor Economy employed 4,712 workers in the Networks Northwest region and contributed 1.15 billion to Gross Regional Product in 2022¹². That study included a baseline analysis of demographic, economic, industry, and spending trends across the 10-county region using Lightcast, as well as Census ACS data to inform population, identity, and economic indicators. They developed a set of criteria for Outdoor Economy industries and reviewed each outdoor industry in terms of employment and Gross Regional Product via Lightcast. The report assessed spending across industries through Esri Business Analyst and Replica. Esri Business Analyst provided data on outdoor activity spending, while Replica provided spending and changes in spending across retail, food and beverage, entertainment & recreation, and airline, hospitality, and car rental. That study also utilized interviews and a survey instrument but did not employ impact modelling.

A 2018 impact study of a proposed Whitewater park in Wisconsin found that the market sizes of whitewater parks varied but that across 10 locations the average daily expenditure for all

12

user types was \$65.97, with sites averaging 44,376 annual visits and an annual expenditure of \$2,927,601.¹³

Impact or contribution analyses can identify how business operations contribute to tax revenues at state and local levels. The IMPLAN software can estimate how the economic activity from industries generates tax collections and break down the total numbers to both state and local portions.

Health and Quality of Life Implications

Quality of life is an increasingly important factor, affecting individual, family, and business location decisions. Quality of life can be defined in different ways. Simply stated, it may be that which makes a place attractive to individuals or households, or those factors that help individuals and families thrive. Research suggests people are willing to pay higher housing prices and even accept lower wages to live in places they think offer a higher quality of life.¹⁴

Every location offers a different mix of advantages and disadvantages. Quality of life can even vary widely within particular places, by neighborhood, zip code, or connections to “opportunity structures,” spatial variations that influence the ways youth, families, and individuals discover, connect with and utilize resources, institutions, and other entities that aid upward mobility.¹⁵

A 2023 study found that quality of life was more important to the economic success of smaller localities than the strength of the business environment. This means that community amenities such as recreation and outdoor opportunities, cultural activities, and excellent services (e.g., good schools, transportation options) are likely bigger contributors to healthy local economies than traditional “business-friendly” measures. A greater quality of life was positively associated with greater population growth, higher employment, and lower poverty rates. These trends became even stronger since the COVID-19 pandemic¹⁶.

A 2018 meta-analysis of nearly 150 research studies found that exposure to nature and green space is associated with numerous health benefits¹⁷. Studies demonstrate that, in addition to

¹³ See chrome-

extension://efaidnbmnnnibpcajpcgclclefindmkaj/https://static1.squarespace.com/static/58efe5c78419c24fe696a016/t/5c5de289fa0d6032b2e8cb85/1549656716728/Whitewater+Park+Economic+Impact+Report+vfinal.pdf

¹⁴ See Albouy, D. (2008). NBER WORKING PAPER SERIES: ARE BIG CITIES BAD PLACES TO LIVE? ESTIMATING QUALITY OF LIFE ACROSS METROPOLITAN AREAS Working Paper 14472 <http://www.nber.org/papers/w14472>

¹⁵ See Galster, G. C., & Killen, S. P. (1995). The geography of metropolitan opportunity: A reconnaissance and conceptual framework. *Housing Policy Debate*, 6(1), 7–43. <https://doi.org/10.1080/10511482.1995.9521180>

¹⁶ See Weinstein, Amanda L., Michael Hicks, and Emily Wornell. “An Aggregate Approach to Estimating Quality of Life in Micropolitan Areas.” *The Annals of Regional Science*, 2023, vol. 70, pp. 447–476.

¹⁷ See Caoimhe Twohig-Bennett, Andy Jones, The health benefits of the great outdoors: A systematic review and meta-analysis of greenspace exposure and health outcomes, *Environmental Research*, Volume 166, 2018, Pages 628–637, ISSN 0013-9351, <https://doi.org/10.1016/j.envres.2018.06.030>. (<https://www.sciencedirect.com/science/article/pii/S0013935118303323>)

economic prosperity, outdoor recreation delivers personal and social benefits on which healthy, happy communities thrive.

Outdoor recreation improves the mental and physical health of residents¹⁸. This may be particularly relevant for young, elderly, and low-income residents, who are those usually the most difficult to reach¹⁹. Access to outdoor recreation—including parks and trails and other small, informal green spaces—has been shown to improve the health and quality of life for groups that historically have been marginalized²⁰.

Research suggests that outdoor recreation contributes to:

- Reduced crime rates.²¹
- Improved educational outcomes for elementary, secondary and post-secondary students, including attention and test scores, retention and high school graduation rates.²²
- Lower long-term individual and public health care costs by reducing stress and obesity rates, improving physical fitness and strengthening social bonds with family and friends.²³
- The largest predictor of a community's health is not the accessibility or quality of clinical care, but rather the social, economic, and physical conditions in which people live. These are considered “upstream” factors, and they shape our environments²⁴.

Among veterans with PTSD, participation in outdoor recreation corresponds with greater levels of well-being²⁵. Kids with attention deficit and related disorders (ADD, etc) experience milder symptoms when they play outside in natural settings.

A 2022 study in the *Journal of Outdoor Recreation, Education, and Leadership* found that a city whitewater park positively contributed to social capital among its users and the community.

¹⁸ See 23. Celis-Morales C, Lyall D, Welsh P, Anderson J, Steell L, Guo Y, Maldonado R, Mackay D, Pell J, Sattar N, & Gill J. (2017). Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ*, 357: j1456; Marselle M, Irvine K, & Warber S. (2014). Examining group walks in nature and multiple aspects of well-being: A large-scale study. *Ecopsychology*, 6(3): 134-147

¹⁹ See Brownson R, Housemann R, Brown D, Jackson-Thompson J, King A, Malone B, & Sallis J. (2000). Promoting Physical Activity in Rural Communities: Walking Trail Access, Use, and Effects. *American Journal of Preventive Medicine*, 18(3): 235-242.

²⁰ See Mitchell R & Popham F. (2008). Effect of exposure to natural environment on health inequalities: an observational population study. *The Lancet*, 372(9650): 1655-1660; Wolch J, Jerrett M, Reynolds K, McConnell R, Chang R, Dahmann N, Brady K, Gilliland F, Su J, & Berhane K. (2011). Childhood obesity and proximity to urban parks and recreational resources: a longitudinal cohort study. *Health & Place*, 17(1): 207-214.

²¹ See for instance: Kondo, Michelle et al. “Effects of Greening and Community Reuse of Vacant Lots on Crime.” *Urban Studies*, 2016.; Weinstein, Netta et al. “Seeing Community for the Trees: The Links Among Contact with Natural Environments, Community Cohesion, and Crime” *BioScience*, 2015.

²² *Green Cities: Good Health*. University of Washington.

²³ *Green Cities: Good Health*. University of Washington.

²⁴ see for instance, White, S., & Blakesley, S. (2016). Improving Health and Mobility in Clatsop County: A Rapid Health Impact Assessment of the Clatsop County Multi-Use Paved Path Concept. Oregon Health Authority Health Impact Assessment Program and Clatsop County Health Department

²⁵ Vella, E.J. et al. “Participation in Outdoor Recreation Program Predicts Improved Psychosocial Well-being Among Veterans with Post-traumatic Stress Disorder: a Pilot Study.” *AMSUS Military Medicine*, 2013.

The study was intended to examine the potential of a city whitewater park in helping to mitigate the decline of social capital in the United States in recent decades. Park users both contributed to and gained from access to resources through their participation in recreational paddling (enhanced social networks, trust, and norms of reciprocity)²⁶.

Outdoor recreation assets and activities can positively impact business attraction and retention as well – communities with outstanding recreational amenities—are more likely to attract and retain highly skilled, educated and entrepreneurial workers, as well as companies²⁷.

About half of the current national workforce is comprised by Millennials and Generation Z – those aged 18-42. This age group values factors such as vibrancy, flexibility, diversity, connection, and social and environmental responsibility in their work and life choices²⁸.

Since the pandemic, that age group, especially those college graduates, cite declining affordability and the greater acceptance of remote work as reasons to move away from or to not locate in larger urban metros. In addition, Stanford economist Rebecca Diamond, lists the increased attractiveness of middle-tier cities. Her work has found that since 2000, “college graduates have increasingly been moving toward high-amenity cities and away from the highest-wage ones.”²⁹

A study of rural counties from 2010-2016 found that those smaller rural counties that lacked a strong recreational economy or asset lost 19.9 residents per 1,000, while those that had recreation-based economies gained 1.3 residents per 1,000³⁰. Talent attraction and retention is critically important to economic growth and outdoor recreation may play a key role in regional development strategies.

²⁶ Schmidt, K, et al. (2022). The Social Benefits of a City Whitewater Park. *Journal of Outdoor Recreation, Education, and Leadership*, Vol. 14, No. 1, pp. 18–32, <https://doi.org/10.18666/JOREL-2022-V14-I1-11407>

²⁷ See NRPA (2018), PROMOTING PARKS AND RECREATION’S ROLE IN ECONOMIC DEVELOPMENT

²⁸ IEDC (2023). ‘Live, Work, and Play’: Attracting and Retaining Tomorrow’s Talent. See https://www.iedconline.org/edrp-reports/archive/live-work-and-play-attracting-and-retaining-tomorrow-s-talent/?back=edrp_publications

²⁹ IEDC (2023). ‘Live, Work, and Play’: Attracting and Retaining Tomorrow’s Talent. See https://www.iedconline.org/edrp-reports/archive/live-work-and-play-attracting-and-retaining-tomorrow-s-talent/?back=edrp_publications

³⁰ See “Recreation Counties Attracting New Residents and Higher Incomes.” Headwaters Economics, January 2019.

Survey

In collaboration with the Whitewater Center, the Virginia Tech Center for Economic and Community Engagement (VTCECE) administered a survey to collect data from individuals who have previously visited the Whitewater facilities in Charlotte, North Carolina. This survey was administered to better understand the impacts that the Whitewater Center has on the wider Charlotte MSA. Whitewater Center solicited online survey responses from recent visitors through their mailing lists over five weeks, May 6th – June 10th. During this period, VTCECE collected 285 completed surveys and 209 partially completed surveys.

Table 8. Survey Completion Breakdown

Completed Surveys	285
Incomplete Surveys	209
Total Responses	494
Completion Rate	58%

Respondent Demographics

Most respondents (60%) live within the Charlotte MSA. Another 13% of respondents live within driving distance and made single day trips to visit the Whitewater Center. This means that out of the survey respondents, 27% stayed in the Charlotte MSA for at least one night while visiting the Whitewater Center. Figure 2 shows a full breakdown of nights stayed in the region by respondents.

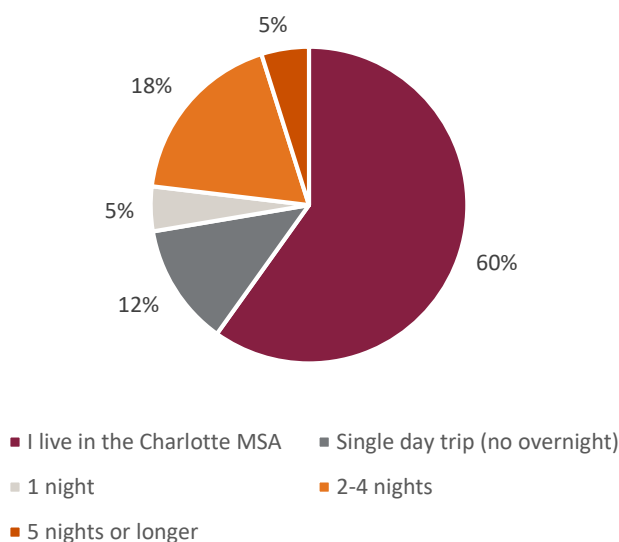


Figure 2. Length of stay in the Charlotte MSA while visiting the Whitewater Center

Source: Whitewater Visitor Survey, n-494

The high concentration of local visitors aligns with feedback from Whitewater that a majority of their visitors are people that live in the MSA and use the Whitewater Center for its hiking and

biking trails, as well as its newly opened dog park and youth play area. Additionally, the survey respondents show that a sizeable chunk of visitors who lived outside the region (40%) said that they visited the Charlotte MSA to visit the Whitewater Center, with another 30 percent saying the primary reason for visiting the region was for vacation or to visit family.

Whitewater has a wide variety of guests ranging from competitive athletes coming to use their facilities to train to local residents who visit for summer concerts. This wide range shows that Whitewater has a wide appeal to many different types of visitors. Figure 4 shows the exact breakdown of how different respondents self-identified.

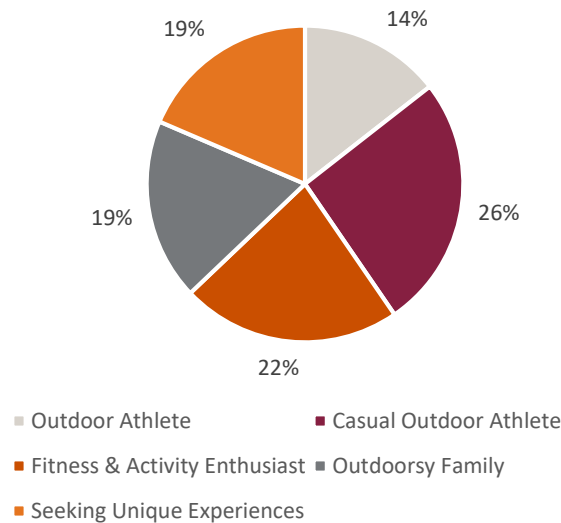


Figure 3. Level of Outdoor Experience

Source: Whitewater Visitor Survey, n-494

Due to the wide range of guests that visit the Whitewater Center, the group's size can vary, but the most common is 1-3 people. On average, guests visit 14 times a year. However, this varies widely depending on proximity to the Center. Guests that live in the Charlotte MSA reported that they visit frequently as they use the trails around the facility to run. Some answers even estimated they visit the facility over 100 times a year.

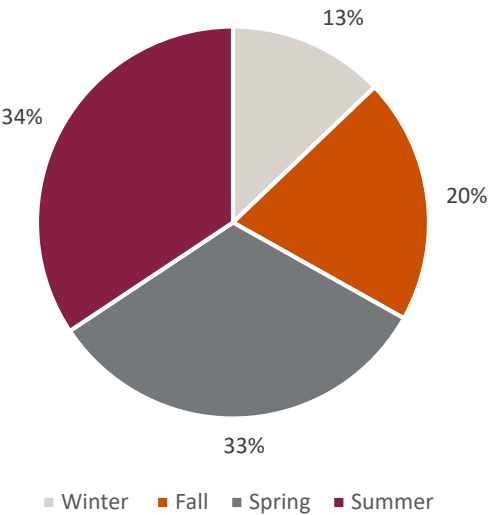


Figure 3. Season of Visit
Source: Whitewater Visitor Survey, n-494

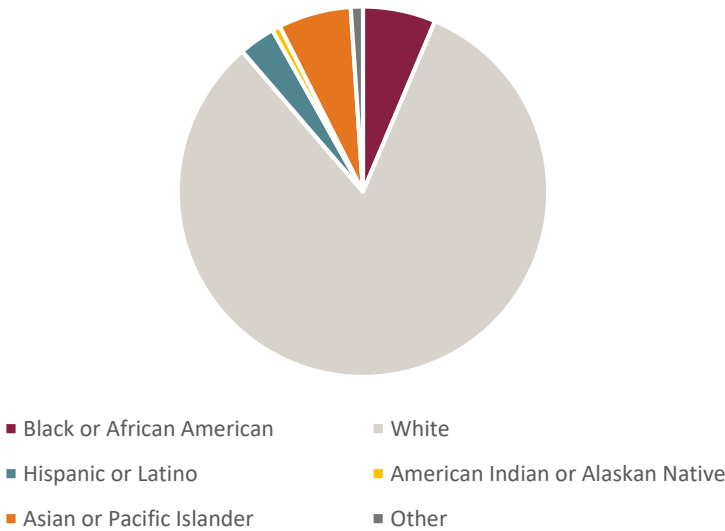


Figure 4. Race of Visitors
Source: Whitewater Visitor Survey, n-494

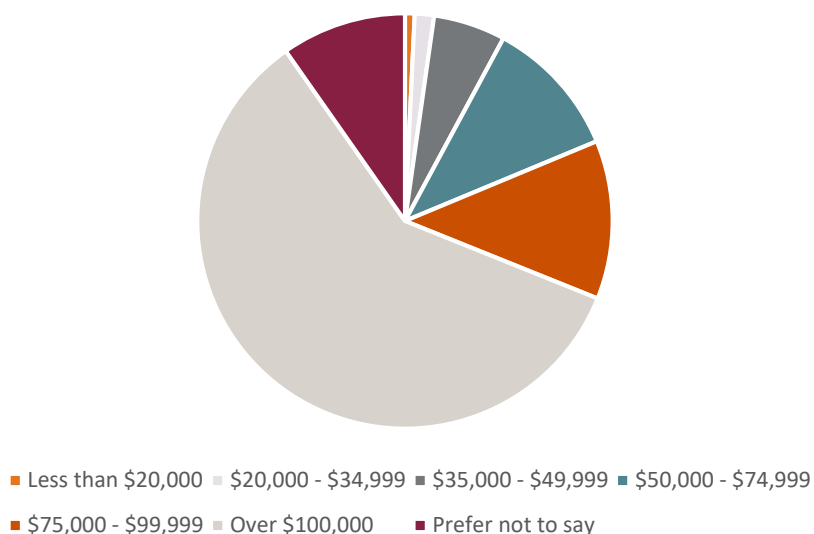


Figure 5. Household Income of Visitors
Source: Whitewater Visitor Survey, n-494

Key Findings

The Whitewater Center plays a measurable role in bringing visitors to the Charlotte region. **63% of survey respondents stated that the Whitewater center had some level of influence in their decision to visit the region.** Table 9 shows the full influence breakdown. Additionally, 52% of respondents stated they had visited the Whitewater Center specifically to attend a race, competition, community event, or festival.

Table 9. How did the Whitewater Center influence your choice to visit the area?

Answer	Count	Percent
No influence	99	36.8%
Limited influence	17	6.32%
Moderate influence	33	12.27%
Important influence	33	12.27%
Very important influence	87	32.34%

Source: Whitewater Visitor Survey, n-494

The Whitewater Center plays a role in the Charlotte MSA as a tourist attraction, gathering space, and recreation park. The survey collected feedback on the perception of the impacts that the Whitewater Center has on the following categories: recreation, quality of life, environment, and economy. Survey respondents overwhelmingly vouched for Whitewater’s positive impact in all these categories. **With Whitewater increasing the opportunities and access to outdoor recreation and outdoor facilities, 81% of respondents shared that Whitewater has influenced their interest in spending time outdoors and participating in outdoor recreation events.** According to survey respondents:

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

- It is a great way to keep the family healthy and outside. I love that it is a great bonding experience.
- Better living.
- Quality of life is a big category. It's a great place to enjoy an active day!
- Upped my fitness level and helps decompress.
- We love having another dog park option and the ability to visit for events and different activities without the cost.
- Having access to the river, allows for great cross-generational time together, best ice-skating option in the area, etc.
- Emotional and fitness growth. A way to bond with my grandsons. It makes me the fun grandmother who can do all the activities with them. I've gotten them all passes this year. And I bring their dog. Who doesn't like puppy love?

Table 10. Reported Impacts from Whitewater

Statement	Significantly Negative	Somewhat Negative	Neutral	Somewhat Positive	Significantly Positive
Recreation (recreation opportunities or promoting outdoor activities)	1.77%	0%	7.07%	14.84%	76.33%
Quality of life (individual or group health)	1.08%	0.36%	6.81%	28.32%	63.44%
Environment (access to green space and parks)	0.72%	1.09%	7.97%	22.83%	67.39%
Economy (jobs, dollars spent, tourism)	0.73%	1.45%	15.64%	34.91%	47.27%

Source: Whitewater Visitor Survey, n=494

Economic Impacts of Tourist and Operational Spending

For this analysis, VTCECE examined the impacts of tourist spending, Whitewater operational spending, and annual capital expenses on the Charlotte MSA. Metropolitan Statistical Areas (MSAs) are typically a good proxy for the geography of a region's economy. All data for this analysis was collected through surveys, Whitewater budgets, and some existing tourist spending data. VTCECE cleaned and analyzed the data using a well-respected Input-Output modelling software developed by IMPLAN.³¹

With the tourist, operational and capital spending components combined, VTCECE estimates that Whitewater Center's economic impact on the Charlotte MSA in 2023 was:

- Over \$267 million in economic output generated due to Whitewater
- As many as 2,358 full-time equivalent jobs made and/or sustained
- More than \$158 million contributed to regional GDP
- Over \$7 million in revenue to local governments through sales, meals and lodging, and other taxes

Table 11. 2023 Economic Impact of Whitewater Center on Charlotte MSA

	Total Economic Output Generated	Full-Time Equivalent Jobs Created/Sustained	Contribution to Regional GDP	Contribution to Local and County Taxes
Tourist Spending	\$252,151,785	2,272	\$149,864,176	\$7,018,662
Operational Spending	\$10,736,707	62	\$5,881,692	\$96,940
Capital Investments	\$4,469,845	24	\$2,312,460	\$56,022
TOTAL	\$267,358,337	2,358	\$158,058,328	\$7,171,624

Tourist Spending

Tourist spending is a common way of assessing an organization's economic impact on a region. Whitewater has as many as 1.1-1.2 million visitors annually. Based on survey results and Whitewater records, 40% of those visitors are nonlocal, or "tourists." The survey results also indicate that 63% of those tourists said Whitewater influenced their decision to visit Charlotte. As such, an estimated 294 thousand tourists come to the Charlotte MSA and spend money thanks to the presence of the Whitewater Center.

Table 12 below shows the average tourist spending per trip by category according to two sources: 1) the Whitewater tourist survey and 2) existing tourist spending estimates from the Charlotte Regional Visitors Authority (CRVA). Both data sets tend to reinforce tourist trends and spending habits. On average, tourist parties have about 2-3 individuals (2.6 people according to CRVA). These parties are often families and stay a little over two nights. The CRVA spending

³¹ IMPLAN (2023). <https://implan.com/company/>.

estimates seem slightly lower than the Whitewater multi-day spending estimates, potentially because CRVA incorporated single-day visitor spending with multi-day visitor spending or Whitewater visitors may have higher spending habits.

Table 12. A Breakdown of Tourist Spending

	Single-Day (WW Survey)	Multi-Day (WW Survey)	CRVA Travel Parties Estimates
Lodging	--	\$629	\$586
Dining	\$76	\$414	\$385
Shopping	\$80	\$277	\$231
Recreation or Entertainment	\$90	\$390	\$170
Transportation at Destination	\$50	\$92	\$170
TOTAL	\$295	\$1,802	\$1,541

Based on the survey results, 30% of tourists were single-day and 70% were multi-day. Using the CRVA travel party size of 2.6 people, VTCECE estimated total dollars spent by tourists in the Charlotte MSA. If 294 thousand tourists came to the region for Whitewater, that means 113,046 travel parties contributing money to the Charlotte MSA economy. Table 13 below illustrates the number of travel parties estimated for one-day and multi-day trips, and the total dollars spent annually by tourists by category. VTCECE entered these numbers into the IMPLAN I-O model using the industry codes listed below.

Table 13. Total Tourist Spending Estimates

	Single-Day (33,914 travel parties)	Multi-Day (79,132 travel parties)	IMPLAN Industry Code
Grocery	\$967,227	\$13,382,276	406 Retail Food and beverage stores
Restaurant	\$1,602,776	\$19,358,325	509 Full-service restaurants 510 Limited-service restaurants
Accommodations	\$0	\$49,790,646	507 Hotels 508 Other Accommodations
Camping	\$0	\$4,932,561	508 Other Accommodations
Equipment	\$1,017,420	\$2,242,073	410 Sports Goods
Clothing	\$1,356,560	\$9,730,334	409 Retail Clothing
Souvenirs	\$339,140	\$9,930,011	412 Misc. Retail
Transportation	\$1,695,700	\$7,274,077	399 Wholesale Petroleum
Entertainment	\$3,035,303	\$30,889,176	501-505 Recreation
TOTAL	\$10,014,126	\$147,529,480	

Whitewater tourists spend approximately \$150 million annually in the Charlotte MSA. Some of that money immediately leaks out of the region, but a significant sum circulates to generate additional economic activity totaling **\$252 million in economic output**. Whitewater tourists

contribute to **2,272 full-time equivalent jobs** in the region and over **\$149 million in regional GDP**. In addition to this economic impact, tourist spending generates over **\$7.0 million in local and county taxes**.

Table 14. Economic Impacts from Whitewater Tourists

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	1,676	\$57,045,225	\$80,049,561	\$130,260,745
2 - Indirect	277	\$20,455,726	\$32,911,004	\$60,737,560
3 - Induced	319	\$19,787,085	\$36,903,611	\$61,153,481
	2,272	\$97,288,037	\$149,864,176	\$252,151,785

Operational Revenue and Spending

As described before in the review of previous impact studies section (page 11), the Whitewater Center’s operational spending can have a significant economic impact on the Charlotte metropolitan area. With new money from tourists and other sources coming into the region and then being spent on local services and commodities to support the operations of the center, Whitewater supports other businesses and job growth throughout the region.

To understand this impact in detail, Whitewater gave VTCECE a comprehensive breakdown of annual revenue and operational spending for the past three years, 2021-2023. This period allowed VTCECE to account for changes in revenue and spending due to the 2020 COVID pandemic. The guest count for Whitewater, for instance, hit a peak of 1.2 million guests in 2021 due to social distancing guidelines. In 2022 and 2023, that number settled slightly at 1.1 million. VTCECE categorized revenue and spending into local and nonlocal categories to understand what new money was being spent locally, or within the Charlotte MSA. A more detailed explanation of local versus nonlocal categorization can be found in Appendix B.

Of all Whitewater revenue, VTCECE identified about 54% as coming from nonlocal sources, mostly tourists³². As seen in Figure 6, total operational spending on local purchases was well below nonlocal revenue. Spending was also below the 63% threshold that can be attributed to money being in the region because of Whitewater’s presence in the region; note, in the visitor survey, 63% of tourists said Whitewater influenced their decision to visit Charlotte. In other words, it is reasonable to say that all local spending by Whitewater is new money to the region, and this new money is here because of Whitewater. It is also important to note that Whitewater’s local spending has increased over time, leading to greater economic impacts for the region.

³² When looking at revenue sources by zip code, about 54% of spending on center passes, food & beverage, and retail were from nonlocal visitors. To be conservative, VTCECE applied this 54% to all other revenue categories including races, facility rentals, and specialized sport fees. The only exception was parking; many locals purchase only parking passes to use the Whitewater trails, so only 40% of parking pass purchases amounted to nonlocal dollars.

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

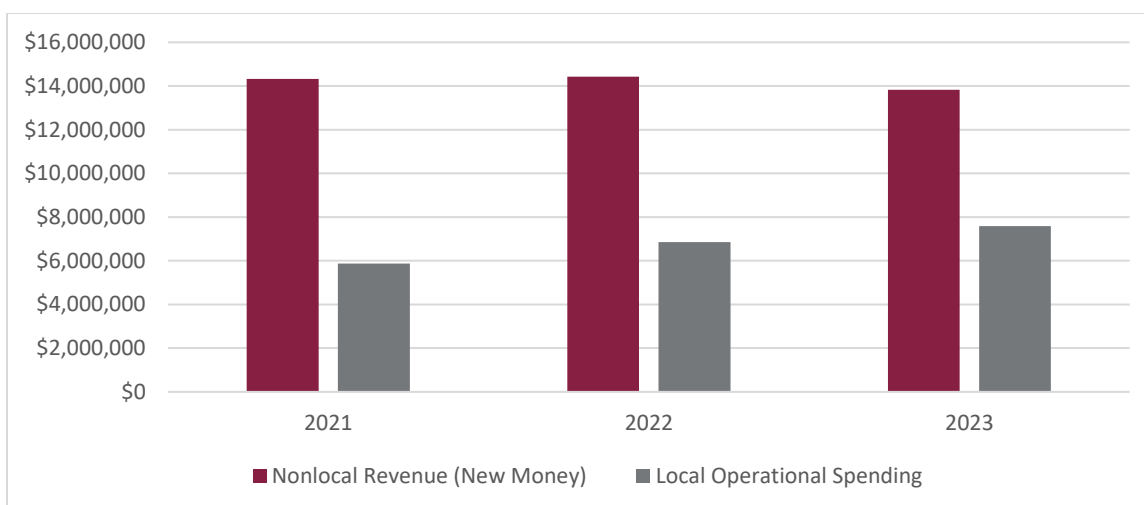


Figure 6. Whitewater Center Revenue and Spending that can contribute to the local economy

Source: Whitewater Center Budget

VTCECE faculty then split local spending into different IMPLAN industry categories. Table 15 shows what data was put into the IMPLAN I-O model. Tables 16-18 show the impact numbers by year developed through the model. For instance, in 2023, Whitewater spent almost \$7.6 million in the Charlotte MSA. This results in a total economic output of \$10.7 million, 62 full-time equivalent jobs, and \$96,940 in local tax revenue.

Table 15. Whitewater Operational Spending in Charlotte MSA by Industry Category

	2021	2022	2023	IMPLAN Industry Codes
Event Costs	\$414,395	\$601,073	\$643,162	507 Hotels 500 Promoter of performing arts, etc.
Food & Beverage	\$1,825,413	\$1,909,622	\$1,982,946	106 Breweries 398 Grocery and related product wholesale
Insurance	\$31,275	\$37,180	\$42,928	444 Insurance Carriers, except direct life
Marketing	\$375,532	\$440,597	\$436,432	465 Advertising, public relations, and related services
Professional Fees	\$67,791	\$96,638	\$170,612	473 Business support 455 Legal services
Repair & Maintenance	\$904,633	\$1,087,900	\$1,587,327	476 Services to buildings 515 Commercial and industrial equipment repair and maintenance 405 Building materials and supply stores 461 Other computer related services, including facility management 463 Environmental and technical consulting services 60 Maintenance and repair construction on nonresidential structures
Retail Inventory	\$263,713	\$389,863	\$304,089	396 Other durable goods merchant wholesalers

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

Supplies	\$610,066	\$697,124	\$726,446	393 Professional and commercial equipment and supplies 519 Dry-cleaning services 477 Landscape services
Utilities	\$982,070	\$1,101,156	\$1,139,883	533 Local government utilities 475 Security services
Other Expenses	\$401,165	\$493,030	\$555,869	510 Limited-Service Restaurants 507 Hotels 526 Postal service 421 Couriers and messengers
Total	\$5,876,051	\$6,854,184	\$7,589,693	

Table 16. 2021 Whitewater Operational Spending Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	26	\$1,405,541	\$2,266,740	\$4,141,190
2 - Indirect	10	\$721,451	\$1,116,608	\$2,030,725
3 - Induced	9	\$524,403	\$970,807	\$1,612,844
	45	\$2,651,396	\$4,354,154	\$7,784,759

Local and County Tax Revenue = \$48,759

Table 17. 2022 Whitewater Operational Spending Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	32	\$1,589,375	\$2,517,529	\$4,839,870
2 - Indirect	12	\$891,426	\$1,414,212	\$2,594,681
3 - Induced	10	\$633,987	\$1,182,296	\$1,959,111
	54	\$3,114,787	\$5,114,037	\$9,393,663

Local and County Tax Revenue = \$78,279

Table 18. 2023 Whitewater Operational Spending Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	36	\$1,867,025	\$2,911,704	\$5,537,248
2 - Indirect	13	\$1,009,347	\$1,598,431	\$2,926,730
3 - Induced	12	\$735,473	\$1,371,557	\$2,272,729
	62	\$3,611,846	\$5,881,692	\$10,736,707

Local and County Tax Revenue = \$96,940

Local Spending on Capital Investments

Capital investments are often a one-time expenditure and can vary from year to year. VTCECE therefore considered capital investments separately in this analysis. Moreover, because Whitewater's facility is so unique, it requires very niche architectural and engineering expertise that often come from across the United States, if not the world. Local spending, therefore, can be significantly less. Overall, Whitewater continues to grow and invest in its Charlotte site as

seen in Table 19. Based on detailed budget data from Whitewater, VTCECE estimated local spending by category and matched each category with IMPLAN industry codes.

Table 19. Whitewater Local Spending on Capital Investments

	%Local	2021	2022	2023	IMPLAN Industry Codes
Building	60%	\$636,589	\$538,258	\$231,163	55 Construction of new commercial structures, including farm structures 405 Building materials and supply stores
Furniture & Fixtures	5%	--	\$100	\$7,743	371 Custom architectural woodwork and millwork
Land	100%	--	\$241,177	\$1,411,103	447 Other real estate
Land Improvements	30%	\$148,531	\$320,068	\$591,159	55 Construction of new commercial structures, including farm structures 477 Landscape and horticulture services
Vehicles	50%	\$21,549	\$28,198	\$46,190	402 Retail - Motor vehicle and parts dealers
Total		\$806,669	\$1,127,800	\$2,287,358	

Table 20. 2021 Whitewater Capital Investment Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	5	\$295,905	\$319,576	\$575,447
2 - Indirect	1	\$72,879	\$119,072	\$219,431
3 - Induced	1	\$90,916	\$168,298	\$279,583
	7	\$459,699	\$606,946	\$1,074,461

Local and County Tax Revenue = \$12,876

Table 21. 2022 Whitewater Capital Investment Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	7	\$412,869	\$535,993	\$983,153
2 - Indirect	2	\$150,326	\$256,474	\$483,982
3 - Induced	2	\$145,680	\$271,650	\$450,117
	12	\$708,875	\$1,064,117	\$1,917,252

Local and County Tax Revenue = \$28,350

Table 22. 2023 Whitewater Capital Investment Economic Impacts

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	13	\$574,189	\$1,049,415	\$2,196,607
2 - Indirect	6	\$442,519	\$775,809	\$1,465,894
3 - Induced	4	\$261,289	\$487,236	\$807,345
	24	\$1,277,997	\$2,312,460	\$4,469,845

Local and County Tax Revenue = \$56,022

Quality of Life and Other Social Impacts

The Whitewater Center provides health, social, and economic benefits to individual users, and in this section, we describe a conservative annual estimation of the economic value of social and health impacts to individual Whitewater visitors within the Charlotte MSA as at least \$15.8 million annually.

Recreational Opportunities

The Whitewater Center offers a variety of recreational activities, enhancing the quality of life for residents and visitors alike. The Center provides opportunities for hiking, biking, water sports, and other outdoor activities, which are crucial for promoting physical health and well-being. Survey respondents overwhelmingly reported positive impacts on recreation, with 76.33% indicating that the Center significantly promotes outdoor activities. The Center provides recreational access to visitors as well as area residents, and new arrivals. A 2021 report found that four in five U.S. adults indicate access to high-quality parks and recreation is an important factor when choosing a place to live, while over half of survey respondents indicated that having such access is “extremely” or “very” important to them³³.

Environmental Benefits

Access to green spaces and outdoor recreation areas like the Whitewater Center is linked to numerous environmental benefits. These include preserving natural habitats, promoting biodiversity, and offering residents a place to engage with nature, which has been shown to improve mental health. According to survey results, 67.39% of respondents noted a significantly positive impact on access to green spaces due to the Whitewater Center.

Social and Health Benefits

Outdoor recreation has been linked to improved mental and physical health. The Whitewater Center provides a venue for activities that reduce stress, promote physical fitness, and foster social interactions. Survey data indicated that 63.44% of respondents believed the Center positively impacts quality of life through health benefits. Studies show that outdoor recreation can also lead to lower healthcare costs by reducing obesity rates and improving overall physical fitness.

Visitors to the Whitewater Center who participate in one or more activities are pursuing an active lifestyle, associated with significant health benefits. Such participation can reduce the incidence of chronic conditions and support enhanced mental and physical well-being.

Time spent in outdoor pursuits generates economic returns related to the mental health of participants. A number of studies have found that time spent in nature improves mental

³³ National Recreation and Park Association (2021). National Engagement With Parks Report. Accessible at <https://www.nrpa.org/publications-research/research-papers/Engagement/>

health³⁴. Poor mental health imposes major economic costs and natural areas, and outdoor recreation amenities have an economic value as a service. This health services value has been estimated at \$6 trillion per year globally, or 8 % of global GNP³⁵.

A 2022 study found that natural outdoor recreation areas increased economic productivity, and reduced direct healthcare costs, by a total of 2.35 % of global GNP or \$2.1 trillion dollars per year³⁶. The study also estimated that the therapeutic effects of nature for mentally unhealthy park visitors are 2.5 times greater than preventive effects for mentally healthy visitors.

A 2023 report from The Trust for Public Land found that cities with the highest rankings in terms of park and recreation access are healthier places to live. In the higher scoring cities (cities with more outdoor spaces, parks, recreational sites), people are on average 9 percent less likely to suffer from poor mental health, and 21 percent less likely to be physically inactive than those in lower ranking cities. This is true even after controlling for race/ethnicity, income, age, and population density³⁷.

A closer proximity to parks and outdoor spaces is associated with lower obesity rates and improved health in both young people and adults. Structured activities in close-to-home parks has been found to be associated with a rise in physical activity³⁸. Beyond those with immediate regular proximity to Whitewater, the act of visiting the Center has positive benefits. One study conducted in 2021 found that visiting green spaces was linked to better mental and physical health and less loneliness³⁹.

In addition, individuals who spend more time in nature display enhanced cognitive functioning and attention and reduced stress. Those people are less likely to exhibit depression or to experience anxiety disorders. They are more likely to report high levels of happiness and well-being⁴⁰.

³⁴ See for instance Bratman et al., 2019; Deroose et al., 2021; Kondo et al., 2020; Kotera et al., 2022; Marselle et al., 2021; South et al., 2020; Taye et al., 2021; White et al., 2021; Zhang et al., 2021

³⁵ See Buckley et al., 2019

³⁶ See Buckley, R., & Chauvenet, A. (2022). Economic value of nature via healthcare savings and productivity increases, *Biological Conservation*, Volume 272. <https://doi.org/10.1016/j.biocon.2022.109665>

³⁷ Trust for Public Land (2023). The Power of Parks to Promote Health A SPECIAL REPORT. Accessible at chrome-extension://efaidnbmnnnibpcajpcgiclfndmkaj/https://e7jecw7o93n.exactdn.com/wp-content/uploads/2023/05/The-Power-of-Parks-to-Promote-Health-A-Trust-for-Public-Land-Special-Report.pdf

³⁸ Trust for Public Land (2023). The Power of Parks to Promote Health A SPECIAL REPORT. Accessible at chrome-extension://efaidnbmnnnibpcajpcgiclfndmkaj/https://e7jecw7o93n.exactdn.com/wp-content/uploads/2023/05/The-Power-of-Parks-to-Promote-Health-A-Trust-for-Public-Land-Special-Report.pdf

³⁹ Edwards, J. et al (March 1, 2023). Associations of greenspace use and proximity with self-reported physical and mental health outcomes during the COVID-19 pandemic. PLOS-ONE <https://doi.org/10.1371/journal.pone.0280837>

⁴⁰ Larson LR, Hipp JA. Nature-based Pathways to Health Promotion: The Value of Parks and Greenspace. N C Med J. 2022 Mar-Apr;83(2):99-102. doi: 10.18043/ncm.83.2.99. PMID: 35256466.

A 2021 study from the United Kingdom found that time in nature as woodland walks saved the UK £185m a year in mental health costs⁴¹.

Research on trail users has shown that the presence of, access to, and use of trails is associated with increased overall physical activity levels and greater levels of individual perceived health compared to people who don't use trails⁴².

Community and Cultural Impact

The Whitewater Center acts as a community hub, hosting various events, races, and festivals that bring people together, fostering a sense of community and belonging. This contributes to social capital by enhancing social networks, trust, and norms of reciprocity among residents. The Center's role in community engagement is crucial for building a cohesive and vibrant community.

The Center functions as a valuable "third place" and an important part of the region's social infrastructure. Third places are physical spaces in a community where people can gather to connect and share resources, support, and information. They can help support health because they promote social interaction, community trust, and resource and information sharing.

The 2021 American Community Life Survey found that proximity to amenities such as cafés and parks increases neighborliness, feelings of safety, social trust, and positive feelings about the community. Access to these sorts of amenities is linked to higher levels of trust in neighbors and fellow residents. Inhabitants of "high-amenity" areas trust their neighbors more than those living in low-amenity cities and suburbs. Most (56 percent) Americans have a local spot they regularly visit and are more likely than not to recognize other people there. Americans who have a regular community spot and say they see their neighbors there are more likely than those who do not to feel closely connected to their communities⁴³.

Third spaces are a form of social infrastructure. Social infrastructure may be thought of as public and quasi-public spaces and places that support social connection. These kinds of spaces constitute the social infrastructure of a community and are essential to vital, inclusive cities⁴⁴.

⁴¹ Saraey, V., et al (2021). Valuing the mental health benefits of woodlands. Forest Research. Accessible at <https://www.forestresearch.gov.uk/publications/valuing-the-mental-health-benefits-of-woodlands/>

⁴² See Smiley A, Ramos WD, Elliott LM, Wolter SA. Association between trail use and self-rated wellness and health. BMC Public Health. 2020;20(1); and Smiley A, Ramos W, Elliott L, Wolter S. Comparing the Trail Users with Trail Non-Users on Physical Activity, Sleep, Mood and Well-Being Index. Int J Environ Res Public Health. 2020;17(17).

⁴³ See <https://www.americansurveycenter.org/research/public-places-and-commercial-spaces-how-neighborhood-amenities-foster-trust-and-connection-in-american-communities/>

⁴⁴ See Klinenberg, Eric. (2018). Palaces for the people: How to build a more equal and united society. Penguin Random House; and Latham, Alan, & Layton, Jack. (2019). Social infrastructure and the public life of cities: Studying urban sociality and public spaces. Geography Compass, 13(7), 1-15. <https://doi.org/https://doi.org/10.1111/gec3.12444>

Economic Development and Employment

The Whitewater Center not only generates direct employment opportunities but also stimulates job creation in supporting industries such as hospitality, retail, and transportation. This creates a ripple effect that benefits the wider economy of the Charlotte MSA. The presence of such a significant recreational facility can attract businesses and professionals looking for a high quality of life, further driving economic growth. Tourism officials describe the Whitewater Center as a “singular asset”; as “one of a kind”; and as a “competitive advantage”.

Approximate Economic Valuation of Social and Quality of Life Benefits of the Whitewater Center

Earlier in this report, we summarized some of the literature and research on quality of life and health impacts of outdoor recreation. Separate from our focus here on economic impact or economic contribution of the Whitewater Center to the region’s economy, we can approximate a rough economic value of the health, social, and related benefits of outdoor recreation to individuals.

In this section, we can follow the National Forest Service and others who employ “direct use values.” These values estimate the benefits to individuals directly engaged in outdoor recreation activities. The values are based on “access” to a recreation site or to an activity and point towards a total net benefit of doing a recreation activity.

The 2016 Recreation Use Values Database summarized recreation economic value estimates from more than 50 years of published economic research (1958-2015) characterizing the value of outdoor recreation in the US and Canada. It included all documented estimates of recreation economic values whether they are published in journal articles, technical reports, book chapters, working papers, conference proceedings, or graduate theses. Included studies encompass a variety of methods, regional and activity foci, sample sizes, and site characteristics. Altogether, the database contained over 3,000 value estimates derived from 422 published studies.

For more information on methodology and rationale for these approaches, see the 2017 USDA report, *Recreation Economic Values for Estimating Outdoor Recreation Economic Benefits From the National Forest System*.⁴⁵

Our surveys for this project found that 60% of respondents lived within the Charlotte MSA. Based on the annual approximate visitation to the Whitewater Center of 1,000,000 people, that represents a sizeable number of area residents (@600,000). Many annual pass holders and residents visit the center multiple times throughout the year, which is a strength in terms of health impacts. For rough estimates, let’s project conservatively that only one third of those are unique visits per year – so 200,000.

⁴⁵ See chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fs.usda.gov/pnw/pubs/pnw_gtr957.pdf

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

Per the National Forest Service value estimates, biking was estimated in 2017 at \$97.60 per day and other nature related activities at \$70.99. We selected the “other nature related activities” to approximate the range of activities at the Whitewater Center (from walking to rafting or kayaking to climbing). Walking would be a much lower value, but other activities such as paddling would be much higher.

This is the average economic value of recreation benefits (use value) by these activities. The average value estimates an expected economic benefit, conditioned on available information and holding all else constant. The value estimates are based on visits and may be multiplied by the number of activity days a location receives to derive the aggregate social and health benefits of outdoor recreation.

For this project, if there are 50,000 annual bike trail users from within the Charlotte MSA and 150,000 other visitors from within the Charlotte MSA, and assuming (to keep estimates conservative), that these are all single visits, the value estimates are \$4.8 million for bike trail users and \$10.8 million for all others, for a total annual value of \$15.8 million. This is not economic impact, but the economic value to those visitors for their participation in Whitewater Center activities.

Considering that the actual visit days by many of these individuals who are local pass holders may far exceed one in a year, this value is a VERY conservative estimate and a VERY rough approximation. Still, it suggests the social and health value for recreation to individuals in the Charlotte MSA provided by the presence of the Whitewater Center.

Discussion and Implications

The Whitewater Center adds significant value to the Charlotte MSA. In particular, the Center:

- **Provides Job Creation and Employment:** The Center generates direct employment opportunities and stimulates job creation in supporting industries such as hospitality, retail, and transportation, creating a significant ripple effect throughout the local economy. In addition to its role as a major employer, the Center's activities help to support over 2,000 full-time equivalent jobs in the Charlotte MSA.
- **Attracts Visitor Spending:** The Center attracts approximately 1.1 to 1.2 million visitors annually, generating over \$25 million in revenue. Of these visitors, 40% are non-locals, contributing significantly to the local economy through spending on lodging, dining, and other activities.
- **Generates Revenue from Non-Local Sources:** In 2023, the Whitewater Center generated \$13,833,563 in non-local revenue and spent \$7,589,693 locally on operations.
- **Creates Quality of Life and Social Impacts:** Using conservative estimates, the annual economic value of the health and social benefits provided by the Whitewater Center to residents is approximately \$15.8 million. This figure is derived from the direct use values of activities such as biking and other nature-related activities.

It is expected that the value of the quality of life, social, and health impacts of the Whitewater Center for local area residents will continue to increase as Whitewater continues to invest in their facilities to enhance or add new experiences. Many of these experiences enhance the enjoyment of the facility for local users across generations and are likely to encourage even more frequent and recurring visits by area residents. Off Leash, the area for canine companions featuring a pebble beach, dock, and dog wash station, is a great example of this; as is the Wildwoods complex designed for younger children and families. In addition, Whitewater's festivals and events attract locals as well as out of region visitors.

There may be ways that the Whitewater Center can better enhance or understand its value in some of these areas. These include:

- Local spending is incredibly important in demonstrating an economic impact to one's region. Whitewater has already increased its local spending over the last several years, particularly supporting local breweries and other retailers. Continuing to support local suppliers and leveraging those relationships through co-marketing can enhance the overall community-oriented mission of Whitewater. For capital projects, consider instances where in-region vendors or contractors may be workable and prioritize that in project planning.
- We did not attempt to approximate a dollar value for all the quality-of-life impacts of the Whitewater Center. Those might include health-cost savings, social capital and mental well-being benefits, and other measures. Beyond the use-value measure, a more comprehensive assessment of the full social, health, and quality of life contributions of

the Whitewater Center might have value. Much of the research in some of these areas is newer and emerging so the commonly accepted standards of value are not as well-established as the more traditional economic impact and contribution analyses.

- The Whitewater Center is a key provider of green space and outdoor recreation for residents of the Charlotte and Mecklenburg municipalities, in particular. There may be opportunities for greater access to these opportunities for underserved communities, or for those residents who face increased barriers to outdoor recreation. The Whitewater Center might consider partnerships, special events, or pilot initiatives with an explicit focus on equity and access.
- The Whitewater Center might consider engaging with researchers interested in the connections between outdoor activity and health and quality of life impacts, or hosting one or more research-focused events or workshops on this topic, in conjunction with one or more university or research partners.
- There are likely many ways to highlight the Whitewater Center even more as a talent attraction and retention asset for the region. This could include enhanced hosting of young professionals or other groups, as well as events or programs in conjunctions with employers or industry-groups.

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Appendix A: Whitewater Visitor Survey

Whitewater Visitor Survey

Whitewater is working with Virginia Tech's Center for Economic and Community Engagement to evaluate Whitewater's impact on the region. As part of this study, we've created a short survey to help us understand how you engage with Whitewater and the surrounding community. We appreciate if you would take a few moments to take this survey.

Map from the Charlotte Regional Business Alliance If you visited the Whitewater Center from outside of the Charlotte region, how many nights did you stay in the Charlotte region on your trip?

1. I live in the Charlotte MSA
2. Single day trip (no overnight)
3. 1 night
4. 2-4 nights
5. 5 nights or longer

When visiting the Whitewater Center, how many members are typically in your party?

	Number in your party
Number of Adults over 18	<input type="checkbox"/>
Number of Children under 12	<input type="checkbox"/>
Children between 12-18	<input type="checkbox"/>

What are your reasons for visiting the Charlotte region?

	Primary Reason	Secondary Reason	Not Applicable
I came to visit the Whitewater Center (primary reason)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I came to visit other attractions in the region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I came to visit family/friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I came for vacation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I came for a special event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I came for a business trip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

On average, how much money do you spend per visit at the Whitewater Center? (include passes, race registrations, parking, food & beverages, merchandise/gear, and other items purchased from or in the Whitewater Center itself)

1. Less than \$10
2. \$10-\$50
3. \$50-\$150
4. \$150-\$300
5. \$300-\$600
6. \$600 - \$1000
7. \$1000+

Thinking about your most recent trip to the Whitewater Center, how much per person did you spend in the Charlotte Metropolitan region (outside the Whitewater Center)? Use the following categories estimate the dollar value to the best of your ability.

	Amount
Grocery	
Restaurant	
Accommodations	
Camping	
Equipment (rented)	
Clothing	
Souvenirs	
Transportation	
Entertainment	
Other	

How did the Whitewater Center influence your choice to visit the area?

1. No influence
2. Limited influence
3. Moderate influence
4. Important influence
5. Very important influence

Please share your perspective on how the Whitewater Center impacts the region.

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

	Significantly Negative	Somewhat Negative	Neutral	Somewhat Positive	Significantly Positive
Recreation (e.g. recreational opportunities or promoting outdoor activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of Life (e.g. individual and group health)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment (e.g. access to green spaces and parks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economy (e.g. jobs, dollars spent, and tourism)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Have you ever attended a race, competition, community event or festival at the Whitewater Center?

1. Yes
2. No
3. Not sure

Has your experience at Whitewater influenced your interest in outdoor recreation or spending time outside?

1. Yes
2. No

In your opinion, what impact does the Whitewater Center have on the Charlotte region (both positive and negative)?

What is the zip code for your residence?

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

How would you describe your outdoor experience level?

1. Outdoor Athlete
2. Casual Outdoor Lover
3. Fitness & Activity Enthusiast
4. Outdoorsy Family
5. Seeking Unique Experiences

What is the average size of your party when visiting the Whitewater Center?

1. 1-3
2. 4-6
3. 6-9
4. 10+

On average, how many times per year do you visit the Whitewater Center?

During which season(s) do you typically visit the Whitewater Center? (check all that apply)

1. Winter
2. Fall
3. Spring
4. Summer

Please select your race or ethnicity: (Select all that apply)

1. Black or African American
2. White
3. Hispanic or Latino
4. American Indian or Alaskan Native
5. Asian or Pacific Islander
6. Other _____

Please select your annual household income: (Select one) *this information is anonymous*

1. Less than \$20,000
2. \$20,000 - \$34,999
3. \$35,000 - \$49,999
4. \$50,000 - \$74,999
5. \$75,000 - \$99,999
6. Over \$100,000
7. Prefer not to say

Whitewater Season Pass Holder Survey

Whitewater is working with Virginia Tech's Center for Economic and Community Engagement to evaluate Whitewater's impact on the region. As part of this study, we've created a short survey to help us understand how you engage with Whitewater and the surrounding community. We appreciate if you would take a few moments to take this survey.

Do you have a season pass to the Whitewater Center?

1. Yes
2. No


Do you bring guests with you to the Whitewater Center from outside the Charlotte region? Map from Charlotte Regional Business Alliance

1. Yes
2. No

How many times in a 12-month period do you bring a guest with you from outside the region.

1. Never
2. Once in a while
3. About half the time
4. Most of the time
5. Always

How many guests do you typically bring with you?

Please use the slider to indicate the number of guests that typically accompany you.	

How many times do you visit the Whitewater Center in total over the length of your annual pass?

--

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

How has the Whitewater Center impacted your quality of life?

Please share your perspective on how the Whitewater Center impacts the region.

	Significant Negative	Somewhat Negative	Neutral	Somewhat Positive	Significant Positive
Recreation (e.g. recreational opportunities or promoting outdoor activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of Life (e.g. individual and group health)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment (e.g. access to green spaces and parks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economy (e.g. jobs, dollars spent, and tourism)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In what ways has your Whitewater membership been most beneficial to you.

Appendix B: Local versus Nonlocal Categorization Methodology

Revenue

The Whitewater Center provided details of different revenue streams for calendar years 2021, 2022, and 2023. Revenue streams were broken down by:

- Parking
- Retail
- Passes
- Food & Beverage
- Paddlesports
- Land & Adventure
- Canopy Tour
- Facilities
- Outdoor School
- Races
- Other Operating
- Other Non-Operating

Individual transactions with zip codes were provided for parking, retail, passes, and food & beverage. These itemized transactions allowed VTCECE to identify the percentage of dollars coming from visitors living in the Charlotte MSA (local) and those living outside the Charlotte MSA (nonlocal).

When looking at revenue sources by zip code, about 54% of spending on center passes, food & beverage, and retail were from nonlocal visitors. To be conservative, VTCECE applied this 54% to all other revenue categories including races, facility rentals, and specialized sport fees. It is likely that the percentages of nonlocal dollars from these revenue categories is greater than 54%. The only exception was parking; many locals purchase only parking passes to use the Whitewater trails, so only 40% of parking pass purchases amounted to nonlocal dollars. This percentage aligns with the visitor survey, which found that about 40% of visitors were nonlocals.

Spending

The Virginia Tech Center for Economic and Community Engagement (VTCECE) employed multiple approaches to collect the necessary data for the IMPLAN model. Tourist spending data was gathered through surveys, capturing expenditures in categories such as groceries, restaurants, accommodations, camping, equipment rentals, clothing, souvenirs, transportation, entertainment, etc. Respondents estimated their spending based on recent visits within the Charlotte MSA but off the Whitewater grounds. Spending was then broken down by visit lengths: single-day trips, one night, two to four nights, and five or more nights.

This data was supplemented by information from the Charlotte Regional Visitors Authority (CRVA). In 2023, the CRVA reported that tourists spent an estimated \$7.3 billion in the greater Charlotte area. This spending was driven by various events, concerts, and attractions that brought millions of visitors to the city. The economic impact from CRVA's direct activities alone was \$1.08 billion, marking a new regional record. Additionally, it was estimated that the region had 29.3 million visitors, resulting in per-visitor spending of \$246.62.

Data on capital expenditures, revenue, and operational spending were analyzed to understand the flow of Whitewater's revenue and spending. Local spending was defined as transactions with a zip code within the Charlotte MSA, while non-local spending included transactions from outside the MSA. Data on parking, food and beverage, retail, and passes from 2021, 2022, and 2023 were examined.

Operational expenditure data from 2018 to 2023 was reviewed in categories such as events, food and beverage, insurance, marketing, professional fees, repairs and maintenance, retail inventory, supplies, utilities, and other expenses. Using 2018 as a baseline, the breakdown between local and non-local spending was estimated based on industry standards, local economic context, and typical business practices.

Local vs. Non-Local Spending Breakdown:

Events

- Local (70%): Most event-related expenses, such as venue rental, entertainment, staff, decorations, permits, and local marketing, are often sourced locally.
- Non-Local (30%): National or out-of-state entertainment, specialized equipment rentals, and national marketing campaigns.

Food & Beverage

- Local (80%): Fresh produce, catering services, bakery goods, and beverages.
- Non-Local (20%): Packaged snacks, beverages from national brands, and specialized food items.

Insurance

- Local (10%): A small portion involving local insurance brokers.
- Non-Local (90%): Large national companies provide most insurance policies, especially for adventure facilities.

Marketing

- Local (40%): Local print ads, radio spots, flyers, posters, local influencers, and sponsorships.

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

- Non-Local (60%): Online marketing services, national campaigns, and SEO services from specialized agencies.

Professional Fees

- Local (50%): Local attorneys, accountants, and consultants.
- Non-Local (50%): Specialized legal and financial services.

Repairs & Maintenance

- Local (85%): Routine repairs, handyman services, and landscaping.
- Non-Local (15%): Specialized repair services or equipment parts unavailable locally.

Retail Inventory

- Local (30%): Locally made crafts, branded merchandise, snacks, and drinks.
- Non-Local (70%): Branded apparel and outdoor gear from national brands and souvenirs sourced outside the region.

Supplies

- Local (60%): Office, cleaning, and maintenance supplies.
- Non-Local (40%): Specialized equipment and bulk purchases.

Utilities

- Local (95%): Electricity, water, sewer, and waste management.
- Non-Local (5%): National internet and similar services.

Other Expenses

- Local (50%): Local taxes, licensing fees, and local association memberships.
- Non-Local (50%): National association memberships, software subscriptions, and travel expenses for non-local conferences or training.

Appendix C: Implan Modeling

Tourist Spending

Table 23. Annual Whitewater Tourist Spending Estimates

	Single-Day (33,914 travel parties)	Multi-Day (79,132 travel parties)	Total Spending	IMPLAN Industry Code
Grocery	\$967,227	\$13,382,276	\$14,349,503	406 Retail Food and beverage stores
Restaurant	\$1,602,776	\$19,358,325	\$20,961,101	509 Full-service restaurants 510 Limited-service restaurants
Accommodations	\$0	\$49,790,646	\$49,790,646	507 Hotels 508 Other Accommodations
Camping	\$0	\$4,932,561	\$4,932,561	508 Other Accommodations
Equipment	\$1,017,420	\$2,242,073	\$3,259,493	410 Sports Goods
Clothing	\$1,356,560	\$9,730,334	\$11,086,894	409 Retail Clothing
Souvenirs	\$339,140	\$9,930,011	\$10,269,151	412 Misc. Retail
Transportation	\$1,695,700	\$7,274,077	\$8,969,777	399 Wholesale Petroleum
Entertainment	\$3,035,303	\$30,889,176	\$33,924,479	501-505 Recreation
TOTAL	\$10,014,126	\$147,529,480	\$157,543,606	

Whitewater Operational Spending

Table 24. Whitewater Operational Spending in Charlotte MSA by Year and Industry

	2021	2022	2023	IMPLAN Industry Codes
Event Costs	\$414,395	\$601,073	\$643,162	
	\$276,263	\$400,715	\$428,775	499 Independent Artist (2/3)
	\$138,132	\$200,358	\$214,387	507 Hotels (1/3)
Food & Beverage	\$1,825,413	\$1,909,622	\$1,982,946	
	\$365,083	\$381,924	\$396,589	106 Breweries (20%)
	\$1,460,330	\$1,527,698	\$1,586,357	398 Grocery and related product wholesale (80%)
Insurance	\$31,275	\$37,180	\$42,928	444 Insurance Carriers, except direct life
Marketing	\$375,532	\$440,597	\$436,432	465 Advertising, public relations, and related services
Professional Fees	\$67,791	\$96,638	\$170,612	
	\$47,454	\$67,647	\$119,428	455 Legal services (70%)

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

	\$20,337	\$28,991	\$51,184	473 Business support (30%)
Repair & Maintenance	\$904,633	\$1,087,900	\$1,587,327	
	\$180,927	\$217,580	\$317,465	476 Services to buildings (20%)
	\$135,695	\$163,185	\$238,099	515 Commercial and industrial equipment repair and maintenance (15%)
	\$135,695	\$163,185	\$238,099	405 Building materials and supply stores (15%)
	\$45,232	\$54,395	\$79,366	461 Other computer related services, including facility management (5%)
	\$180,927	\$217,580	\$317,465	463 Environmental and technical consulting services (20%)
	\$226,158	\$271,975	\$396,832	60 Maintenance and repair construction on nonresidential structures (25%)
Retail Inventory	\$263,713	\$389,863	\$304,089	396 Other durable goods merchant wholesalers
Supplies	\$610,066	\$697,124	\$726,446	
	\$406,711	\$464,749	\$484,297	393 Professional and commercial equipment and supplies (2/3)
	\$203,355	\$232,375	\$242,149	519 Dry-cleaning services (1/3)
Utilities	\$982,070	\$1,101,156	\$1,139,883	
	\$923,146	\$1,035,087	\$1,071,490	533 Local government utilities (94%)
	\$58,924	\$66,069	\$68,393	475 Security services (6%)
Other Expenses	\$401,165	\$493,030	\$555,869	
	\$40,117	\$49,303	\$55,587	510 Limited-Service Restaurants (10%)
	\$80,233	\$98,606	\$111,174	507 Hotels (20%)
	\$20,058	\$24,652	\$27,793	526 Postal service (5%)
	\$160,466	\$197,212	\$222,348	421 Couriers and messengers (40%)
	\$100,291	\$123,258	\$138,967	534 Other local government enterprises (25%)
Total	\$5,876,051	\$6,854,184	\$7,589,693	

Whitewater Capital Investments

Table 25. Whitewater Capital Investment Spending in Charlotte MSA by Year and Industry

	%Local	2021	2022	2023	IMPLAN Industry Codes
Building	60%	\$636,589	\$538,258	\$231,163	55 Construction of new commercial structures, including farm

Economic Impact and Contribution Study of Whitewater Center in Charlotte NC

					structures (65%) 405 Building materials and supply stores (35%)
Furniture & Fixtures	5%		\$100	\$7,743	371 Custom architectural woodwork and millwork
Land	100%		\$241,177	\$1,411,103	447 Other real estate
Land Improvements	30%	\$148,531	\$320,068	\$591,159	55 Construction of new commercial structures, including farm structures (50%) 477 Landscape and horticulture services (50%)
Vehicles	50%	\$21,549	\$28,198	\$46,190	402 Retail - Motor vehicle and parts dealers
Total		\$806,669	\$1,127,800	\$2,287,358	