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1203 Harbin Hill Rd
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Executive Summary

Doe Mountain Recreation Authority (DMRA) is a recreational facility in Johnson County, Tennessee, offering outdoor activities such as hiking, ATV riding, and wildlife observation. Attracting visitors from 31 states, DMRA has become a crucial economic driver for the county, generating nearly \$1 million in economic output annually. This economic impact analysis, conducted using the IMPLAN program, highlights DMRA's significant contribution to local employment, indirect and induced economic activity, and enhanced tax revenues. DMRA's ability to draw a geographically diverse visitor base underscores its importance in enhancing the economic vitality of Johnson County, Tennessee.

IMPLAN Economic Impact Analysis

1. *Direct Impact:*

- **Employment:** The number of jobs directly supported by Doe Mountain Recreation Authority activities.
- **Labor Income:** Wages and salaries paid to employees directly working for Doe Mountain Recreation Authority.
- **Value Added:** The contribution to Gross Domestic Product (GDP) directly from Doe Mountain Recreation Authority activities. It includes labor income, taxes on production, and profits.
- **Output:** The approximate total of economic activity generated directly by Doe Mountain Recreation Authority, including all sales and revenue.



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2. *Indirect Impact:*

- **Employment:** Jobs supported in the supply chain of Doe Mountain Recreation Authority. These are the jobs supported by businesses that supply goods and services to Doe Mountain Recreation Authority.
- **Labor Income:** Approximate income paid to employees in these supplier industries.
- **Value Added:** The contribution to GDP from supplier industries.
- **Output:** The approximate total in economic activity generated by the suppliers to Doe Mountain Recreation Authority.

3. *Induced Impact:*

- **Employment:** Jobs supported due to the spending of incomes earned in the direct and indirect phases. This spending supports jobs in retail, services, and other sectors.
- **Labor Income:** The approximate Income paid to employees in these induced sectors.
- **Value Added:** The contribution to GDP from industries supported by the spending of wages from direct and indirect employees.
- **Output:** The approximate total in economic activity generated from this consumer spending.

Economic Indicators

1. *Direct Impact:*

- **Employment:** 15 jobs are directly supported.
- **Labor Income:** \$120,015.64 in paid in wages and salaries.
- **Value Added:** \$337,656.74 contributed directly to the GDP.
- **Output:** \$647,030.01 in economic activity generated.

2. *Indirect Impact:*

- **Employment:** 1 job is supported in the supply chain.
- **Labor Income:** \$69,336.20 is approximately paid to indirect employees.
- **Value Added:** \$101,283.71 contributed to GDP from these suppliers.
- **Output:** \$212,731.40 is the approximate total in economic activity generated by the suppliers.

3. *Induced Impact:*

- **Employment:** 0.81 jobs are supported from the spending of incomes earned in the direct and indirect phases.



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- Labor Income: \$41,266.3 in supported induced sectors.
- Value Added: \$76,412.43 contributed to GDP from these induced sectors.
- Output: \$131,215.81 in economic activity generated from this consumer spending.

Total Economic Impact:

- Employment: 17 jobs in total are supported by Doe Mountain Recreation Authority activities.
- Labor Income: \$230,618.15 in wages and salaries are supported.
- Value Added: \$515,352.88 contributed to GDP.
- Output: \$990,977.22 in economic activity generated.

Conclusion:

The economic impact analysis shows that Doe Mountain Recreation Authority significantly contributes to the local economy. The Authority not only supports direct employment and economic activity but also stimulates further economic benefits through indirect and induced effects. In total, the Authority supports approximately 16.85 jobs and generates nearly \$1 million in economic output, showcasing its importance as an economic driver in the region.

Table 1. Economic Indicators

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	14.84	\$120,015.64	\$337,656.74	\$647,030.01
2 - Indirect	1.2	\$69,336.20	\$101,283.71	\$212,731.40
3 - Induced	0.81	\$41,266.31	\$76,412.43	\$131,215.81
Total Output	16.85	\$230,618.15	\$515,352.88	\$990,977.22



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Tax Implications

Tax Revenue Impact by Level of Government Forecast:

- *Sub County General Tax:* This refers to taxes collected at the city level, often used to fund general services and infrastructure projects within the city. The DMRA is estimated to generate approximately \$13,194.60 in general tax revenue for the sub-county (city) annually.
- *County Tax:* Taxes collected at the county level, which support county-wide services and initiatives. DMRA is estimated to contribute around \$15,121.68 in county tax revenue annually.
- *State Tax:* Revenue collected by the state government, which goes towards funding state-wide programs and services. It is estimated to generate approximately \$71,480.24 in state tax revenue annually.
- *Federal Tax:* Taxes collected by the federal government, contributing to national-level expenditures and programs. DMRA is estimated to yield approximately \$60,417.16 in federal tax revenue annually.

Total Tax Revenue Impact Forecast:

- **Total Tax Revenue Generated:** In total, DMRA is estimated to generate approximately \$160,277.32 in tax revenue annually across all levels of government.



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Table 2. Tax Results:

Impact	Sub County General	Sub County Special Districts	County	State	Federal	Total
1 - Direct	\$11,244.60	\$54.26	\$12,885.99	\$60,310.51	\$34,044.26	\$118,539.62
2 - Indirect	\$827.06	\$3.99	\$948.50	\$4,830.43	\$16,124.49	\$22,734.47
3 - Induced	\$1,122.92	\$5.42	\$1,287.19	\$6,339.29	\$10,248.41	\$19,003.23
Total Output	\$13,194.60	\$63.66	\$15,121.68	\$71,480.24	\$60,417.16	\$160,277.32

Findings and Implications

Comparing Passes and Rentals at Doe Mountain Recreation Authority:

This economic impact analysis evaluates the contribution of Doe Mountain Recreation Authority to the local and regional economy based on visitor demographics and activity data. The analysis is grounded on responses from 2,055 participants, representing 421 unique zip codes across 31 states. This diverse geographic representation indicates DMRA's broad appeal and its ability to attract visitors from a wide area, suggesting significant economic potential beyond the immediate local community.

The data reveals visitors comprising both annual and day pass holders, with 39.3% of visitors opting for annual passes and 60.3% for day passes. This split underscores DMRA's appeal to both regular visitors vs. occasional. The high percentage of day pass holders indicates a robust influx of short-term visitors, which is likely to boost local spending on services such as dining, retail, and lodging.

The rental data presents a significant opportunity for expansion. With 2,099 visitors utilizing the facilities for motorized recreation and a total of 58 recorded rentals, indicating a strong relationship between visitor numbers and the demand for motorized rentals. This strong relationship highlights the facility's potential to generate substantial ancillary revenue through its



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rental services. The consistent demand for these rentals indicates that visitors are not only interested in motorized activities but also depend on the facility's equipment, underscoring an important revenue stream. By increasing the availability and variety of rental equipment, the facility can further capitalize on this demand. Expanding the rental offerings could attract more visitors, enhance their experience, and drive additional economic activity through both direct spending on passes and increased secondary spending on rentals. This strategic expansion would position the facility as a key player in the recreational market, fostering sustained growth and profitability.

Overall, DMRA demonstrates a significant economic impact through its ability to attract a large and geographically diverse visitor base, a balanced mix of annual and day pass users, and substantial ancillary revenue from rentals. These factors collectively contribute to the local and regional economy by generating consistent revenue streams and supporting local businesses.

Visitor Demographics & Analysis

Since March, DMRA experienced a notable influx of visitors from across the United States. DMRA has attracted users from 31 different states, demonstrating the wide-reaching appeal and the growing interest in offerings. This report delves into the geographical distribution of visitors, highlighting key states that contribute significantly to the user base.

Visitor Distribution

The data reveals that the majority of visitors come from a diverse array of states. However, three states stand out due to their substantial contribution to our overall visitor numbers:

- North Carolina (NC): 49.7%
- Tennessee (TN): 29.7%
- Virginia (VA): 7.3%

These three states alone account for 87% of total visitors. This indicates a strong regional interest particularly in the southeastern United States.

Out-of-State Visitors

An important observation is that more than 70% of visitors are from states other than Tennessee. This suggests that the reach extends well beyond local boundaries, attracting a national audience. The high percentage of out-of-state visitors underscores the broader appeal and potential to



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capture interest across the country.

North Carolina (49.7%)

North Carolina leads in visitor numbers, contributing 49.7% to the total. This could be due to several factors, such as targeted marketing efforts, word-of-mouth referrals, or a particular alignment of services with the needs and interests of North Carolinians. The significant share from NC suggests that current strategies in this state are effective and should be continued or even expanded.

Tennessee (29.7%)

Tennessee follows with 29.7% of visitors. This substantial proportion indicates a strong presence and interest in TN, potentially due to similar reasons as NC. Understanding the specific drivers of this engagement could help replicate such success in other states.

Virginia (7.3%)

Virginia, with 7.3% of visitors, also plays a crucial role in our visitor demographics. The interest from VA could be leveraged further by increasing engagement through targeted campaigns and partnerships.

Recommendations:

Strengthen Presence in Top States

Given that NC, TN, and VA make up 87% of visitors, it would be strategic to:

- Enhance marketing efforts in these states to solidify DMRA's presence.
- Explore partnerships with local organizations and businesses to further embed their platform within these communities.
- Conduct user feedback surveys specifically targeting visitors from these states to understand their needs better and tailor offerings accordingly.

Expand Outreach to Other States

With visitors from 31 states, there's an evident interest beyond the top three states. To capitalize on this:

- Identify and target the states with growing interest and potential for higher engagement.
- Customize marketing strategies for different regions to appeal to local preferences and cultural nuances.
- Monitor and analyze the performance of outreach efforts to ensure resources are effectively utilized.

Enhance User Experience for Out-of-State Visitors

Given that over 70% of visitors are from out of state, it's crucial to:



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- Provide excellent customer support tailored to the needs of visitors from different states.
- Gather and analyze feedback from out-of-state visitors to continually improve their experience and address any feedback.

Expand Rental Services to Drive Growth

Given the strong correlation between visitor numbers and motorized rentals, it's crucial to:

- Increase the availability and variety of rental equipment to capitalize on demand.
- Attract more visitors by enhancing their experience with expanded rental offerings.
- Boost economic activity through direct spending on passes and increased secondary spending on rentals.
- Position the facility as a key player in the recreational market, fostering sustained growth and profitability.

Conclusion:

The geographical distribution of visitors since March of 2023 highlights a significant trend of strong regional engagement coupled with broad national interest. By focusing on strengths in NC, TN, and VA while also expanding the outreach efforts to other states for continued growth.

Activity Popularity and Visitor Preferences:

The visitor data for Doe Mountain Recreation Authority (DMRA) highlights the diverse range of activities offered and their varying levels of popularity. This qualitative analysis aims to provide insights into the preferences and behavior of DMRA visitors, which can inform future strategies for enhancing visitor experiences and economic impact.

1. Day vs. Annual Passes

- Day Passes (1,239): A significant majority of visitors opt for day passes, indicating a preference for occasional visits rather than long-term commitments. This suggests that DMRA attracts many tourists or casual visitors looking for short-term recreational activities.
- Annual Passes (807): A substantial number of visitors also commit to annual passes, reflecting a loyal customer base that values frequent access to the facilities.

2. Activity Participation

Hiking (79):

- Hiking emerges as one of the more popular non-motorized activities, aligning with the trend



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of increasing interest in outdoor, low-impact recreational activities. This could be due to the scenic trails and natural beauty of Doe Mountain.

ATV Riding (567), Dirt Biking (462) and SXS (1,012):

- ATV riding, Dirt Biking and Side-by-Side (SXS) activities are highly popular, with SXS leading in participation. These high-adrenaline activities are a significant draw for adventure enthusiasts.

Special Events (7):

- Special events have minimal participation, indicating either limited availability or lower interest. Enhancing the variety and frequency of special events could attract more visitors.

Equestrian Activities (3):

- This activity sees very low participation, suggesting niche interests or perhaps the need for better promotion and improved facilities to attract more visitors.

Archery (10) and Axe Throwing (10):

- These activities also have lower participation rates but could be potential areas for growth with targeted marketing and special promotions.

Polaris Rentals (58):

- The relatively moderate number of Polaris rentals indicates a steady but not overwhelming demand, possibly due to high costs or a preference for personal vehicles.

Biking (30):

- With 30 participants, biking is less popular compared to hiking and motorized activities, but it represents a growing segment that could be developed further with improved trails and amenities.

Other Activities (24):

- This category likely includes less common activities, indicating a broad but shallow engagement across these options.



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Economic and Strategic Implications

- *Enhancing Popular Activities:* Focusing on improving facilities and services for the most popular activities like ATV riding, Dirt Biking, and SXS can enhance visitor satisfaction and attract repeat visitors. Expanding trail networks, ensuring safety, and providing additional amenities can further boost these activities' appeal.
- *Diversifying Offerings:* Increasing participation in less popular activities such as equestrian sports, hiking, archery, and axe throwing can be achieved through targeted marketing, introductory sessions, and special events. This diversification can attract a wider audience and increase overall visitor numbers.
- *Special Events:* The low turnout for special events suggests a need for innovation in this area. Developing themed events, festivals, or competitions could draw larger crowds and create a more dynamic and engaging visitor experience.
- *Rental Services:* Given the moderate interest in Polaris rentals, reviewing pricing strategies, enhancing rental packages, expanding rental offerings and promoting the convenience and adventure of rentals could stimulate higher engagement.
- *Loyalty Programs:* Encouraging more day pass holders to switch to annual passes through loyalty programs, discounts, or exclusive access to certain activities can build a more stable and predictable revenue stream.

Conclusion:

The qualitative analysis of DMRA's visitor data reveals a clear preference for certain activities, highlighting opportunities to enhance popular offerings while also growing less frequented activities. By focusing on strategic improvements and targeted marketing, DMRA can continue to expand its appeal, increase visitor numbers, and further cement its role as a key economic driver for Johnson County, Tennessee.



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Limitations

- 1. Data Availability and Quality:* The limitations of Implan analysis software can stem from the availability and quality of the input data. Implan relies heavily on regional economic data, and if this data is outdated, incomplete, or inaccurate, it can significantly impact the reliability and validity of the analysis results.
 - 2. Regional Specificity:* Implan analysis software may not capture the nuances of highly localized or specialized economies accurately. It relies on aggregated regional data, which might overlook unique characteristics or industries that are significant in smaller geographical areas.
 - 3. Assumptions and Simplifications:* Like any modeling tool, Implan software operates based on certain assumptions and simplifications about economic relationships and interdependencies. These assumptions may not always hold true in specific contexts or may oversimplify complex economic interactions.
 - 4. Lack of Dynamic Modeling:* Implan software typically employs static input-output models, which assume that economic relationships remain constant over time. This might not accurately reflect the dynamic nature of economies, where factors such as technological advancements, policy changes, or external shocks can significantly alter economic dynamics.
 - 5. Inability to Capture Non-Market Transactions:* Implan analysis software primarily focuses on market transactions and may not adequately capture non-market activities or informal sectors of the economy, leading to an incomplete picture of economic impacts.
 - 6. Scope and Granularity:* The scope and granularity of Implan data may not align with the specific research questions or the level of detail required for certain analyses. This can limit the software's utility in certain contexts, particularly for studies requiring fine-grained analysis or focusing on niche industries.
 - 7. Limited Sensitivity Analysis:* While Implan software allows for scenario analysis, the range of scenarios that can be tested may be limited by the capabilities of the software. This can restrict researchers from fully exploring the sensitivity of results to different assumptions or inputs.
 - 8. User Expertise Dependence:* The effectiveness of Implan analysis heavily relies on the user's expertise in understanding the software's functionalities, interpreting results, and making appropriate adjustments. Lack of expertise or misinterpretation of results can introduce biases or errors into the analysis.
- ## Limitations



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9. *Data Source Limitations:* The demographic information used in this analysis was provided by the DMRA through their smart waiver Excel file. The reliability and accuracy of this data are contingent on the completeness and correctness of the information collected and inputted by the visitors. Any errors or omissions in the waiver data could impact the validity of our findings.

10. *Short Operational History:* The recreation facility has been open for less than two years. This limited timeframe may not provide a comprehensive view of long-term trends and patterns in visitor behavior and economic impact. Seasonal variations, economic fluctuations, and other external factors may not be fully represented in the available data, potentially skewing the results and limiting the generalizability of the conclusions.

12. *Sample Size Constraints:* Due to the facility's short operational period, the sample size of visitors in certain categories in the collected data may be relatively small. This can reduce the statistical power of the analysis and increase the margin of error, making it more challenging to draw definitive conclusions or identify significant trends.

13. *External Influences:* The analysis may not account for all external influences that could affect visitor numbers and rental demand, such as local events, economic conditions, and weather patterns. These factors could introduce variability that is not captured in the provided data, impacting the accuracy of the economic assessment.

Reference:

- IMPLAN® model, 2024 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System (data and software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 www.IMPLAN.com.



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