



# Visitors' Travel Behavior and Perceptions of the Monongahela National Forest Region

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## EXECUTIVE SUMMARY

This visitor survey for the Monongahela National Forest area of West Virginia was conducted using the Prolific online survey platform with a valid sample size of 574 respondents from seven states identified as the target markets by the local leadership. These target markets include Kentucky (KY), Maryland (MD), North Carolina (NC), Ohio (OH), Pennsylvania (PA), South Carolina (SC), and Virginia (VA).

The main purpose of this survey is to learn more from visitors to the region from outside of West Virginia (excluding visitors to the region that reside in West Virginia) about their trip characteristics and their perceptions of the importance and performance of sustainability indicators, destination competitiveness, relationships between humans and the environment, and travel preferences and behaviors post COVID-19.

Results show Blackwater Falls in Tucker County was the most popular attraction in the area. Approximately one third (34.5%) of respondents reported having visited the park during their most recent trips to the eight-county region. However, Pocahontas County (50.6%) was the most visited county in the region, followed by Greenbrier (38.2%). In terms of activities in which visitors participated, hiking and sightseeing were the most frequently reported (62.1% for the former vs. 61.2% for the latter).

Nearly 16% of respondents reported a group spending of \$1,001 to \$2,000/per trip, the largest among all spending segments. Respondents were more likely to stay overnight post-COVID-19 (2021, 2022, and 2023) than pre-COVID-19 (2019) and during the pandemic (2020). The average number of overnight stays was 2.90. Most respondents stayed in hotels/motels/inns (40.8%), followed by Airbnb (26.5%) properties and camping sites/tents (23.3%).

In terms of respondents' perceptions of sustainability indicators, 93.1% of respondents either moderately agreed (22.0%) or strongly agreed (71.1%) that "protection of the natural environment" was the most important indicator, followed by "environmental quality" (91.2%), and "management of waste" (79.0%). All these three indicators relate to the environmental domain of sustainability. As measured by mean (*M*) responses on a five-point Likert scale, visitors felt the environmental indicators were most important with an average mean score of 4.08 for the eight items along with the cultural indicators (*M* = 3.94), and they perceived less strongly on institutional indicators (*M* = 3.70) and socio-economic indicators (*M* = 3.74).

An Importance-Performance Analysis (IPA) indicates that six environmental indicators (items 1, 2, 3, 5, 6, and 8), four cultural indicators (items 17, 18, 19, and 24), and one institutional indicator (item 29) are located in the 'keep up the good work' quadrant, while three socio-economic indicators (items 11, 14, and 16), one cultural indicator (item 23), and one institutional indicator (item 30) are located in the 'concentrate here' quadrant, implying that higher priorities for improvement should be placed on these socio-economic, cultural, and institutional indicators.

## **1. Introduction**

Gateway communities in the United States suffer from a similar lack of research-based performance indicators to measure and evaluate their strengths and weaknesses and to clearly identify where additional resources are needed to enhance the tourism and recreation economy. To this end, a multi-state, integrated project team that involves research and extension faculty from West Virginia University, Pennsylvania State University, the University of Vermont, and the University of New Hampshire was formed with support from the Northeast Regional Center for Rural Development to develop an integrated process for measuring and evaluating sustainable tourism performance indicators and competitiveness in rural destinations in the northeast United States. By understanding the factors that make destinations resilient the project will produce policy recommendations and general guidelines for improving destination and gateway community sustainability and well-being. This project was funded through a USDA Agriculture and Food Research Initiative grant and adopts a mixed method approach that involves primary and secondary data collection for three targeted rural case study destinations in northwestern Pennsylvania, the Upper Valley region on the Vermont/New Hampshire border, and the Monongahela National Forest region of West Virginia. This report only focuses on findings on visitor profiles, visitor spending and visitors' perceptions of tourism sustainability indicators in the Monongahela National Forest (MNF) region of West Virginia.

## **2. Methods**

### **2.1. Questionnaire**

A questionnaire was designed based on findings from the literature (e.g., Asmelash & Kumar, 2019; Powell et al., 2017; Vogt, 2021) and with input from the research team and invited external reviewers including tourism leadership in the targeted destinations. This questionnaire

consisted of eight sections: 1) background information, 2) trip characteristics, 3) perceptions of tourism sustainability indicators: importance, 4) perceptions of tourism sustainability indicators: performance, 5) perceptions of relative competitiveness for the Monongahela National Forest area, 6) post-Covid-19 travel preferences and behaviors, 7) perceptions of the relationship between humans and the environment, and 8) socio-demographics (Appendix A). The questionnaire was built into Qualtrics and reviewed and approved by the West Virginia University Institutional Review Board. The questionnaire was pilot tested on the Prolific online survey platform in December 2022 and was finalized based on comments and feedback from 44 participants.

## **2.2. Data collection and data analysis**

The questionnaire was built in Qualtrics and integrated into Prolific which was used as the online survey platform for this study. The survey used a two-step approach: an initial survey that identifies eligible participants and a follow-up full length survey that targets those who met the screening criteria in the initial survey. The target states for the MNF area include Kentucky (KY), Maryland (MD), North Carolina (NC), Ohio (OH), Pennsylvania (PA), South Carolina (SC), and Virginia (VA) with a total of 7,815 eligible participants. Specifically, for the initial survey, the purpose of the survey was described as follows:

This is a short screening survey that only asks you to answer 3 questions. Only those who meet the study criteria will be invited to participate in the follow-up full survey. This study is being conducted by West Virginia University. To enroll in this study, you must: 1) be at least 18 years old, and 2) have travelled at least once to the Monongahela National Forest area in West Virginia in the past 4 years or so (2019-present).

The Monongahela National Forest area includes the national forest itself and its surrounding 8 counties: Grant, Tucker, Randolph, Greenbrier, Webster, Nicholas, Pendleton, and Pocahontas.

This initial short survey takes approximately 2 minutes and pays \$0.5.

For the follow-up full length survey, the following description was used:

You recently participated in a short screening survey on tourism resilience and sustainability in the Monongahela National Forest area. You are invited again to participate in the second survey that targets those who met the screening criteria: at least 18 years old and have travelled at least once to the Monongahela National Forest area in West Virginia in the past 4 years or so (2019-present).

This study is being conducted by West Virginia University. You will be asked to answer questions on your trip characteristics, your perceptions of tourism sustainability indicators, and your demographics. This study takes approximately 13 minutes and pays \$4.00.

The initial survey started on February 27 and ended on March 8, 2023, with 1,518 respondents. Of this number, 721 were eligible for this study. These eligible participants were then invited again to participate in the full-length survey, which started on March 1 and ended on April 4, 2023. Of the 721 participants invited, 598 responded, resulting in a response rate of 82.9%. Of the 598 respondents, 24 were removed due to systematic incomplete responses, resulting in 574 valid responses for further analysis.

As mentioned, this report is largely descriptive. Importance-Performance Analysis (IPA) was used for plotting indicators items into each of the four quadrants: keep up the good work, concentrate here, low priority, and possible overkill. The two most used methods of placing crosshairs for establishing the quadrants are scale-centered, where the scale middle (i.e., 3 on a five-point Likert scale) is used and data-centered, where the item mean scores are used. This report used the data-centered approach.

### 3. Results

#### 3.1. Demographics

Of the 574 valid respondents, over half were males (55.8%) while females accounted for 41.8%. In addition, a small percent of respondents identified themselves as non-binary (2.1%) while 0.2% preferred not to say (Figure 1).

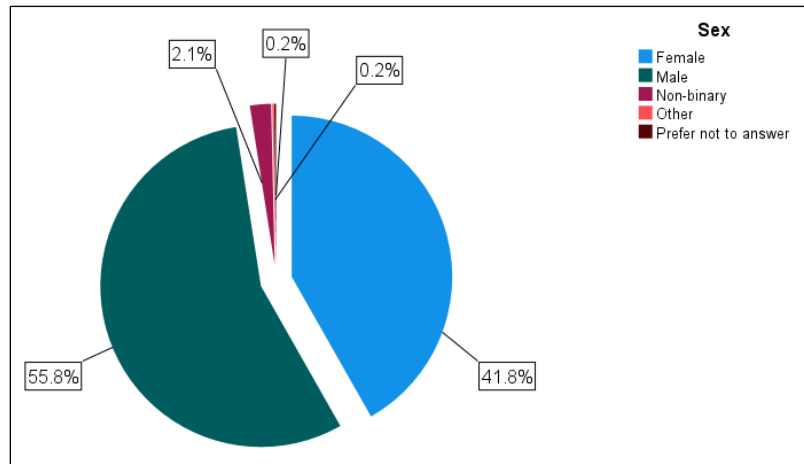


Figure 1. Respondents by sex

Most respondents were young, with over three-quarters (77.2%) ranging between 18 and 44 years of age (and 17.7% for age range 18-24, 34.7% for age 25-34, and 24.8% for age 35-44, respectively) (Figure 2).

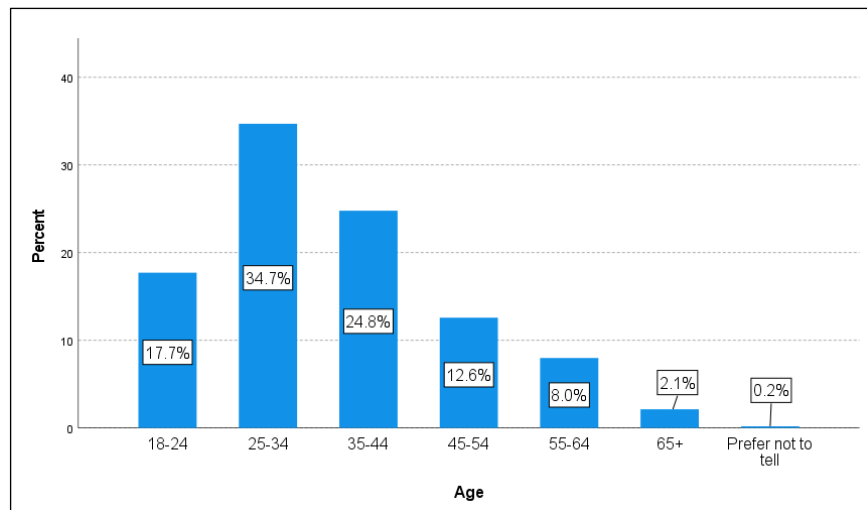


Figure 2. Respondents by age

2). Respondents between 45 and 64 years old accounted for 20.6% while a small percentage of respondents were 65 years old and over (2.1%). In addition, 0.2% of respondents preferred not to tell.

Figures 3 and 4 present respondents by education and income, respectively. Most respondents were well educated and affluent. Specifically, 88.1% had some level of college



education; 25.1% had attended some college, 43.4% had an undergraduate or post-secondary degree, and nearly one in five (19.6%) had a graduate school degree. In addition, 14.5% had a high school degree or equivalent while a very small percent of respondents (0.7%) had less than a high school degree.

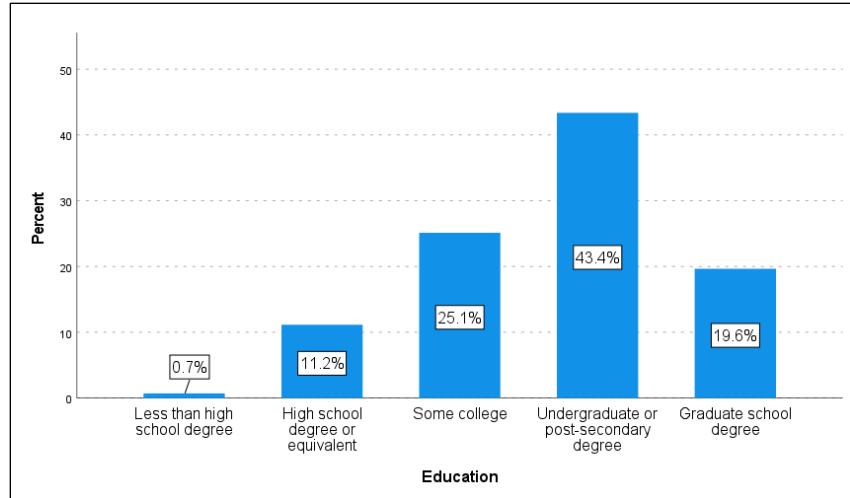


Figure 3. Respondents by education

In terms of pre-tax household income, over half of respondents (57.9%) reported a household income of less than \$80,000 (17.5%, 14.0%, 17.0%, and 9.4% had an income between \$60,001 and \$80,000; between \$40,001 and \$60,000; between \$20,001 and \$40,000, and less than \$20,000, respectively). The remaining 42.1% reported an income of \$80,001 or above (14.0%, 17.0%, and 6.2% reported a household income between \$80,001 and \$100,000, between \$100,001 and \$150,000, and between \$150,001 and \$200,000, respectively).

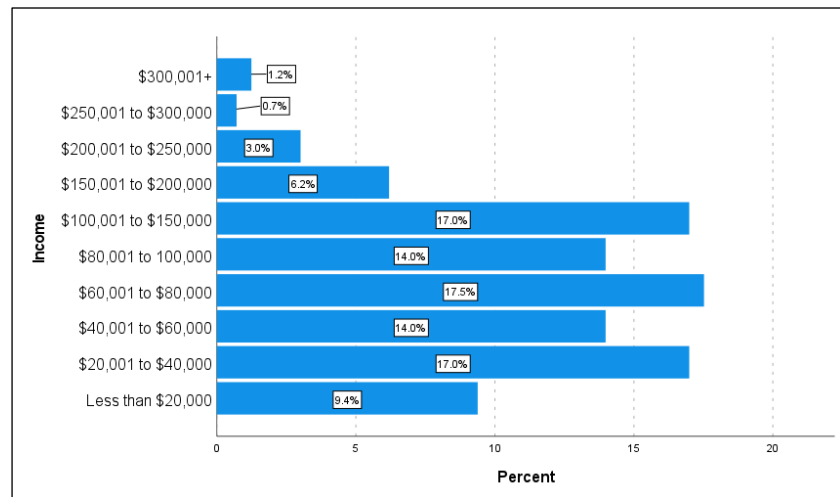
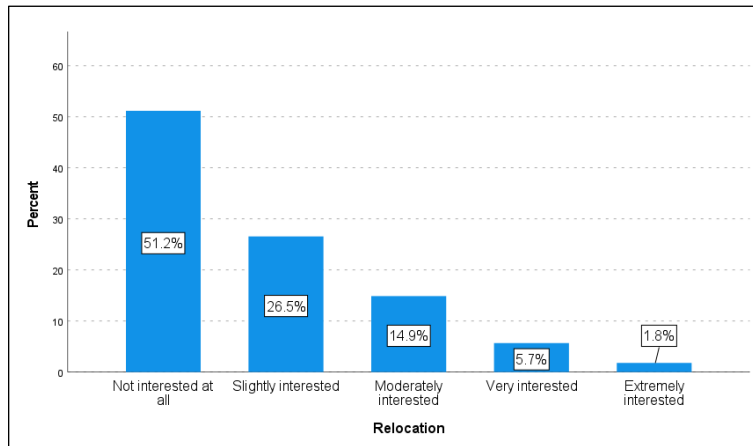


Figure 4. Respondents by income

remaining 42.1% reported an income of \$80,001 or above (14.0%, 17.0%, and 6.2% reported a household income between \$80,001 and \$100,000, between \$100,001 and \$150,000, and between \$150,001 and \$200,000, respectively).

Survey participants were also asked to indicate the extent to which they were interested in relocating their family or business to the forest area (Figure 5). As the figure shows, slightly over half (51.2%) of respondents reported not being interested at all in relocating to the area, while 1.8% and 5.7% of



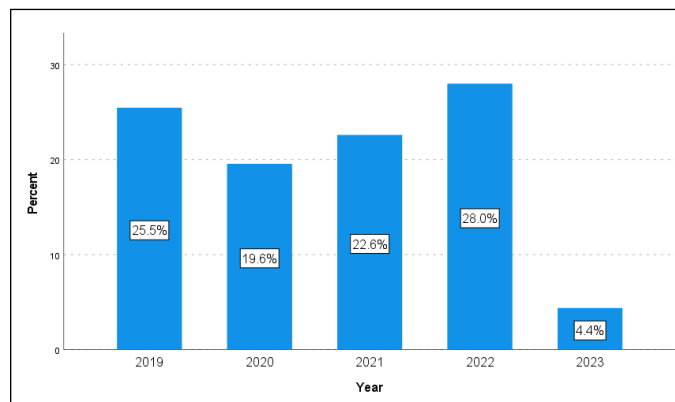
**Figure 5. Levels of interests in relocation to the area**

respondents were extremely or very interested in relocating, respectively. In addition, 14.9% and 26.5% of respondents were either moderately or slightly interested in relocation. Further analysis (such as where they are from and the distance they traveled to reach the area) could reveal characteristics of these visitors that may be helpful for targeted recruitment efforts. In addition, a more rigorous analysis based on a regression of income, education, and other variables can be conducted to predict respondents' interests in relocation.

### 3.2. Trip Characteristics

#### *Most recent trip to the area*

Participants were asked to indicate the year in which they travelled most recently to the area (2019 to present). Figure 6 shows that slightly over one-quarter (25.5%) of respondents visited the area in 2019 (pre-COVID-19), which is higher than the 19.6% in 2020 (during COVID-19) and 22.6% in 2021 (transition year toward post-COVID-19), but lower than

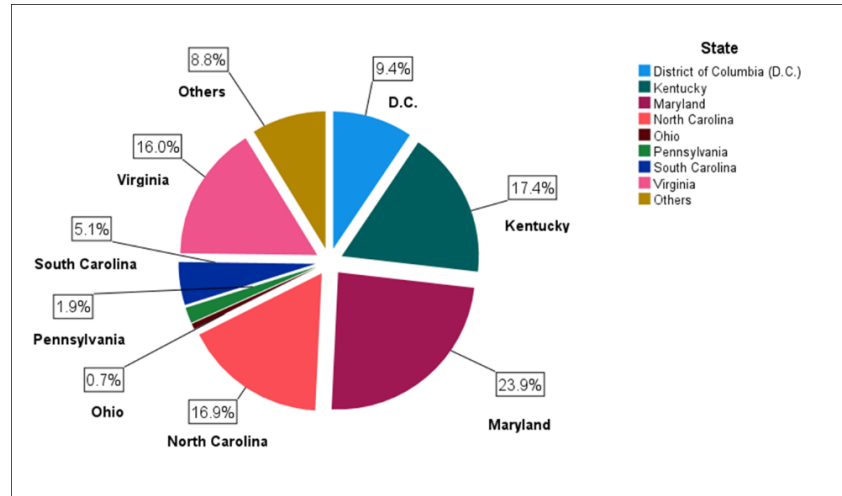


**Figure 6. Most recent year traveled to the area**

28.0% in 2022 (post-COVID-19). A small percentage of respondents (4.4%) reported visiting the area most recently in 2023 (as of April 4, 2023, the closing date for the survey).

**Origin of Respondents by State**

Figure 7 presents the origin of respondents by state. Of the eight targeted states, three states (Maryland, North Carolina, and Virginia) combined accounted for most of the respondents



**Figure 7. Origin of respondents by state**

(56.8%), with 23.9% being from Maryland, the largest portion of the sample, followed by North Carolina (16.9%) and Virginia (16.0%). It is worth noting that the percentage for each state should not be used as a proxy for market segments for the area because the survey participants were intentionally limited to the eight targeted states, with West Virginia (the major market of the MNF) being excluded (for more detailed info on origins of respondents for the recent NVUM for the forest, refer to <https://apps.fs.usda.gov/nvum/results/A09021.aspx/FY2019>).

**Places Visited**

Table 1 presents places that respondents visited during their most recent trip to the area. Blackwater Falls in Tucker County was the most popular attraction in the area. Approximately one-third (34.5%) of respondents reported having visited the park during their most recent trip to the eight-county region. The second most popular place was Seneca Rocks in Pendleton County (19.5%) and Greenbrier River Trail State Park in Greenbrier County and Pocahontas County

(19.4%). The least visited places/events included WV Road Kill Cook Off (1.0%), Durbin Days (2.0%), and Pickin' in Parsons Bluegrass Festival (2.0%).

**Table 1. Places visited.**

Places visited	Responses		Percent of cases
	N	(%)	(%)
Blackwater Falls	203	14.3	34.5
Seneca Rocks	115	8.1	19.5
Greenbrier River Trail State Park	114	8.0	19.4
Highland Scenic Highway	107	7.5	18.2
Greenbrier Resort	93	6.6	15.8
Spruce Knob	86	6.1	14.6
Snowshoe Mountain Resort	85	6.0	14.4
Smoke Hole Caverns	65	4.6	11.0
Dolly Sods	64	4.5	10.9
White Sulphur Springs	64	4.5	10.9
Falls of Hills Creek	56	3.9	9.5
Canaan Valley Resort	53	3.7	9.0
West Fork Trail	42	3.0	7.1
Green Bank Observatory	36	2.5	6.1
Timberline Resort	32	2.3	5.4
Mountain State Forest Festival	29	2.0	4.9
Treasure Mountain Festival	28	2.0	4.8
Tri County Fair	21	1.5	3.6
Trains-Durbin Rocket; Cass Scenic Railroad; Potomac Eagle; New Tygart Flyer	20	1.4	3.4
Pickens, West Virginia Maple Syrup Festival	19	1.3	3.2
Durbin Days	12	0.8	2.0
Pickin' in Parsons Bluegrass Festival	12	0.8	2.0
WV Dandelion Festival	11	0.8	1.9
WV Road Kill Cook Off	6	0.4	1.0
Others	46	3.2	7.8
<b>Total</b>	<b>1419</b>	<b>100.0</b>	<b>240.9</b>

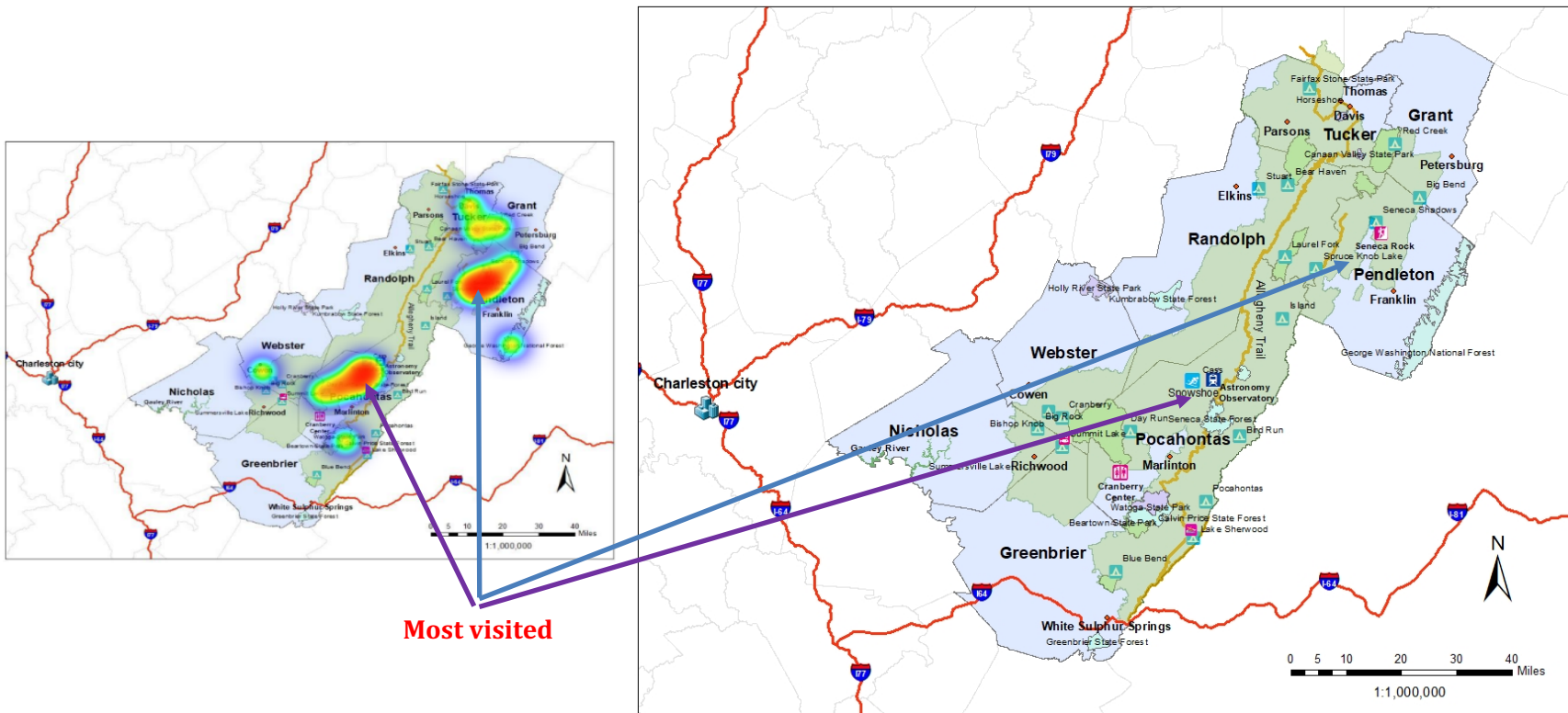
*Note:* This is a multiple-response question where the percent of response is the percentage of each response out of the total number of responses with a sum total of percent of responses being 100 while the percent of cases refers to the percent of respondents who visited a given place.

Respondents were also asked to click on the Monongahela National Forest area map to roughly show places they visited during their most recent trip to the area (maximum 10 clicks). Figure 8 shows the two most popular subregions based on the frequency of clicks. Subregion 1 (around Snowshoe in Pocahontas) was the most visited, followed by subregion 2 (around Spruce

Knob and Seneca Rocks in Pendleton). The top three most visited counties are Pocahontas (50.0%), Greenbrier (38.2%), and Pendleton (34.7%) (Table 2).

**Table 2. Counties visited.**

<b>Counties visited</b>	<b>Responses</b>		<b>Percent of cases</b>
	<b>N</b>	<b>(%)</b>	<b>(%)</b>
Pocahontas	265	23.5	50.6
Greenbrier	200	17.7	38.2
Pendleton	182	16.1	34.7
Randolph	156	13.8	29.8
Tucker	151	13.4	28.8
Webster	86	7.6	16.4
Grant	54	4.8	10.3
Nicholas	34	3.0	6.5
<b>Total</b>	<b>1128</b>	<b>100.0</b>	<b>215.3</b>



**Most visited**

Figure 8. Heat map showing places most visited

### Travel Purposes

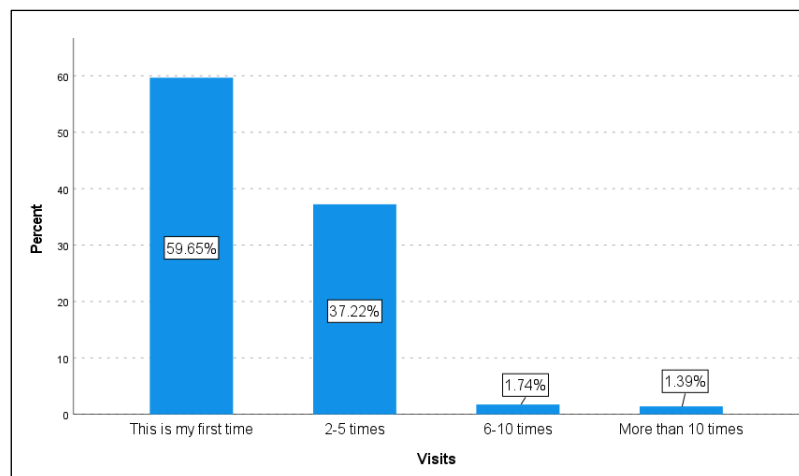
In terms of travel purpose (respondents were allowed to choose multiple purposes), most respondents (91.1%) traveled to the forest area for leisure/holiday/vacation, followed by visiting friends and/or relatives (23.0%), and business (2.1%). A small number of respondents (4.0%) reported having visited the area for other reasons (e.g., traveling through on a road trip; driving through the state, taking the scenic route; just exploring; picking up person in another state and spending a few days in the forest, etc.).

**Table 3. Travel purpose.**

Reasons for visiting the area	Responses		Percent of Cases
	N	(%)	(%)
Leisure	524	75.8	91.1
VFR	132	19.1	23.0
Business	12	1.7	2.1
Other	23	3.3	4.0
Total	691	100.0	120.2

### Frequency of Visits

Respondents were asked to report how many times they have visited the forest area in the past four years or so (2019-present). Responses are displayed in Figure 9.



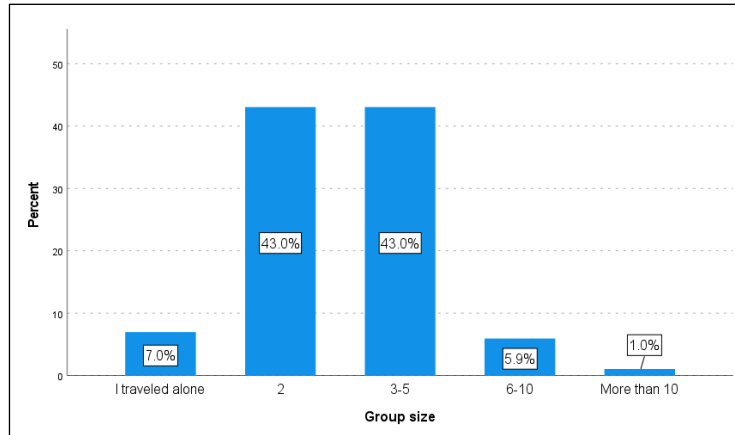
**Figure 9. Frequency of visits in the past 3 years**

Interestingly, nearly 60% of respondents reported being the first time, followed by 37.2% of respondents who have visited the area between two and five times. A small number of respondents reported a frequency of visits

of 6-10 times (1.7%), or more than 10 times (1.4%), respectively. The average number of visits in the previous 12 months was 1.12 times.

### *Group Size*

Exactly 43.0% of the respondents reported visiting the area in groups of 3-5 or 2 people, respectively, while 17.0% reported having travelled to the area alone. A small percentage of respondents reported having travelled in groups 6-10 (5.9%), or more than 10 people (1.0%)



**Figure 10. Group size**

### *Activities Participated in*

Table 4 presents activities that respondents have participated in during their most recent trip to the region. Not surprisingly, hiking was the most frequently reported activity, with the most responses (62.1%), closely followed by sightseeing (61.2%). These two activities were also reported as the primary activity by 29.3% and 22.6% of respondents (Table 5). Other popular activities included food and drinking experiences (44.8%), viewing wildlife (37.5%), and backpacking (33.6%). In contrast, activities such as factory tours (1.9%), hunting (1.9%), XC skiing (1.6%), and snowmobiling/ATV/UTV riding (2.5%) were the least commonly reported activities.



**Table 4. Activities participated in.**

<b>Activities participated in</b>	<b>Responses</b>		<b>Percent of cases</b>
	<b>N</b>	<b>(%)</b>	<b>(%)</b>
Hiking	351	13	62.1
Sightseeing	346	12.8	61.2
Food & drink experiences	253	9.4	44.8
Viewing wildlife	212	7.8	37.5
Backpacking	190	7	33.6
Shopping	179	6.6	31.7
Picnicking	146	5.4	25.8
Fairs & events	118	4.4	20.9
Farms/farmer's markets	117	4.3	20.7
Civil war sites/historic sites	106	3.9	18.8
Canoeing/Kayaking	93	3.4	16.5
Fishing	85	3.1	15
Swimming	77	2.8	13.6
Nightlife	66	2.4	11.7
Leaf peeping	59	2.2	10.4
Downhill Skiing/Snowboarding	55	2	9.7
Rail-trail/Road Biking	37	1.4	6.5
Geocaching	35	1.3	6.2
Mountain Biking	34	1.3	6
Performing arts	26	1	4.6
Rock Climbing/Bouldering	26	1	4.6
Whitewater Rafting	20	0.7	3.5
Snowmobiling/ATV/UTV riding	14	0.5	2.5
Factory tours	11	0.4	1.9
Hunting	11	0.4	1.9
XC Skiing	9	0.3	1.6
Other	27	1.0	4.8
<b>Total</b>	<b>2703</b>	<b>100.0</b>	<b>478.4</b>

**Table 5. Primary activity.**

	<b>Primary activity*</b> <b>(%)</b>
Hiking	29.3
Sightseeing	22.6
Backpacking	7.5
Downhill Skiing/Snowboarding	6.5
Fairs & events	6.0
Food & drink experiences	4.8
Viewing wildlife	3.3
Canoeing/Kayaking	2.3
Civil war sites/historic sites	2.3
Shopping	2.0
Leaf peeping	1.8
Swimming	1.8
Fishing	1.7
Farms/farmer's markets	1.5
Picnicking	1.5
Rock Climbing/Bouldering	1.5
Mountain Biking	1.2
Nightlife	1.0
Performing arts	0.8
Snowmobiling/ATV/UTV riding	0.8
Whitewater Rafting	0.8
XC Skiing	0.7
Factory tours	0.5
Geocaching	0.5
Hunting	0.3
Rail-trail/Road Biking	0.2
Other	5.4
Total	103.2

### *Spending*

Figure 11 presents the distribution of group spending/per trip reported by respondents. As shown, 15.7% of respondents reported a group spending of \$1,001 to \$2,000/per trip, the largest percentage among all spending segments. It seems that percentage of respondents is similar

across years in the range of \$1,001 to \$2,000, with the percentage of respondents in 2022 being slightly higher than other years (Figure 12).

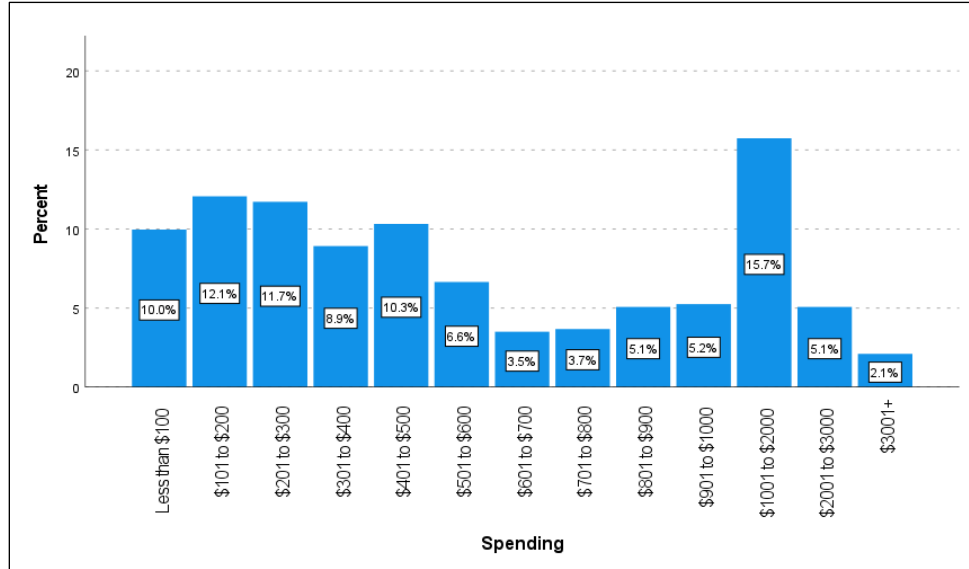


Figure 11. Group spending/per trip

Nearly equal number of respondents reported a spending less than \$100 (10.0%) and \$401 to \$500 (10.3%), respectively. In addition, 12.1% and 11.7% of respondents spent in the range of \$101 to \$200 and \$201 to \$300, respectively. A small percentage of respondents reported a group spending more than \$3,001 (2.1%).

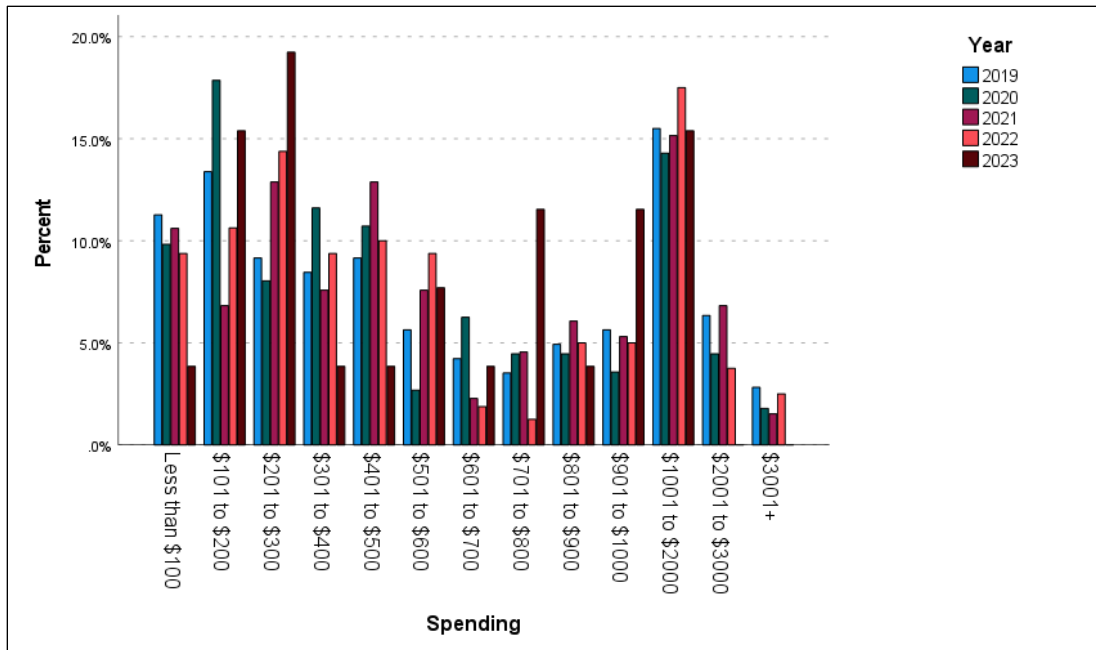


Figure 12. Group spending/per trip

### Overnight Stays

The spending pattern shown in Figures 11 and 12 generally corresponds with most respondents being overnight visitors (70.6% vs. 29.4% being day trippers) as shown in Figure 13.

Interestingly, respondents were more likely to stay overnight post-COVID-19 (2021, 2022, and 2023) than pre-COVID-

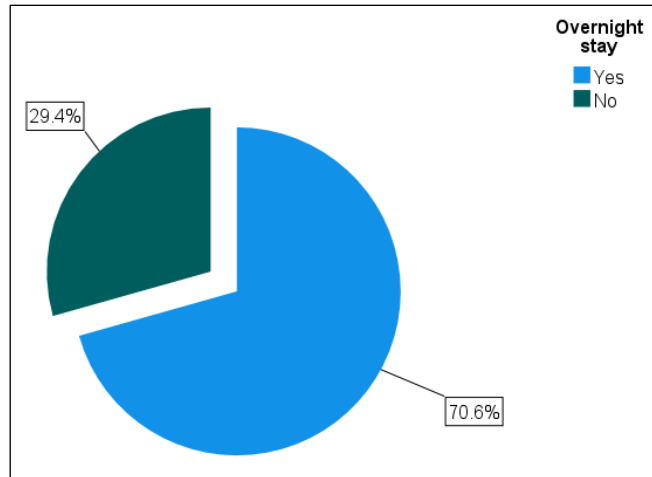


Figure 13. Overnight visitors vs. day trippers

19 (2019) and during the height of the pandemic in 2020 (Figure 14). The average number of overnight stays was 2.90.

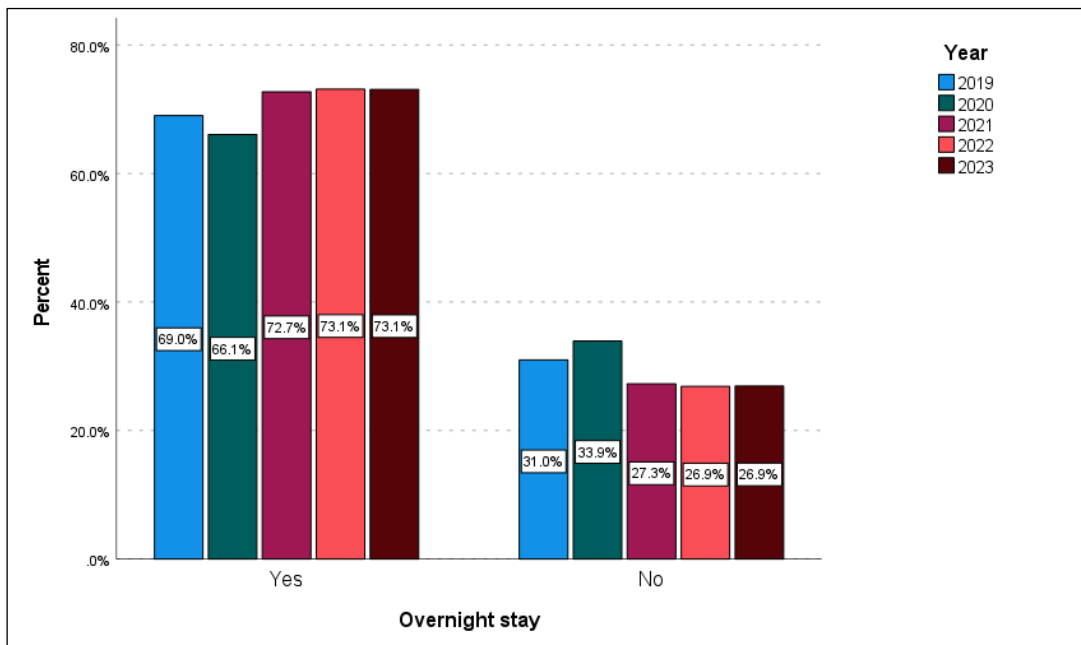


Figure 14. Overnight visitors vs. day trippers by year

Table 6 presents responses on where respondents stayed during their most recent trip to the MNF region (as with their responses on travel purposes, respondents were also allowed to choose multiple lodging types). As shown, most stayed in hotels/motels/inns (40.8%), followed by Airbnb (26.5%) properties, camping sites/tents (23.3%), and friends/relatives (14.4%). A small number of respondents stayed in rented houses/apartments (1.7%), second homes (1.2%), and timeshare (1.0%).

**Table 6. Respondents by lodging types.**

<b>Lodging</b>	<b>Responses</b>		<b>Percent of cases</b>
	<b>N</b>	<b>(%)</b>	<b>(%)</b>
Hotel/motel/inn	165	33.1	40.8
Airbnb	107	21.4	26.5
Camping/tent	94	18.8	23.3
Friends and/or relatives	58	11.6	14.4
Bed & Breakfast	30	6.0	7.4
RV	14	2.8	3.5
Other (please specify)	12	2.4	3.0
Rented house/apartment/VRBO	7	1.4	1.7
Second home	5	1.0	1.2
Timeshare	4	0.8	1.0
Homestays	3	0.6	0.7
<b>Total</b>	<b>499</b>	<b>100.0</b>	<b>123.5</b>

Respondents were also asked to indicate which town (s) they stayed in. Results are presented in Table 7. White Sulphur (18.7%), Seneca Rocks (17.4%), and Snowshoe (17.2%) were the top three towns with the most overnight visitors, followed by Canaan Valley (13.4%), Elkins (9.2%), and Marlinton (9.0%). A smaller percentage of respondents reported having stayed in Parsons (1.7%) and Thomas (2.2%).

**Table 7. Towns stayed in.**

Town stayed in	Responses		
	N	Percent (%)	Percent of cases (%)
White Sulphur	75	14.5	18.7
Seneca Rocks	70	13.5	17.4
Snowshoe	69	13.3	17.2
Canaan Valley	54	10.4	13.4
Elkins	37	7.1	9.2
Marlinton	36	6.9	9.0
Davis	33	6.4	8.2
Petersburg	28	5.4	7.0
Franklin	24	4.6	6.0
Richwood	24	4.6	6.0
Cowen	15	2.9	3.7
Durbin	13	2.5	3.2
Thomas	9	1.7	2.2
Parsons	7	1.4	1.7
Others	24	4.6	6.0
Total	518	100.0	128.9

### **3.3. Perceptions of Sustainability Indicators**

The so-called indicators of sustainability related to various aspects of tourism and recreation are used increasingly to assess longer-term prospects for tourism development in different communities. These are usually rated on a 5-point (Likert) scale ranging from strong agreement that an indicator is important or performing well to neutral and strong disagreement. In addition to rating the importance of different indicators in a destination, visitors are then also asked to indicate how the destination is performing on the indicator. When a given indicator is rated as important and at the same time the community is rated as performing well on that indicator, no further action is needed. On the other hand, if the community is rated as underperforming, that particular indicator points to an important area for potential improvement. Here we consider four broad categories (also referred to as dimensions) of indicators, including

those related to the environment, socioeconomic conditions, cultural factors and institution-related items. Within these four broad categories, more specific and measurable sub-indicators are examined. This section reports results from the visitor survey in the MNF area.

### *Descriptive Analysis*

Table 8 presents respondents' assessment of current levels or the state of the 32 sustainable tourism indicators. More than 93.1% of respondents either moderately agreed (22.0%) or strongly agreed (71.1%) that “protection of the natural environment” (item 1) is an important indicator ( $M = 4.61$ ), followed by “environmental quality” (item 3) (91.2%) ( $M = 4.52$ ), and “management of waste” (item 6) (79.0%) ( $M = 4.19$ ). All three of these indicators relate to the environmental domain of sustainability. In contrast, “opportunities for visitors to reflect on religious or other spiritual values” (item 22) was rated the lowest with 40.2% of respondents moderately agreeing (20.3%) or strongly agreeing (40.2%) that it is an important indicator ( $M = 3.11$ ), followed by “existence of a regional collaboration and marketing organization” (item 26) (46.5%) ( $M = 3.34$ ), and “career opportunity and training in tourism” (item 15) (51.7%) ( $M = 3.49$ ). Overall, visitors were more positive on the environmental indicators with an average mean score of 4.08 for the eight items and cultural indicators ( $M = 3.94$ ), while being less positive on the institutional ( $M = 3.70$ ) and the socio-economic indicators ( $M = 3.74$ ).

**Table 8. Visitors' assessment of the *importance* of the tourism sustainability indicators.**

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	MA+ SA	Mean
1. Protection of the natural environment	1.1	1.4	4.4	22	71.1	93.1	4.61
3. Environmental quality	1.2	1.2	6.3	26.5	64.7	91.2	4.52
6. Management of waste	1.4	4.8	14.7	30.9	48.1	79	4.19
17. A policy and system to evaluate, rehabilitate, and conserve cultural assets, including built heritage and cultural landscapes	1.6	4.3	16.2	33.8	44.1	77.9	4.15
18. Celebration and protection of intangible cultural heritage, including local traditions, arts, music, language,	2.1	4.8	15.2	33.2	44.7	77.9	4.13

food and other aspects of local identity and distinctiveness							
20. Guidelines for visitor behavior at sensitive sites and cultural events being made available to visitors	1.4	5.5	14.6	36.6	41.9	78.5	4.12
5. Control of negative impacts through long-term planning	2.3	5	16.9	33.9	41.8	75.7	4.08
21. Optimize visitor flow and minimize adverse impacts in cultural sites	1.6	4.4	18.5	35.9	39.6	75.5	4.07
19. Accurate interpretative material that informs visitors of the significance of the cultural and natural aspects of the sites they visit	1.8	4.8	17.7	37.6	38.2	75.8	4.06
14. Contribution to community and sustainability initiatives in a responsible manner from enterprises, visitors, and the public	2	5.3	18.7	37.5	36.6	74.1	4.01
11. Improvement of the well-being of rural communities from tourism development	2.8	4.8	20.2	37.3	34.9	72.2	3.97
29. A risk reduction, crisis management and emergency response plan	2	7.1	21.7	31.7	37.4	69.1	3.96
23. Cultural/heritages sites accessible to physically disabled tourists	3	8.1	19	30.9	39	69.9	3.95
24. Safeguarding cultural identify of local community	3.4	5.8	20.7	34.9	35.2	70.1	3.93
2. Rural authenticity	3	5.3	21.4	37.4	32.9	70.3	3.92
16. A system to monitor, prevent, publicly report, and respond to crime, safety, and health hazards that addresses the needs of both visitors and residents	3	6.6	23.5	29.1	37.8	66.9	3.92
30. A system to monitor and respond to socio-economic, cultural and environmental issues and impacts arising from tourism	2.2	7.9	21.7	33.9	34.4	68.3	3.91
8. Management of overcrowding	2.8	9.2	21.8	31	35.2	66.2	3.87
31. Public participation in sustainable destination planning and management	2.7	7.3	22.5	36.3	31.1	67.4	3.86
32. The destination management strategy/plan clearly visible and available online	3.8	8.4	22.5	34.2	31.1	65.3	3.81
9. Economic opportunities from tourism development	3	8.1	24.3	35.4	29.1	64.5	3.8
7. Reduction of greenhouse gas emissions	6.1	10.6	20.3	29.6	33.4	63	3.74
27. Local leaders' support for tourism development	3.8	9.8	24.7	32.9	28.8	61.7	3.73
4. Reduction of energy consumption and improvement of efficiency in its use	4.3	10.7	24	31.7	29.4	61.1	3.71
13. More investment in tourism development	3.9	10.1	28.2	35.5	22.2	57.7	3.62
28. Quality of public-private partnership in tourism	4.6	10.6	27.8	34.5	22.5	57	3.6
12. Marketing and promotion of tourism assets to visitors	4.8	12.3	27.6	30.2	25.1	55.3	3.59
10. High-paying jobs from tourism development	5.2	14.3	27.6	31.2	21.7	52.9	3.5
15. Career opportunities and training in tourism	5.2	13.5	29.6	30.7	21	51.7	3.49
25. Evidence of links and engagement with other bodies	6.9	14.1	33.3	28.1	17.6	45.7	3.36
26. Existence of a regional collaboration and marketing organization	7.2	15.7	30.6	28.8	17.7	46.5	3.34
22. Opportunities for visitors to reflect on religious or other spiritual values	14.3	20.1	25.5	20.3	19.9	40.2	3.11

Note. Items 1-8: environmental; items 9-16: socio-economical; items 17-24: cultural; items 25-32: institutional

Table 9 presents visitors' perceptions of the performance of the 32 sustainability indicators. Three environmental indicators - item 1 'protection of the natural environment', item 2 'rural authenticity', and item 3 'environmental quality'- were perceived to perform well, with mean



**Table 9. Visitors' perceptions of the *performance* of the tourism sustainability indicators.**

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	MA+ SA	Mean
1. Protection of the natural environment	0.7	1.8	8.6	32.1	56.8	88.9	4.42
3. Environmental quality	0.5	1.6	9.5	34.4	53.9	88.3	4.40
2. Rural authenticity	0.9	2.4	13.1	38.9	44.8	83.7	4.24
6. Management of waste	0.6	6	21.3	38.1	34	72.1	3.99
18. Celebration and protection of intangible cultural heritage, including local traditions, arts, music, language, food and other aspects of local identity and distinctiveness	1.6	5.2	22.1	40.8	30.3	71.1	3.93
20. Guidelines for visitor behavior at sensitive sites and cultural events being made available to visitors	2.3	6.6	20.5	36.3	34.2	70.5	3.93
19. Accurate interpretative material that informs visitors of the significance of the cultural and natural aspects of the sites they visit	1.7	6.1	23.2	37.4	31.6	69	3.91
29. A risk reduction, crisis management and emergency response plan	2.1	6.5	21.9	38	31.6	69.6	3.91
8. Management of overcrowding	1.1	7.1	23.4	38.7	29.7	68.4	3.89
24. Safeguarding cultural identify of local community	1.8	5.9	23.1	39.8	29.4	69.2	3.89
5. Control of negative impacts through long-term planning	1.5	6	25.1	38.6	28.8	67.4	3.87
21. Optimize visitor flow and minimize adverse impacts in cultural sites	1.4	7.5	23.7	37.7	29.6	67.3	3.87
32. The destination management strategy/plan clearly visible and available online	3.1	6	23.4	35.9	31.6	67.5	3.87
17. A policy and system to evaluate, rehabilitate, and conserve cultural assets, including built heritage and cultural landscapes	1.5	7.1	24.5	38.4	28.5	66.9	3.85
4. Reduction of energy consumption and improvement of efficiency in its use	2.6	5.2	26.2	37.1	28.8	65.9	3.84
31. Public participation in sustainable destination planning and management	1.3	9.9	21.7	38.6	28.5	67.1	3.83
27. Local leaders' support for tourism development	3.1	8.7	22.7	35.6	30	65.6	3.81
30. A system to monitor and respond to socio-economic, cultural and environmental issues and impacts arising from tourism	1.4	8.8	25.5	38.3	26	64.3	3.79
12. Marketing and promotion of tourism assets to visitors	2.1	7.7	27.1	36	27.1	63.1	3.78
16. A system to monitor, prevent, publicly report, and respond to crime, safety, and health hazards that addresses the needs of both visitors and residents	2.5	8.9	25.6	35	28	63	3.77
9. Economic opportunities from tourism development	1.9	6.5	29.3	37.5	24.8	62.3	3.77
14. Contribution to community and sustainability initiatives in a responsible manner from enterprises, visitors, and the public	2.5	8.4	26.2	36.2	26.8	63	3.76
23. Cultural/heritages sites accessible to physically disabled tourists	3	8.9	27.9	30.4	29.8	60.2	3.75
28. Quality of public-private partnership in tourism	3.6	7.8	24.8	38.8	25	63.8	3.74
7. Reduction of greenhouse gas emissions	4.4	8.3	25.8	32.6	28.9	61.5	3.73
11. Improvement of the well-being of rural communities from tourism development	2.9	8.7	25.4	38.4	24.7	63.1	3.73
13. More investment in tourism development	2.5	9.1	28.5	39.1	20.8	59.9	3.67
26. Existence of a regional collaboration and marketing organization	2.4	10.8	28.3	34.7	23.8	58.5	3.67
25. Evidence of links and engagement with other bodies	3.2	11.5	29.4	34.7	21.1	55.8	3.59
15. Career opportunities and training in tourism	3.8	12.7	29.9	31.4	22.2	53.6	3.55
22. Opportunities for visitors to reflect on religious or other spiritual values	8.1	12.5	26.2	30.6	22.6	53.2	3.47
10. High-paying jobs from tourism development	5.3	14.9	32.2	29	18.6	47.6	3.41

Note. Items 1-8: environmental; items 9-16: socio-economical; items 17-24: cultural; items 25-32: institutional

scores of 4.42, 4.24, and 4.40, respectively. Similar to respondents' assessment of the socio-economic and institutional indicators being less important than the other two dimensions of sustainability, visitors noted that those indicators in these two categories performed worse than those in the environmental and cultural dimensions.

Several items were perceived to perform poorly, including item 10 'high-paying jobs from tourism development' ( $M = 3.41$ ), item 15 'career opportunities and training in tourism' ( $M = 3.55$ ), item 22 'opportunities for visitors to reflect on religious or other spiritual values' ( $M = 3.47$ ), and item 25 'evidence of links and engagement with other bodies' ( $M = 3.59$ ).

From Tables 8 and 9, a so-called gap analysis can be performed between the importance and performance for each of the 32 indicators (Table 10). Among the eight pairs of environmental indicators, five consistently show performance being significantly lower than their importance rating. Additionally, four pairs of socio-economic indicators and two institutional indicators are significantly different with performance being lower than importance. On the cultural dimension, all eight pairs of indicators show significant differences between performance and importance, with one pair reaching significance at  $p < .1$ . In six out of these eight pairs, performance was rated consistently lower than importance.

**Table 10. Paired-sample t-tests for mean differences between performance and importance.**

Item	Mean		Mean difference	<i>p</i>
	Performance	Importance		
1. Protection of the natural environment	4.42	4.61	-0.19	<.001***
2. Rural authenticity	4.24	3.92	0.30	<.001***
3. Environmental quality	4.40	4.52	-0.14	<.001***
4. Reduction of energy consumption and improvement of efficiency in its use	3.84	3.71	0.14	.011
5. Control of negative impacts through long-term planning	3.87	4.08	-0.17	<.001***
6. Management of waste	3.99	4.19	-0.19	<.001***
7. Reduction of greenhouse gas emissions	3.73	3.74	-0.02	.795
8. Management of overcrowding	3.89	3.87	0.02	.671
9. Economic opportunities from tourism development	3.77	3.80	-0.08	.082
10. High-paying jobs from tourism development	3.41	3.50	-0.14	.010
11. Improvement of the well-being of rural communities from tourism development	3.73	3.97	-0.25	<.001***
12. Marketing and promotion of tourism assets to visitors	3.78	3.59	0.18	<.001***
13. More investment in tourism development	3.67	3.62	-0.03	.560

14. Contribution to community and sustainability initiatives in a responsible manner from enterprises, visitors, and the public	3.76	4.01	-0.23	<.001***
15. Career opportunities and training in tourism	3.55	3.49	-0.01	.872
16. A system to monitor, prevent, publicly report, and respond to crime, safety, and health hazards that addresses the needs of both visitors and residents	3.77	3.92	-0.16	.004**
17. A policy and system to evaluate, rehabilitate, and conserve cultural assets, including built heritage and cultural landscapes	3.85	4.15	-0.28	<.001***
18. Celebration and protection of intangible cultural heritage, including local traditions, arts, music, language, food and other aspects of local identity and distinctiveness	3.93	4.13	-0.23	<.001***
19. Accurate interpretative material that informs visitors of the significance of the cultural and natural aspects of the sites they visit	3.91	4.06	-0.17	<.001***
20. Guidelines for visitor behavior at sensitive sites and cultural events being made available to visitors	3.93	4.12	-0.20	<.001***
21. Optimize visitor flow and minimize adverse impacts in cultural sites	3.87	4.07	-0.21	<.001***
22. Opportunities for visitors to reflect on religious or other spiritual values	3.47	3.11	0.18	.001***
23. Cultural/heritages sites accessible to physically disabled tourists	3.75	3.95	-0.25	<.001***
24. Safeguarding cultural identify of local community	3.89	3.93	-0.09	.066
25. Evidence of links and engagement with other bodies	3.59	3.36	0.12	.035*
26. Existence of a regional collaboration and marketing organization	3.67	3.34	0.24	<.001***
27. Local leaders' support for tourism development	3.81	3.73	-0.02	.712
28. Quality of public-private partnership in tourism	3.74	3.60	0.04	.367
29. A risk reduction, crisis management and emergency response plan	3.91	3.96	-0.10	.061
30. A system to monitor and respond to socio-economic, cultural and environmental issues and impacts arising from tourism	3.79	3.91	-0.10	.070
31. Public participation in sustainable destination planning and management	3.83	3.86	-0.06	.273
32. The destination management strategy/plan clearly visible and available online	3.87	3.81	-0.05	.302
<b>Average</b>	<b>3.83</b>	<b>3.86</b>	<b>N/A</b>	<b>N/A</b>

\* $p < .05$ , \*\* $p < .01$ ,  $p < .001$ .

### *Importance-Performance Analysis*

Figure 15 displays the distribution of the 32 indicators in the I-P grid, which essentially plots the rankings of importance vs. performance of each sub-indicator. Six environmental indicators (items 1, 2, 3, 5, 6, and 8), four cultural indicators (items 17, 18, 19, and 24), and one institutional indicator (item 29) are located in the ‘keep up the good work’ quadrant, while three socio-economic indicators (items 11, 14, and 16), one cultural indicator (item 23), and one institutional indicator (item 30) are located in the ‘concentrate here’ quadrant, implying that higher priority could be paid to these socio-economic, cultural, and institutional indicators to make the area more attractive to visitors.

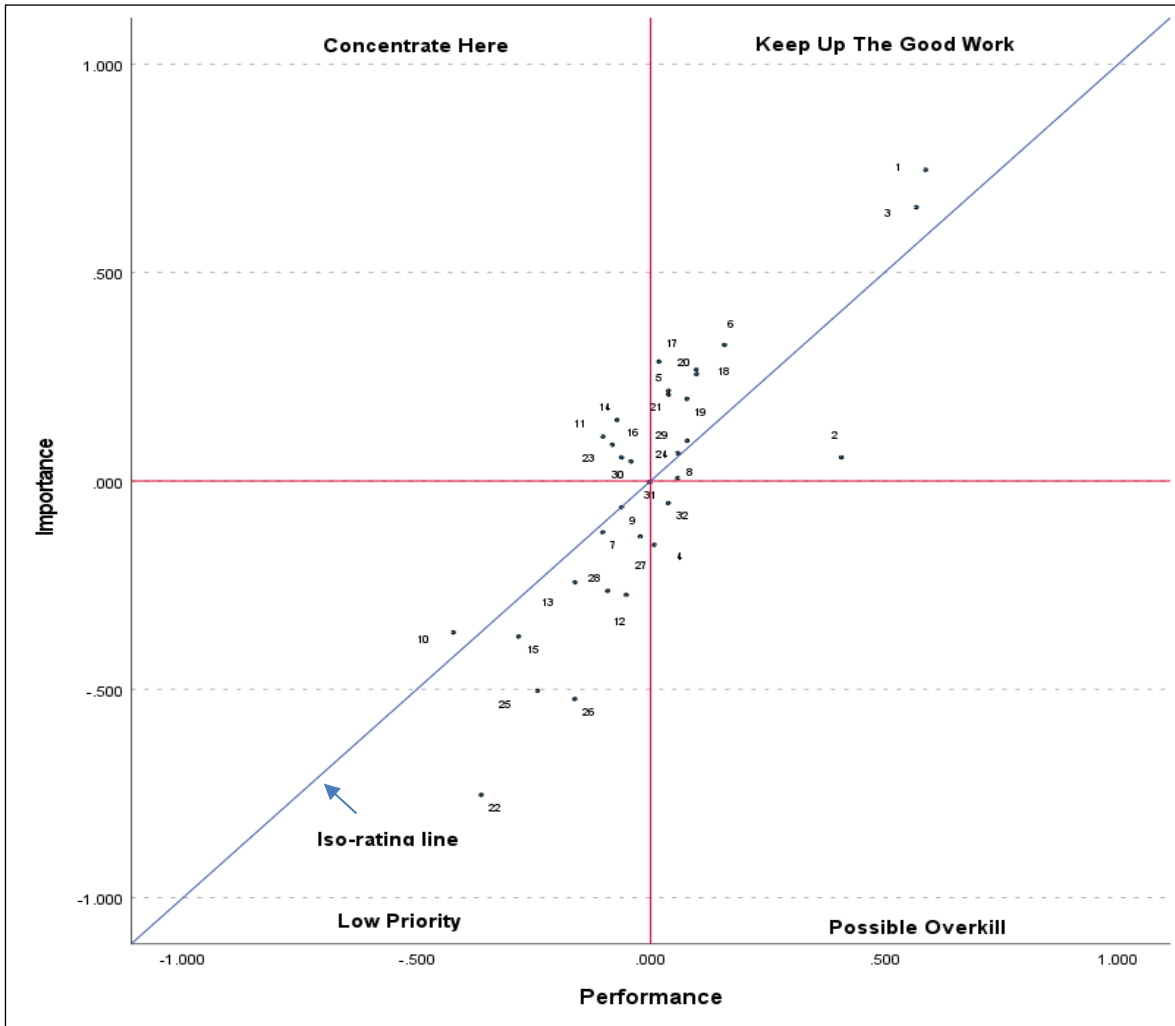


Figure 15. Importance-performance analysis of sustainability indicators

### 3.4. Perceptions of Relative Competitiveness

#### *Similar Rural Areas Visited*

Participants were then asked to report if they have visited any other rural destination(s) similar to the MNF in the past 4 years or so (2019-present). Slightly over half of the respondents (52%) reported having visited at least one rural area similar to the study area (Table 11). Similar areas visited included national parks, national forests, state parks, state forests, heritage areas/recreations, trails, resorts, and more.

**Table 11. Similar destinations compared to the Monongahela National Forest area.**

	Similar destinations
National parks	Acadia NP, Big Bend NP, Black Canyon of the Gunnison SP, Canyonlands SP, Crater Lake NP, Cumberland Gap NP, Custer NF, Cuyahoga Valley NP, Death Valley NP, Francis Marion NF, Glacier NP, Grand Canyon NP, Grant Teton NP, Great Smoky Mountain NP, Harpers Ferry NP, Hawai'i Volcanoes NP, Mammoth Cave SP, New River Gorge NP, North Cascades SP, Olympic NP, Shenandoah NP, White Sands NP, Yellowstone NP, Yosemite NP
National forests	Allegheny NF, Arapaho and Roosevelt NFs, Chattahoochee NF, Chequamegon Nicolet NF, Cherokee NF, Coconino NF, Daniel Boone NF, Francis Marion NF, Gifford Pinchot NF, Gorge Washington-Jefferson NFs, Gorge Wilderness/Pisgah NF, Hiawatha NF, Hoosier NF, Linville Nantahala NF, Mount Baker-Snoqualmie NF, Ocala NF, Okanogan-Wenatchee NF, Ozark NF, Shawnee NF, Superior NF, Tahoe, NF, Talladega NF, Uncompahgre NF, Wayne NF, White Mountain NF
State parks	CA: Jedediah Smith Redwoods SP KY: John James Audubon SP, Nolin Lake SP MD: Cunningham Falls SP, Deep Creek Lake SP, Gunpowder Falls SP, Greenbrier SP, Patapsco Valley SP, Swallow Falls SP ME: Baxter SP MI: Porcupine Mountains Wilderness SP NC: Grandfather Mountain SP NJ: Cape May Point SP NY: Minnewaska State Park Preserve, Taughannock Falls SP OH: Burr Oak SP, John Bryan SP, Mohican SP, Ohio Hocking Hills SP PA: Cherry Springs SP, Cook Forest SP, Lehigh Gorge SP, Laurel Mountain SP, McConnells Mill SP, Moraine SP, Ohiopyle SP, Presque Isle SP, Raccoon Creek SP, Raymond B. Winter SP, Ricketts Glen SP, Yellow Creek SP TX: Dinosaur Valley SP VA: Grayson Highlands SP, Holiday Lake SP, James River SP, Natural Bridge SP, Pocahontas SP, Staunton River SP WV: Cacapon Resort SP, Holly River SP, Tygart Lake SP, Watoga SP
State forests	MD: Elk Neck SF PA: Delaware SF, Elk SF, Forbes SF, Michaux SF, Moshannon SF, Pinchot SF, Rothrock SF, Skyline Drive SF, Sproul SF, Susquehannock SF, Tioga SF/PA Grand Canyon VA: Cumberland SF WV: Coppers Rock SF, Kanawha SF
Heritage areas/recreation areas	Blue Ridge Parkway, Catoctin Mountain Park (MD), Chincoteague National Wildlife Refuge (VA), Delaware Water Gap National Recreation Area (PA), Northern Neck National Heritage Area (VA),
Trails	Appalachian Trail, Mountains-to-Sea Trail (NC), Backbone Mountain (WV, MD), Manoa Falls (HI), Great Allegheny Passage and the C&O Canal.
Resorts	Outer Banks (NC), Niagara Falls (NY), Salt Fork Lodge & Conference Center (OH), WISP (MD), Whitefish Mountain Resort (MT), Pocono Mountains (PA), Seven Springs (PA), Whitetail Resort (PA), Holiday Valley (NY), Massanutten Resort (VA), Wintergreen Resort (VA), Jackson Hole Mountain Resort (WY)
Others	Hawksbill Crag (AK), Nocalula Falls (AL), Napa Valley (CA), Bernheim Arboretum and Research Forest (KY), Red River Gorge (KY), North Carolina Mountains (NC), Sylva NC, Western NC, Mount Washington (NH), Adirondack Mountains (NY), Bear Mountain (NY), Finger Lakes (NY), Katerskill Wild Forest (NY), The Gunks (NY), Amish Country Ohio (OH), Dundee Falls (OH), Ohio Caverns (OH), Lake Wallenpaupack (PA), Raystown Lake (PA), Black Hills and Badlands (SD), Pigeon Forge (TN), Upstate Vermont, Townsend (TN), Parowan Valley (UT), Great Falls Park (VA), Roanoke (VA), Salt Pond Mountain, Tidewater trail (VA), Susquehanna Valley, Point Pleasant (WV), Rock Springs (WY)

Table 12 presents similar areas reported at least twice by respondents. Of these areas, the Great Smoky Mountains was cited 33 times, accounting for 15.5% of the most frequently reported destinations similar to the area, followed by Western NC (13.6%), Shenandoah (13.1%), and Allegheny National Forest (11.7%).

**Table 12. Most frequently reported destinations similar to the MNF area.**

Similar places	Counts	Percentage (%)
Great Smoky Mountains	33	15.5
Western NC	29	13.6
Shenandoah VA	28	13.1
Allegheny National Forest	25	11.7
Blue Ridge Mountains	19	8.9
Hocking Hills	17	8.0
Yellowstone National Park	11	5.2
Red River Gorge	7	3.3
Appalachian Trail	4	1.9
Cuyahoga National Park	5	2.3
Daniel Boone National Forest	5	2.3
New River Gorge	5	2.3
Ohiopyle	5	2.3
Pisgah National Forest	5	2.3
Geoge Washington National Forest	4	1.9
Yosemite National Park	3	1.4
Acadia National Park	3	1.4
Nantahala National Forest	3	1.4
Sylva NC	2	0.9
<b>Total</b>	<b>213</b>	<b>100.0</b>

### *Perceptions of Competitiveness*

Participants were further asked to indicate how competitive the MNF area was as compared to the similar rural area(s) they have visited in the past 4 years or so (2019-present). Most participants regarded the study area as equally competitive when compared to similar areas they had visited (Table 13). For instance, over 60% rated the area as 'about the same' in terms of accessibility (60.0%), resource consideration (62.0%), and security and safety (67.5%).

Additionally, 59.0% of participants considered the area to be 'about the same' in terms of overall

competitiveness. These are important findings, and they could be emphasized in marketing the MNF region. For example, the price competitiveness and abundant outdoor recreational opportunities are all strong selling points for the region. On the other hand, the perceived weaknesses of lacking infrastructure, and shopping and entertainment or night-life could be considered as key development opportunities.

**Table 13. Perceptions of competitiveness.**

Items	MW (%)	SW (%)	AS (%)	SB (%)	MB (%)	SB + MB	Mean
13. Outdoor recreation opportunities	0.7	4.7	51.5	31.5	11.5	43.0	3.48
1. Natural Attraction	1.4	6.4	50.2	30.2	11.9	42.1	3.45
3. Rural tranquility and authenticity	0.3	9.5	49.2	31.9	9.2	41.1	3.40
15. Level of crowding	2.7	12.5	39.7	34.9	10.2	45.1	3.37
10. Festivals and events	1.4	9.8	51.5	27.1	10.2	37.3	3.35
12. Prices	0.7	14.2	44.4	31.5	9.2	40.7	3.34
4. Hospitality and friendliness of local residents	0.3	11.9	51.5	27.8	8.5	36.3	3.32
2. Heritage and cultural assets	1.0	9.2	55.6	27.5	6.8	34.3	3.30
9. Resource conservation	1.0	5.4	62.0	25.8	5.8	31.6	3.30
18. Overall competitiveness	1.0	8.5	59.0	24.7	6.8	31.5	3.28
11. local food/eatery	1.7	15.3	48.1	24.4	10.5	34.9	3.27
17. Lodging	0.7	11.5	57.3	22.0	8.5	30.5	3.26
7. Security and safety	0.3	7.5	67.5	19.3	5.4	24.7	3.22
5. Diversity and uniqueness of local products	1.4	13.6	56.6	21.4	7.1	28.5	3.19
16. Shopping	1.4	16.6	54.9	19.3	7.8	27.1	3.16
6. Accessibility	1.0	13.6	60.0	19.0	6.4	25.4	3.16
8. Infrastructure	1.0	18.3	54.2	19.0	7.5	26.5	3.14
14. Entertainment and night life	3.1	22	48.1	18.0	8.8	26.8	3.07

Note, MW = much worse, SW = somewhat worse, AS = about the same, SB = somewhat better, MB = much better

### *Most Negative Aspects Affecting Visitors' Experience*

To gain a deeper understanding of visitors' overall experience at the destination, respondents were asked to indicate both the most negative and the most positive aspects of their most recent visit to the area. Results are presented in Tables 14 and 15. A total of 285 valid responses were provided regarding what most negatively affected their overall experience. These responses are grouped into 20 categories (Table 14). The most frequently mentioned negative aspect was

infrastructure/facilities/transportation/drive time, accounting for 14.0% of all responses (e.g., it's just so long and difficult to get to. There's no direct way to Snowshoe, it just takes forever to drive there once you leave the interstate). The second most common negative aspect was crowding (12.3%) (e.g., overcrowding; lot of people; crowded; there were a lot of people in the area). This was followed by weather (8.8%) (e.g., just the weather, the rain caused some closers; rained a lot), which is tied with management/service (8.8%) (e.g., signage was not clear, so finding my way was not the easiest. lack of info on things to do during the day besides sightseeing; not enough culturally competent historic information; lack of information on site; not updated online), price/cost (7.7%) (the unexpected prices where says cheaper online and in person more expensive, not updated online; pricing was the largest issue; cost of lodging; the price for parking was a bit expensive), and locals (6.7%) (not enough knowledge of the area by locals; racism of people in the area; weird locals; the locals made me and my family, who are people of color, feel a bit uncomfortable and out of place).

**Table 14. Most negative aspects of visitors' most recent visit to the area. \***

No.	Category	Selected negative comments	Counts**	%
1	Infrastructure /facilities/ transportation /drive time	It's just so long and difficult to get to. There's no direct way to Snowshoe, it just takes forever to drive there once you leave the interstate; long drive on roads with low-speed limits; just the slowness of the roads but that was okay and to be expected; quality of rural roads; my husband is handicapped and find most rural areas hard to navigate. We would love to see more places for him to go in nature; the most negative aspect was the poor road conditions during the icy parts of the trip; limited bathroom areas; poor road network; traffic congestion; the narrow roads and driving; distance; some of the forest roads were closed to tourists.	40	14.0
2	Crowding	Overcrowding; lot of people; crowded; there were a lot of people in the area; we weren't quite sure where we were going even with a regular map and GPS, the signage was okay, but it was a busy day and lots of road traffic with people making sudden stops and turns that made us take a few wrong turns; there were A LOT of people, so it felt like I wasn't able to enjoy the "solitude" of the area as much as I would've liked. It felt more like I was	35	12.3



		experiencing this wonder with EVERYONE because I couldn't really "get away" from people (except for when we were backcountry camping). It just seemed to be a VERY POPULAR place, which kind of took away from the relaxation of it all; the overcrowding/amount of people in the areas we visited at the time.		
3	Weather	Just the weather, the rain caused some closers; rained a lot; it was nothing that the Park done, our visit was affected by the weather; the poor weather at various points.	25	8.8
4	Management /service	We arrived after dark and the signage was terrible. We drove a mile past the turn off to the park. It was better going back in the other direction. Signage was not clear, so finding my way was not the easiest. lack of info on things to do during the day besides sightseeing; not enough culturally competent historic information; lack of information on site; not updated online; when we decided to go on a hike around Greenbrier there just really wasn't enough verbiage on where to go; soil erosion, trail extension, camping; it can be a long process to just get yourself signed and paid to enter the resort; I hate to see the lack of recycling bins anywhere in this area; evidence of deforestation and continuation of far too much logging that caused the floods a few years back; level of criminal activity and vandalism; a lot of places were confusing where we were going, better directions and signs; long wait times; hard to find my way around without a guide; the service was really poor, but I knew beforehand so didn't stress much about it; the environment needs to be protected; I wish wild places would remain wild, naturally; The website for the hiking aspect was a bit misleading, but we still made the hike despite it being a little harder than anticipated; lack of signs; the experience was good but some of the tourism schedules were delayed and then had me constantly adjusting my schedules	25	8.8
5	Price/cost	I didn't think there were any though a couple of people in the group thought prices were very high considering it was WV, I tried to explain the Greenbrier was a major resort and not typical price wise with much of the area; the unexpected prices where says cheaper online and in person more expensive, not updated online; pricing was the largest issue; cost of lodging; the price for parking was a bit expensive; gas prices; only the prices of accommodation in the area; prices in Thomas seemed much higher than expected	22	7.7
6	Locals	Not enough knowledge of the area by locals; racism of people in the area; weird locals; the locals made me and my family, who are people of color, feel a bit uncomfortable and out of place; a feeling from the locals that they did not want us there; we encountered some unfriendly locals in a diner; racism; racist WV natives; some locals were unfriendly; it seemed like there were a lot of close minded people there; As a BIPOC and mixed	19	6.7

		family, we felt a little uncomfortable at times during our visit; racist locals picked a fight with another group		
7	Cleanliness	Litter garbage; visible trash; amount of trash outside; lack of clean porta potties; some areas were not as clean as I expected; some of the people left trash; Litter on roads; more litter than I'd like to see; some areas looked dirty and neglected; there were some wastes that weren't cleaned up; there was trash at the campsites and on the trails; large crowds generating tons of trash, where some people just threw it wherever instead of in dedicated locations	16	5.6
8	Food/dining places	Not a lot of food options/hotels booked quickly; the lack of food places; the restaurant we had dinner in did not have any good vegetarian options, and I was not consuming meat at the time of the trip; wanted to see some more local breweries; our stay in Snowshoe was relaxing, but there was a severe lack of good food; the food was somewhat substandard; I think getting good food was hard; not many restaurants	14	4.9
9	Bugs	Bugs; insects; mosquitos; not being prepared for bugs	11	3.9
10	Poverty /disparity	Poverty in some areas; I generally felt as if the conditions outside of tourist areas were not great for the local residents and I did not feel right when we traveled outside of our hotel seeing some of the conditions people were living in; local people being impacted; The poor living conditions of some of the indigenes; It seems like the local towns don't know how to respond to the tourism influx. Economic disparity and a multitude of low-income jobs are making it hard for the local populace to be able to afford their own towns, because businesses are appealing to tourist dollars; I grew up in the area and over time the place has become more run down and there are fewer economic opportunities, it doesn't present itself very well	9	3.2
11	Cell coverage	Internet/cellular service; difficult to get cell service but that is true in many similar areas; lack of cellular service for GPS directions; poor internet on the road and in rural areas; We were unable to receive cell service in some areas, which was frustrating, but understandable; inability to navigate due to minimal cell service	8	2.8
12	Activity /attraction	less attractions overall; Lack of attractions; some attractions were closed due to it being seasonal; no good places; lack of wildlife seen; I wish there was more things to do in the area with kids, well a better way of finding these things...my kids became bored with this trip; not much in the area; lack of interactive events are certain places in the region; lack of things to do besides ski	8	2.8
13	Time not enough	Takes a while to get from place to place; need a long trip to see multiple things; I didn't get to stay as long as I would have liked; I couldn't stay long enough due to commitments; didn't have enough days to explore more; I could only stay for a single day; I couldn't stay longer, had to get back to work	7	2.5

14	Lodging	There would be no place to stay overnight so lodging was very limited if you wanted to stay in the Seneca Rocks area; hotels booked quickly; lodging options are spread out; the hotel in Richwood was not good quality; the specific hotel I stayed at was quite small for 3 people, even though it was advertised to be suitable for the amount; Airbnb experience, not a reflection on the area	7	2.5
15	Group congruence	My girlfriend talked and talked and talked...; The most negative aspect wasn't anything to do with the place but not being able to decide on what to do because of the people I was with; poor planning on our own group's behalf. No fault other than our own; I don't recall anything negative that had to do with the area itself; more issues on the planning side; I loved the wilderness, but felt like there was more that I could have experienced if we had planned it out better beforehand.	5	1.8
16	visitors	tourists; smokers in parking lot; other visitors were not respectful of the beauty that is the state of West Virginia; shirtless dudes on ATVs on the road. This isn't Baltimore; the presence of hunters.	5	1.8
17	Safety /security	could do more on safety; unsafe drivers; more safety guards in place; could be a little dangerous because of how rocky it was	5	1.8
18	COVID	none maybe some pandemic impact; some businesses were closed due to economic downturn; we went when many areas were locked down for COVID (in 2020); some attractions weren't available. We did a lot of driving and hiking, which wasn't affected by restrictions.	4	1.4
19	Political	I don't feel welcome because of all the Trump signs, and the level to which many locals seem to take it, with effigies and such. It makes me uncomfortable; the lack of effort by local officials to really capitalize upon the tourism opportunity. Their extreme homophobia, racism and general attitude toward outsiders make it tough to want to return; WV's lack of commitment to reducing fossil fuel dependency.	3	1.1
20	Others	Tiredness from too much walk; the predatory police that prey on visitors with out of state tags to generate revenue for their municipalities; tolls were annoying due to being cash only; pretty busy skiing, but it's not anything that I haven't seen before on other mountains; tolls on the highway; too many Airbnbs are hunting oriented and have mounted animals as decorations; when I travel, I get car sick; got a flat tire and tow truck took half a day to come get us; tough to see everything when partially disabled; bowel movement; cultural differences; sites under construction; there is very little to do at night; need more of nighttime activities; hard to get groceries or anything for the cabins; not enough convenience stores.	17	6.0
<b>Total</b>			<b>285</b>	<b>100.0</b>

\*Some respondents provided more than one negative aspect; \*\*the category "others" includes all responses on a single negative aspect less than 3 counts.

### *Most Positive Aspects Affecting Visitors' Experience*

Table 15 presents 727 of the most positive things experienced by respondents during their most recent visit to the area. These responses are outlined into 19 categories. The most frequently mentioned positive experience was related to scenery/nature/scenic views, accounting for 42.9% of all responses (e.g., the untouched part of nature; scenery; natural beauty; very beautiful and mainly untouched). The second most positive aspect was outdoors (12.9%) (e.g., great adventure; nice hike; we enjoyed hiking the rails and seeing the falls; pretty walks through the woods), followed by people/community (5.9%) (e.g., people were very friendly and full of useful information; every individual we ran into was friendly, along with the workers; everyone who was “local” was nice, helpful and friendly), which is closely followed by tranquility and relaxing (5.0%) (e.g., it was so peaceful; tranquility; I loved how peaceful and serene it was; a feeling of getting away). Other positive aspects included family/friends (4.7%), environment/rurality/fresh air (4.5%), fun/interesting (3.0%), and local culture/custom (3.0%). In addition, 14 positive responses (on a single negative aspect less than 3 counts) are grouped as “others”, accounting for 1.9% of total responses.

**Table 15. Most positive aspects of visitors' most recent visit to the area. \***

<b>No.</b>	<b>Category</b>	<b>Sample positive comments</b>	<b>Counts**</b>	<b>Percent (%)</b>
1	Scenery/nature/scenic views	The untouched part of nature; scenery; natural beauty; very beautiful and mainly untouched	312	42.9
2	Outdoors	Great adventure; nice hike; we enjoyed hiking the rails and seeing the falls; pretty walks through the woods	92	12.7
3	People/community	People were very friendly and full of useful information; every individual we ran into was friendly, along with the workers; everyone who was “local” was nice, helpful and friendly	43	5.9
4	Tranquility/relaxing	It was so peaceful; tranquility; I loved how peaceful and serene it was; a feeling of getting away	36	5.0
5	Family/friends	Had a good time as a family; spending time with family; seeing friends; great area to get together with friends	34	4.7

6	Environment/rurality /fresh air/	Unpolluted air; the clean air; biodiversity; rurality; felt authentic; the environment	33	4.5
7	Fun/interesting/like	Fun; fun surrounding areas; had lots of fun; I had a fun visit;	22	3.0
8	Local culture/custom	Culture; the local people and culture they have here; getting to see a new place and culture surrounding it	22	3.0
9	Memories/experience	The experience; visit was all round great; promoting self-wellness; being part of nature; making memories; the memories I'll be able to share with my friend	21	2.9
10	Wildlife view	The wildlife; lots of wildlife were seen; amazing wildlife sightings	19	2.6
11	Service/lodging	Staying at the Greenbrier hotel; great guide services; the accommodation (Airbnb) was very nice	19	2.6
12	Management	The area was well taken care of; great nature preservation; I really appreciate how well the roads were treated around Canaan; the trail was well kept	18	2.5
13	Cleanliness	Cleanliness; well kept outdoor areas were very clean; it was clean, quiet, and calm	9	1.2
14	Less crowded	The area is less crowded than seven springs; not very crowded; never crowded; just enjoying somewhere that is not overcrowded	8	1.1
15	Weather	Super nice weather and foliage; the weather was gorgeous	6	0.8
16	Location	Close by; good remote location; remoteness	6	0.8
17	Uniqueness	Just the difference from where I live; unique golf resorts and state of nature; unique natural views	5	0.7
18	Facilities	The visitor center was amazing; the wide variety of shops	4	0.6
19	Price	Affordable; prices of products	4	0.6
20	Others	Safety; job for locals; sharing; everything	14	1.9
<b>Total</b>			<b>727</b>	<b>100.0</b>

\*Some respondents provided more than one positive aspect; \*\*the category “others” includes responses on a single positive aspect less than 3 counts.

### 3.5. Post-COVID-19 Travel Preferences and Behaviors

Respondents were also asked to indicate how much they disagreed or agreed with 16 statements measuring their perceptions of travel preferences and behaviors post-COVID-19. Results are presented in Table 16. Most respondents either mildly agreed or strongly agreed that they care more about hygiene and safety in future trips (75.1%). This was followed by their intention to 'give more attention to reviews about the cleanliness of accommodations' (70.5%), 'Search for less crowded places' (67.4%), express 'more interest in nature-based tourism' (66.9%), and 'spend more time searching for information about the destination' (66.1%)."

**Table 16. Perceptions of travel preferences and behaviors post COVID-19.**

<b>Items</b>	<b>SD (%)</b>	<b>MD (%)</b>	<b>N (%)</b>	<b>MA (%)</b>	<b>SA (%)</b>	<b>MA+SA (%)</b>	<b>Mean</b>
7. Care more about hygiene and safety in future trips	5.1	5.8	13.9	43.2	31.9	75.1	3.91
13. Give more attention to the reviews about the accommodation cleanness	3.4	8.6	17.5	40.9	29.6	70.5	3.85
2. Search for less crowded places	9.5	9.9	13.2	40.9	26.5	67.4	3.65
8. More interested in nature-based tourism	4.2	6.0	22.9	39.2	27.7	66.9	3.80
9. Spend more time searching for information about the destination	4.8	7.6	21.5	40.4	25.7	66.1	3.75
16. Use mobile payment options more	6.7	7.2	21.5	40.9	23.6	64.5	3.68
3. Prefer rural areas over urban areas	6.5	9.0	22.8	36.2	25.6	61.8	3.65
5. Prefer to travel with family members or relatives	7.4	9.7	23.3	34.9	24.7	59.6	3.60
12. Prefer to travel domestically	7.4	10.8	24.7	32.3	24.9	57.2	3.56
1. More cautious about travelling	13.9	16.9	14.3	39.2	15.7	54.9	3.26
14. Look for booking a flight ticket with more flexibility	6.5	8.5	30.9	33.0	21.2	54.2	3.54
10. Travel less compared to the period before the pandemic	12.2	20.6	15.9	29.8	21.5	51.3	3.28
4. Travel to places closer to home	10.4	16.0	22.8	36.0	14.8	50.8	3.29
15. More likely to share travel experience and write reviews on social media platforms	10.9	17.5	30.5	27.7	13.4	41.1	3.15
11. Prefer to stay at a small hotel rather than a big one	11.5	17.1	32.3	24.9	14.3	39.2	3.13
6. Prefer to stay in short-term rentals over other lodging types	12.3	16.9	31.6	26.8	12.3	39.1	3.10

SD = Strongly Disagree, MD = Mildly Disagree, N = Neutral, MA = Mildly Agree, SA = Strongly Agree

### 3.6. Perceptions of the Relationship between Humans and the Environment

Table 17 presents visitors' perceptions of the relationship between humans and the environment measured by the New Ecological Paradigm (NEP) (Dunlap et al., 2000). Participants' responses were most positive for Item 9, 'Despite our special abilities, humans are still subject to the laws of nature' (86.9%), Item 5, 'Humans are severely abusing the environment' (83.7%), and Item 7, 'Plants and animals have as much right as humans to exist' (83.4%). It should be noted that over 60% of respondents either agreed or strongly agreed with Item 6, 'The earth has plenty of natural resources if we just learn how to develop them' with a

mean value of 2.47 out of 5, the lowest among all the 15 items (note: as with other even-numbered items, this item was also reverse recoded).

**Table 17. Perceptions of the relationship between humans and the environment.**

<b>Items</b>	<b>SD (%)</b>	<b>MD (%)</b>	<b>N (%)</b>	<b>MA (%)</b>	<b>SA (%)</b>	<b>MA+SA (%)</b>	<b>Mean</b>
9. Despite our special abilities humans are still subject to the laws of nature	0.2	1.6	11.3	35.9	51	86.9	4.36
5. Humans are severely abusing the environment	1.8	3.7	10.8	36.8	46.9	83.7	4.23
7. Plants and animals have as much right as humans to exist	1.8	2.5	12.4	30.1	53.3	83.4	4.31
3. When humans interfere with nature it often produces disastrous consequences	1.6	6	12.9	43.2	36.3	79.5	4.07
13. The balance of nature is very delicate and easily upset	1.6	8.1	16.5	41.1	32.7	73.8	3.95
15. If things continue on their present course, we will soon experience a major ecological catastrophe	3.5	6	18.1	29.6	42.8	72.4	4.02
10. The so-called “ecological crisis” facing humankind has been greatly exaggerated	7.6	15.4	13.3	20.4	43.4	63.8	3.76
11. The earth is like a spaceship with very limited room and resources	8.8	13.1	15.2	38.8	24.1	62.9	3.56
1. We are approaching the limit of the number of people the earth can support	12	15.9	15.6	36.3	20.2	56.5	3.37
12. Humans were meant to rule over the rest of nature	7.8	14.5	21.8	22.5	33.5	56	3.59
2. Humans have the right to modify the natural environment to suit their needs	6.2	19.1	19.5	35	20.2	55.2	3.44
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations	9.4	20.7	19.3	28.1	22.5	50.6	3.34
14. Humans will eventually learn enough about how nature works to be able to control it	6.9	21.6	25.7	25.1	20.7	45.8	3.31
4. Human ingenuity will ensure that we do NOT make the earth unlivable	7.8	20.7	32.2	24.4	14.9	39.3	3.18
6. The earth has plenty of natural resources if we just learn how to develop them	22.3	38.4	17.2	14.7	7.4	22.1	2.47

Note: Agreement with the eight odd-numbered items and disagreement with the seven even-numbered items, which were reverse worded, indicate pro-NEP responses. The seven-numbered items were re-coded in the same direction as the eight-numbered items so that higher percentages/means indicate more support for the environment.

## 4. Discussion and Conclusions

While the development of recreational economies in gateway communities near public lands has been a longstanding practice in the US, it is only recently that the possibility has emerged as a national priority for rural community development. To capitalize on this momentum, the MNF,

in partnership with West Virginia University and USDA Rural Development, has brought together diverse stakeholders to create a shared vision for promoting and developing recreational economies in the region. This effort involved 12 towns in eight counties surrounding the MNF. This regional approach for rural development can be better implemented with an understanding of how the recreational economy was perceived from the perspective of visitors, particularly those from the major tourism markets of the region.

This study identified 32 sustainability indicators with inputs from the research team and by drawing upon findings from the literature. These 32 indicators were selected to reflect the four dimensions of sustainability - environmental, socio-economic, cultural, and institutional with eight items for each. A gap analysis between importance and performance for all 32 indicators revealed that performance scores are significantly lower than importance scores, indicating a need and opportunity for improving sustainability indicators for the eight-county region. It is worth noting that in the tourism literature, attributes are often rated high in importance but low in performance (Deng et al., 2017).

A further Importance-Performance Analysis (IPA) indicates that six environmental indicators (items 1, 2, 3, 5, 6, and 8), four cultural indicators (items 17, 18, 19, and 24), and one institutional indicator (item 29) are located in the 'keep up the good work' quadrant, while three socio-economic indicators (items 11, 14, and 16), one cultural indicator (item 23), and one institutional indicator (item 30) are located in the 'concentrate here' quadrant, implying that destination managers should place higher priorities on these socio-economic, cultural, and institutional indicators when developing management plans.

Findings from the IPA show that visitors cared more about the environmental sustainability than the other three sustainability dimensions, particularly the socio-economic sustainability.



This finding is consistent with the literature. For example, previous studies also reported that tourists scored significantly higher on environmental attributes than on social and economic attributes (Deng & Bender, 2007; Gezici, 2006). This suggests that visitors tended to value their experiences (e.g., rural authenticity and the natural environment) more than the potential benefits for local communities from tourism development (e.g., economic gains for gateway communities).

In summary, survey results in this report provide useful information on visitors' profiles, and their perceptions of destination competitiveness and importance, and the performance of sustainability indicators. This research-based information is critical for developing sustainable recreational economies in national forest areas, thus strengthening the link between recreation for community well-being and forest resource management, a primary goal for the USDA.

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## Appendix A: Survey questionnaire



**March 1, 2023**

**Dear Participant:**

You recently participated in a short screening survey on tourism resilience and sustainability in the Monongahela National Forest area. You are invited again to participate in the second survey that targets those who met the screening criteria: at least 18 years old and have travelled at least once to the Monongahela National Forest area in West Virginia in the past 4 years or so (2019-present).

Thank you for assisting us in our research project about visitors' perceptions of rural tourism in the **Monongahela National Forest and its surrounding 8 counties** (Grant, Tucker, Randolph, Greenbrier, Webster, Nicholas, Pendleton, and Pocahontas). This project is being conducted by Dr. Doug Arbogast, an associate professor with WVU Extension Service and Dr. Jinyang Deng, a professor with WVU Recreation, Parks and Tourism Resources Program. Your participation in this project is greatly appreciated and will take approximately 13 minutes to complete the survey.

The study is funded by the United States Department of Agriculture (USDA). The objectives of the grant are focused on better understanding resiliency of rural destinations and indicators of sustainable tourism related to COVID-19. Sections 3, 4 and 6 in the survey are focused on sustainable tourism indicators and post COVID-19 travel preferences and behaviors. Section 7 will provide the theoretical framework for a doctoral dissertation. The results of this survey will also be used to improve policy makers' understanding of visitors' attitudes and opinions toward tourism in the region and help them determine future tourism development opportunities in order to create more resilient and sustainable destinations. The information obtained from this survey will also provide recreation/tourism leaders the opportunity to learn about and respond to public opinions. Sections 2 and 5 are designed to specifically provide insight to support local decision makers.

Your participation in this survey is voluntary and you can quit at any time. However, you can help us very much by taking a few minutes to respond. You do not have to answer all of the questions, but any information you provide will contribute to the project's success. **All information collected will be kept strictly confidential.** Information you provide is anonymous and only summaries will be reported in which an individual's answers will not be identified.

This survey was reviewed and approved by WVU Institutional Review Board (IRB) and a **WVU IRB acknowledgement is on file**. If you have any further questions, please feel free to contact Doug Arbogast by phone (304-293-8686) and/or by email (douglas.arbogast@mail.wvu.edu). Your contribution to this study is greatly appreciated and will be a great benefit to this region.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jinyang Deng'.

Dr. Jinyang Deng  
West Virginia University  
Professor  
Recreation, Parks and Tourism Resources

A handwritten signature in black ink, appearing to read 'Doug W. Arbogast'.

Doug Arbogast  
West Virginia University  
Extension Specialist  
Rural Tourism Development

## Consent

1. You will be offered \$4 for completing this survey. If you agree to participate in this survey, please check "Yes" below:

- Yes  
 No

## Background Information

2. Please check the year in which you made **your most recent trip** to the area.

- 2019  
 2020  
 2021  
 2022  
 2023

3. What state do you currently reside in?

- District of Columbia (D.C.)  
 Kentucky  
 Maryland  
 North Carolina  
 Ohio  
 Pennsylvania  
 South Carolina  
 Virginia  
 None of Above

4. Please choose from the following list of places you have visited in the area during your most recent trip (click to choose all that apply). If the places you visited are not on the list, please write down in the blank space provided.

- |   |   |
|---|---|
| <input type="checkbox"/> Blackwater Falls     | <input type="checkbox"/> Smoke Hole Caverns       |
| <input type="checkbox"/> Canaan Valley Resort | <input type="checkbox"/> Snowshoe Mountain Resort |
| <input type="checkbox"/> Dolly Sods           | <input type="checkbox"/> Spruce Knob              |

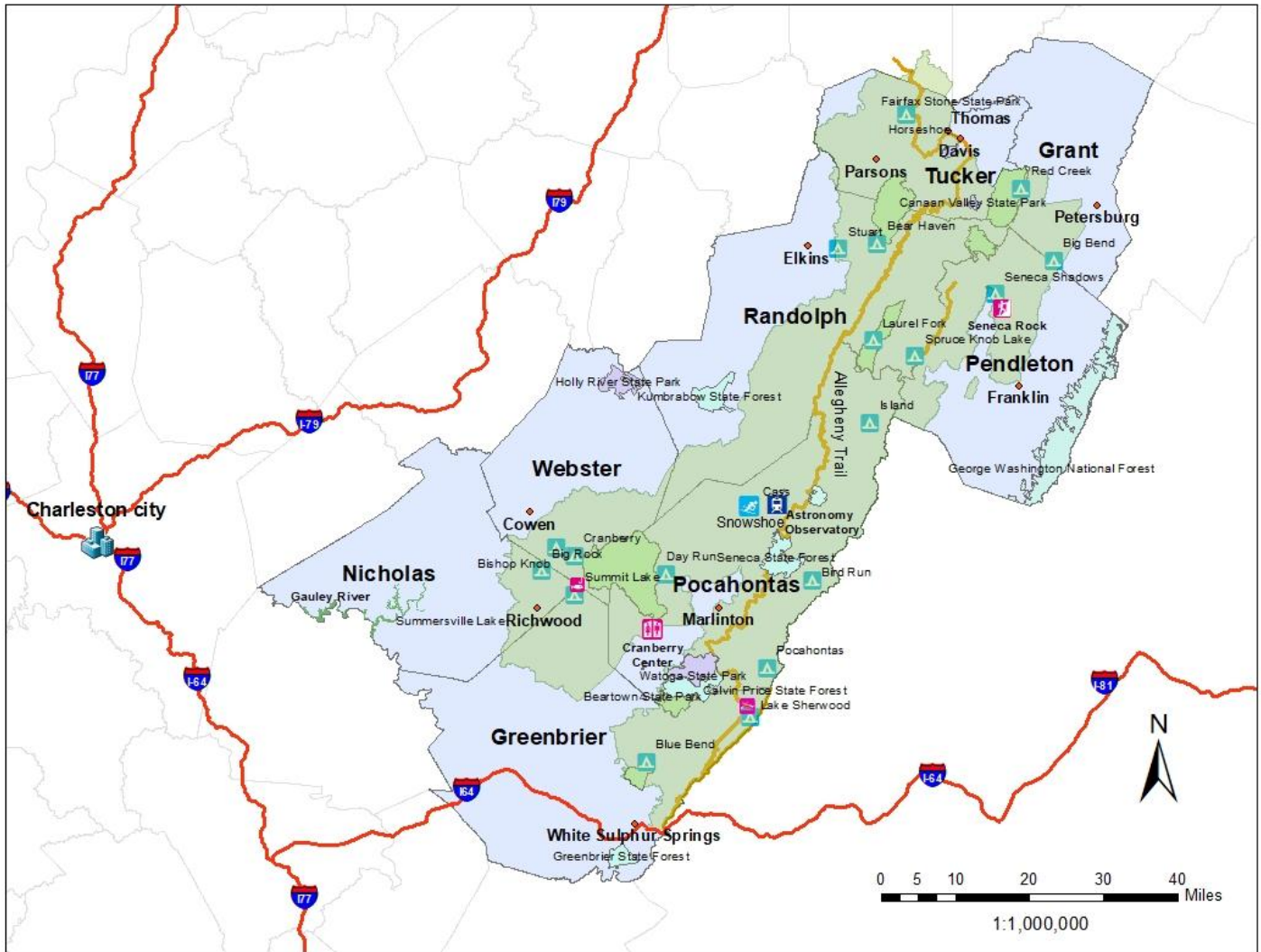
- Durbin Days
- Falls of Hills Creek
- Green Bank Observatory
- Greenbrier Resort
- Greenbrier River Trail State Park
- Highland Scenic Highway
- Mountain State Forest Festival
- Pickens, West Virginia Maple Syrup Festival
- Pickin' in Parsons Bluegrass Festival

- Timberline Resort
- Trains-Durbin Rocket; Cass Scenic Railroad; Potomac Eagle; New Tygart Flyer
- Treasure Mountain Festival
- Tri County Fair
- West Fork Trail
- White Sulphur Springs
- WV Dandelion Festival
- WV Road Kill Cook Off

**Others (please specify)**

- Seneca Rocks

5. Following the previous question, please click on the map (**the shaded area that shows the Monongahela National Forest and its surrounding 8 counties**) to roughly show places you have visited during your most recent trip to the area (Maximum 10 clicks. To delete a point, put the cursor on the point, then left click. To move the point, put the cursor on the point, left click, hold and drag. if you use a mobile device, simply finger touch the map area, touch again to delete. To move the point, touch, hold and drag).



### Prolific ID

6. What is your Prolific ID

Please note that this response should auto-fill with the correct ID

### Section 2: Trip Characteristics

### Section 2: Trip Characteristics

1. Please check where appropriate to indicate your reason(s) for visiting the 8-county region including the Monongahela National Forest during your most recent visit.

- Leisure/holiday/vacation
- Visiting friends and/or relatives
- Business
- Others (please specify)**

2. Including your most recent visit, how many times have you visited the 8-county region including the Monongahela National Forest **in the past 4 years or so (2019-present)?**

- This is my first time
- 2-5 times
- 6-10 times
- More than 10 times

3. Including your most recent visit, how many times have you visited the 8-county region including the Monongahela National Forest **in the previous 12 months?** (Numbers only, please enter 0 if you have not visited the area in the past 12 months).

4. **Including yourself**, how many people were traveling with you during your most recent trip to the area?

- I traveled alone
- 2
- 3-5
- 6-10
- More than 10

5. What activities have you participated in during your most recent trip to the region?



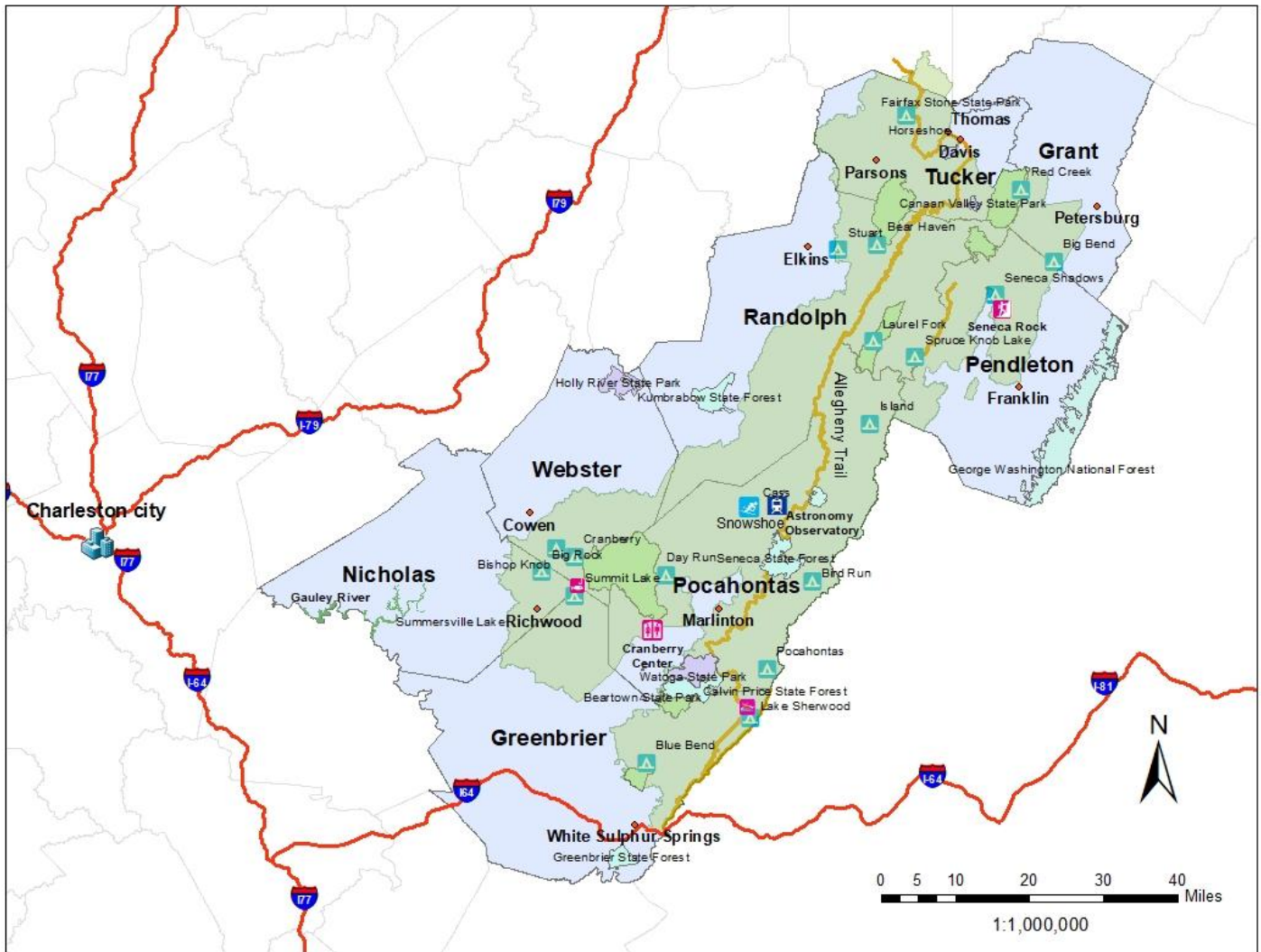
	Select <u>all</u> activities you participated in during your most recent trip to the area Click all that apply	Select the <u>one</u> activity that was the primary activity you participated during your most recent trip to the area. Choose only ONE
Backpacking	<input type="checkbox"/>	<input type="checkbox"/>
Canoeing/Kayaking	<input type="checkbox"/>	<input type="checkbox"/>
Civil war sites/historic sites	<input type="checkbox"/>	<input type="checkbox"/>
Downhill Skiing/Snowboarding	<input type="checkbox"/>	<input type="checkbox"/>
Fairs & events	<input type="checkbox"/>	<input type="checkbox"/>
Farms/farmer's markets	<input type="checkbox"/>	<input type="checkbox"/>
Food & drink experiences	<input type="checkbox"/>	<input type="checkbox"/>
Factory tours	<input type="checkbox"/>	<input type="checkbox"/>
Fishing	<input type="checkbox"/>	<input type="checkbox"/>
Geocaching	<input type="checkbox"/>	<input type="checkbox"/>
Hiking	<input type="checkbox"/>	<input type="checkbox"/>
Hunting	<input type="checkbox"/>	<input type="checkbox"/>
Leaf peeping	<input type="checkbox"/>	<input type="checkbox"/>
Mountain Biking	<input type="checkbox"/>	<input type="checkbox"/>
Nightlife	<input type="checkbox"/>	<input type="checkbox"/>
Performing arts	<input type="checkbox"/>	<input type="checkbox"/>
Picnicking	<input type="checkbox"/>	<input type="checkbox"/>
Rail-trail/Road Biking	<input type="checkbox"/>	<input type="checkbox"/>
Rock Climbing/Bouldering	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>
Sightseeing	<input type="checkbox"/>	<input type="checkbox"/>
Swimming	<input type="checkbox"/>	<input type="checkbox"/>
Snowmobiling/ATV/UTV riding	<input type="checkbox"/>	<input type="checkbox"/>
Viewing wildlife	<input type="checkbox"/>	<input type="checkbox"/>
Whitewater Rafting	<input type="checkbox"/>	<input type="checkbox"/>
XC Skiing	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) <input style="width: 150px; height: 20px;" type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. During your most recent trip to the region, how much have you or your group spent in the region? (If you traveled as a group, enter the estimated spending for the whole group. If you traveled alone, enter the spending for yourself).

- Less than \$100
- \$101 to \$200
- \$201 to \$300
- \$301 to \$400



- \$401 to \$500
- \$501 to \$600
- \$601 to \$700
- \$701 to \$800
- \$801 to \$900
- \$901 to \$1000
- \$1001 to \$2000
- \$2001 to \$3000
- \$3001+



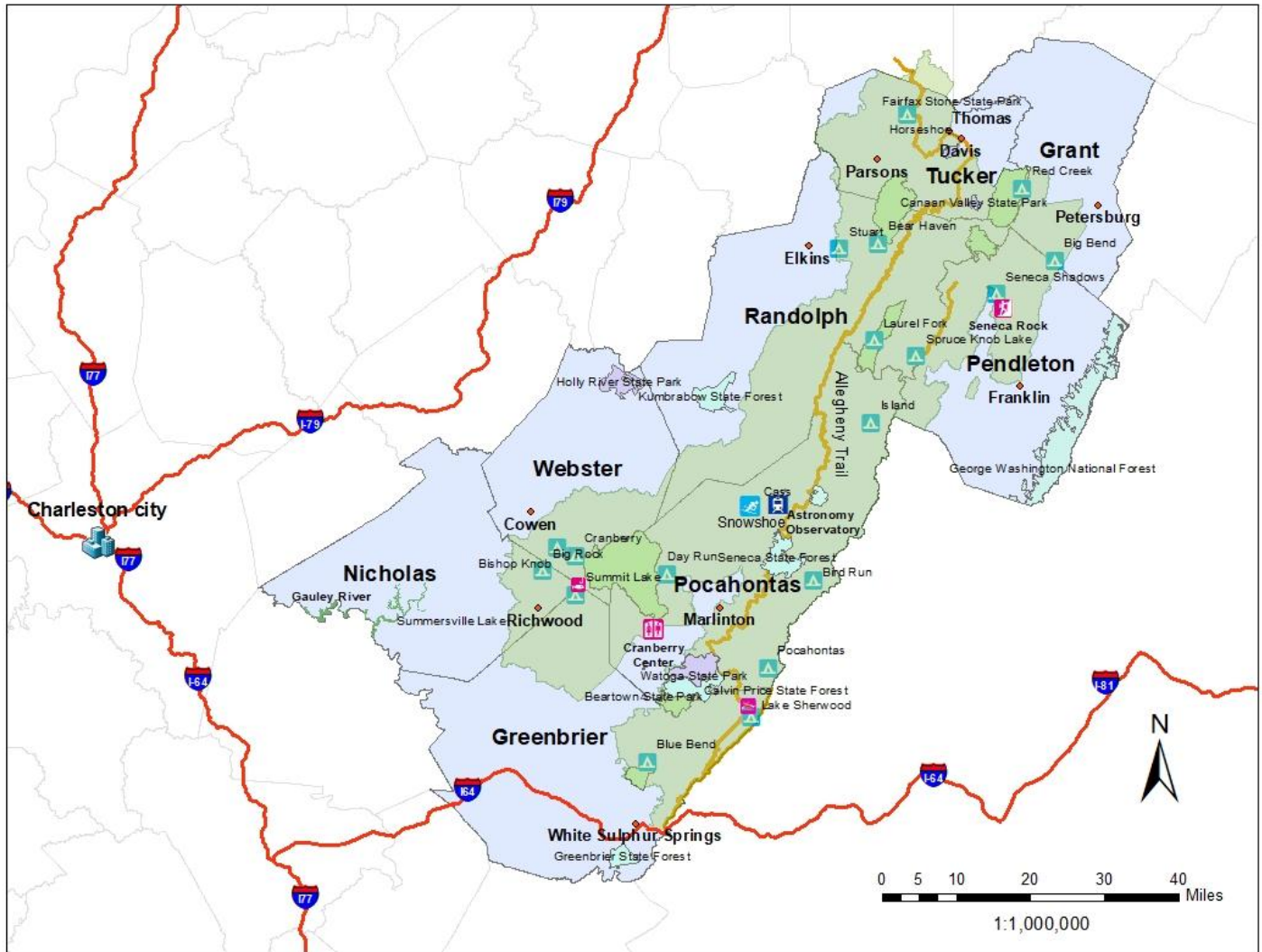
7. Have you stayed overnight in the region (anywhere in the region defined above including the Forest and/or any places in the 8 counties) during your most recent trip?

- Yes
- No

8. During your most recent trip to the region, how many nights have you stayed in the region? (number only)

9. Please indicate your main type(s) of accommodation that you stayed at during your most recent trip to the region.

- Airbnb
- Bed & Breakfast
- Camping/tent
- Friends and/or relatives
- Homestays
- Hotel/motel/inn
- Rented house/apartment/VRBO
- RV
- Second home
- Timeshare
- Youth hostel
- Other (please specify)



10. What town/area have you stayed overnight in during your most recent visit to the area? (Please check all that apply or write down the names in the blank space).

- |  |  |
|--|--|
| <input type="checkbox"/> Canaan Valley | <input type="checkbox"/> Petersburg    |
| <input type="checkbox"/> Cowen         | <input type="checkbox"/> Richwood      |
| <input type="checkbox"/> Davis         | <input type="checkbox"/> Seneca Rocks  |
| <input type="checkbox"/> Durbin        | <input type="checkbox"/> Snowshoe      |
| <input type="checkbox"/> Elkins        | <input type="checkbox"/> Thomas        |
| <input type="checkbox"/> Franklin      | <input type="checkbox"/> White Sulphur |
| <input type="checkbox"/> Marlinton     | <b>Others (please specify)</b>         |

## SECTION 3: Perceptions of Tourism Sustainability Indicators

### Section 3: Perceptions of Tourism Sustainability Indicators: Importance

1. Listed below are phrases about your perceptions of the aspects of tourism sustainability in **rural destinations as a whole**. Please using the following scale to indicate how important (**1 = least important, 5 = most important**) each indicator is to measure tourism sustainability.

	1	2	3	4	5	N/A
1. Protection of the natural environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Rural authenticity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Environmental quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Reduction of energy consumption and improvement of efficiency in its use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Control of negative impacts through long-term planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Management of waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Reduction of greenhouse gas emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	N/A
8. Management of overcrowding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Economic opportunities from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. High-paying jobs from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Improvement of the well-being of rural communities from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Marketing and promotion of tourism assets to visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. More investment in tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Contribution to community and sustainability initiatives in a responsible manner from enterprises, visitors, and the public	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	N/A
15. Career opportunities and training in tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. A system to monitor, prevent, publicly report, and respond to crime, safety, and health hazards that addresses the needs of both visitors and residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. A policy and system to evaluate, rehabilitate, and conserve cultural assets, including built heritage and cultural landscapes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Celebration and protection of intangible cultural heritage, including local traditions, arts, music, language, food and other aspects of local identity and distinctiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Accurate interpretative material that informs visitors of the significance of the cultural and natural aspects of the sites they visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4	5	N/A
20. Guidelines for visitor behavior at sensitive sites and cultural events being made available to visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Optimize visitor flow and minimize adverse impacts in cultural sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	N/A
22. Opportunities for visitors to reflect on religious or other spiritual values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Cultural/heritages sites accessible to physically disabled tourists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Safeguarding cultural identify of local community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Evidence of links and engagement with other bodies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Existence of a regional collaboration and marketing organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Local leaders' support for tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Quality of public-private partnership in tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	N/A
29. A risk reduction, crisis management and emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. A system to monitor and respond to socio-economic, cultural and environmental issues and impacts arising from tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Public participation in sustainable destination planning and management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. The destination management strategy/plan clearly visible and available online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section 4: Perceptions of Tourism Sustainability Indicators: Performance

2. Listed below are phrases about your perceptions of the aspects of tourism sustainability **specifically related to the Monongahela National Forest area**. Please using the following scale to indicate how satisfied (**1 = very dissatisfied, 5 = very satisfied**) with the performance of each indicator in the area.

	1	2	3	4	5	Unsure
1. Protection of the natural environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Rural authenticity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Environmental quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Reduction of energy consumption and improvement of efficiency in its use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Control of negative impacts through long-term planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Management of waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Reduction of greenhouse gas emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	Unsure

	1	2	3	4	5	Unsure
8. Management of overcrowding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Economic opportunities from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. High-paying jobs from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Improvement of the well-being of rural communities from tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Marketing and promotion of tourism assets to visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. More investment in tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Contribution to community and sustainability initiatives in a responsible manner from enterprises, visitors, and the public	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4	5	Unsure
15. Career opportunities and training in tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. A system to monitor, prevent, publicly report, and respond to crime, safety, and health hazards that addresses the needs of both visitors and residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. A policy and system to evaluate, rehabilitate, and conserve cultural assets, including built heritage and cultural landscapes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Celebration and protection of intangible cultural heritage, including local traditions, arts, music, language, food and other aspects of local identity and distinctiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Accurate interpretative material that informs visitors of the significance of the cultural and natural aspects of the sites they visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Guidelines for visitor behavior at sensitive sites and cultural events being made available to visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Optimize visitor flow and minimize adverse impacts in cultural sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4	5	Unsure
22. Opportunities for visitors to reflect on religious or other spiritual values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Cultural/heritages sites accessible to physically disabled tourists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Safeguarding cultural identify of local community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Evidence of links and engagement with other bodies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Existence of a regional collaboration and marketing organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Local leaders' support for tourism development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Quality of public-private partnership in tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4	5	Unsure
29. A risk reduction, crisis management and emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. A system to monitor and respond to socio-economic, cultural and environmental issues and impacts arising from tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Public participation in sustainable destination planning and management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. The destination management strategy/plan clearly visible and available online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**SECTION 5: Perceptions of Relative Competitiveness for Mon National Forest Area**

### Section 5: Perceptions of Relative Competitiveness for Mon National Forest Area

1. Have you visited any other rural destination(s) similar to the Monongahela National Forest Area in the past **4 years or so (2019-present)**?

- Yes
- No

2. Please list up to three rural destinations you are comparing to the Monongahela National Forest area (Text only) (please list the name of the destination and state).

1

2

3

3. Listed below are phrases about your perceptions of how competitive the Monongahela National Forest area is as compared to a similar rural area(s) you have visited in the past **4 years or so (2019-present)**.

	Much Worse	Somewhat Worse	About the Same	Somewhat Better	Much Better
1. Natural attraction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Heritage and cultural assets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Rural tranquility and authenticity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Hospitality and friendliness of local residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Diversity and uniqueness of local products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Accessibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Much Worse	Somewhat Worse	About the Same	Somewhat Better	Much Better

	<b>Much Worse</b>	<b>Somewhat Worse</b>	<b>About the Same</b>	<b>Somewhat Better</b>	<b>Much Better</b>
<b>7. Security and safety</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>8. Infrastructure</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>9. Resource conservation</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>10. Festivals and events</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>11. local food/eatery</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>12. Prices</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<b>Much Worse</b>	<b>Somewhat Worse</b>	<b>About the Same</b>	<b>Somewhat Better</b>	<b>Much Better</b>
<b>13. Outdoor recreation opportunities</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>14. Entertainment and night life</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>15. Level of crowding</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>16. Shopping</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>17. Lodging</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>18. Overall competitiveness</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. What was the most negative aspect of your most recent visit to this area, if any?

5. What was the most positive aspect of your most recent visit to this area, if any?

6. What specifically could this region do to be more competitive as a tourism destination?



## Section 6: Post COVID-19 Travel Preferences and Behaviors

### Section 6: Post COVID-19 Travel Preferences and Behaviors

1. List below are phrases on your **post-COVID-19** travel preferences and attitudes *as compared to pre-COVID-19*. Please use the following scale to indicate how much you agree or disagree with each item (**1 = strongly disagree, 5 = strongly agree**).

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
1. More cautious about travelling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Search for less crowded places	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Prefer rural areas over urban areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Travel to places closer to home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Prefer to travel with family members or relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Prefer to stay in short-term rentals over other lodging types	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
7. Care more about hygiene and safety in future trips	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. More interested in nature-based tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Spend more time searching for information about the destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Travel less compared to the period before the pandemic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Prefer to stay at a small hotel rather than a big one	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Prefer to travel domestically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
13. Give more attention to the reviews about the accommodation cleanliness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Look for booking a flight ticket with more flexibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. More likely to share travel experience and write reviews on social media platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Use mobile payment options more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

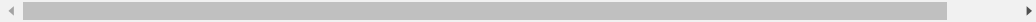
## Section 7: Perceptions of the Relationship between Humans and the Environment

### Section 7: Perceptions of the Relationship between Humans and the Environment

1. Please rate the extent to which you disagree or agree with each statement below.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. We are approaching the limit of the number of people the earth can support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Humans have the right to modify the natural environment to suit their needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When humans interfere with nature it often produces disastrous consequences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Human ingenuity will ensure that we do NOT make the earth unlivable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Humans are severely abusing the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The earth has plenty of natural resources if we just learn how to develop them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
7. Plants and animals have as much right as humans to exist	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The balance of nature is strong enough to cope with the impacts of modern industrial nations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Despite our special abilities humans are still subject to the laws of nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. The so-called "ecological crisis" facing humankind has been greatly exaggerated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
11. The earth is like a spaceship with very limited room and resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Humans were meant to rule over the rest of nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. The balance of nature is very delicate and easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Humans will eventually learn enough about how nature works to be able to control it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. If things continue on their present course, we will soon experience a major ecological catastrophe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## SECTION 8: Socio-demographics

### Section 8: Socio-demographics

- Female
- Male
- Non-binary
- Other
- Prefer not to answer

### 2. What is your age?

- 18-24
- 25-34
- 35-44
- 45-54

- 55-64
- 65+
- Prefer not to tell

3. What is the highest level of education you have completed?

- Less than high school degree
- High school degree or equivalent
- Some college
- Undergraduate or post-secondary degree
- Graduate school degree

4. What was your approximate household income from all sources, before taxes, in **2022**?

- Less than \$20,000
- \$20,001 to 40,000
- \$40,001 to 60,000
- \$60,001 to \$80,000
- \$80,001 to 100,000
- \$100,001 to \$150,000
- \$150,001 to \$200,000
- \$200,001 to \$250,000
- \$250,001 to \$300,000
- \$300,001+

5. What is your zip code

6. Please circle a number in the following scale to indicate the extent to which you are interested in relocating your family or business to the Monongahela National Forest area?

- Not interested at all
- Slightly interested
- Moderately interested
- Very interested
- Extremely interested

7. If you are interested in relocating to the Monongahela National Forest area, what are the reasons

8. What are the barriers to relocating?

9. Do you have any other comments on COVID-19 and tourism in the area?

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