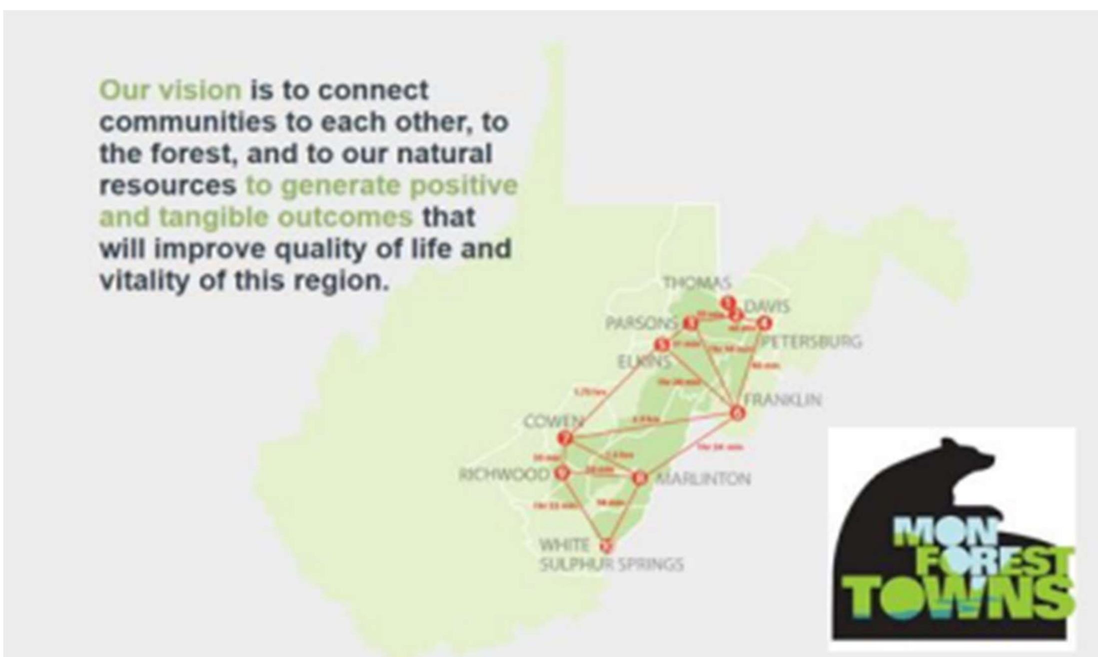
Resident's Perceptions of Recreation Economy in the Monongahela National Forest Area

Prepared by:

Morgan Martin[1]
Jinyang Deng,[1] Ph.D.
Doug Arbogast,[2] Ph.D.

[1]Recreation, Parks & Tourism Resources Program
School of Natural Resources
West Virginia University
Morgantown, West Virginia

[2]Family & Community Development
West Virginia University Extension Service
Morgantown, Werst Virginia



August 2, 2022

Table of Contents

List of Figures

List of Tables

Executive Summary

This resident survey for the Monongahela National Forest area was conducted using the Qualtrics online survey platform, with a valid sample size of 682 respondents from a target area of eight counties in West Virginia including 10 towns in the region: Grant County, Tucker County, Randolph County, Greenbrier County, Webster County, Pocahontas County, Pendleton County, and Nicholas County. The main purpose of this survey is to learn more from the perspective of local residents (those living within one of the listed counties) about their perceptions of branding, collaboration and marketing, attitudes, strengths, weaknesses, opportunities, threats, and impacts of COVID-19 as related to the forest area so as to provide information and insight to guide marketing, planning, and development strategies for the promotion and future development efforts of a recreation economy in the area.

Results show that the majority of respondents were positive in these perceptions, but not without concerns and room for improvement. Specifically, nearly half of respondents reported having prior knowledge of the Mon Forest Towns (MFT) Initiative (45.7%) and of the logo (52.9%) before taking the survey. About 88% of respondents felt that regional collaboration and marketing can enhance tourism product portfolio and that it can leverage on each county's unique tourism product. In addition, about 60% of respondents felt that the brand makes a strong impression on visual sense or other senses and that it is interesting in a sensory way.

Respondents' attitudes on the recreation economy in the area were generally supportive of recreation and tourism, with nearly 90% of respondents either "mildly agreeing" or "strongly agreeing" that tourism development will provide more economic opportunities for the area and that long-term planning and managed growth are important to control any negative impacts of tourism. Concerns here are present in that 52.6% of respondents think that increased tourism will increase the cost of living in the area and only 50% support taxes for tourism development in the area.

Strengths of the area as perceived by the respondents from the local community were identified as nature-based, with nearly 90% of respondents agreeing that the area is rich in natural/heritage tourism resources and that the area provides opportunities for lots of outdoor recreation activities. Weaknesses include lacking infrastructure, (cellphone service, accommodations, and dining options) with nearly 80% of respondents agreeing that these areas are lacking for the region. The perceived weaknesses also provide insight on opportunities where future efforts for improvement could be focused.

Finally, in terms of perceived impacts of COVID-19 on the area's recreation and tourism, it seemed that respondents were cautiously optimistic or uncertain about the impacts and recovery of the recreation economy in the area. Only 30.5% of respondents thought that tourism in the forest area was hit hard by the pandemic, while over 70% believe that the Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic, suggesting that the respondents feel that there is increasing tourism to the area regardless of the pandemic.

1. Introduction

External forces such as globalization and technological change have led to a decline in traditional agricultural, forestry, and mining jobs in West Virginia. As a result, many small towns and communities in the state are looking to effective means such as recreation and tourism for economic diversification and growth. The rural authenticity, unique culture and heritage, distinctive and “alive” assets of traditional music, art and craft, local food and drink, and outdoor beauty and recreation have been increasingly identified as important assets that can help to improve local economies. It is argued that asset-based economic development is more sustainable as opposed to the traditional coal mining industry and the newly emerged industry on Marcellus Shale gas extraction in the state. The increasing importance of the recreation economy has been recognized by the USDA as an emerging or priority area of national need and an effective means for rural development. A recent study (The U.S. Bureau of Economic Analysis, 2021) reveals that outdoor recreation economy accounted for 1.8% ($374.3 billion) of GDP in 2020, compared to 2.1% ($459.8 billion) in 2019 pre-COVID-19 pandemic (The U.S. Bureau of Economic Analysis, 2020).

Although outdoor recreation is a growing and diverse economic sector, many rural communities lack the capacity and resources to successfully capitalize on the recreation economy. Moreover, most previous studies are community specific and few, if any, have examined recreation economy in gateway communities from a regional approach. A regional approach focuses on the development of partnership and collaboration that go beyond the community boundaries in a region to enhance co-growth and avoid competition among communities. To promote regional recreation economy in the Monongahela National Forest area, the MFT Partnership was initiated in 2017 through the support of the US Forest Service, West Virginia University, USDA Rural Development and 10 gateway communities to the Monongahela National Forest. The mission of MFT is to collaboratively grow a strong, sustainable recreation economy that enhances the quality of life for residents and visitors by providing the best outdoor experience.

To fulfill this mission, faculty from the West Virginia University Extension Service and Recreation, Parks, and Tourism Resources Program collaborated with local representatives from the MFT Partnership to identify the sustainability indicators (economic, environmental, and social) applicable to recreation economies and to develop an integrated process for measuring and evaluating these performance indicators which can be used to monitor and track, as a baseline, the impact of recreation economy development strategies.

With funding from Claude Worthington Benedum Foundation and WVU Community Engagement Grants, surveys of both local residents and visitors were conducted in 2021-2022 to learn more about recreation economy at the regional level in the Monongahela National Forest area. The main purpose is to triangulate data from multiple sources in order to examine how public land can impact local communities and what role recreation in public land plays in enhancing the quality of life for local residents and attracting visitors to the region in order to influence regional branding, marketing and asset development. Initial assessment of residents' and visitors' perceptions of recreation economy will establish the baseline with the intent to monitor this data every 5 years to determine trends over time. Reported here are results from the resident survey. Results from the visitor survey are reported separately.

2. Methods

2.1. Questionnaire

A questionnaire was designed based on findings from literature and with inputs from the MFT Marketing Committee. This questionnaire consists of 7 sections: 1) background information/demographics, 2) trip characteristics, 3) perceptions of regional collaboration and marketing, 4) perceptions of branding, 5) attitudes toward rural tourism development, 6) perceptions of strengths, weaknesses, opportunities, and threats, and 7) perceptions of the impacts of COVID-19 on recreation and tourism in the Monongahela National Forest and surrounding area. The questionnaire was reviewed and acknowledged for use by the WVU Institutional Review Board (IRB) and further pilot tested by the MFT Marketing Committee members before it was launched online.

2.2. Data Collection and Data Analysis

The research team built the questionnaire into Qualtrics, an online survey tool company, which also serves as the data collection tool. Prospective participants were targeted from eight counties in West Virginia: Grant, Tucker, Randolph, Greenbrier, Webster, Nicholas, Pendleton, and Pocahontas, which were identified as the primary market for the study area by the research team based upon the MFT's County residence. Prospective participants from the eight counties were recruited from two sources: 1) social media, and 2) emails purchased from DirectMail.com, a data marketing company. Levene's T-test for Equality of Variances and T-test for Equality of Means were conducted on those questions measuring perceptions for the two sources, finding that the majority (64.2%) of the questions were similar for both tests, 11.9% had similar results for the tests on variance but were different in tests on mean, 17.9% were similar in results for mean but different in that of variance, and that a small 6.0% were not similar in results for either of the two tests. Based on these results, the team decided that the responses were similar from the two sources (social media and email participants), to which they were combined for data analysis in this report.

Each participant who completed the survey was offered an opportunity to be entered into a raffle for MFT merchandise to compensate their time spent taking the survey. The surveys were conducted between January 10, 2022 and May 26, 2022 for the social media collection, and between March 9, 2022 and May 26, 2022 for the email collection. Participation from the email collection accounted for 139 responses (out of 186 total attempts) while participation from the social media collection accounted for 543 responses (out of 959 total attempts), providing a combined valid sample size of 682 (out of 1145 total attempts). Data were analyzed using SPSS 28. Results presented here are more descriptive in nature and are based on complete questionnaires, with incomplete responses omitted. Some background information questions were designed in a manner where responses were optional for the user, which could affect the sample sizes for those questions; completion of these questions were not influential factors depicting overall completion of the survey.

3. Demographics and Trip Characteristics

3.1 Demographics

Of the 682 valid respondents, the largest proportion resided in Randolph County (25.81%), followed by Nicholas (14.66%), Pocahontas (14.52%), Tucker (13.93%), Greenbrier

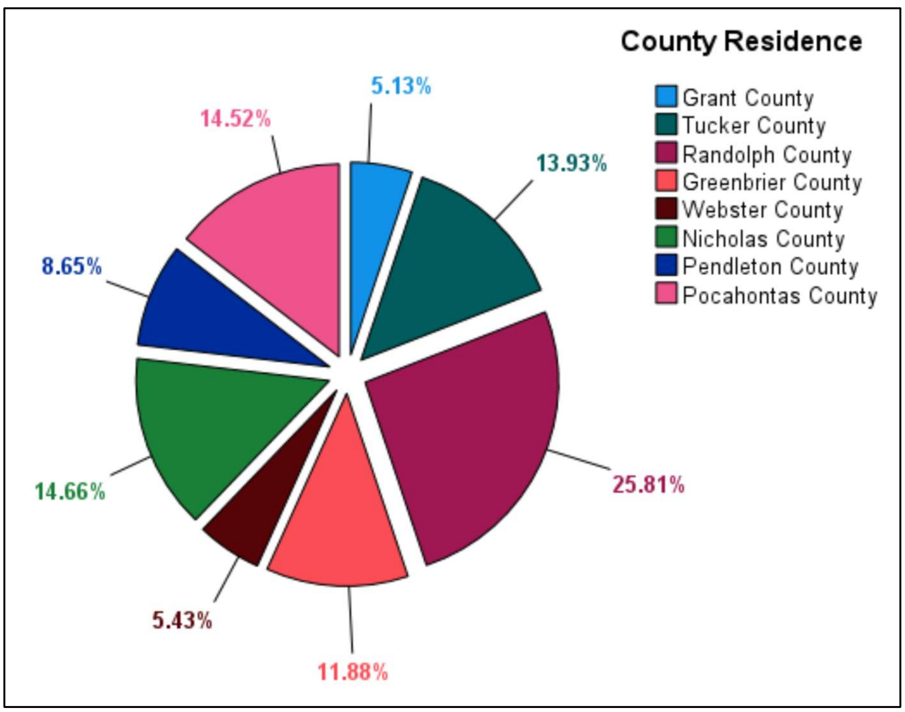


Figure 1: Respondents by County Residence

(11.88%), Pendleton (8.65%), Webster (5.43%) and lastly Grant (5.13%) (Figure 1).

Over half of the respondents were female (57.3%), with less than half (41.2%) of the respondents identifying as male. In addition, a small percentage of respondents preferred not to identify their gender (Figure 2).

Respondents were also asked to report their age and highest level of education they have completed (Figures 3 and 4, respectively). Figure 3 presents respondents by age group. A majority of the respondents were between the ages of 25 and 60 years old, accounting for 72.8% of the total amount (14.7% for age 25-34, 25.1% for age 35-44, 14.4% for age 45-50, and 18.6% for age 51-60, respectively). Respondents between 18-24 accounted for 4.6%, ages 61-69 accounted for 14.4%, and 7.0% accounted for respondents aged 70 and older. In addition, a small number of respondents (1.2%) preferred not to provide information on age.

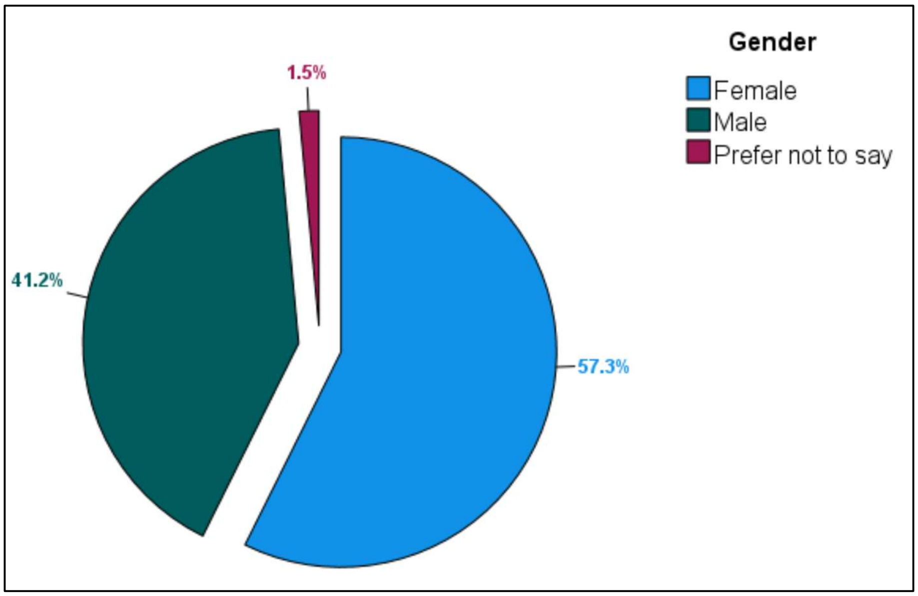


Figure 2: Respondents by Gender

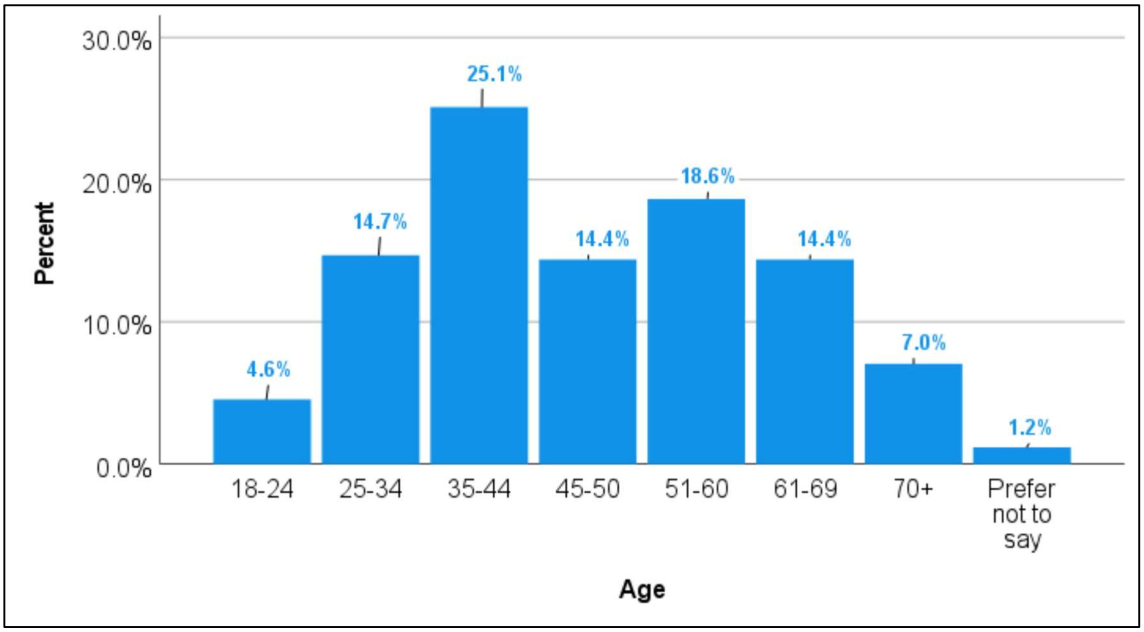


Figure 3: Respondents by Age

Figures 4 and 5 present respondents by the highest level of completed education and the average total household income, respectively. As shown, a majority were well educated and affluent. Specifically, most respondents (85.2%) had received at least some college level

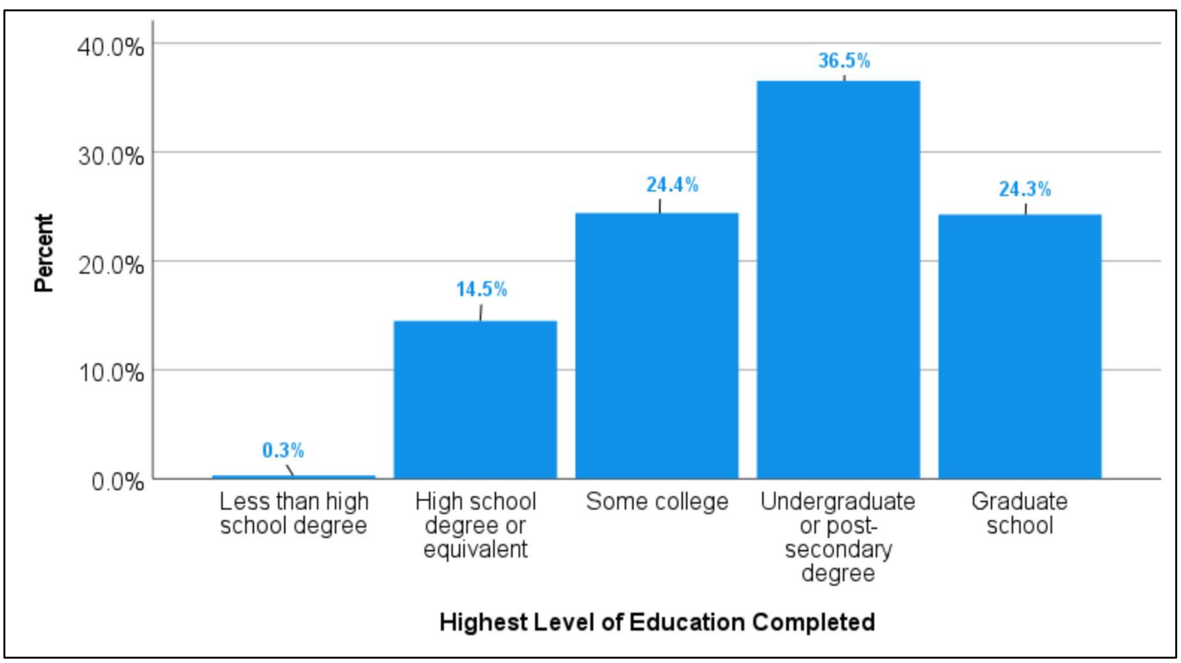


Figure 4: Respondents by Highest Level of Education Completed

education (24.4%) or college degree (36.5%) undergraduate or post-secondary degree, and 24.3% graduate school degree). In addition, 14.5% had a high school degree or equivalent while a very small portion (0.3%) of respondents had less than a high school degree.

In terms of household income before taxes, a large portion of respondents (38.0%) reported an income of $80,001 or above (16.2% with an income between $80,001 and $100,000 and 21.8% with an income of $100,000 or more). Similar percentages of respondents reported having an income between $60,001 and $80,000 (18.0%) and between $40,001 and $60,000 (19.8%). Respondents with an income between $20,001 and $40,000 accounted for 18.6% of the total

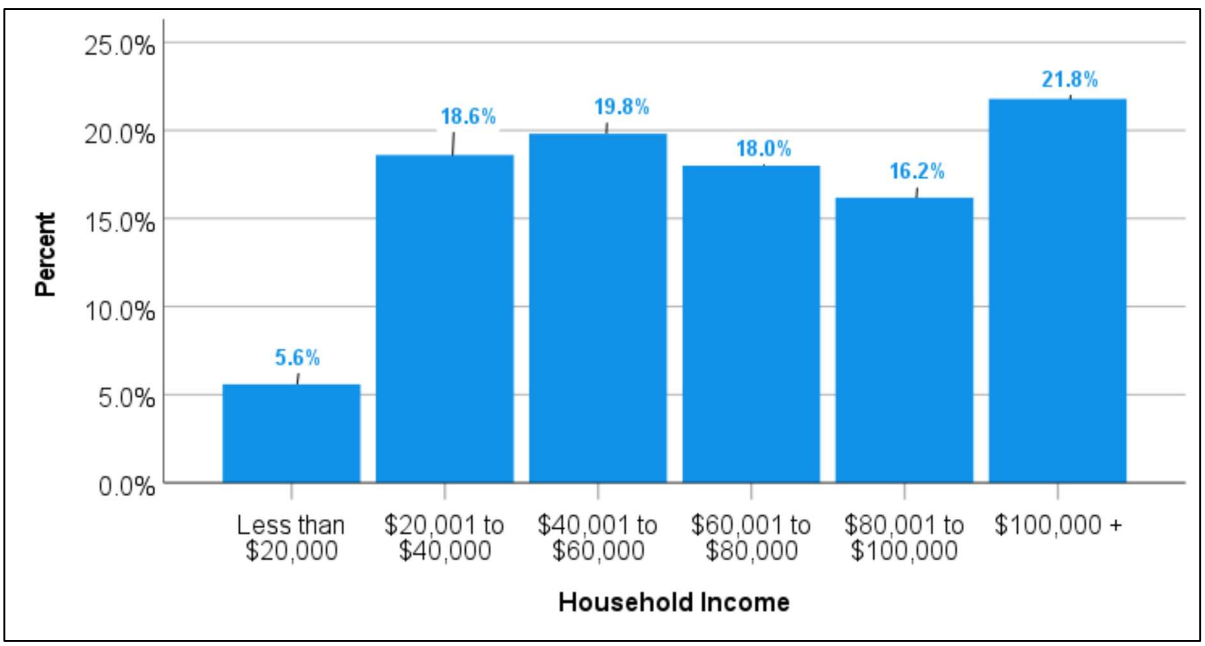


Figure 5: Respondents by Household Income

respondents, while 5.6% reported a household income of less than $20,000.

Respondents were also asked to report their role(s) within their community (Figure 6). It should be noted that respondents were given the option to choose multiple choices, and that the percentages shown are representative of the total reported community roles. This survey was gathering information on the relationships with recreation and tourism and the choices presented in this question aim to distinquish community role involvement that is or is not related to the

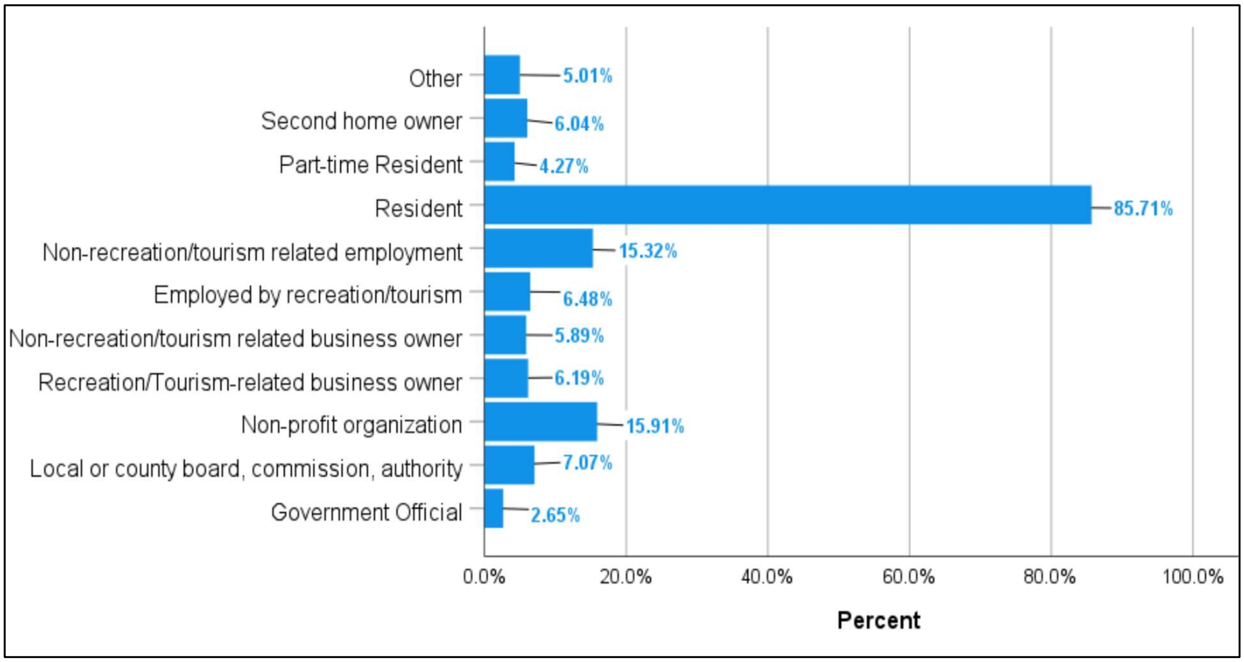


Figure 6: Respondents by Community Role

recreation and tourism activities. The majority of respondents roported themselves to be residents (85.71%), followed by being part of a non-profit organization (15.91%) and employed by non-recreation/tourism related employment (15.32%), while interestingly, only a small percentage were employed with the recreation/tourism area of their community (6.48%). Second home owners accounted for 6.04%, and those identyfiyng as part-time residents for 4.27%. Community members that identify as a business owner outside of the recreation/tourism sector was 5.89% with a slightly larger percentage (6.19%) of business owners operating withing the recreation/tourism department of their community. Additionally, 7.07% of respondents were part of their local county board, commission, or authority, 2.65% were government officials, and 5.01% identified within "other" roles not specified.

3.2 Trip Characteristics

Respondents were asked to answer questions reflecting the characteristics of their recent visits to the Monongahela National Forest area. They were asked to click on the Monongahela National Forest area map to roughly show places they had visited during their most recent trip to the area (maximum of 10 clicks). Figure 7 shows the most popular subregions that were determined by frequency of clicks. Subregion 1 (Seneca Rocks and Roaring Plains) was the most visited (42.1%), followed by subregion 2 (Richwood and Cranberry Glades) (35.0%), and subregion 3 (Snowshoe) (33.4%).

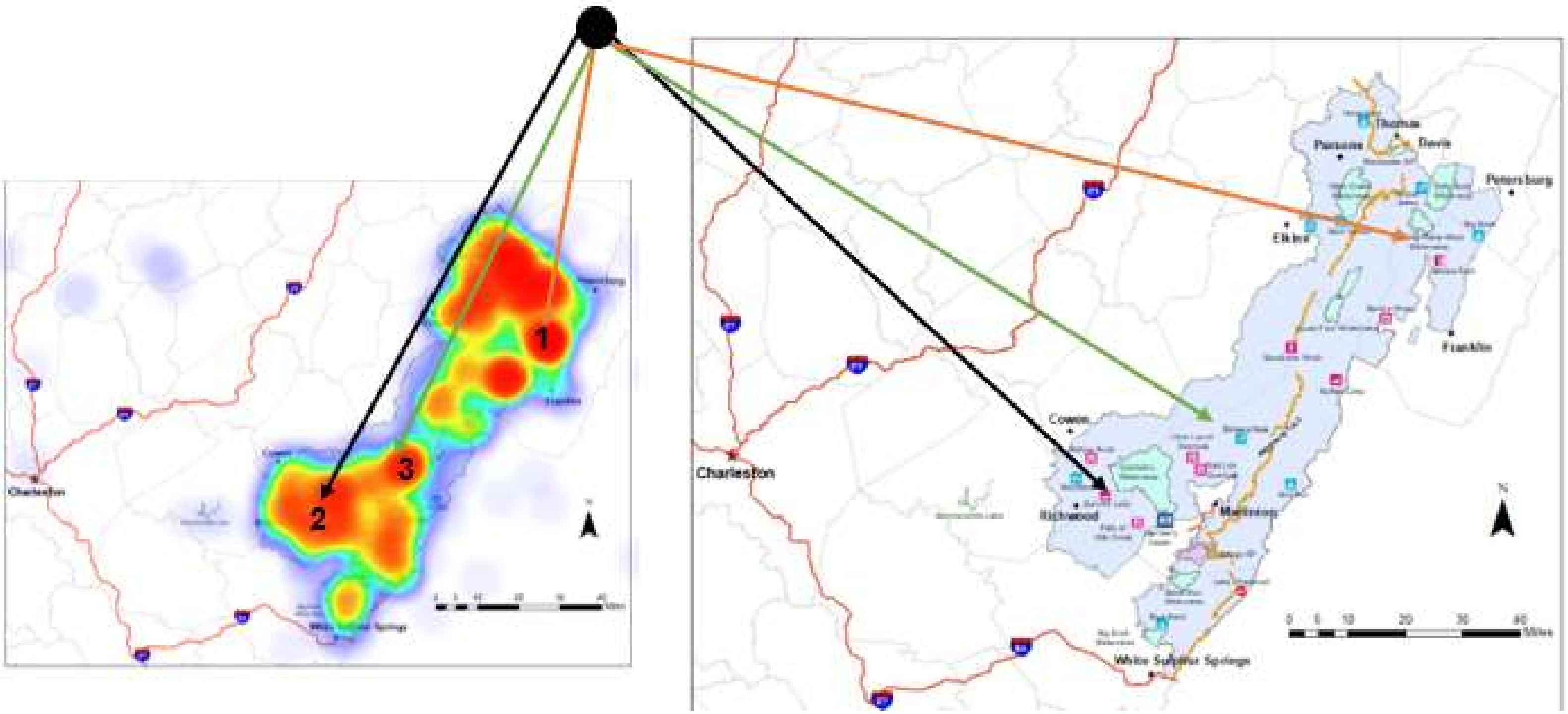


Figure 7: Heat Map Showing Places Most Visited

In terms of frequency of visits to the area, respondents were asked to report how many times they have visited the forest area in the past three years (Figure 8) and the past twelve months (Figure 9), respectively. The majority of respondents reported that in the past three years, they had visited the forest area more than 10 times (65.0%). Significantly smaller percentages were

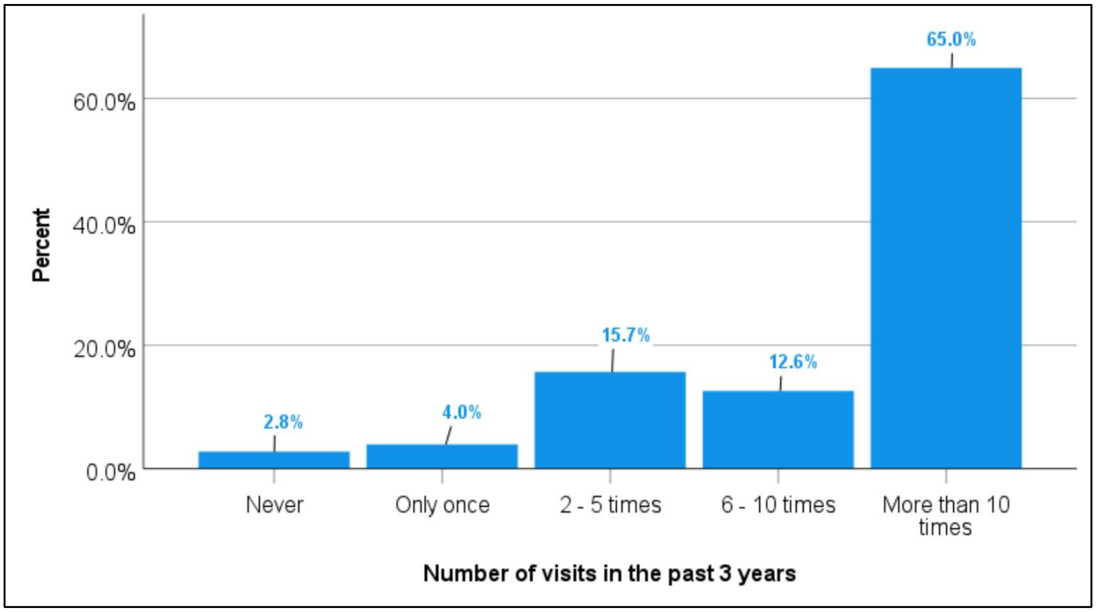


Figure 8: Frequency of Visits in the Past 3 Years

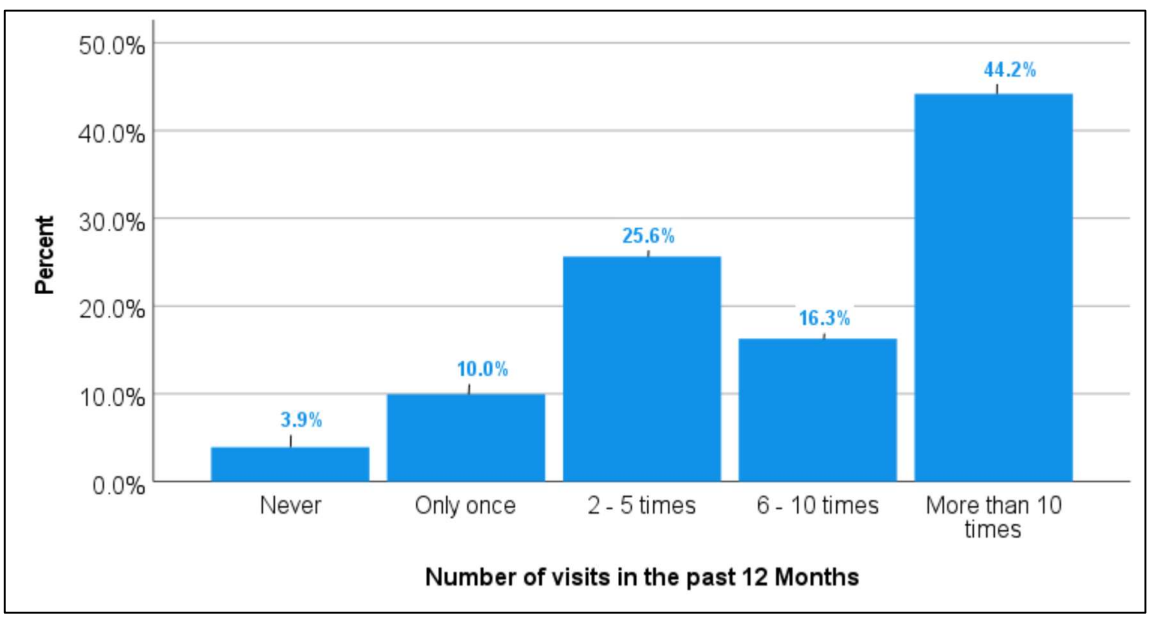


Figure 9: Frequency of Visits in the Past 12 Months

reported for 6 to 10 times (12.6%), 2 to 5 times (15.7%), a singular visit (4.0%) and having never visited the forest area in the last 3 years (2.8%).

The general trend for frequency of visits in the previous 12 months is similar to that of the last 3 years. In the last year, 44.2% of respondents reported visiting the forest area more than 10 times, with lower percentages in the smaller visitation frequencies. Respondents reporting 6 to 10 visits accounted for 12.6%, followed by 2 to 5 times for 15.7%, a single visit for 4.0%, and never having visited accounting for 2.8% of respondents. The comparable nature and decreases in number of visits to the forest area from the past 3 years to the past 12 months suggests that some respondents visited the forest area less frequently during the COVID-19 pandemic.

More than a third of respondents (including themselves) (38.6%) visited the area with a group size of two people, while similar proportions of respondents reported traveling alone (14.6%), in a group of 3 (15.7%) or a group of 4 (16.0%). Additionally, lower reports were given of groups that were of 5 people (6.0%) and for groups 6 or more people (9.1%) (Figure 10).

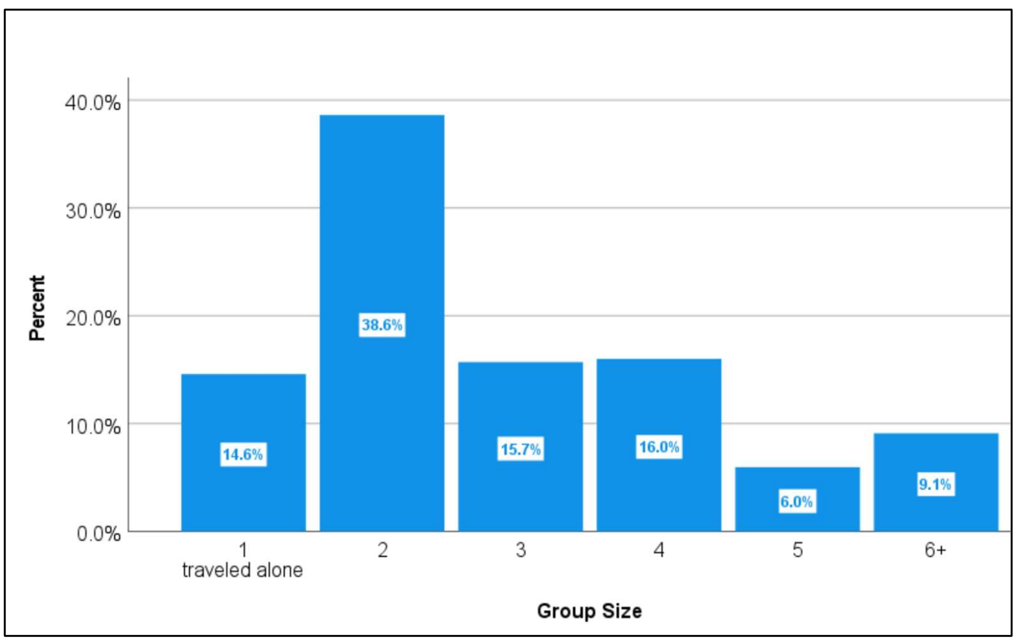


Figure 10: Respondents by Group Size

Figure 11 presents the amount of the respondent's group trip spending. The majority of respondents (60.5%) reported spending less than $100, followed by spending $101 to $200 (21.6%), and $201 to $300 (6.8%). Much smaller percentages of respondents reported spending $301 to $400 (3.5%), $401 to 500 (3.1%), and $501 to $600 (1.3%), respectively. Less than 1% of respondents reported spending in the $601 to $700 (0.5%), the $701 to $800 (0.3%), the $801 to $900 (0.2%) and the $901 to $1,000 (0.5%) spending categories. Additionally, only 1.9% of respondents reported spending more than $1,001 as a group.

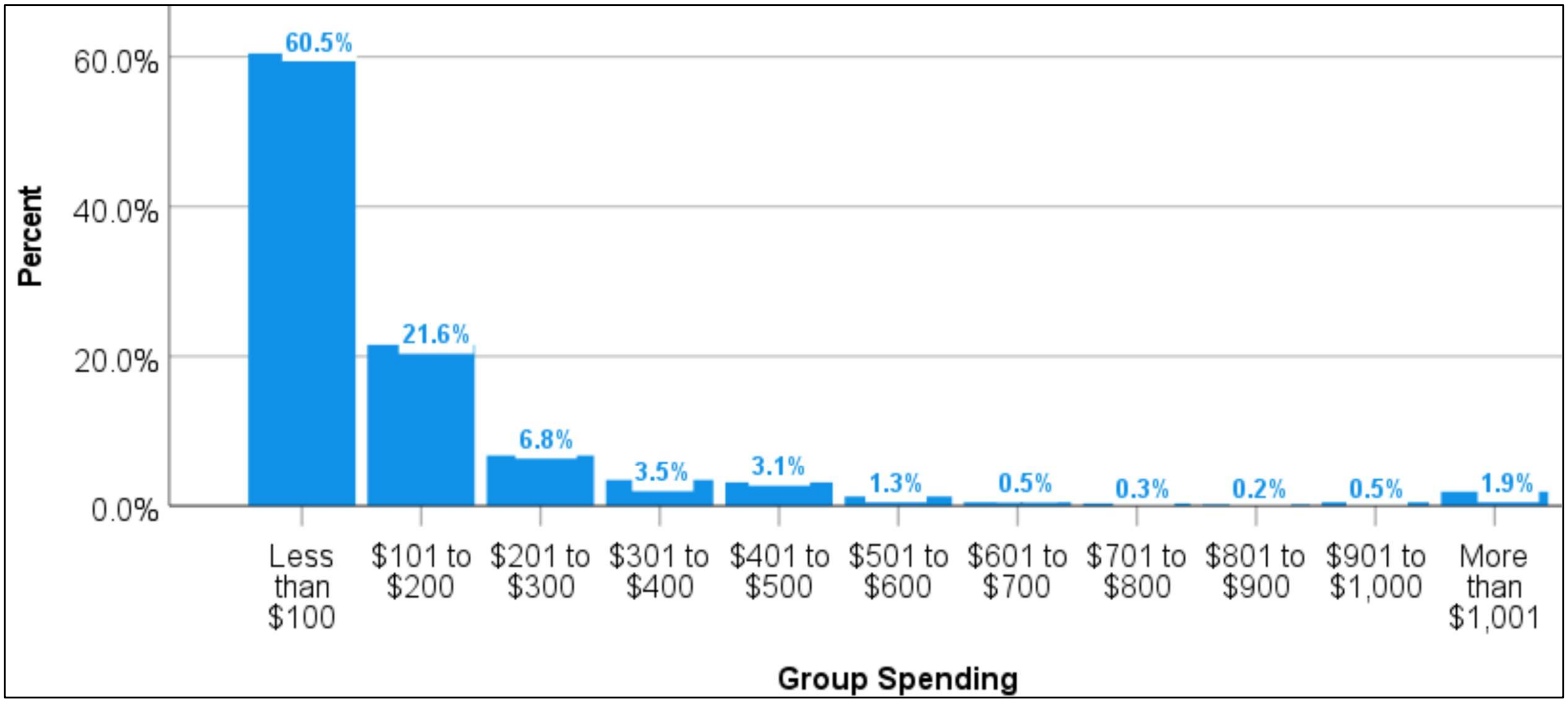


Figure 11: Respondents by Group Spending

The survey also gauged information in whether the respondent stayed overnight on their most recent visit to the Monongahela National Forest area, and further if they did stay overnight, the type(s) of accommodations that the respondents used. Figure 12 represents the proportion of respondents that stayed overnight (33.8%) and those that visited for a day trip (did not stay overnight in the forest area) (66.2%).

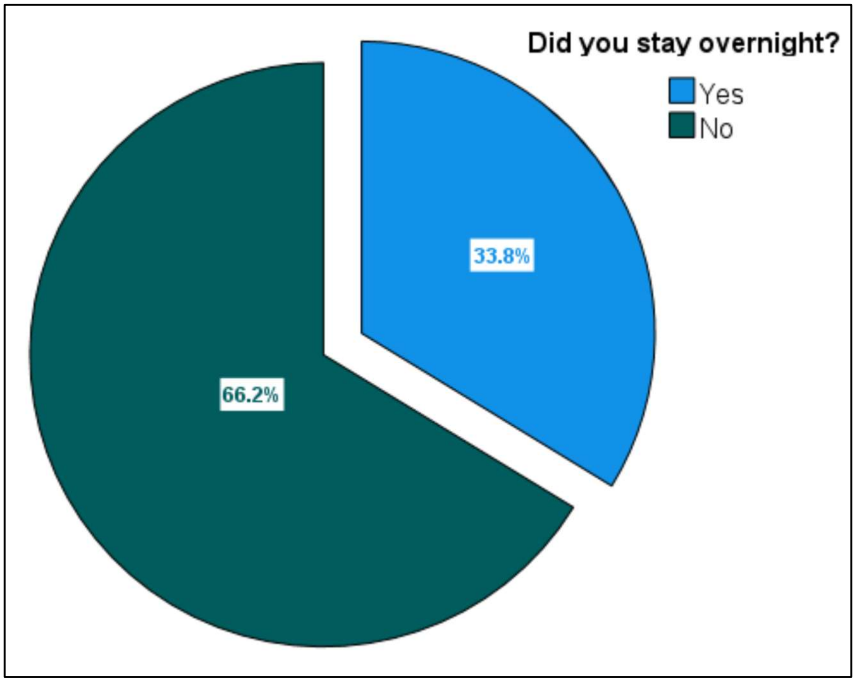


Figure 12: Respondents by Day-Trippers VS Overnight Accommodators

Those respondents that did report staying overnight were asked to report the accommodation type they used (Figure 13). It should be noted that respondents were able to choose multiple responses for this question, and that they were asked to provide clarification on the "Other" types of accommodation they used. The responses for the "Other" category are provided in Table 1 below. The largest portion of respondents reported staying overnight camping or in a tent (39.5%), followed by staying in a second home (14.0%), in a RV (13.0%), a hotel/motel/or Inn (9.8%), equally in both an Airbnb (8.4%) and Homestays (8.4%) and in a rented house or apartment (7.0%). Only half of a percent of respondents reported staying in either a bed & breakfast (0.5%) or a timeshare (0.5%). The respondents that reported staying in

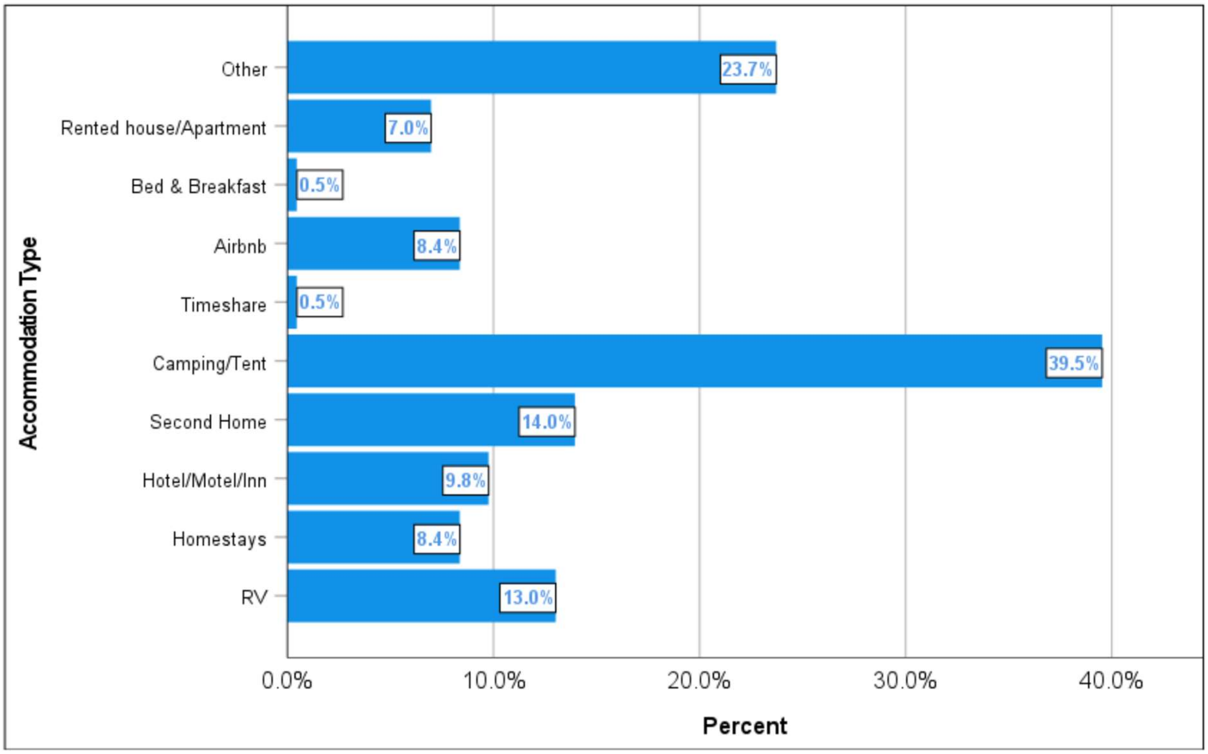


Figure 13: Respondents by Overnight Accommodation Types

the "other" category accounted for 23.7% of the total, with other reported accommodation types being their primary home, a cabin, with a family member, with friends, Tentrr, in state park or resort lodging, or a single report for Camp Caesar (Table 1). It should be noted that the percentages in Table 1 are proportional to the overall percentage of respondents that reported "Other" in Figure 13.

Table 1: "Other" Types of Accommodations as reported by Respondents

Number	Accommodation Type	Count	Percent
1	Primary Home	31	62%
2	Cabin	7	14%
3	With Family	3	6%
4	With Friends	2	4%
5	Tentrr	1	2%
6	State Park / Resort	5	10%
7	Camp Caesar	1	2%
	Total	**50**	**100%**

4. Perceptions of Regional Collaboration and Marketing in the Monongahela National Forest Area

Respondents were queried in this section to report on their prior knowledge and familiarity of the MFT Initiative prior to taking this survey to gauge the amount of exposure the residents to the region have of the initiative thus far.

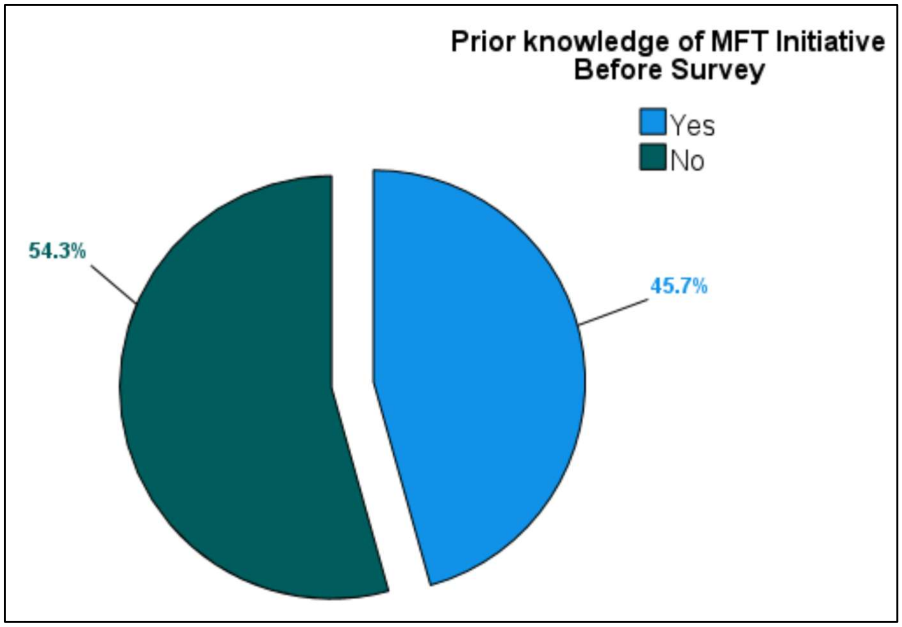


Figure 14: Respondents by Prior Knowledge of the Mon Forest Towns Initiative

Figure 14 presents the proportion of respondents that had knowledge of the MFT Initiative before taking the survey (45.7%) as well as those who had not (54.3%). There is a near even split in the resident community, suggesting that there is room for increased efforts to inform the resident population of the initiative.

Those respondents that reported having prior knowledge of the MFT Initiative were further asked to report on their level of familiarity of the initiative. Results to this are presented in Figure 15, with nearly equal percentages of respondents said they were slightly familiar (30.5%) or somewhat familiar (30.2%). A quarter of the prior knowledge respondents said that they were moderately familiar (25.1%) and 11.3% reporting being extremely familiar with the initiative. Interestingly, 2.9% of the respondents with prior knowledge of the MFT Initiative said that they were not at all familiar, suggesting that they knew of its existence but did not know the details of what the initiative truly is, again illuminating an area of improvement in the awareness

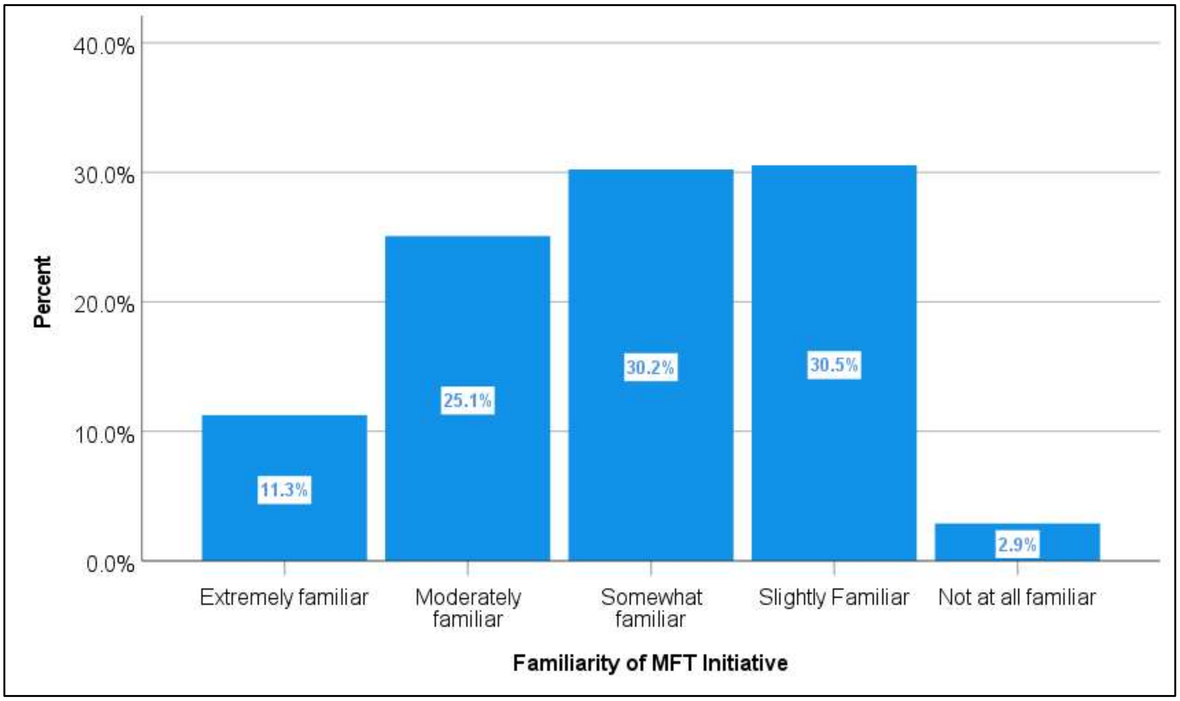


Figure 15: Respondents by Level of Familiarity of the Mon Forest Towns Initiative

efforts of the initiative.

All respondents were asked to report their level of agreement (or dis-agreement) that they had with statement regarding their perceptions of regional collaboration and marketing in the Monongahela National Forest area. As show in Table 2, response patterns on items 1, 3, 4, 6,7, and 8 are quite similar. Over 80% of respondents either mildly agreed (MA) or strongly agreed (SA) that regional collaboration is important to the success of recreation economy (80.8%), can improve tourism products (87.5%), can leverage on each county's unique tourism product (88.4%), that counties in the Monongahela National Forest area can achieve more by working together (89.1%), counties in the Monongahela National Forest area share commonalities in heritage tourism resources (82.7%) and that counties in the Monongahela National Forest area share commonalities in nature-based tourism resources (85.2%). In addition, respondents agreed slightly less that there is a lack in regional collaboration and marketing in the area (56.3%), regional collaboration and marketing can reduce costs and increase efficiency (64.7%), counties in the Monongahela National Forest area have similar tourism products and services (69.5%) and that counties in the Monongahela National Forest area have the same target market (59.5%).

Table 4: Perceptions of Regional Collaboration and Marketing in the Monongahela National Forest Area

	Strongly Disagree (SD) (%)	Mildly Disagree (MD) (%)	Neutral (%)	Mildly Agree (MA) (%)	Strongly Agree (SA) (%)	SD+MD (%)	SA+MA (%)
1. Regional Collaboration and marketing play an important role in the success of recreation economy.	4.7	2.8	11.7	34.8	46.0	**7.5**	**80.8**
2. There is a lack in regional collaboration and marketing in the area.	3.8	9.1	30.8	40.0	16.3	**12.9**	**56.3**
3. Regional collaboration and marketing can enhance tourism product portfolio.	3.8	1.6	7.0	34.0	53.5	**5.4**	**87.5**
4. Regional collaboration and marketing can leverage on each county's unique tourism product.	3.2	1.6	6.7	36.7	51.8	**4.8**	**88.4**
5. Regional collaboration and marketing can reduce costs and increase efficiency.	4.3	4.5	26.5	32.1	32.6	**8.8**	**64.7**
6. Counties in the Monongahela National Forest area can achieve more by working together.	2.2	1.9	6.7	23.3	65.8	**4.1**	**89.1**
7. Counties in the Monongahela National Forest area share commonalities in heritage tourism resources.	2.3	4.8	10.1	37.2	45.5	**7.2**	**82.7**
8. Counties in the Monongahela National Forest area share commonalities in nature-based tourism resources.	2.9	4.1	7.8	37.0	48.2	**7.0**	**85.2**
9. Counties in the Monongahela National Forest area have similar tourism products and services.	4.0	12.2	14.4	48.2	21.3	**16.1**	**69.5**
10. Counties in the Monongahela National Forest area have the same target market.	3.7	16.3	20.5	41.6	17.9	**19.9**	**59.5**

5. Perceptions of Branding for Recreation Economy in the Monongahela National Forest Area

This section of the survey asked respondents to answer questions pertaining to their perceptions on branding for recreation economy in the Monongahela National Forest Area and the MFT logo, shown here, and whether they had prior knowledge of the logo before taking the survey.

Prior knowledge of the survey (Figure 16) is nearly evenly split in half, where 52.9% of respondents reported having prior knowledge, and 47.1% having no prior knowledge of the MFTs logo before taking the survey. Additionally, respondents that reported having prior knowledge were asked to report the source of which they were first exposed to the logo. Results present in

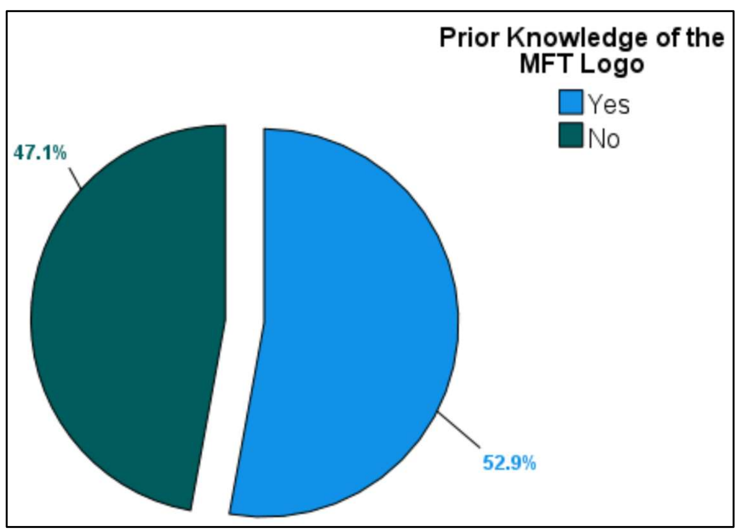


Figure 16: Respondents by Prior Knowledge of the Mon Forest Towns Logo

Figure 17 report that the majority of respondents were first exposed to the logo for the MFT via a roadside signage (62.7%) followed by social media exposure (14.6%). Less respondents

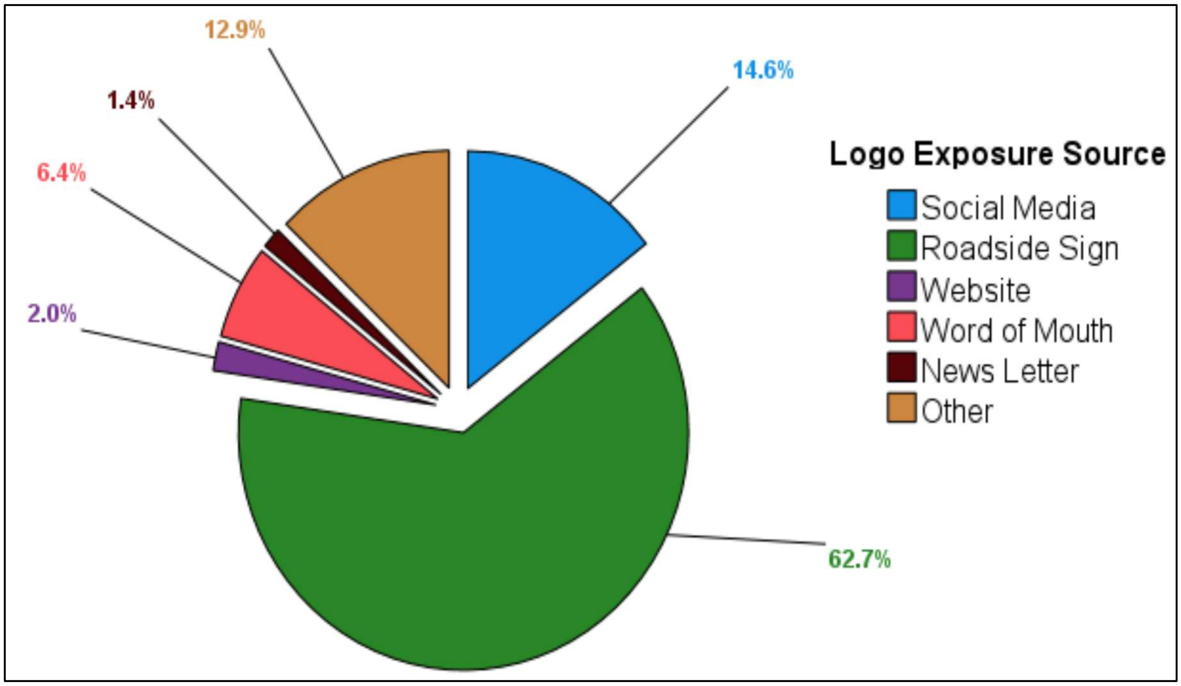


Figure 17: Source of Initial Exposure to the Mon Forest Towns Logo

reported being exposed to the MFT logo via word of mouth (6.4%), a website (2.0%) and lastly from a newsletter (1.4%). Over 10% of respondents reported having been exposed to the logo from some other source (12.9%), and those respondents were asked to report their source of exposure (Table 3). Of those who reported "other", 41% reported their exposure

Table 6: "Other" Sources of Logo Exposure as Reported by Respondents

Number	Logo Exposure "other"	Count	Percent
1	Sticker/ Souvenir	3	9%
2	Newspaper	10	29%
3	Town or Stakeholder Meeting	14	41%
4	Association / Club Group	1	3%
5	Business Front	3	9%
6	At Work	3	9%
	Total	**34**	**100%**

being from attending a town hall or stakeholder meeting, 29% from a newspaper, equal reports (9%) from a sticker/souvenir, on a business front, or at their place of work. Additionally, one respondent (3%) reporting having been exposed to the logo while participating in an association or club group.

Table 7: Perceptions of Branding for Recreation Economy in the Monongahela National Forest Area

	Strongly Disagree (SD) (%)	Mildly Disagree (MD) (%)	Neutral (%)	Mildly Agree (MA) (%)	Strongly Agree (SD) (%)	SD+MD (%)	SA+MA (%)
1. This brand makes a strong impression on my visual sense or other senses.	5.9	11.6	22.3	41.8	18.5	**17.4**	**60.3**
2. I find this brand interesting in a sensory way.	7.2	12.8	24.0	40.0	16.0	**19.9**	**56.0**
3. This brand does not appeal to my senses.	24.2	28.3	23.2	16.1	8.2	**52.5**	**24.3**
4. This brand includes feelings and sentiments.	9.2	17.2	41.1	27.1	5.4	**26.4**	**32.6**
5. I do not have strong emotions for this brand.	9.4	15.4	39.3	22.9	13.0	**24.8**	**35.9**
6. This brand is an emotional brand.	11.7	21.7	49.7	14.2	2.6	**33.4**	**16.9**
7. I engage in a lot of thinking when I encounter this brand.	16.7	23.6	38.7	18.2	2.8	**40.3**	**21.0**
8. This brand stimulates my curiosity and problem solving.	19.1	20.2	38.3	18.8	3.7	**39.3**	**22.4**
9. This brand does not make me think.	11.1	18.5	34.0	23.8	12.6	**29.6**	**36.4**

Table 4 presents residents' perceptions of the logo, measured by nine items which were identified from the literature (Barnes et al., 2014, Brakus et al., 2009; Garcia et al., 2012), three of which were worded negatively. The nine items measure three of the five experiences proposed by Schmitt (1999): sense, feel, and think (other two being act and relate, but are not present). Example items include "This brand stimulates my curiosity and problem solving" and "This brand does not appeal to my senses". The reported results show that the items measuring sense experiences quality had the highest scores of agreement (mildly agree combined with strongly agree) of 60.3% for item "This brand makes a strong impression on my visual sense or other senses", and 56.0% for item "I find this brand interesting in a sensory way". Items on emotion and thinking involvement ranked lower in comparison.

6. Perceptions of Attitudes toward Recreation/Tourism in the Monongahela National Forest Region

Resident's attitudes towards recreation and tourism economy in the region are presented in Table 5. Respondents were most in agreement that "Long-term planning and managed growth are important to control any negative impacts of tourism" (90.0%), "Tourism development will provide more economic opportunities for the area" (87.7%), and "The area should invest in tourism development" (77.0%). Other items that sored high on the "mildly agree" and "strongly agree" when combined (over 60%) were "Tourism development will help to protect natural/heritage resources in the area" (61.3%), "Tourism will improve the wellbeing of communities in the area" (68.6%). Some items reflecting concerns, for example, "An increase in tourism will lead to crowding of outdoor recreation, historic, and cultural sites/attractions" (62.8%) with the combined "mildly agree" and "strongly agree" measures, implying that while there is support for long term planning for tourism success and for the promotion of recreation/tourism in the area, there are concerns and hesitations (like a reluctancy to support allocating more tax dollars to tourism and recreation in the region, for example) held by the respondents for their area of residence.

Table 8: Perceptions of Attitudes toward Recreation/Tourism in the Monongahela National Forest Region

	Strongly Disagree (SD) (%)	Mildly Disagree (MD) (%)	Neutral (%)	Mildly Agree (MA) (%)	Strongly Agree (SA) (%)	SD+MD (%)	SA+MA (%)
1. An increase in tourism will increase the cost of living in the Monongahela National Forest area.	8.7	21.8	16.9	35.6	17.0	**30.5**	**52.6**
2. Tourism development will provide more economic opportunities for the area.	4.1	4.7	3.5	38.6	49.1	**8.8**	**87.7**
3. Tourism development will only produce low-paying service jobs.	13.0	32.3	19.9	25.8	8.9	**45.3**	**34.8**
4. I support taxes for tourism development in the area.	14.4	14.4	20.5	33.3	17.4	**28.7**	**50.7**
5. Tourism development will help to protect natural/heritage resources in the area.	10.0	13.9	14.8	38.7	22.6	**23.9**	**61.3**
6. Tourism will improve the wellbeing of communities in the area.	7.5	8.4	15.5	40.6	28.0	**15.8**	**68.6**
7. The area should invest in tourism development.	6.3	4.1	12.6	37.4	39.6	**10.4**	**77.0**
8. An increase in tourism will lead to crowding of outdoor recreation, historic, and cultural sites/attractions.	4.4	15.4	17.4	39.6	23.2	**19.8**	**62.8**
9. Long-term planning and managed growth are important to control any negative impacts of tourism.	2.2	1.3	6.5	28.4	61.6	**3.5**	**90.0**
10. The area should do more to promote its tourism assets to visitors.	5.9	6.0	13.5	37.5	37.1	**11.9**	**74.6**
11. The area should discourage more intensive development of facilities, services, and attractions for tourists.	25.4	28.2	21.7	14.7	10.1	**53.5**	**24.8**
12. An increase in tourism will lead to unacceptable amounts of traffic, crime, and pollution.	19.5	28.3	19.1	21.3	11.9	**47.8**	**33.1**

7. Perceptions of Strengths, Weaknesses, Opportunities, and Threats about Recreation/Tourism in the Monongahela National Forest Area

Residents' perceptions of strengths, weaknesses, opportunities, and threats about recreation and tourism in the Monongahela National Forest area are presented in Table 6. Most items (15 out of the total 21) have combined measure values ("mildly agree" plus "strongly agree") reported over 70%, some of which reflect positive perceptions (strengths) as well as negative ones (weaknesses/opportunities for improvement).

Specifically, respondents identified perceived strengths were “the area provides opportunities for lots of outdoor recreation activities” (92.7%), “the area is rich in natural/heritage tourism resources (89.9%), “local people in the area are friendly” (88.3%), “the area allows visitors to experience rural authenticity” (86.2%), “trails are becoming increasingly popular across the area” (80.4%), “there is an increasing retiree market seeking quiet, rural, low cost of living” (78.4%), “there is an increasing market for experiencing rural authenticity” (77.0%), and that “people's desire to visit natural areas will increase after the Covid-19 pandemic” (74.1%). The items that were identified as strengths reflected the natural elements, cultural/heritage authenticity, and perceived popularity of the recreation resources and opportunities present in the area, beneficial to the recreation and tourism industries in the region.

Also measuring above 70% agreement combined, but indicating weaknesses and/or opportunities where the area can improve upon for the region were more human related factors than those identified as strengths: lacking cell phone service in the area (83.4%), people have a poor image of the state (81.1%), limited employment opportunities (78.6%), that increasing gas prices may reduce people’s desire to travel (78.4%), limited dining options (77.2%), limited accommodation options (75.3%), and lacking investment in the area (71.6%). Respondents identify that there are deficiencies in infrastructure and investment, which could be related to the belief that there is a perceived poor image of the state of West Virginia. These items identify areas that are generally more negatively perceived by the respondents, but also areas that efforts can be focused for future planning and improvement opportunities for the region.

Table 9: Perceptions of Strengths, Weaknesses, Opportunities, and Threats about Recreation/Tourism in the Monongahela National Forest Area

	Strongly Disagree (SD) (%)	Mildly Disagree (MD) (%)	Neutral (%)	Mildly Agree (MA) (%)	Strongly Agree (SA) (%)	SD+MD (%)	SA+MA (%)
1. The area is rich in natural/heritage tourism resources.	1.5	2.5	6.1	25.5	64.4	**4.0**	**89.9**
2. Local people in the area are friendly.	0.7	3.8	7.1	37.4	50.9	**4.6**	**88.3**
3. Politicians and decision makers support recreation economy in the area.	7.0	20.9	33.8	29.2	9.1	**27.9**	**38.3**
4. The area provides opportunities for lots of outdoor recreation activities.	1.0	2.8	3.4	21.2	71.5	**3.9**	**92.7**
5. The area allows visitors to experience rural authenticity.	1.5	3.3	9.0	37.1	49.1	**4.7**	**86.2**
6. The area is limited in accommodation options.	3.1	8.7	13.0	40.4	34.9	**11.8**	**75.3**
7. The area is limited in dining options	2.7	10.5	9.7	39.5	37.7	**13.1**	**77.2**
8. The area is limited in human capacity for tourism marketing and development.	4.7	16.8	26.0	35.7	16.8	**21.5**	**52.5**
9. The area is distant from markets.	5.3	14.6	16.5	41.3	22.4	**19.9**	**63.7**
10. The area lacks cell phone service.	2.4	5.3	8.9	37.3	46.2	**7.7**	**83.4**
11. The area lacks investment.	2.9	6.9	18.5	39.3	32.4	**9.9**	**71.6**
12. People's desire to visit natural areas will increase after the Covid-19 pandemic.	2.4	6.5	17.0	31.4	42.8	**8.9**	**74.1**
13. There is an increasing market for experiencing rural authenticity.	2.2	2.1	18.7	37.1	39.9	**4.3**	**77.0**
14. There is an increasing retiree market seeking quiet, rural, low cost of living.	1.3	2.7	17.7	38.3	40.1	**4.0**	**78.4**
15. There are increasing interests among decision makers in developing recreation economy.	2.6	6.9	34.1	40.7	15.6	**9.6**	**56.3**
16. Trails are becoming increasingly popular across the area.	1.0	2.1	16.5	42.8	37.6	**3.1**	**80.4**
17. There is a negative impact of shale gas extraction on recreation and tourism in the area.	18.1	15.4	30.7	14.0	21.9	**33.5**	**35.8**
18. Employment opportunities are limited.	2.4	8.0	11.0	40.8	37.8	**10.3**	**78.6**
19. People tend to have a poor image of the state.	1.5	6.5	10.9	38.8	42.3	**8.0**	**81.1**
20. Increase of gas price may reduce people's desire to travel.	3.1	9.1	9.4	41.0	37.4	**12.2**	**78.4**
21. People may be reluctant to travel because of Covid-19.	14.1	26.0	21.0	28.9	10.0	**40.1**	**38.9**

Items 21, 3, and 17 had the lowest percentages, 38.9%, 38.3%, and 35.8% respectively, of responses in the two categories “mildly agree” and “strongly agree” combined, suggesting that a substantial portion of respondents were pessimistic about local politician and decision maker's support for recreation/tourism, the impact of the shale gas industry upon the recreation/tourism industry, and people's reluctancy to travel due to the COVID-19 Pandemic. Nearly a third of respondents for items 3 and 17 responded that they were neutral, suggesting that there is uncertainty about politician/decision maker's support for recreation as well as the impact that the shale gas industry may or may not have on the recreation and tourism industry.

8. Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism in the Monongahela National Forest and Surrounding Areas

To understand the perceived impacts that the COVID-19 Pandemic, respondents were asked to indicate how much they agreed or disagreed with 15 statements measuring the impacts of the COVID-19 pandemic on recreation and tourism in the Monongahela National Forest and surrounding areas (Table 7). The items were created based on recent research studies on COVID-19 as related to tourism (da Silva Lopes et al., 2021; Joo et al., 2021; Rahman et al., 2021; Wang et al., 2021). Example items include, "Camping has become more popular across the U.S. due to the pandemic. This popularity may fade away post the pandemic", "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level", "Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest", and "Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic".

Responses reported on the perceived impacts of COVID-19 on recreation and tourism in the area seemed to have more diversity in in the combined categories of "mildly agree" and "strongly agree" than other perception measures (attitudes, strengths/weaknesses/opportunities/threats, branding, and collaboration/marketing) provided by the respondents, ranging from 6.2% to 87.4% of agreement (items 11 and 8, respectively). Other perception measures included smaller range gaps: 35.8% to 92.7% (strengths/weaknesses/opportunities/threats), 24.8% to 90.0% (attitudes), 16.9% to 60.3%

Table 10: Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism in the Monongahela National Forest and Surrounding Areas

	Strongly Disagree (SD) (%)	**Mildly Disagree (MD) (%)**	**Neutral (%)**	**Mildly Agree (MA) (%)**	**Strongly Agree (SA) (%)**	**SD+MD (%)**	**SA+MA (%)**
1. Covid-19 reduces the possibility of travelling with groups.	13.3	21.6	18.3	37.0	9.8	**34.9**	**46.8**
2. I prefer to avoid traveling to urban areas due to COVID-19 pandemic.	21.7	14.2	17.6	26.7	19.8	**35.9**	**46.5**
3. Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest.	45.9	19.2	21.0	9.2	4.7	**65.1**	**13.9**
4. There is a low likelihood of contracting COVID-19 when travelling to the Monongahela National Forest area.	4.4	5.1	15.5	28.2	46.8	**9.5**	**74.9**
5. The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic.	3.1	5.0	20.4	40.9	30.6	**8.1**	**71.6**
6. People may choose to stay in Airbnb over hotels/motels while traveling to the forest area during the pandemic.	2.5	5.9	29.8	38.1	23.8	**8.4**	**61.9**
7. Camping has become more popular across the U.S. due to the pandemic. This popularity may fade away post the pandemic.	7.9	18.3	25.4	33.6	14.8	**26.2**	**48.4**
8. People's travel preferences and behaviors have been changed due to the pandemic.	1.3	1.9	9.4	49.6	37.8	**3.2**	**87.4**
9. Tourism in the forest area was hit hard by the pandemic.	15.1	23.9	30.5	18.3	12.2	**39.0**	**30.5**
10. New forms of tourism may emerge in the forest area due to the pandemic.	2.1	4.4	28.2	46.0	19.4	**6.5**	**65.4**
11. Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level.	36.2	34.8	22.9	4.7	1.5	**71.0**	**6.2**
12. Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic.	2.5	4.0	28.9	42.1	22.6	**6.5**	**64.7**
13. People will care about safety and hygiene while travelling more than they used to due to the pandemic.	4.8	9.4	20.5	47.9	17.3	**14.2**	**65.2**
14. COVID-19 increases the possibility of travelling alone or with family.	5.1	8.1	33.9	39.0	13.9	**13.2**	**52.9**
15. Number of COVID-19 cases in the forest area may increase with influx of tourists.	11.1	16.0	27.9	32.3	12.8	**27.1**	**45.0**

(branding), and 56.3% to 89.1% (collaboration/marketing). This implies that respondents may hold a more diverse view of COVID-19's effects on recreation and tourism in the Monongahela National Forest are than for the other measures.

The top scoring measures on the "mildly agree" and "slightly agree" combined are item 8 "People's travel preferences and behaviors have been changed due to the pandemic" (87.4%), item 4 "There is a low likelihood of contracting COVID-19 when travelling to the Monongahela National Forest area" (74.9%) and item 5 "The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic" (71.6%). Four other items that has responses over 60% in the two combined categories, including item 6 "People may choose to stay in Airbnb over hotels/motels while traveling to the forest area during the pandemic" (61.9%), item 10 "New forms of tourism may emerge in the forest area due to the pandemic" (65.4%), item 12 " Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic" (64.7%), and item 13 " People will care about safety and hygiene while travelling more than they used to due to the pandemic" (65.2%).

Interestingly, item 11 "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level" had the lowest percentage (6.2%) of respondents in agreement, similar with the respondents' responses on item 3 "Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest" (13.9%), and item 9 "Tourism in the forest area was hit hard by the pandemic" (which similar amount of respondents agree, disagree, or feel neutral, illuding to uncertainty). This stands to suggest that there is uncertainty in regard to the impacts that COVID-19 on recreation and tourism in the area, and potential optimism on the effects of the pandemic being impermanent.

10. Conclusion

The idea of integrating recreation economy development into gateway community identity and future planning in areas of the US in proximity of public lands is not a new endeavor but has drawn an increasing amount of attention nationwide in conjunction with the influx of interest, popularity, and accessibility of outdoor recreation activities to the potential resulting economic impacts/stimulation for local communities. The Monongahela National Forest, partnered with West Virginia University and USDA Rural Development, brought together stakeholders together to work to create a shared collective vision for the region involving ten towns in eight counties. A regional approach for rural development can be better implemented with a collective understanding of how the area and recreation economy is currently perceived by the local resident population, identifying concerns and preferences held within the communities.

The results in this report provide useful information on resident's profiles and their perceptions of branding, collaboration and marketing, attitudes, strengths, weaknesses, opportunities, threats, and impacts of COVID-19 in the Monongahela National Forest region of West Virginia. The knowledge-based information from the standpoint of local people is a critical part of the development of sustainable recreation for the forest and for the development and growth of sustainable economies/societies of the rural communities involved. This work is in efforts of facilitating connections between future community planning and development and forest planning and management, which is also a goal of the USDA in rural development efforts.

11. References

Barnes, S.J., Mattsson, J., Sorensen, F. (2014). Destination brand experience and visitor behavior: Testing a scale in the tourism context. Annals of Tourism Research, 48, 121-139.

Blasco, D., Guia, J., & Prats, L. (2014). Emergence of governance in cross-border destinations. *Annals of Tourism Research*, *49*, 159–173.

Brakus, J.J., Schmitt, B.H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73, 52-68.

Charnley, S., Carothers, C., Satterfield, T., Levine, A., Poe, M. R., Norman, K., Donatuto, J., Breslow, S. J., Mascia, M. B., Levin, P. S., Basurto, X., Hicks, C. C., García-Quijano, C., & St. Martin, K. (2017). Evaluating the best available social science for natural resource management decision-making. *Environmental Science & Policy*, *73*, 80–88.

Costa, T., Umbelino, J., de Lurdes Calisto, M., Nunes, S., & Afonso, V. A. (2020). Impacts of Tourism and Residents' Perceptions: A Study in the Regional Tourism Area of Lisbon. *European Journal of Tourism, Hospitality and Recreation*, *10*(1), 28–40.

Choi, H.-S. C., & Sirakaya, E. (2005). Measuring Residents' Attitude toward Sustainable Tourism: Development of Sustainable Tourism Attitude Scale. *Journal of Travel Research*, *43*(4), 380–394.

da Silva Lopes, H., Remoaldo, P.C., Ribeiro, V., & Martin-Vide, J. (2021). Effects of the COVID-19 Pandemic on Tourist Risk Perceptions—The Case Study of Porto. sustainability, 13, 6399; https://doi.org/10.3390/su13116399

Ganji, S. F. G., Johnson, L. W., & Sadeghian, S. (2021). The effect of place image and place attachment on residents' perceived value and support for tourism development. *Current Issues in Tourism*, *24*(9), 1304–1318.

Garcia, J., Gomez, M., & Molina, A. (2012). A destination-branding model: An empirical analysis based on stakeholders. *Tourism Management*, 33, 646-661.

Harrill, R. (2004). Residents' Attitudes toward Tourism Development: A Literature Review with Implications for Tourism Planning. *Journal of Planning Literature*, *18*(3), 251–266.

Hassan, T. H., Salem, A. E., & Abdelmoaty, M. A. (2022). Impact of Rural Tourism Development on Residents' Satisfaction with the Local Environment, Socio-Economy and Quality of Life in Al-Ahsa Region, Saudi Arabia. *International Journal of Environmental Research and Public Health*, *19*(7), 4410.

Joo, D., Xu, W., Lee, J., Lee, C., & Woosnam, K.M. (2021). Residents' perceived risk, emotional solidarity, and support for tourism amidst the COVID-19 pandemic. *Journal of Destination Marketing & Management*, 19, 100553.

Kim, S., Kang, Y., Park, J.-H., & Kang, S.-E. (2021). The Impact of Residents' Participation on Their Support for Tourism Development at a Community Level Destination. *Sustainability*, *13*(9), 4789.

León-Gómez, A., Ruiz-Palomo, D., Fernández-Gámez, M. A., & García-Revilla, M. R. (2021). Sustainable Tourism Development and Economic Growth: Bibliometric Review and Analysis. *Sustainability*, *13*(4), 2270.

Maples, J., & Bradley, M. (2021). Outdoor Recreation and Rural Transitions in Central Appalachia: Revisiting the Economic Impact of Rock Climbing in Kentucky's Red River Gorge. *Journal of Economic Impact*, *3*(3), 186–195.

Mugauina, R., Rey, I. Y., Sabirova, R., Rakhisheva, A. B., Berstembayeva, R., Beketova, K. N., & Zhansagimova, A. (2020). Development of Rural Tourism after the Coronavirus Pandemic. *Journal of Environmental Management & Tourism*, *11*(8), 2020–2027.

Neuts, B., Kimps, S., & van der Borg, J. (2021). Resident Support for Tourism Development: Application of a Simplified Resident Empowerment through Tourism Scale on Developing Destinations in Flanders. *Sustainability*, *13*(12), 6934.

Perdue, R. R., Long, P. T., & Allen, L. (1990). Resident support for tourism development. *Annals of Tourism Research*, *17*(4), 586–599.

Rahman, M.K., Gazi, A.A.I., Bhuiyan, M.A., Rahaman, M.A. (2021). Effect of Covid-19 pandemic on tourist travel risk and management perceptions. PLOS ONE, 16(9), e0256486; https://doi.org/10.1371/journal.pone.0256486

Schmitt, B.H. (1999), Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, Relate to Your Company and Brands. New York: The Free Press.

Stylidis, D., Biran, A., Sit, J., & Szivas, E.M. (2014). Residents' support for tourism development: The role of residents' place image and perceived tourism impacts. *Tourism Management*, 45, 260-274.

The U.S. Bureau of Economic Analysis. (2021). Outdoor Recreation Satellite Account, U.S. and States, 2019. https://www.bea.gov/news/2020/outdoor-recreation-satellite-account-us-and-states-2019

The U.S. Bureau of Economic Analysis. (2021). Outdoor Recreation Satellite Account, U.S. and States, 2020. https://www.bea.gov/news/2021/outdoor-recreation-satellite-account-us-and-states-2020

Tosun, C. (2006). Expected nature of community participation in tourism development. *Tourism Management*, *27*(3), 493–504.

Wang, X., Lai, I.K.W., Zhou, Q., & Pang, Y.H. (2021). Regional Travel as an Alternative Form of Tourism during the COVID-19 Pandemic: Impacts of a Low-Risk Perception and Perceived Benefits. *International Journal of Environmental Research and Public Health*, 18, 9422.

White, E., Bowker, J. M., Askew, A. E., Langner, L. L., Arnold, J. R., & English, D. B. K. (2016). *Federal outdoor recreation trends: Effects on economic opportunities* (PNW-GTR-945;

p. PNW-GTR-945). U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Funding

This survey was jointly funded by Claude Worthington Benedum Foundation and WVU Community Engagement Grants.

Acknowledgements

We would like to thank the MFT Marketing Committee, Cara Rose, and the Pocahontas County Convention & Visitors Bureau for their support and assistance with this survey. Thanks also to Crystal Howell (Director, Commercial Sales and Marketing) and her team at Direct Mail for their assistance and professionalism that aided the survey's success. Special thanks to all those respondents for their participation in this survey and for their support for this project.

Appendix A: Resident survey questionnaire (Qualtrics version)

Cover Letter

WestVirginiaUniversity.
EXTENSION SERVICE

Jan. 7, 2022

Dear Participant:

We are writing to ask your help to determine local residents' attitudes regarding recreation economy in the Monongahela National Forest region. We hope you can help by filling out this online survey which simply asks what you think about recreation and tourism development in this region. This survey is open to anyone 18 years of age or older residing in the region (Grant, Tucker, Randolph, Greenbrier, Webster, Nicholas, Pendleton, and Pocahontas).

The study is funded by Benedum Foundation, and is being conducted by Dr. Doug Arbogast, an extension associate professor with WVU Extension Service and Dr. Jinyang Deng, a professor with WVU Recreation, Parks and Tourism Resources Program. The results of this survey will be used to improve policy makers' understanding of resident attitudes and opinions toward tourism in the region and help them determine future tourism development opportunities. The information obtained from this survey will also provide recreation/tourism leaders the opportunity to learn about and respond to public opinions.

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.

You will be entered into a raffle for some Mon Forest Towns swag (bumper stickers, tote bags, water bottles, t-shirts, etc.) to commensurate your time spent taking this survey if you qualify for and complete the survey.

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 at 304-293-8686. Your contribution to this study is greatly appreciated and will be a great benefit to this region.

Sincerely,

Douglas W. Arbogast

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

Doug Arbogast
West Virginia University
Extension Specialist
Rural Tourism Development

Is this your **first time** taking this survey?

- ◯ **Yes**, this is my first time taking the survey.
- ◯ **No**, I have already taken this survey. *(previously accessed from social media, newsletter, etc.)*

You will be entered into a raffle for some Mon Forest Towns swag (bumper stickers, tote bags, water bottles, t-shirts, etc.) to commensurate your time spent taking this survey if you qualify for and complete the survey.
If you agree to participate in this survey, please check "Yes" below:

- ◯ Yes
- ◯ No

Are you over the age of 18 as of today?

- ◯ Yes
- ◯ No (under 18 years old)

Do you live in one of the following counties in West Virginia?

- ◯ Grant County
- ◯ Tucker County
- ◯ Randolph County
- ◯ Greenbrier County
- ◯ Webster County
- ◯ Nicholas County
- ◯ Pendleton County
- ◯ Pocahontas County
- ◯ I do not live in one of the counties listed above

Section 1: Trip Characteristics

Section 1: Trip Characteristics

1. How many times have you visited the Monongahela National Forest in the past 3 years?

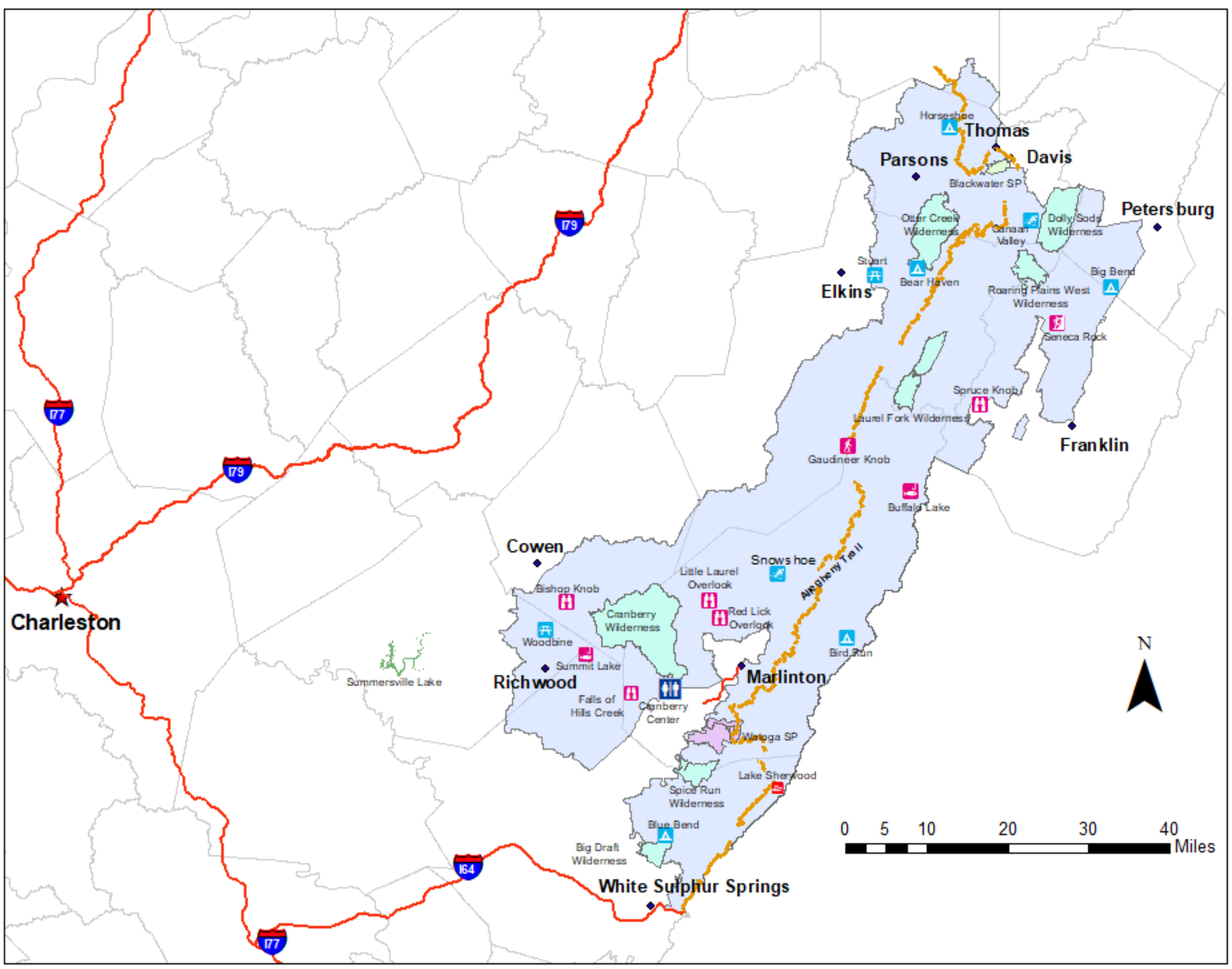
- ◯ Never

- ◯ Only once
- ◯ 2 - 5 times
- ◯ 6 - 10 times
- ◯ More than 10 times

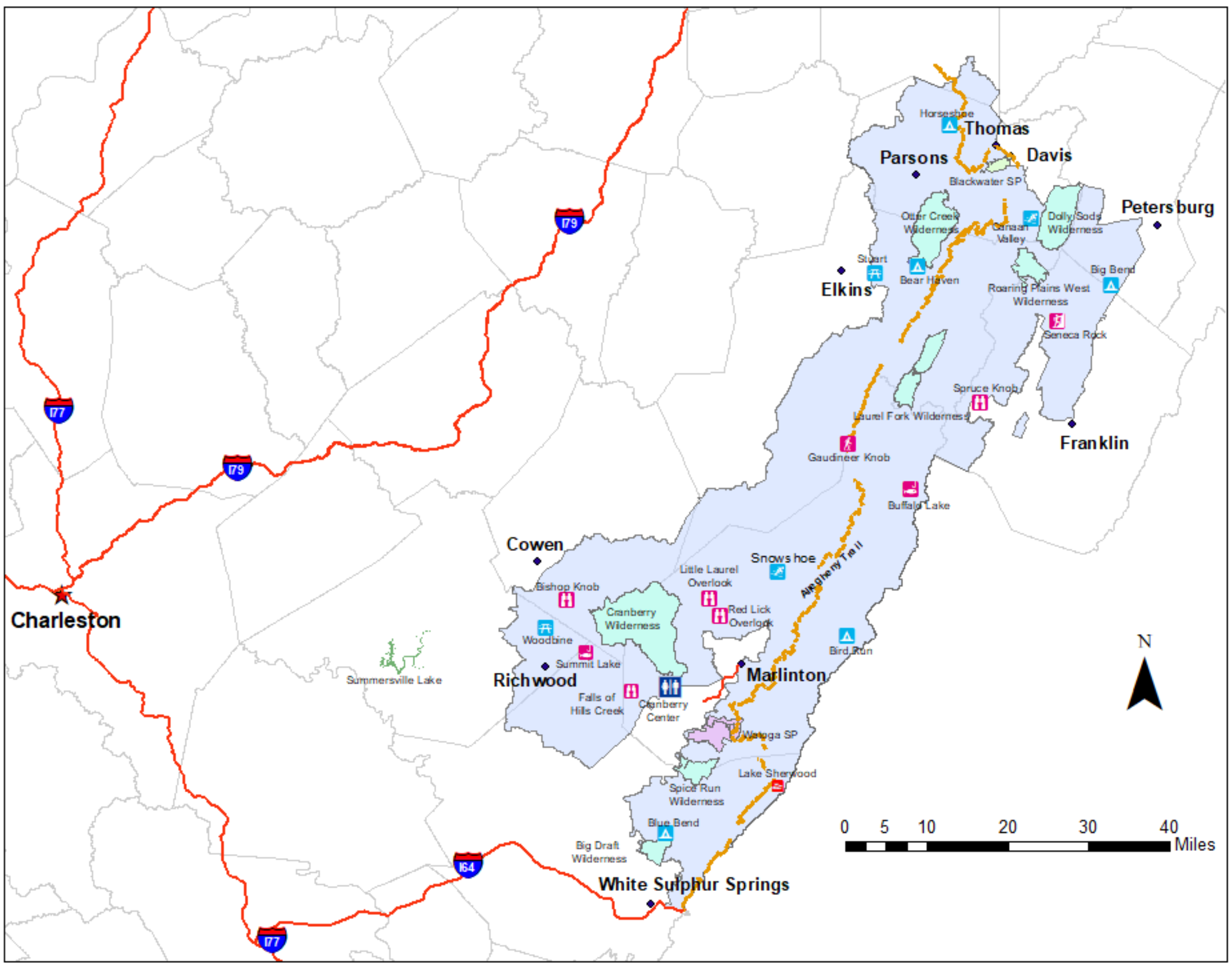
2. How many times have you visited the Monongahela National Forest in the previous 12 months?

- ◯ Never
- ◯ Only once
- ◯ 2 - 5 times
- ◯ 6 - 10 times
- ◯ More than 10 times

3. Below is a map that shows the Monongahela National Forest (shaded region). If you have visited the forest in the past 3 years, please list the sites you visited **during your most recent trip** to the forest (Maximum 10 sites. If you visited more than 10 sites, please list the 10 most important ones).



4. Following the previous question, please click on the map (shaded region) to roughly show sites that you have visited during your **most recent trip to the forest**.
(Maximum of 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 forest area, touch again to delete. To move the point, touch, hold and drag)



5. Including yourself, how many people were traveling with you during your **most recent trip** to the forest? (Numbers only)

6. During your **most recent trip** to the Monongahela National Forest, how much have you or your group spent in the area? (If you travelled as a group, enter the estimated spending for the whole group. If you travelled 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 $1,000
- ◯ More than $1,001

7. Did you stay overnight in the Monongahela National Forest area (anywhere in the forest and/or any of the towns near the forest) during your **most recent trip**?

- ◯ Yes
- ◯ No

8. During your **most recent trip** to the forest, how many nights have you stayed in or near the forest?

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ More than 5

9. Please indicate your main type(s) of accommodation during your **most recent visit** to the Monongahela National Forest.

- ☐ Youth Hostel
- ☐ RV

- ☐ Homestays
- ☐ Hotel/Motel/Inn
- ☐ Second Home
- ☐ Camping/Tent
- ☐ Timeshare
- ☐ Airbnb
- ☐ Bed & Breakfast
- ☐ Rented house/Apartment
- ☐ ______ Other (Please specify)

Section 2:

Section 2: Perceptions of Regional Collaboration and Marketing in the Monongahela National Forest Area

1. The Mon Forest Towns Initiative was created to connect 10 towns near and within the Monongahela National Forest , aiming to cultivate relations across lands and forest gateway communities that will enhance the economy and quality of life for residents and visitors while sustaining the quality of the environment at the regional level. Were you aware of the Mon Forest Towns Initiative prior to this survey?

- ○ Yes
- ○ No

2. Below is a question about how familiar you are with the Initiative, please indicate to what extent you know about the Initiative?

	Extremely familiar	Moderately familiar	Somewhat familiar	Slightly Familiar	Not at all familiar
How familiar are you with the Initiative?	○	○	○	○	○

3. Listed below are phrases about your perceptions of regional collaboration and marketing for recreation economy in the Monongahela National Forest area. Regional collaboration and marketing address regional challenges by engaging and connecting people and resources within the region and market collectively for

the region. Please indicate how much you disagree or agree with each phrase by circling your response.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. Regional Collaboration and marketing play an important role in the success of recreation economy.	◯	◯	◯	◯	◯
2. There is a lack in regional collaboration and marketing in the area.	◯	◯	◯	◯	◯
3. Regional collaboration and marketing can enhance tourism product portfolio.	◯	◯	◯	◯	◯
4. Regional collaboration and marketing can leverage on each county's unique tourism product.	◯	◯	◯	◯	◯
5. Regional collaboration and marketing can reduce costs and increase efficiency.	◯	◯	◯	◯	◯

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
6. Counties in the Monongahela National Forest area can achieve more by working together.	◯	◯	◯	◯	◯
7. Counties in the Monongahela National Forest area share commonalities in heritage tourism resources.	◯	◯	◯	◯	◯
8. Counties in the Monongahela National Forest area share commonalities in nature-based tourism resources.	◯	◯	◯	◯	◯

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
9. Counties in the Monongahela National Forest area have similar tourism products and services.	○	○	○	○	○
10. Counties in the Monongahela National Forest area have the same target market.	○	○	○	○	○
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

Section 3

Section 3: Perceptions of Branding for Recreation Economy in the Monongahela National Forest Area

1. Below is the logo recently developed for the Monongahela Forest Towns Initiative which connects the 10 gateway towns in the Monongahela National Forest area. Have you known about this logo prior to this survey?

○ Yes
○ No

2. How did you first learn about the logo for the Monongahela Forest Towns Initiative?

- ◯ Social Media
- ◯ Roadside Sign
- ◯ Website
- ◯ Word of Mouth
- ◯ News Letter
- ◯ [ ] Other (please specify)

3. Below is the logo recently developed for the Monongahela Forest Towns Initiative which connects the 10 small towns in the Monongahela National Forest Area.

Listed below are phrases about the logo/branding for recreation economy in the Monongahela National Forest Area. Please indicate how much you disagree or agree with each phrase by circling your response.

	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
1. This brand makes a strong impression on my visual sense or other senses.	○	○	○	○	○
2. I find this brand interesting in a sensory way.	○	○	○	○	○
3. This brand does not appeal to my senses.	○	○	○	○	○
4. This brand includes feelings and sentiments.	○	○	○	○	○
5. I do not have strong emotions for this brand.	○	○	○	○	○
6. This brand is an emotional brand.	○	○	○	○	○
7. I engage in a lot of thinking when I encounter this brand.	○	○	○	○	○
8. This brand stimulates my curiosity and problem solving.	○	○	○	○	○
9. This brand does not make me think.	○	○	○	○	○
	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree

Section 4: Attitudes toward Recreation/Tourism in the Monongahela National Area

Section 4: Attitudes toward Recreation/Tourism in the Monongahela National Area

1. Please indicate the extent to which you agree or disagree with the following statements on your perceptions of recreation/tourism development in the Monongahela National Forest area by circling the number that best represents your answer.

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
1. An increase in tourism will increase the cost of living in the Monongahela National Forest area.	○	○	○	○	○
2. Tourism development will provide more economic opportunities for the area.	○	○	○	○	○
3. Tourism development will only produce low-paying service jobs.	○	○	○	○	○
4. I support taxes for tourism development in the area.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
5. Tourism development will help to protect natural/heritage resources in the area.	○	○	○	○	○
6. Tourism will improve the wellbeing of communities in the area.	○	○	○	○	○
7. The area should invest in tourism development.	○	○	○	○	○
8. An increase in tourism will lead to crowding of outdoor recreation, historic, and cultural sites/attractions.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
9. Long-term planning and managed growth are important to control any negative impacts of tourism.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
10. The area should do more to promote its tourism assets to visitors.	○	○	○	○	○
11. The area should discourage more intensive development of facilities, services, and attractions for tourists.	○	○	○	○	○
12. An increase in tourism will lead to unacceptable amounts of traffic, crime, and pollution.	○	○	○	○	○
	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree

Section 5: Perceptions of COVID-19

Section 5: Perceptions of Strengths, Weaknesses, Opportunities, and Threats about Recreation/Tourism in the Monongahela National Forest Area

1. Please identify your thoughts and feelings toward recreation economy in the Monongahela National Forest Area by indicating how much you disagree or agree with each statement by circling the response that best represents your answer.

	Strongly Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Strongly Agree
1. The area is rich in natural/heritage tourism resources.	○	○	○	○	○
2. Local people in the area are friendly.	○	○	○	○	○
3. Politicians and decision makers support recreation economy in the area.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Strongly Agree
4. The area provides opportunities for lots of outdoor recreation activities.	○	○	○	○	○
5. The area allows visitors to experience rural authenticity.	○	○	○	○	○
6. The area is limited in accommodation options.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Strongly Agree
7. The area is limited in dining options	○	○	○	○	○
8. The area is limited in human capacity for tourism marketing and development.	○	○	○	○	○
9. The area is distant from markets.	○	○	○	○	○
10. The area lacks cell phone service.	○	○	○	○	○
11. The area lacks investment.	○	○	○	○	○
12. People's desire to visit natural areas will increase after the Covid-19 pandemic.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Strongly Agree
13. There is an increasing market for experiencing rural authenticity.	○	○	○	○	○
14. There is an increasing retiree market seeking quiet, rural, low cost of living.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree or Agree	Somewhat Agree	Strongly Agree
15. There are increasing interests among decision makers in developing recreation economy.	◯	◯	◯	◯	◯
16. Trails are becoming increasingly popular across the area.	◯	◯	◯	◯	◯
17. There is a negative impact of shale gas extraction on recreation and tourism in the area.	◯	◯	◯	◯	◯
18. Employment opportunities are limited.	◯	◯	◯	◯	◯
	Strongly Disagree	**Somewhat Disagree**	**Neither Disagree or Agree**	**Somewhat Agree**	**Strongly Agree**
19. People tend to have a poor image of the state.	◯	◯	◯	◯	◯
20. Increase of gas price may reduce people's desire to travel.	◯	◯	◯	◯	◯
21. People may be reluctant to travel because of Covid-19.	◯	◯	◯	◯	◯
	Strongly Disagree	**Somewhat Disagree**	**Neither Disagree or Agree**	**Somewhat Agree**	**Strongly Agree**

Section 6: Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism in the Monongahela National Forest and Surrounding Areas

	Strongly Disagree	Somewhat Disagree	Neither Disagree Nor Agree	Somewhat Agree	Strongly Agree
1. Covid-19 reduces the possibility of travelling with groups.	◯	◯	◯	◯	◯

	Strongly Disagree	Somewhat Disagree	Neither Disagree Nor Agree	Somewhat Agree	Strongly Agree
2. I prefer to avoid traveling to urban areas due to COVID-19 pandemic.	○	○	○	○	○
3. Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest.	○	○	○	○	○
4. There is a low likelihood of contracting COVID-19 when travelling to the Monongahela National Forest area.	○	○	○	○	○
5. The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree Nor Agree	Somewhat Agree	Strongly Agree
6. People may choose to stay in Airbnb over hotels/motels while traveling to the forest area during the pandemic.	○	○	○	○	○
7. Camping has become more popular across the U.S. due to the pandemic. This popularity may fade away post the pandemic.	○	○	○	○	○
8. People's travel preferences and behaviors have been changed due to the pandemic.	○	○	○	○	○
9. Tourism in the forest area was hit hard by the pandemic.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree Nor Agree	Somewhat Agree	Strongly Agree
10. New forms of tourism may emerge in the forest area due to the pandemic.	○	○	○	○	○

	Strongly Disagree	Somewhat Disagree	Neither Disagree Nor Agree	Somewhat Agree	Strongly Agree
11. Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level.	○	○	○	○	○
12. Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic.	○	○	○	○	○
13. People will care about safety and hygiene while travelling more than they used to due to the pandemic.	○	○	○	○	○
14. COVID-19 increases the possibility of travelling alone or with family.	○	○	○	○	○
15. Number of COVID-19 cases in the forest area may increase with influx of tourists.	○	○	○	○	○

Section 7: Background Information

1. What is your Zipcode?

2. What is your gender?

- Female
- Male
- Prefer not to say

3. What is your age?

- 18-24
- 25-34
- 35-44
- 45-50
- 51-60
- 61-69
- 70+
- Prefer not to say

4. 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

5. What was your approximate household income from all sources, before taxes, in 2020?

- Less than $20,000
- $20,001 to $40,000
- $40,001 to $60,000
- $60,001 to $80,000
- $80,001 to $100,000
- $100,000 +

6. What is your role in your community? (Please check all that apply)

- Government Official
- Local or county board, commission, authority
- Non-profit organization (please specify)
- Recreation/Tourism-related business owner
- Non-recreation/tourism related business owner

- [ ] ______ Employed by recreation/tourism (please specify employer)
- [ ] ______ Non-recreation/tourism related employment (please specify employer)
- [ ] Resident
- [ ] Part-time Resident
- [ ] Second home owner
- [ ] ______ Other (please specify)

7. Do you have any other comments?

______