Visitors' Perceptions of Recreation Economy in the Monongahela National Forest Area

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EXECUTIVE SUMMARY

This visitor survey for the Monongahela National Forest area was conducted using the Qualtrics online survey platform with a valid sample size of 621 respondents from five targeted states including: Pennsylvania, Virginia, Maryland, Ohio, and Washington D.C. The main purpose of this survey is to learn more from the perspective of outside visitors (excluding visitors from West Virginia) about their perceptions of branding, values, images, competitiveness, satisfaction, loyalty, and COVID-19 impacts as related to the forest area so as to provide data to guide marketing and development strategies for the development and promotion of a recreation economy in the area.

Results show that the majority of respondents were very positive in their responses about these perceptions. Specifically, nearly half of respondents (48.41%) reported having known about the logo before taking the survey. About 76% of respondents felt the brand was interesting in a sensory way and can make a strong impression on their visual sense or other senses. In addition, over 80% of respondents either mildly agreed or strongly agreed that their visits to the area were worthy of time (84.2%), effort (84.0%), and price (83.1%); and that the area has provided a good deal (81.7%) and good service (81.4%). Likewise, most respondents (87.3% of) were highly positive about the area, with 84.7% of them being either somewhat satisfied (35.7%) or extremely satisfied (49.0%) with their overall visit experience in the area. Consistent with their positive images and high level of satisfaction, over 80% of respondents were also very loyal to the area (willing to recommend, to say something positive, and to revisit), a good sign for the long-term sustainability of the area.

Contrary to values, images, satisfaction, and loyalty being perceived as highly positive, respondents seemed to be somewhat conservative in their perceived competitiveness of the

area compared to similar areas visited most recently, in that 62.9% considered the area to be somewhat better (36.2%) or much better (26.7%) than other similar destinations they visited.

The relationship between image, competitiveness, and satisfaction was further examined using a method similar to importance-performance analysis (IPA). This gap analysis indicates that positive images and high level of satisfaction are highly and positively related for destination attributes measuring the use and protection of resources, rural atmosphere, and security/safety. These attributes were also rated as highly competitive with other similar destinations. In contrast, other attributes on festivals and events, entertainment and nightlife, and shopping were perceived lower in terms of image, competitiveness, and satisfaction, and thus need to be improved upon in the future to enhance their images and increase their competitiveness.

The gap analysis results are, to some extent, consistent with visitors' responses on questions that asked them to indicate one single aspect that might have most negatively or most positively affected their visit experience. Natural scenery/beauty was mentioned most frequently as the most positive factor that contributed to their satisfaction while infrastructure/facilities/transportation as the most negative factor that reduced their overall experience.

Finally, in terms of perceived impacts of COVID-19 on the area's recreation and tourism, it seemed that respondents were cautiously optimistic about the recovery of recreation economy in the area with 43.5% considering that "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level", the lowest among all COVID-19 impact items.

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 Mon Forest Towns 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 Mon Forest Towns 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 Mon Forest Towns 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 visitor survey. Results from the resident survey will be reported separately.

2. Methods

2.1. Questionnaire

A questionnaire was designed based on findings from the literature and with inputs from the Mon Forest Towns Marketing Committee. This questionnaire consists of 10 sections: 1) background information, 2) trip characteristics, 3) perceptions of values, 4) perceptions of destination images, 5) perceptions of relative competitiveness, 6) perceptions of branding, 7) destination satisfaction, 8) destination loyalty, 9) perceptions of the impacts of COVID-19 on recreation and tourism in the Monongahela National Forest and surrounding area, and 10) socio-demographics (Appendix A). The questionnaire was reviewed and acknowledged for use by WVU Institutional Review Board (IRB) and further pilot tested by the Mon Forest Town Marketing Committee members before it was launched online.

2.2. Data Collection and Data Analysis

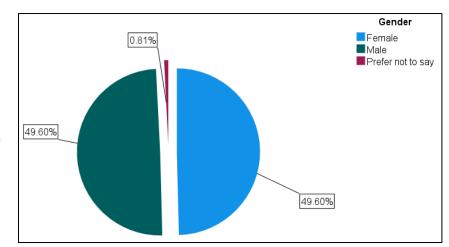
Data collection was contracted to Qualtrics, an online survey tool company, who further fine-tuned the online version of the questionnaire that was built into Qualtrics by the research team. Prospective participants were targeted from five states such as Pennsylvania, Virginia, Maryland, Ohio, and D.C., which were identified as the primary market for the study area by the research team based on results from previous national visitor use monitoring surveys that are conducted every five years in the Monongahela National Forest. Prospective participants from the five states were recruited from a data poll created by Qualtrics. Each participant who completed the survey was offered an opportunity to get a reimbursement that is commensurate with the time they spent on the survey. The survey was carried out between Oct. 21, 2021 and Jan. 8, 2022, with a valid sample size of 621 (out of 815 attempts). Data were

analyzed using SPSS 28. Results presented here are more descriptive in nature and are based on usable questionnaires with missing data omitted using case-wise deletion, if not otherwise indicated.

3. Demographics and Trip Characteristics

3.1. Demographics

Of the 621 valid respondents, nearly half of them were males or females, each accounting for 49.6%. In addition, a very



small percent of respondents

Figure 1. Respondents by gender

preferred not to say their gender (Figure 1).

The majority of respondents were young, with 79.5% of them ranging between 18 and 44

years old (15.6% for age 18-24, 31.7% for age 25-34, and 32.2% for age 35-55, respectively) (Figure 2). Respondents between 45 and 60

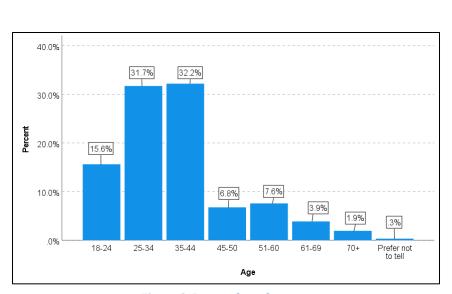


Figure 2. Respondents by age

years old accounted for 14.4% while only a small percent aged 61 and over. In addition, 3% of respondents did not provide information on age.

Figures 3 and 4 present respondents by education and income, respectively. As shown, the majority were well educated and affluent. Specifically, most respondents (76.3%) had some college level education (30.8%) or college degree (28.3% undergraduate or post-secondary degree and 17.2% graduate school degree). In addition, 21.9% had a high school degree or equivalent while a small percent of respondents (1.8%) had a less than high school degree.

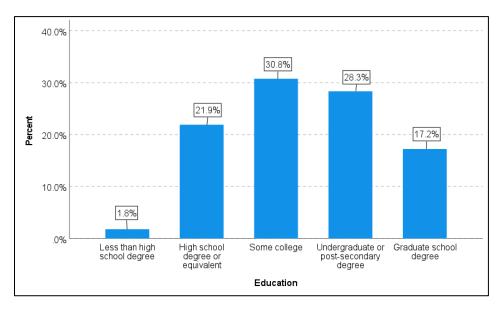


Figure 3. Respondents by education

In terms of household income before taxes, the majority of respondents (40.8%) reported an income of \$80,001 or above (15.0% with an income between \$80,001 and \$100,000 and 15.8% had an income over \$100,000). About equal percentage of respondents had an income between \$20,000 and \$40,000 (16.4%) and \$40,001 and \$80,000 (16.6%). Respondents with an income between \$60,001 and \$80,000 accounted for 13.8%, while 10.6% reported an income less than \$20,000. Finally, 1.8% did not report income.

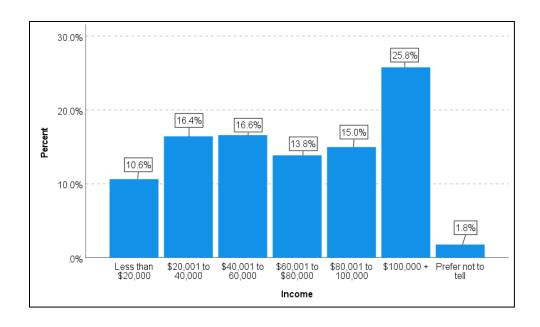


Figure 4. Respondents by income

3.2. Trip Characteristics

Of the five targeted states, Pennsylvania and Virginia accounted for most of the participants

(67.51%), with 34.83% for the former and 32.32 for the latter, followed by Maryland (17.41%) and Washington D.C. (14.78%), while only a small percentage of respondents being from Ohio (0.66%) (Figure 1).

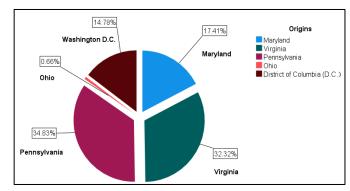


Figure 5. Respondents by origin

It is worth noting that the above 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 five states, with West Virginia (the major market of the Monongahela National Forest) being excluded (for a 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).

Respondents were also 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 10 clicks). Figure 6 shows the three most popular subregions that were determined by frequency of clicks. Subregion 1 (Richwood and Cranberry Wilderness) was most visited (36.46%), followed by subregion 2 (Seneca Rock) (31.46%), and subregion 3 which is featured by Snowshoe and a segment of Highland Scenic Highway (27.71%).

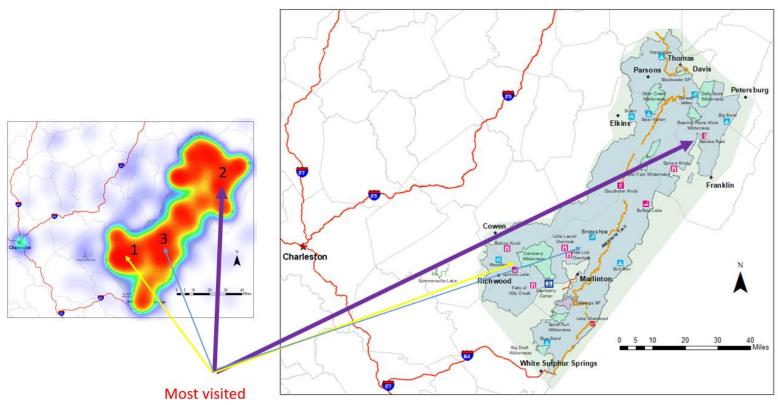


Figure 6. Heat map showing places most visited

In terms of travel purposes (note; respondents were allowed to choose multiple purposes), most respondents (84.09%) traveled to the forest area for leisure/holiday/vacation, followed by visiting friends and/or relatives (40.56%), and business (10.45%). There were a small number of respondents (3.59%) who reported having visited the area for other reasons (e.g., passing through, wedding, spur of the moment, research, etc.) (Figure 7).

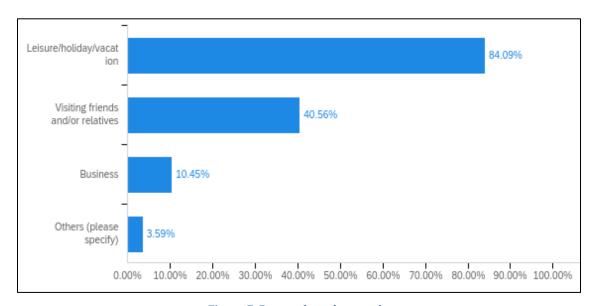


Figure 7. Respondents by travel reasons

Respondents were asked to report how many times they have visited the forest area in the

past three years. Responses are displayed in Figure 8.
Interestingly, a large number of respondents (46.4%)
reported being the first time to visit the area, followed by 43.6% of respondents who

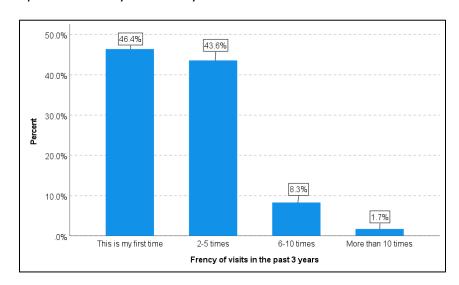


Figure 8. Frequency of visits in the past 3 years

had visited the area 2-5 times. A small

number of respondents reported a frequency of visits of 6-10 times (8.3%) or more than 10 times (1.7%), respectively. Respondents were also asked to report frequency of visits in the previous 12 months. Interestingly, most respondents (44.9%) visited the area for the first time in the previous 12 months, with average number of visit times of 2.26 in the previous 12 months. This is comparable to 46.4% being first time visitors in the past three years, suggesting that many respondents visited the area for the first time during the COVID-19 pandemic.

Nearly half (45.1%) and over one third (37.3%) of the respondents visited the area with a group size of 3-5 or 2 people, respectively, while 11.8% reported having travelled to the area alone. Relatively, a small percent of respondents travelled with a group size of 6-10 (4.5%) or more than 10 people (1.3%) (Figure 9).

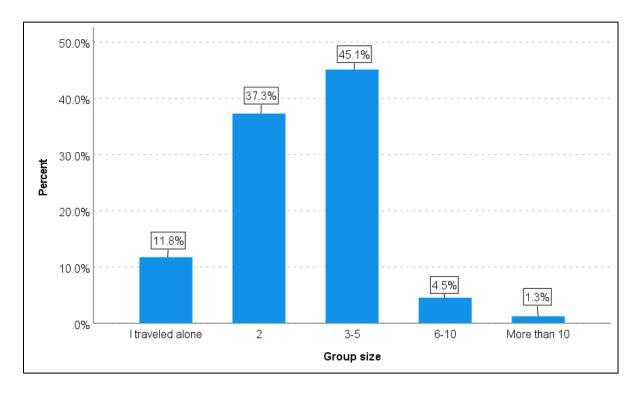


Figure 9. Respondents by group size

Figure 10 presents the amount of group trip spending reported by respondents. Nearly equal number of respondents reported a spending of \$201 to \$300 (13.8%) and \$401 to \$500 (13.7%), respectively. A good number of respondents spent over \$600 per group/trip (29.8%) while 9.3% spent less than \$100.

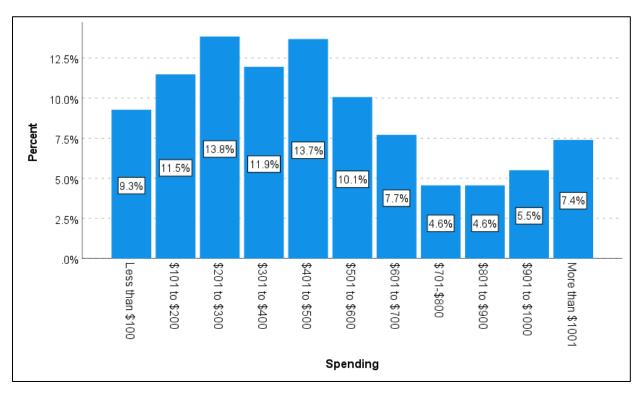


Figure 10. Respondents by spending

The spending pattern shown in Figure 11 corresponds with the majority of respondents being overnight visitors (78.3% vs. 21.7% being day trippers) as shown in Figure 9.

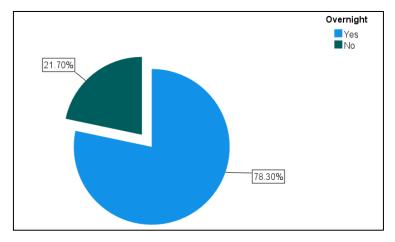


Figure 11. Respondents by overnight stay vs. day trippers

Figure 12 presents the distribution of number of nights stayed, reported by respondents. The majority of respondents (67.5%) stayed 2 (38.2%) or 3 nights (29.3%). An additional 10.4% of respondents stayed 4 nights. Respondents who stayed 5 or more nights accounted for 7.8%, while 14.3% stayed 1 night. This distribution pattern with most respondents staying more than 2 nights also corresponds with the spending pattern in Figure 10 that shows a higher level of spending by most respondents.

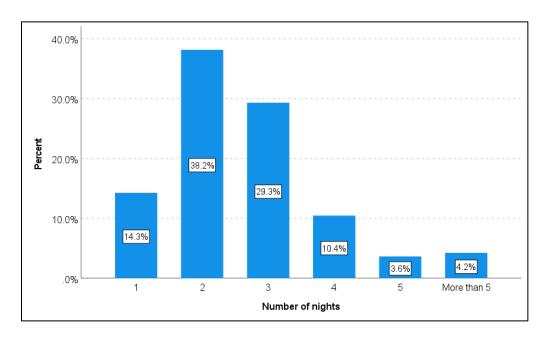


Figure 12. Respondents by number of nights

Figure 13 presents responses on where visitors stayed during their most recent trip to the Monongahela National Forest area (note; as with their responses on travel purposes, respondents were also allowed to choose multiple lodging types). Most stayed in hotels/motels/inns (40.36%), followed by friends/relatives (35.14%), camping/tents (31.93%), and Airbnb (14.46%). A small number of respondents stayed in rented houses/apartments (5.42%, not shown in the figure due to the length of the figure).

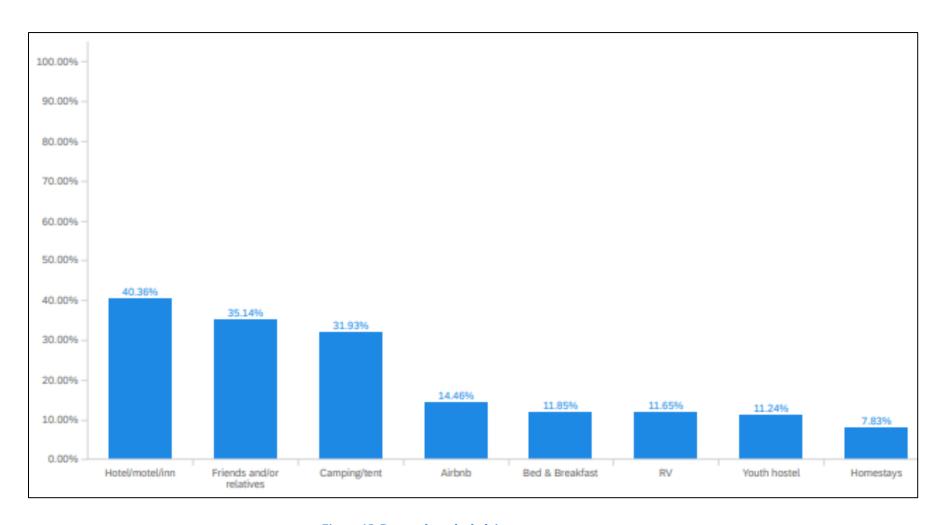


Figure 13. Respondents by lodging types

4. Perceptions of Values and Images in the Monongahela National Forest Area

Table 1 presents results of perceived values in the Mon National Forest area. The six items measuring perceived values were adopted from previous studies (Aliman et al., 2014; Chen & Chen, 2010; Gallarza & Saura, 2006; Ponte et al., 2015). As shown, response patterns on each item are quite similar. Over 80% of respondents either mildly agreed or strongly agreed that their visit to the area was worthy of time (84.2%), effort (84.0%), and price (83.1%); and that the area has provided a good deal (81.7%) and good service (81.4%). In addition, nearly 80% of them mildly or strongly agreed that the area provided great value as compared to other similar destinations (79.4%).

Table 1. Perceptions of perceived values in the Monongahela National Forest Area.

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
1. Compared to the time I spent,	4.3	4.0	7.6	37.8	46.4	8.3	84.2
the visit to the Monongahela							
National Forest area was worthy							
2. Compared to the efforts I	2.8	3.8	9.3	39.7	44.3	6.6	84.0
made, the visit to the							
Monongahela National Forest							
area was worthy							
3. My trip to the Monongahela	2.2	3.3	11.4	34.7	48.4	5.5	83.1
National Forest area was worth							
the price I paid	2.0	2.5	12.0	261	15.		04 =
4. I think the Monongahela	2.8	2.7	12.8	36.1	45.6	5.5	81.7
National Forest area provides a							
good deal	2.7	3.6	10.2	27.7	12.7	6.3	81.4
5. I think the Monongahela	2.7	3.0	12.3	37.7	43.7	0.3	81.4
National Forest area provides good service							
6. I think the Monongahela	1.7	4.1	14.7	39.1	40.3	5.8	79.4
National Forest area provides me							
great value as compared to							
other rural destinations							

Table 2 presents visitors' responses on their perceived destination images, measured by 18 items including one measuring overall image ("My overall image of the area was positive").

These image items were adopted from Alcocer and Ruiz (2020), Kokkali et al. (2009), and Stylidis et al. (2014). Specifically, 87.8% of respondents either moderately agreed (32.2%) or

Table 2. Perceptions of destination images in the Monongahela National Forest area.

	Strongly disagree (SD)	Mildly disagree (MD)	Neutral (N)	Mildly agree (MA)	Strongly agree (SA)	(ID. IMD	344 . GA
Items 1. I was impressed by the natural	(%) 2.5	(%) 2.9	(%) 6.8	(%) 32.2	(%) 55.6	5.4	MA+SA 87.8
attractions in the area	2.3	2.9	0.8	32.2	33.0	5.4	07.0
2. I was impressed by the heritage and cultural assets in the area	1.6	4.4	17.3	36.5	40.3	6.0	76.8
3. The area provides a good opportunity to experience rural tranquility and authenticity	2.2	4.1	10.6	36.3	46.8	6.3	83.1
4. Local residents are hospitable and friendly	1.7	3.3	16.8	35.7	42.5	5.0	78.2
5. Local products are diverse and unique	1.6	3.8	16.8	40.6	37.2	5.4	77.8
6. The area is easily accessible	1.3	5.1	16.2	40.7	36.8	6.4	77.5
7. I felt secure and safe during my recent trip to the area	2.5	3.5	10.9	38.0	45.0	6.0	83.0
8. The area has enough and adequate infrastructure	1.1	5.4	17.7	36.9	38.8	6.5	75.7
9. The area is well maintained and conserved	1.4	3.2	11.4	39.5	44.5	4.6	84.0
10. The area provides opportunities to experience festivals and events	2.2	4.8	21.9	37.4	33.8	7.0	71.2
11. The area provides opportunities to experience local food/eatery	1.9	4.1	15.2	42.0	36.8	6.0	78.8
12. Prices are reasonable	1.0	5.2	13.6	42.3	37.9	6.2	80.2
13. The area provides diverse and quality outdoor recreational activities	2.2	3.3	14.3	35.8	44.4	5.5	80.2
14. The area provides good opportunities to enjoy entertainment and night life	2.4	7.1	21.6	38.4	30.6	9.5	69.0
15. The area is not crowded	1.7	5.9	16.2	39.6	36.6	7.6	76.2
16. The area is good for shopping	3.0	9.8	28.4	31.5	27.3	12.8	58.8
17. The area has a wide choice of lodging	1.9	5.1	22.8	40.3	30.0	7.0	70.3
18. My overall image of the area was positive	1.7	1.9	9.0	34.1	53.2	3.6	87.3

strongly agreed that they were impressed by the natural attractions in the area, followed by "The area is well maintained and conserved" (84.0%), and "The area provides a good opportunity to experience rural tranquility and authenticity" (83.1%). In contrast, 69% of respondents thought that "The area provides good opportunities to enjoy entertainment and

night life", the lowest among all items, followed by "The area has a wide choice of lodging" (70.3%), and "The area provides opportunities to experience festivals and events" (71.2%).

Overall, visitors held a very positive image about the area with responses on the two categories "moderately agree" and "strongly agree" combined being 87.3%, higher than any individual image item.

5. Perceptions of Relative Competitiveness for Monongahela National Forest Area

One purpose of this survey is to understand how competitive the Mon National Forest area is as perceived by respondents as compared with other similar destinations they visited recently.

Only those who have recently

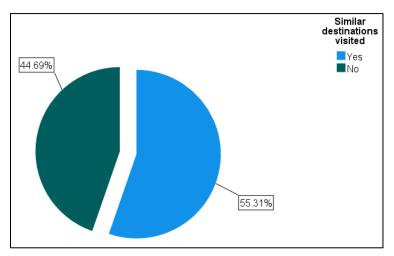


Figure 14. Respondents by past experience

visited a similar destination(s) were asked to

provide their answers. Figure 14 shows that over half (55.31%) reported having visited similar destinations. Their perceived competitiveness of each destination attribute is presented in Table 3.

It appears that the majority of respondents either considered the area to be competitive or highly competitive as compared with similar destinations visited. This is particularly true for "outdoor recreation opportunities" whereas 64.1% perceived the area as "somewhat better" (35.1%) or "much better" (29.1%), the highest among all destination attributes. Other attributes such as "rural tranquility and authenticity", "hospitability and friendliness of local people",

"accessibility", and "prices" were also considered competitive with responses on the two categories "somewhat better" and "much better" combined being 63.8%, 63.2%, 62.7%, and 62.6%, respectively. The least competitive attributes include "shopping" (51.2%), "entertainment and night life" (56.3%), and "festivals and events" (56.6%) which is tied with "crowding" (56.6%). Finally, 62.9% of respondents considered the area's overall competitiveness to be "somewhat better" or "much better" than similar destinations visited.

Table 3. Perceptions of Relative Competitiveness for the Monongahela National Forest Area.

Items	Much worse (%)	Somewhat worse (%)	About the same (%)	Somewhat better (%)	Much better (%)	First two	Last two
1. Natural attractions	4.3	6.9	27.9	31.6	29.3	11.2	60.9
2. Heritage and cultural assets	3.4	6.3	31.0	37.9	21.3	9.7	59.2
3. Rural tranquility and authenticity	2.6	4.6	29.0	37.1	26.7	7.2	63.8
4. Hospitability and friendliness of local people	1.7	5.5	29.6	34.8	28.4	7.2	63.2
5. Diversity and uniqueness of local products	2.3	6.9	31.9	34.5	24.4	9.2	58.9
6. Accessibility	2.0	6.9	28.4	32.2	30.5	8.9	62.7
7. Security and safety	2.0	4.3	35.1	27.9	30.7	6.3	58.6
8. Infrastructure	2.3	6.0	32.5	32.2	27.0	8.3	59.2
9. Resource conservation	2.0	7.2	32.2	32.5	26.1	9.2	58.6
10. Festivals and events	1.4	8.6	33.3	28.2	28.4	10	56.6
11. Local food/eatery	1.7	7.5	29.9	30.7	30.2	9.2	60.9
12. Prices	1.7	7.5	28.2	35.6	27.0	9.2	62.6
13. Outdoor recreation opportunities	1.4	3.7	30.7	35.1	29.0	5.1	64.1
14. Entertainment and night life	2.6	6.6	34.5	29.0	27.3	9.2	56.3
15. Crowding	1.4	8.0	33.9	31.9	24.7	9.4	56.6
16. Shopping	1.4	9.2	38.2	27.3	23.9	10.6	51.2
17. Lodging	2.9	6.3	33.6	30.7	26.4	9.2	57.1
18. Overall competitiveness	1.7	7.5	27.9	36.2	26.7	9.2	62.9

Respondents were also asked to list up to three rural destinations they compared to the Monongahela National Forest area. Similar destinations like national forests, state forests, national parks, and state parks are among the most listed. However, there are visitors who also listed similar destinations that are water-related such as: Chesapeake Bay, Virginia Beach, Deep

Creek Lake in Maryland, and Cheat Lake in West Virginia. Other types of recreational areas were also mentioned, such as trails (e.g., Hatfield-McCoy Trail in West Virginia), farm resorts (e.g., Twin Farms in Vermont and Blackberry Farms in Tennessee), and golf courses (e.g., Palm Springs Golf Courses, California), among others (Table 4).

Table 4. Similar destinations that respondents compared to the Monongahela National Forest area.

	Similar destinations
National forest	Allegheny NF, Cherokee NF, Coconino NF, George Washington & Jefferson NF, Gifford
	Pinchot NF, Ocala NF, Shenandoah NF
State forest	Appomattox-Buckingham SF, Skyline Drive SF, Delaware SF, Conway Robinson SF
National park	Acadia NP, Blue Ridge Parkway, Glacier NP, Grand Canyon NP, Great Smoky Mountain NP,
	New River Gorge, Shenandoah NP, Tongass NF, White Sands NP, Yosemite NP
State park	Blackwater Falls SP, Dans Mountain SP, Gifford Pinchot SP, Linn Run SP, Moraine SP,
	Natural Bridge SP, Niagara Falls SP, Ohiopyle SP, Pocahontas SP, Presque Isle SP, Raccoon
	Creek SP, Shawnee SP
Others	Chesapeake Bay, Chesapeake & Ohio Canal, Deep Creek Lake, Hatfield-McCoy Trail, Prince
	William Forest Park, Rodman Mountains Wilderness Area, Virginia Beach

6. Perceptions of Branding for the Monongahela National Forest Area

The Mon Forest Towns Initiative adopted a logo to brand the area (Figure 15). Respondents were asked to report whether or not they have known about this logo prior to this survey.

Figure 16 shows that nearly half of respondents (48.41%) reported having known about the logo before taking the survey. This is impressive given the logo has not been used for a long duration of time.





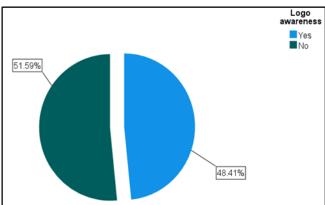


Figure 16. Respondents by logo awareness

Table 5 presents visitors' 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). Of the nine items used in this project, three were worded negatively. These nine items measure three of the five experiences proposed by Schmitt (1999): sense, feel, and think (other two aspects are act and relate). Example items include "This brand makes a strong impression on my visual sense or other senses" and "I do not have strong emotions for this brand". Results show that the two items measuring sense experience and sensory quality had the highest scores on the two categories "mildly agree" and "strongly agree" combined, with 76.4% for the item "I find this brand interesting in a sensory way" and 76.1% for the item "This brand makes a strong impression on my visual sense or other senses."

Table 5. Perceptions of Branding for the Monongahela National Forest area.

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
This brand makes a strong impression on my visual sense or other senses	3.5	5.6	14.9	43.0	33.1	9.1	76.1
2. I find this brand interesting in a sensory way	2.4	5.9	15.3	39.8	36.6	8.3	76.4
3. This brand does not appeal to my senses	20.0	22.5	17.9	24.4	15.2	42.5	39.6
4. This brand induces feelings and sentiments	2.4	10.2	25.9	38.7	22.8	12.6	61.5
5. I do not have strong emotions for this brand	12.0	19.0	26.2	25.9	16.9	31.0	42.8
6. This brand is an emotional brand	5.0	12.0	29.6	27.5	26.0	17.0	53.5
7. I engage in a lot of thinking when I encounter this brand	4.3	9.6	27.6	33.4	25.1	13.9	58.5
8. This brand stimulates my curiosity and problem solving	3.7	9.7	21.6	36.7	28.3	13.4	65.0
9. This brand does not make me think	16.6	19.2	24.9	22.0	17.3	35.8	39.3

7. Perceptions of Destination Satisfaction and Loyalty in Monongahela National Forest Area

Visitors' destination satisfaction with each individual destination attribute as well as their overall experience are presented in Table 6. Respondents were most satisfied with "natural attractions" in the area with responses on the two categories "somewhat satisfied" and

Table 6. Perceptions of Destination Satisfaction in Mon National Forest Area.

Items	Extremely dissatisfied (%)	Somewhat dissatisfied (%)	Neutral (%)	Somewhat satisfied (%)	Extremely satisfied (%)	First two	Last two
1. Natural attractions	1.6	1.9	9.3	36.1	51.1	3.5	87.2
2. Heritage and cultural assets	1.1	3.8	17.8	41.8	35.4	4.9	77.2
3. Rural tranquility and authenticity	1.6	1.9	15.2	36.2	45.0	3.5	81.2
4. Hospitability and friendliness of local people	2.1	4.0	16.5	39.3	38.1	6.1	77.4
5. Diversity and uniqueness of local products	2.4	4.0	19.2	40.1	34.3	6.4	74.4
6. Accessibility	.8	4.2	17.6	39.1	38.3	5.0	77.4
7. Security and safety	1.6	3.0	14.6	37.0	43.8	4.6	80.8
8. Infrastructure	1.6	4.0	22.9	40.4	31.1	5.6	71.5
9. Resource conservation	1.3	2.6	16.2	38.3	41.7	3.9	80.0
10. Festivals and events	1.9	5.0	25.5	33.8	33.8	6.9	67.6
11. Local food/eatery	1.6	4.3	19.4	39.4	35.3	5.9	74.7
12. Prices	1.1	5.1	17.9	41.7	34.1	6.2	75.8
13. Outdoor recreation opportunities	1.0	2.6	13.9	37.8	44.7	3.6	82.5
14. Entertainment and night life	2.2	5.9	26.6	32.2	33.0	8.1	65.2
15. Crowding	1.6	5.4	21.0	39.4	32.5	7.0	71.9
16. Shopping	2.4	6.4	26.0	35.4	29.8	8.8	65.2
17. Lodging	2.2	3.2	19.7	39.9	34.9	5.4	74.8
18. Overall experience	1.6	2.1	11.5	35.7	49.0	3.7	84.7

"extremely satisfied" combined being 87.2%, followed by "outdoor recreation opportunities" (82.5%), "rural tranquility and authenticity" (81.2%), "security and safety" (80.8%), and "resource conservation" (80.0%). Two attributes "entertainment and night life" and "shopping" are tied to be least satisfied (65.2%), followed by "festivals and events" (67.6%) and "crowding"

(71.9%). Overall, 84.7% of respondents were either somewhat satisfied (35.7%) or extremely satisfied (49.0%) with their overall visit experience in the area.

It is worth noting that responses on satisfaction are comparable to those on images and competitiveness. For example, two items "entertainment and night life" and "festivals and events" were rated among the lowest on the satisfaction measure in a way they were rated in the measures of images and competitiveness.

Tables 7 and 8 present destination loyalty measured by behavior loyalty and behavioral intentions. Loyalty, in the marketing literature, has been defined in three dimensions: attitudinal, behavioral intention, and actual behavior. Attitudinal loyalty refers to expressed liking for a destination/establishment or festival/event without overt intentions, while behavioral intention is defined by intention to revisit, recommend, and say positive things about a person's experience. In addition, willingness to pay more and likelihood to switch are also included in some studies to measure behavioral intention. Finally, behavior loyalty refers to the actual purchase of a product/service (e.g., proportion of nights/visitors/dollars spent at a particular brand or property, frequency of visits, and actual patronization of a destination) (Deng & Pierskalla, 2018). While behavioral intentions have been widely examined in the tourism literature, few have asked if respondents have actually recommended the destination, have said something positive about the destination, and have planned to revisit the destination. Arguably, this study, for the first time, simultaneously examined the two types of destination loyalty: behavioral intentions and behavior loyalty (will vs. have).

As shown in Table 7, majority of respondents have recommended the area to their family and relatives (81.3%), have said positively about the area (84.5%), and have planned to revisit

(70.2%) since their most recent trip to the area. The lower percentage on the item "have made a plan to visit" indicates that people were more likely to recommend the area and speak positively about the area than to say they would visit the area again.

Table 7. Destination Loyalty to the Monongahela National Forest Area (behavior loyalty).

	Yes	No
Items	(%)	(%)
1. I have recommended the area to my friends and family since my most recent trip to the area	81.3	18.7
2. I have said something positive about the area since my most recent trip to the area	84.5	15.5
3. I have made a plan to visit the area again since my most recent trip to the area	70.2	29.8

Behavioral intentions presented in Table 8 show similar response patterns to behavior loyalty in Table 7 except for the revisit item. Specifically, over 80% of respondents mildly agreed or strongly agreed that they will recommend the area (85.1%), will speak positively about the area (86.1%), and will visit the area again (83.7%). Once again, the higher percentage for the item "will visit" as opposed to the lower percentage for the item "have made a plan to visit" substantiate that it is easier to say than to do.

Table 8. Destination Loyalty to the Monongahela National Forest Area (behavioral intentions).

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
I will recommend the area to my friends and family	3.1	2.6	9.3	36.6	48.5	5.7	85.1
2. I will say something positive about the area	2.1	3.5	8.2	33.3	52.8	5.6	86.1
3. I will visit the area again	1.9	2.7	11.6	30.6	53.1	4.6	83.7

To further understand visitors' overall experience in the destination, respondents were asked to indicate the most negative aspect as well as most positive aspect of their most recent visit to this area. Results are presented in Tables 9 and 10. A total of 252 respondents provided 264 valid responses on things that have most negatively affected their overall experience.

These responses are grouped into 18 categories (Table 9). The topmost negative aspect is

related to Infrastructure/facilities/transportation/drive time (e.g., supporting facilities are not perfect, infrastructure and connectivity is lacking; it is a bit of drive, the traffic is not very convenient), accounting for 13.6% of all responses. The second most negative aspect is price/cost (8.7%) (e.g., food is expensive, I spent too much money, the price of things bought here is too expensive, prices are going up), followed by people/visitors being not friendly and hospitable (8.0%) (language conflict with a local tourist; there were a couple of hikers who were extremely rude-not from the area; one of people that live in the area was quite rude), crowding (7.6%) (e.g., too many people, a lot of people go which leads to lot of congestion; too crowded, large flow of people), bad weather (7.2%) (e.g., cold, terrible weather, rainy and windy), and responses related to management (6.4%) (e.g., public implementation is not perfect; the park rangers had a lot of questions and talked too much; hard to find a bathroom; did not get along with some of the rules).

Table 9. Most negative aspects of visitors' most recent visit to the area.*

No.	Category	Sample negative comments	Counts**	Percent
1	Infrastructure/facilities/ transportation/drive	supporting facilities are not perfect, infrastructure and connectivity is lacking; it is a bit of drive, the	36	13.6
	time	traffic is not very convenient.		
2	Price/cost	Food is expensive, I spent too much money, the price of things bought here is too expensive, prices are going up	23	8.7
3	People/visitors	Language conflict with a local tourist, there were a couple of hikers who were extremely rude-not from the area, the people, one of people that live in the area was quite rude	21	8.0
4	Crowding	Too many people, a lot of people go which leads to lot of congestion, crowding and accessibility, too crowded, large flow of people	20	7.6
5	Weather	Cold, terrible weather, weather, rainy and windy	19	7.2
6	Management	Public implementation is not perfect, the park rangers had a lot of questions and talked too much, hard to find a bathroom, I did not get along with some of the rules	17	6.4
7	Sanitation	Littering is serious, the environment is poor, a lot of trash on ground in park along with a lot of intoxication of campers that were noisy and vulgar language. These people looked to be homeless.	15	5.7

8	Bugs	The bugs, the mosquito bites, too many bugs, bugs are the most negative aspect, climate change, fire season deterioration and forest pest flow season			
9	Food	Lack of buffet restaurants, not enough food choices, I had hoped to more diversity in the food places around	13	4.9	
10	Safety	Lots of sketchy areas surrounding, felt unsafe, some places in this area are a little unsafe and a little dangerous, is a dangerous area, there was a wasp next the place we were told to check in	9	3.4	
11	Shopping	I didn't like that I had to go out of my way to get the everyday things I needed because of the lack of options, Shopping is not convenient without more infrastructure, shopping is not particularly convenient	8	3.0	
12	Time not enough	Couldn't stay longer, I only wish we would have stayed in the area, too much to see in the little time we had	7	2.7	
13	Nightlife	Not a lot of nightlife activities, the night life is boring, not much nightlife, there was not much to do at night	7	2.7	
14	COVID	COVID restrictions, the locals are anti-maskers, the pandemic has forced me to be cautious, not everything is open due to COVID	7	2.7	
15	Cell coverage	Low cell coverage, some of the roads are in poor state, and there is not a lot of cell phone reception if an emergency were to occur, lack of cell service	5	1.9	
16	Political	Republicans, Trump supporters, political flags and banners around the area	4	1.5	
17	Activity/attraction	Not enough activities, there was really no diversity in the place, lack of attractions, long drive with same scenery	4	1.5	
18	Others	Tired, got lost, feeling unhappy/not what I expected, my sleep schedule was interrupted and I have struggled to get back on track, not good, it was when me and my daughter want out for a long rid. Every now and again, I get lost, I couldn't do many things, I have allergies to some of the area bothered me, there was a bad smell, heat, not a good thing to do, seeing a lizard, getting to campsite	34	12.9	
Total		seeing a neard, gearing to campsite	264	100.0	

^{*}some respondents provided more than one negative aspects; **the category "others" include all responses on a single negative aspect less than 3 counts.

Table 10 presents 614 most positive things experienced by 534 respondents during their most recent visit to the area. These responses are outlined into 19 categories. The top most positive experience is related to scenery/nature (e.g., I like the old growth forest; beautiful view, beautiful scenery, the area was beautiful, the scenery was beautiful and the air seemed to be

much fresher than in the city where I live), accounting for 35.2% of all responses. The second most positive aspect is related to outdoors (11.1%) (e.g., love the outdoors, hiking, fishing, got to be outdoor for a while, being outside, the adventure, there is so many places to go! many outdoor activities), which is closely followed by tranquility and relaxing (10.9%) (e.g., peacefulness, I loved the sights and sounds and I liked getting away from the city, relaxing, lots to see and take pictures of-definitely an experience to have again). Other positive aspects include friendly/hospitable people/communities (7.3%), everything (5.9%), family and friends (5.5%), fun/interesting (4.4%), and quality service (2.4%). In addition, there are 35 positive responses (on a single negative aspect less than 3 counts) are grouped as "others", accounting for 5.7% of total responses.

Table 10. Most positive aspects of visitors' most recent visit to the area. *

No.	Category	Sample positive comments	Counts**	Percent
1	Scenery/nature	I like the old growth forest, beautiful, the view, nature, beautiful scenery, the area was beautiful, the scenery was beautiful and the air seemed to be much fresher than in the city where I live	216	35.2
2	Outdoors	Love the outdoors, hiking, fishing, got to be outdoor for a while, being outside, the adventure, there is so many places to go! I could probably explore for hours, and find new things, quiet camping, many outdoor activities	68	11.1
3	Tranquility/relaxing	Peacefulness, I loved the sights and sounds and I liked getting away from the city, relaxing, lots to see and take pictures of-definitely an experience to have again, the atmosphere, it is very peaceful, beautiful nature	67	10.9
4	People/community	Nice people, they are friendly and amazing, friendliness of people there, local residents are hospitable and warm, people in the area are quite welcoming, the friendliness and courtesy of the community, the locals are actually pretty friendly, despite political difference, the overall welcoming of the community and the area in general	45	7.3
5	Everything	Everything, entire trip, all of it	36	5.9
6	Family/friends	Eating dinners with family, enjoying my children have a great time, we had a great family outing, spending time with my loved ones and it was my	34	5.5

		youngest grandsons first time there, great time for my family to be together		
7	Fun/interesting/like	Fun, interesting, enjoyable, like it, good	27	4.4
8	Service/lodging	Good service attitude, service is good, the hotel was great, I like the scenic spots, environment and accommodation in the area, lodging was great, staff are very friendly	15	2.4
9	Sanitation	The sanitation is very good, nice environment, cleanness	13	2.1
10	Food	Local food is very good, the food is very delicious	8	1.3
11	Local culture/custom	The calmness and culture really made a positive impact on my stay, the natural landscape, including the local cultural landscape, gives me pleasure and comfort in mind, The local customs are very interesting, and the entertainment is also fun	8	1.3
12	Safety	The safety of my trip was a positive one, the security measures in this place are in place and beautiful	7	1.1
13	Wildlife view	Wildlife, the most positive aspect is that we found food the animals would normally eat and it was good but we only tried the fruits	7	1.1
14	Weather	Temperature, nice weather and clean, had good weather	7	1.1
15	Location	The location, have a very good location	6	1.0
16	Parking/facilities	Parking, public facilities are complete, there are many scenic spots and complete facilities	6	1.0
17	Nightlife	Good nightlife, the nightlife is great	5	0.8
18	Price	Price, it is very cheap affordability and nice	4	0.7
19 Total	Others		35 614	5.7 100.0

^{*}some respondents provided more than one negative aspects; **others include responses on a single negative aspect less than 3 counts.

8. Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism

Respondents were also asked to indicate how much they disagreed or agreed with 15 statements measuring the impacts of the COVID 19 pandemic on recreation and tourism in the Monongahela National Forest and surrounding areas (Table 11). These 15 items were created based on recent studies on COVID-19 and tourism (da Silva Lopes et al., 2021; Joo et al., 2021; Rahman et al., 2021; Wang et al., 2021). Example items are "Covid-19 reduces the possibility of travelling with groups", "People's travel preferences and behaviors have been changed due to the pandemic", and "Number of COVID-19 cases in the forest area may increase with influx of

tourists".

Compared to responses on destination satisfaction, images, and competitiveness, visitors' responses on the COVID-19 impacts on recreation and tourism in the area seemed to be more diverse with responses on the two categories "mildly agree" and "strongly agree" combined

Table 11. Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism.

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
1. Covid-19 reduces the possibility of	7.6	6.9	17.7	38.2	29.6	14.5	67.8
travelling with groups	7.0	0.5	17.7	30.2	27.0	1.10	07.0
2. I prefer to avoid traveling to urban	9.7	11.8	22.5	35.1	20.9	21.5	56.0
areas due to COVID-19 pandemic							
3. Number of daily COVID-19 cases is	10.8	9.5	27.1	30.8	21.9	20.3	52.7
a key factor that affects my intention							
to travel to the Monongahela							
National Forest							
4. There is a low likelihood of	6.1	8.7	30.0	30.6	24.6	14.8	55.2
contracting COVID19 when travelling to							
the Monongahela National Forest area							
5. The Monongahela National Forest will	2.3	6.8	24.3	39.9	26.7	9.1	66.6
become more popular for city dwellers							
post the COVID-19 pandemic							
6. People may choose to stay in Airbnb	3.4	6.9	28.7	37.0	24.0	10.3	61.0
over hotels/motels while traveling to the							
forest area during the pandemic							
7. Camping has become more popular	3.1	11.8	28.2	33.8	23.2	14.9	57.0
across the U.S. due to the pandemic. This							
popularity may fade away post the							
pandemic							
8. People's travel preferences and	1.9	3.4	20.8	35.9	38.0	5.3	73.9
behaviors have been changed due to the							
pandemic							
9. Tourism in the forest area was hit	3.7	9.7	31.1	31.7	23.8	13.4	55.5
hard by the pandemic							
10. New forms of tourism may emerge in	2.9	4.2	24.6	41.5	26.7	7.1	68.2
the forest area due to the pandemic							
11. Recreation economy/tourism	10.0	19.2	27.4	25.8	17.7	29.2	43.5
industry in the forest area will never							
come back to the pre-pandemic level							
12. Recreation/tourism in the forest area	2.6	4.8	25.8	43.0	23.8	7.4	66.8
will end up being more resilient and							
sustainable post the pandemic							
13. People will care about safety and	2.4	4.5	19.5	36.1	37.5	6.9	73.6
hygiene while travelling more than they							
used to due to the pandemic							
14. COVID-19 increases the possibility	3.9	7.7	23.7	36.9	27.9	11.6	64.8
of travelling alone or with family							
15. Number of COVID-19 cases in	4.2	8.5	29.3	37.0	20.9	12.7	57.9
the forest area may increase with influx							
of tourists							

ranging between 43.5% and 73.8% (as opposed to responses on the two upper categories ranging between 65.2% and 87.2% for satisfaction, between 58.8% and 87.8% for images and between 51.2% and 64.1% for competitiveness, respectively). This implies that respondents may hold a more diverse view of COVID-19 as it affects recreation and tourism than their perceptions of destination satisfaction, images, and competitiveness.

The top two items with highest responses on the "mildly agree" and "strongly agree" combined are item 8 "People's travel preferences and behaviors have been changed due to the pandemic" (73.9%) and item 13 "People will care about safety and hygiene while travelling more than they used to due to the pandemic" (73.6%). There are six other items that had responses over 60% in the two combined categories, including item 10 "New forms of tourism may emerge in the forest area due to the pandemic" (68.2%), item 1 "Covid-19 reduces the possibility of travelling with groups" (67.8%), item 12 "Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic" (66.8%), item 5 "The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic" (66.6%), item 14 "COVID-19 increases the possibility of travelling alone or with family" (64.8%), and item 6 "People may choose to stay in Airbnb over hotels/motels while traveling to the forest area during the pandemic" (61.0%).

Item 11 "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level" had the lowest percent of responses on the two categories "mildly agree" and "strongly agree" combined (43.5%), suggesting that a good portion of respondents were pessimistic about the recovery of recreation and tourism in the area. That said, nearly 30% were optimistic as they either strongly disagreed (10.0%) or mildly disagreed (19.2%) with

the statement while 27.4% were not certain. Consistent with item 11 where 43.5% of respondents were not confident about the future of recreation and tourism in the area, most respondents (52.7%) thought that "Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest" (item 3). As with item 11, a similar percentage of respondents (27.1%) also chosen "neutral" as they responded to item 3.

9. Gap Analysis of Image, Competitiveness, and Satisfaction

To further understand the relationship between image, competitiveness, and satisfaction, a gap analysis was conducted using a method similar to importance-performance analysis (IPA) following Enright and Newton (2004). While there are different ways to determine the position of the crosshairs in a typical IPA, the mean-centered method (Deng et al., 2017) was used because of one advantage, that is, "all points will be automatically distributed, if plotted using Excel, across the four quadrants with the crosshairs being positioned as (0, 0) and the iso-rating line [45 degree diagonal line] positioned diagonally through the origin (0, 0), resulting in an effective spread of attributes in the matrix" (p. 225).

Figure 17 presents gap analysis of image and satisfaction whereas all 18 items in Table 2 (image) and Table 3 (competitiveness) are plotted in one of four quadrants defined by the mean-centered approach. Basically, all items are scattered somewhat along the 45-degree diagonal line, indicating a positive linear relationship between image and satisfaction, which is consistent with the literature (e.g., Ragab et al., 2019; Jebbouri et al., 2021). Specifically, items 1 (natural attractions), 3 (rural tranquility and authenticity), 7 (security and safety), 9 (resource conservation), 13 (outdoor recreation opportunities), and 18 (overall experience vs. overall image) are located in the high image-high satisfaction zone, suggesting that positive images

(above the mean value) on destination attributes related to the use and protection of resources, rural atmosphere, and security/safety are highly related to higher level of satisfaction on these attributes. In contrast, negative images (below the mean value) on diversity and uniqueness of local products (item 5), infrastructure (item 8), festivals and events (item 10), local food/eatery (item 11), entertainment and night life (item 14), crowding (item 15), shopping (item 16), and lodging (item 17) are related to lower level of satisfaction. This is particularly so for shopping which was rated lowest image and least satisfied. Thus, these attributes rated both on lower image and lower satisfaction are where higher priority should be placed in the future.

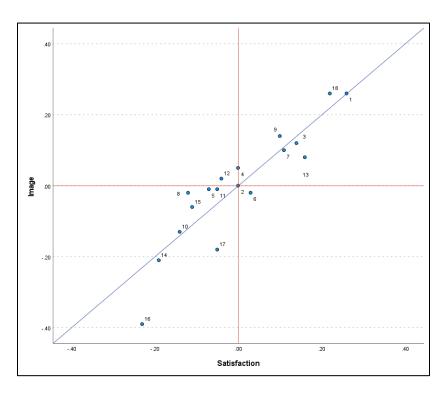


Figure 17. Gap analysis of image and satisfaction

Interestingly, item 2 "heritage and cultural assets" is located right in the origin (0, 0), which means its image matches satisfaction perfectly. Item 4 "hospitability and friendliness of local people" was rated higher on image but average on satisfaction, suggesting improvement on this

item is needed. Finally, item 6 "accessibility" was rated lower on image but higher on satisfaction, implying accessibility has little impact on satisfaction.

Figure 18 displays the results of gap analysis between image and competitiveness. As shown, the distribution patterns of the 18 items generally assemble those in Figure 17.

Specifically, items 3 (rural tranquility and authenticity), 4 (hospitability and friendliness of local people), 7 (Security and safety), 12 (prices), 13 (outdoor recreation opportunities), and 18 (overall experience) were perceived higher for both image and competitiveness, suggesting these items were well maintained and highly competitive, and thus can be considered as selling points of the area. As with Figure 17, items 5 (diversity and uniqueness of local products), 10 (festivals and events), 14 (entertainment and night life), 16 (shopping), and 17 (lodging) were in the low image and low competitiveness zone, and need to be improved upon to enhance their images and increase their competitiveness.

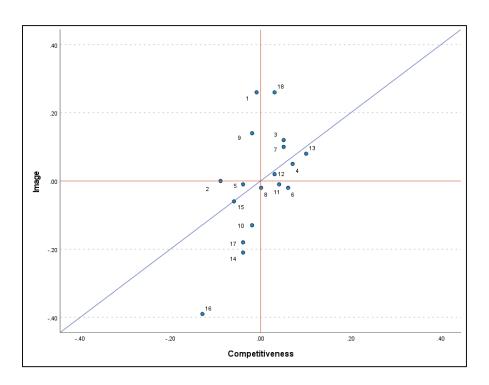


Figure 18. Gap analysis of image and competitiveness

10. Conclusion

Although developing recreation economy in gateway communities around public lands in the US is not a new phenomenon, it has drawn increasing attention nationwide because of the increasing popularity of outdoor recreation activities and resulting economic impacts to local communities. To ride on this momentum, the Monongahela National Forest, in partnership with West Virginia University and USDA Rural Development, has brought diverse stakeholders together to create a shared vision for the promotion and development of recreation economy for the region that involves 10 towns in eight counties. This regional approach for rural development can be better implemented with an understanding of how recreation economy is perceived from the perspective of visitors, particularly those from the major tourism markets of the region including Pennsylvania, Virginia, Maryland, Ohio, and D.C.

Survey results in this report provide useful information on visitors' profiles and their perceptions of destination values, branding, images, competitiveness, satisfaction, loyalty, and impacts of COVID-19. This knowledge-based information is critical not only for the development of sustainable recreation for the forest, but for the development of sustainable economies/societies of these rural communities, thus facilitating the linkage between community planning and development and forest planning and management, which is also a primary goal for the USDA.

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Appendix A: Visitor survey questionnaire (Qualtrics version)

Visitors' Perceptions of Recreation Economy in the Monongahela National Forest Area

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EXECUTIVE SUMMARY

This visitor survey for the Monongahela National Forest area was conducted using the Qualtrics online survey platform with a valid sample size of 621 respondents from five targeted states including: Pennsylvania, Virginia, Maryland, Ohio, and Washington D.C. The main purpose of this survey is to learn more from the perspective of outside visitors (excluding visitors from West Virginia) about their perceptions of branding, values, images, competitiveness, satisfaction, loyalty, and COVID-19 impacts as related to the forest area so as to provide data to guide marketing and development strategies for the development and promotion of a recreation economy in the area.

Results show that the majority of respondents were very positive in their responses about these perceptions. Specifically, nearly half of respondents (48.41%) reported having known about the logo before taking the survey. About 76% of respondents felt the brand was interesting in a sensory way and can make a strong impression on their visual sense or other senses. In addition, over 80% of respondents either mildly agreed or strongly agreed that their visits to the area were worthy of time (84.2%), effort (84.0%), and price (83.1%); and that the area has provided a good deal (81.7%) and good service (81.4%). Likewise, most respondents (87.3% of) were highly positive about the area, with 84.7% of them being either somewhat satisfied (35.7%) or extremely satisfied (49.0%) with their overall visit experience in the area. Consistent with their positive images and high level of satisfaction, over 80% of respondents were also very loyal to the area (willing to recommend, to say something positive, and to revisit), a good sign for the long-term sustainability of the area.

Contrary to values, images, satisfaction, and loyalty being perceived as highly positive, respondents seemed to be somewhat conservative in their perceived competitiveness of the

area compared to similar areas visited most recently, in that 62.9% considered the area to be somewhat better (36.2%) or much better (26.7%) than other similar destinations they visited.

The relationship between image, competitiveness, and satisfaction was further examined using a method similar to importance-performance analysis (IPA). This gap analysis indicates that positive images and high level of satisfaction are highly and positively related for destination attributes measuring the use and protection of resources, rural atmosphere, and security/safety. These attributes were also rated as highly competitive with other similar destinations. In contrast, other attributes on festivals and events, entertainment and nightlife, and shopping were perceived lower in terms of image, competitiveness, and satisfaction, and thus need to be improved upon in the future to enhance their images and increase their competitiveness.

The gap analysis results are, to some extent, consistent with visitors' responses on questions that asked them to indicate one single aspect that might have most negatively or most positively affected their visit experience. Natural scenery/beauty was mentioned most frequently as the most positive factor that contributed to their satisfaction while infrastructure/facilities/transportation as the most negative factor that reduced their overall experience.

Finally, in terms of perceived impacts of COVID-19 on the area's recreation and tourism, it seemed that respondents were cautiously optimistic about the recovery of recreation economy in the area with 43.5% considering that "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level", the lowest among all COVID-19 impact items.

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 Mon Forest Towns 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 Mon Forest Towns 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 Mon Forest Towns 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 visitor survey. Results from the resident survey will be reported separately.

2. Methods

2.1. Questionnaire

A questionnaire was designed based on findings from the literature and with inputs from the Mon Forest Towns Marketing Committee. This questionnaire consists of 10 sections: 1) background information, 2) trip characteristics, 3) perceptions of values, 4) perceptions of destination images, 5) perceptions of relative competitiveness, 6) perceptions of branding, 7) destination satisfaction, 8) destination loyalty, 9) perceptions of the impacts of COVID-19 on recreation and tourism in the Monongahela National Forest and surrounding area, and 10) socio-demographics (Appendix A). The questionnaire was reviewed and acknowledged for use by WVU Institutional Review Board (IRB) and further pilot tested by the Mon Forest Town Marketing Committee members before it was launched online.

2.2. Data Collection and Data Analysis

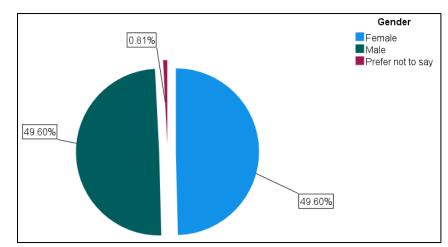
Data collection was contracted to Qualtrics, an online survey tool company, who further fine-tuned the online version of the questionnaire that was built into Qualtrics by the research team. Prospective participants were targeted from five states such as Pennsylvania, Virginia, Maryland, Ohio, and D.C., which were identified as the primary market for the study area by the research team based on results from previous national visitor use monitoring surveys that are conducted every five years in the Monongahela National Forest. Prospective participants from the five states were recruited from a data poll created by Qualtrics. Each participant who completed the survey was offered an opportunity to get a reimbursement that is commensurate with the time they spent on the survey. The survey was carried out between Dec. 24, 2021 and Jan. 8, 2022, with a valid sample size of 621 (out of 815 attempts). Data were

analyzed using SPSS 28. Results presented here are more descriptive in nature and are based on usable questionnaires with missing data omitted using case-wise deletion, if not otherwise indicated.

3. Demographics and Trip Characteristics

3.1. Demographics

Of the 621 valid respondents, nearly half of them were males or females, each accounting for 49.6%. In addition, a very



small percent of respondents

Figure 1. Respondents by gender

preferred not to say their gender (Figure 1).

The majority of respondents were young, with 79.5% of them ranging between 18 and 44

years old (15.6% for age 18-24, 31.7% for age 25-34, and 32.2% for age 35-55, respectively) (Figure 2). Respondents between 45 and 60

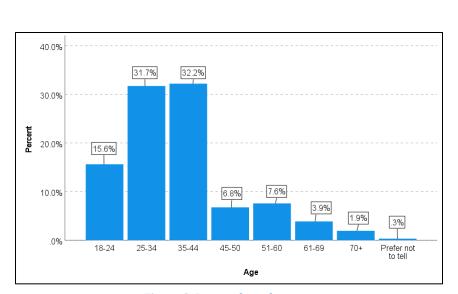


Figure 2. Respondents by age

years old accounted for 14.4% while only a small percent aged 61 and over. In addition, 3% of respondents did not provide information on age.

Figures 3 and 4 present respondents by education and income, respectively. As shown, the majority were well educated and affluent. Specifically, most respondents (76.3%) had some college level education (30.8%) or college degree (28.3% undergraduate or post-secondary degree and 17.2% graduate school degree). In addition, 21.9% had a high school degree or equivalent while a small percent of respondents (1.8%) had a less than high school degree.

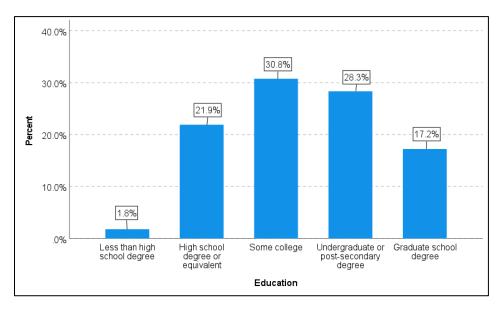


Figure 3. Respondents by education

In terms of household income before taxes, the majority of respondents (40.8%) reported an income of \$80,001 or above (15.0% with an income between \$80,001 and \$100,000 and 15.8% had an income over \$100,000). About equal percentage of respondents had an income between \$20,000 and \$40,000 (16.4%) and \$40,001 and \$80,000 (16.6%). Respondents with an income between \$60,001 and \$80,000 accounted for 13.8%, while 10.6% reported an income less than \$20,000. Finally, 1.8% did not report income.

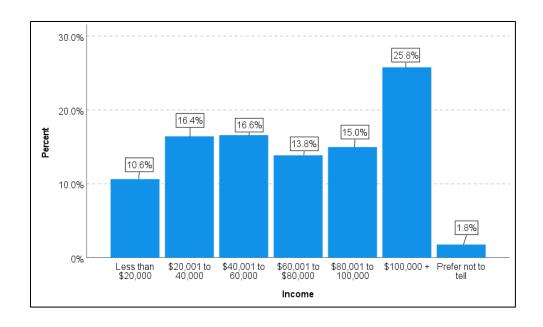


Figure 4. Respondents by income

3.2. Trip Characteristics

Of the five targeted states, Pennsylvania and Virginia accounted for most of the participants

(67.51%), with 34.83% for the former and 32.32 for the latter, followed by Maryland (17.41%) and Washington D.C. (14.78%), while only a small percentage of respondents being from Ohio (0.66%) (Figure 1).

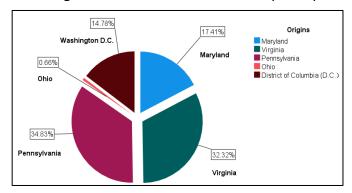


Figure 5. Respondents by origin

It is worth noting that the above 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 five states, with West Virginia (the major market of the Monongahela National Forest) being excluded (for a 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).

Respondents were also 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 10 clicks). Figure 6 shows the three most popular subregions that were determined by frequency of clicks. Subregion 1 (Richwood and Cranberry Wilderness) was most visited (36.46%), followed by subregion 2 (Seneca Rock) (31.46%), and subregion 3 which is featured by Snowshoe and a segment of Highland Scenic Highway (27.71%).

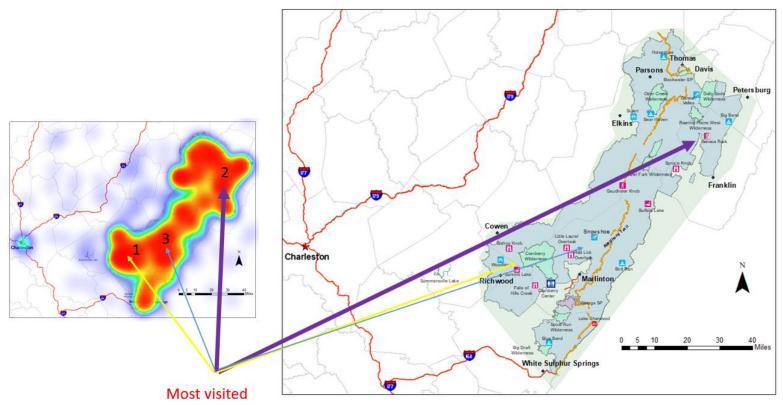


Figure 6. Heat map showing places most visited

In terms of travel purposes (note; respondents were allowed to choose multiple purposes), most respondents (84.09%) traveled to the forest area for leisure/holiday/vacation, followed by visiting friends and/or relatives (40.56%), and business (10.45%). There were a small number of respondents (3.59%) who reported having visited the area for other reasons (e.g., passing through, wedding, spur of the moment, research, etc.) (Figure 7).

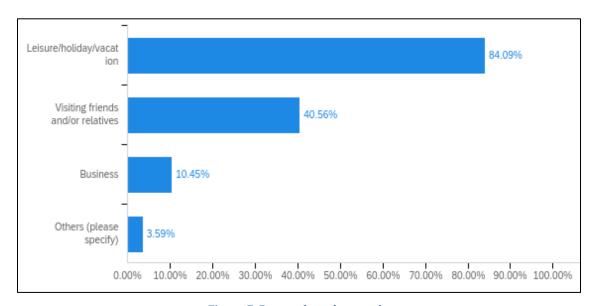


Figure 7. Respondents by travel reasons

Respondents were asked to report how many times they have visited the forest area in the

past three years. Responses are displayed in Figure 8.
Interestingly, a large number of respondents (46.4%)
reported being the first time to visit the area, followed by 43.6% of respondents who

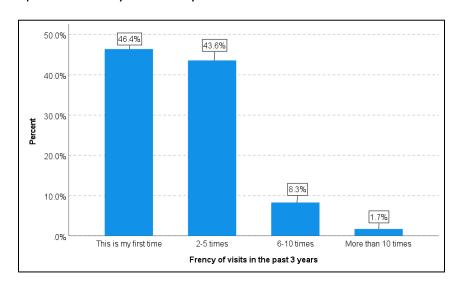


Figure 8. Frequency of visits in the past 3 years

had visited the area 2-5 times. A small

number of respondents reported a frequency of visits of 6-10 times (8.3%) or more than 10 times (1.7%), respectively. Respondents were also asked to report frequency of visits in the previous 12 months. Interestingly, most respondents (44.9%) visited the area for the first time in the previous 12 months, with average number of visit times of 2.26 in the previous 12 months. This is comparable to 46.4% being first time visitors in the past three years, suggesting that many respondents visited the area for the first time during the COVID-19 pandemic.

Nearly half (45.1%) and over one third (37.3%) of the respondents visited the area with a group size of 3-5 or 2 people, respectively, while 11.8% reported having travelled to the area alone. Relatively, a small percent of respondents travelled with a group size of 6-10 (4.5%) or more than 10 people (1.3%) (Figure 9).

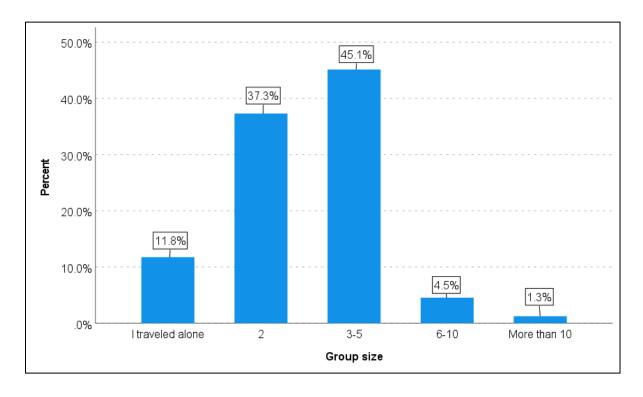


Figure 9. Respondents by group size

Figure 10 presents the amount of group trip spending reported by respondents. Nearly equal number of respondents reported a spending of \$201 to \$300 (13.8%) and \$401 to \$500 (13.7%), respectively. A good number of respondents spent over \$600 per group/trip (29.8%) while 9.3% spent less than \$100.

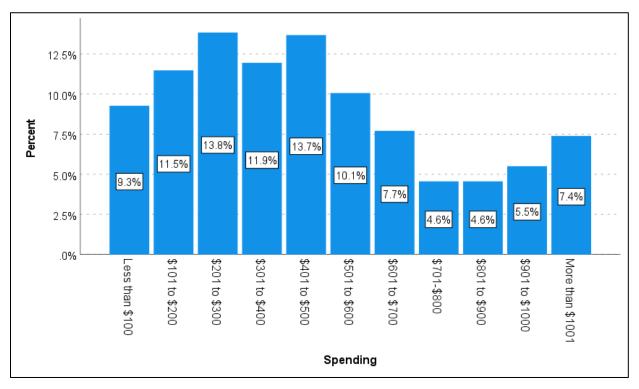


Figure 10. Respondents by spending

The spending pattern shown in Figure 11 corresponds with the majority of respondents being overnight visitors (78.3% vs. 21.7% being day trippers) as shown in Figure 9.

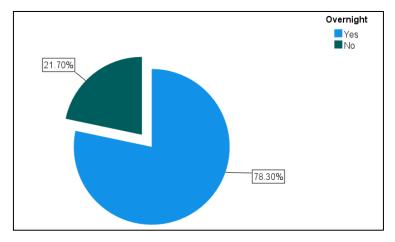


Figure 11. Respondents by overnight stay vs. day trippers

Figure 12 presents the distribution of number of nights stayed, reported by respondents. The majority of respondents (67.5%) stayed 2 (38.2%) or 3 nights (29.3%). An additional 10.4% of respondents stayed 4 nights. Respondents who stayed 5 or more nights accounted for 7.8%, while 14.3% stayed 1 night. This distribution pattern with most respondents staying more than 2 nights also corresponds with the spending pattern in Figure 10 that shows a higher level of spending by most respondents.

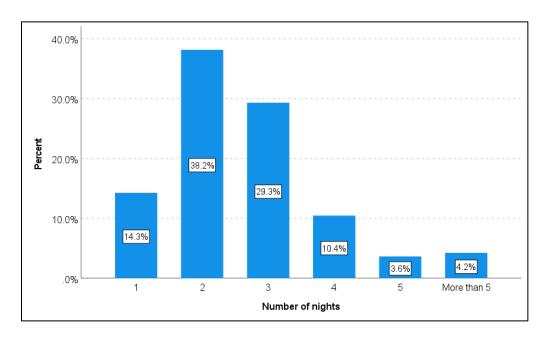


Figure 12. Respondents by number of nights

Figure 13 presents responses on where visitors stayed during their most recent trip to the Monongahela National Forest area (note; as with their responses on travel purposes, respondents were also allowed to choose multiple lodging types). Most stayed in hotels/motels/inns (40.36%), followed by friends/relatives (35.14%), camping/tents (31.93%), and Airbnb (14.46%). A small number of respondents stayed in rented houses/apartments (5.42%, not shown in the figure due to the length of the figure).

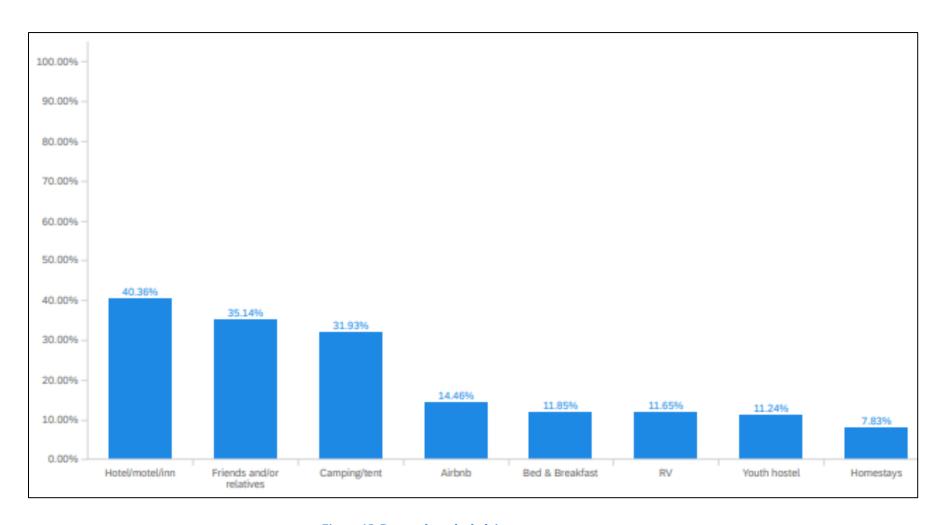


Figure 13. Respondents by lodging types

4. Perceptions of Values and Images in the Monongahela National Forest Area

Table 1 presents results of perceived values in the Mon National Forest area. The six items measuring perceived values were adopted from previous studies (Aliman et al., 2014; Chen & Chen, 2010; Gallarza & Saura, 2006; Ponte et al., 2015). As shown, response patterns on each item are quite similar. Over 80% of respondents either mildly agreed or strongly agreed that their visit to the area was worthy of time (84.2%), effort (84.0%), and price (83.1%); and that the area has provided a good deal (81.7%) and good service (81.4%). In addition, nearly 80% of them mildly or strongly agreed that the area provided great value as compared to other similar destinations (79.4%).

Table 1. Perceptions of perceived values in the Monongahela National Forest Area.

	Strongly disagree (SD)	Mildly disagree (MD)	Neutral (N)	Mildly agree (MA)	Strongly agree (SA)		
Items	(%)	(%)	(%)	(%)	(%)	SD+MD	MA+SA
1. Compared to the time I spent,	4.3	4.0	7.6	37.8	46.4	8.3	84.2
the visit to the Monongahela							
National Forest area was worthy							
2. Compared to the efforts I	2.8	3.8	9.3	39.7	44.3	6.6	84.0
made, the visit to the							
Monongahela National Forest							
area was worthy							
3. My trip to the Monongahela	2.2	3.3	11.4	34.7	48.4	5.5	83.1
National Forest area was worth							
the price I paid							
4. I think the Monongahela	2.8	2.7	12.8	36.1	45.6	5.5	81.7
National Forest area provides a							
good deal							
5. I think the Monongahela	2.7	3.6	12.3	37.7	43.7	6.3	81.4
National Forest area provides good service							
6. I think the Monongahela	1.7	4.1	14.7	39.1	40.3	5.8	79.4
National Forest area provides me							
great value as compared to							
other rural destinations							

Table 2 presents visitors' responses on their perceived destination images, measured by 18 items including one measuring overall image ("My overall image of the area was positive").

These image items were adopted from Alcocer and Ruiz (2020), Kokkali et al. (2009), and Stylidis et al. (2014). Specifically, 87.8% of respondents either moderately agreed (32.2%) or

Table 2. Perceptions of destination images in the Monongahela National Forest area.

	Strongly disagree (SD)	Mildly disagree (MD)	Neutral (N)	Mildly agree (MA)	Strongly agree (SA)		
Items	(%)	(%)	(%)	(%)	(%)	SD+MD	MA+SA
1. I was impressed by the natural	2.5	2.9	6.8	32.2	55.6	5.4	87.8
attractions in the area	1.6	4.4	17.3	36.5	40.3	6.0	76.8
2. I was impressed by the heritage and cultural assets in the area	1.0	4.4	17.3	30.3	40.3	0.0	70.8
3. The area provides a good	2.2	4.1	10.6	36.3	46.8	6.3	83.1
opportunity to experience rural tranquility and authenticity	2.2	7.1	10.0	30.3	40.0	0.3	03.1
4. Local residents are hospitable and friendly	1.7	3.3	16.8	35.7	42.5	5.0	78.2
5. Local products are diverse and unique	1.6	3.8	16.8	40.6	37.2	5.4	77.8
6. The area is easily accessible	1.3	5.1	16.2	40.7	36.8	6.4	77.5
7. I felt secure and safe during my recent trip to the area	2.5	3.5	10.9	38.0	45.0	6.0	83.0
8. The area has enough and adequate infrastructure	1.1	5.4	17.7	36.9	38.8	6.5	75.7
9. The area is well maintained and conserved	1.4	3.2	11.4	39.5	44.5	4.6	84.0
10. The area provides opportunities to experience festivals and events	2.2	4.8	21.9	37.4	33.8	7.0	71.2
11. The area provides opportunities to experience local food/eatery	1.9	4.1	15.2	42.0	36.8	6.0	78.8
12. Prices are reasonable	1.0	5.2	13.6	42.3	37.9	6.2	80.2
13. The area provides diverse and quality outdoor recreational activities	2.2	3.3	14.3	35.8	44.4	5.5	80.2
14. The area provides good opportunities to enjoy entertainment and night life	2.4	7.1	21.6	38.4	30.6	9.5	69.0
15. The area is not crowded	1.7	5.9	16.2	39.6	36.6	7.6	76.2
16. The area is good for shopping	3.0	9.8	28.4	31.5	27.3	12.8	58.8
17. The area has a wide choice of	1.9	5.1	22.8	40.3	30.0	7.0	70.3
lodging 18. My overall image of the area was positive	1.7	1.9	9.0	34.1	53.2	3.6	87.3

strongly agreed that they were impressed by the natural attractions in the area, followed by "The area is well maintained and conserved" (84.0%), and "The area provides a good opportunity to experience rural tranquility and authenticity" (83.1%). In contrast, 69% of respondents thought that "The area provides good opportunities to enjoy entertainment and

night life", the lowest among all items, followed by "The area has a wide choice of lodging" (70.3%), and "The area provides opportunities to experience festivals and events" (71.2%).

Overall, visitors held a very positive image about the area with responses on the two categories "moderately agree" and "strongly agree" combined being 87.3%, higher than any individual image item.

5. Perceptions of Relative Competitiveness for Monongahela National Forest Area

One purpose of this survey is to understand how competitive the Mon National Forest area is as perceived by respondents as compared with other similar destinations they visited recently.

Only those who have recently

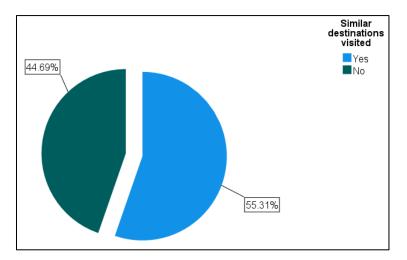


Figure 14. Respondents by past experience

visited a similar destination(s) were asked to

provide their answers. Figure 14 shows that over half (55.31%) reported having visited similar destinations. Their perceived competitiveness of each destination attribute is presented in Table 3.

It appears that the majority of respondents either considered the area to be competitive or highly competitive as compared with similar destinations visited. This is particularly true for "outdoor recreation opportunities" whereas 64.1% perceived the area as "somewhat better" (35.1%) or "much better" (29.1%), the highest among all destination attributes. Other attributes such as "rural tranquility and authenticity", "hospitability and friendliness of local people",

"accessibility", and "prices" were also considered competitive with responses on the two categories "somewhat better" and "much better" combined being 63.8%, 63.2%, 62.7%, and 62.6%, respectively. The least competitive attributes include "shopping" (51.2%), "entertainment and night life" (56.3%), and "festivals and events" (56.6%) which is tied with "crowding" (56.6%). Finally, 62.9% of respondents considered the area's overall competitiveness to be "somewhat better" or "much better" than similar destinations visited.

Table 3. Perceptions of Relative Competitiveness for the Monongahela National Forest Area.

Items	Much worse (%)	Somewhat worse (%)	About the same (%)	Somewhat better (%)	Much better (%)	First two	Last two
1. Natural attractions	4.3	6.9	27.9	31.6	29.3	11.2	60.9
2. Heritage and cultural assets	3.4	6.3	31.0	37.9	21.3	9.7	59.2
3. Rural tranquility and authenticity	2.6	4.6	29.0	37.1	26.7	7.2	63.8
4. Hospitability and friendliness of local people	1.7	5.5	29.6	34.8	28.4	7.2	63.2
5. Diversity and uniqueness of local products	2.3	6.9	31.9	34.5	24.4	9.2	58.9
6. Accessibility	2.0	6.9	28.4	32.2	30.5	8.9	62.7
7. Security and safety	2.0	4.3	35.1	27.9	30.7	6.3	58.6
8. Infrastructure	2.3	6.0	32.5	32.2	27.0	8.3	59.2
9. Resource conservation	2.0	7.2	32.2	32.5	26.1	9.2	58.6
10. Festivals and events	1.4	8.6	33.3	28.2	28.4	10	56.6
11. Local food/eatery	1.7	7.5	29.9	30.7	30.2	9.2	60.9
12. Prices	1.7	7.5	28.2	35.6	27.0	9.2	62.6
13. Outdoor recreation opportunities	1.4	3.7	30.7	35.1	29.0	5.1	64.1
14. Entertainment and night life	2.6	6.6	34.5	29.0	27.3	9.2	56.3
15. Crowding	1.4	8.0	33.9	31.9	24.7	9.4	56.6
16. Shopping	1.4	9.2	38.2	27.3	23.9	10.6	51.2
17. Lodging	2.9	6.3	33.6	30.7	26.4	9.2	57.1
18. Overall competitiveness	1.7	7.5	27.9	36.2	26.7	9.2	62.9

Respondents were also asked to list up to three rural destinations they compared to the Monongahela National Forest area. Similar destinations like national forests, state forests, national parks, and state parks are among the most listed. However, there are visitors who also listed similar destinations that are water-related such as: Chesapeake Bay, Virginia Beach, Deep

Creek Lake in Maryland, and Cheat Lake in West Virginia. Other types of recreational areas were also mentioned, such as trails (e.g., Hatfield-McCoy Trail in West Virginia), farm resorts (e.g., Twin Farms in Vermont and Blackberry Farms in Tennessee), and golf courses (e.g., Palm Springs Golf Courses, California), among others (Table 4).

Table 4. Similar destinations that respondents compared to the Monongahela National Forest area.

	Similar destinations
National forest	Allegheny NF, Cherokee NF, Coconino NF, George Washington & Jefferson NF, Gifford
	Pinchot NF, Ocala NF, Shenandoah NF
State forest	Appomattox-Buckingham SF, Skyline Drive SF, Delaware SF, Conway Robinson SF
National park	Acadia NP, Blue Ridge Parkway, Glacier NP, Grand Canyon NP, Great Smoky Mountain NP,
	New River Gorge, Shenandoah NP, Tongass NF, White Sands NP, Yosemite NP
State park	Blackwater Falls SP, Dans Mountain SP, Gifford Pinchot SP, Linn Run SP, Moraine SP,
	Natural Bridge SP, Niagara Falls SP, Ohiopyle SP, Pocahontas SP, Presque Isle SP, Raccoon
	Creek SP, Shawnee SP
Others	Chesapeake Bay, Chesapeake & Ohio Canal, Deep Creek Lake, Hatfield-McCoy Trail, Prince
	William Forest Park, Rodman Mountains Wilderness Area, Virginia Beach

6. Perceptions of Branding for the Monongahela National Forest Area

The Mon Forest Towns Initiative adopted a logo to brand the area (Figure 15). Respondents were asked to report whether or not they have known about this logo prior to this survey. Figure 16 shows that nearly half of respondents (48.41%) reported having known about the logo before taking the survey. This is impressive given the logo has not been used for a long duration of time.



Figure 15. Logo of Mon Forest Towns

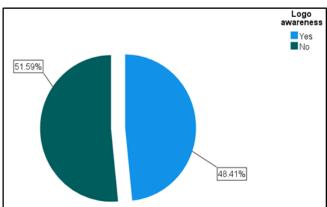


Figure 16. Respondents by logo awareness

Table 5 presents visitors' 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). Of the nine items used in this project, three were worded negatively. These nine items measure three of the five experiences proposed by Schmitt (1999): sense, feel, and think (other two aspects are act and relate). Example items include "This brand makes a strong impression on my visual sense or other senses" and "I do not have strong emotions for this brand". Results show that the two items measuring sense experience and sensory quality had the highest scores on the two categories "mildly agree" and "strongly agree" combined, with 76.4% for the item "I find this brand interesting in a sensory way" and 76.1% for the item "This brand makes a strong impression on my visual sense or other senses."

Table 5. Perceptions of Branding for the Monongahela National Forest area.

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
This brand makes a strong impression on my visual sense or other senses	3.5	5.6	14.9	43.0	33.1	9.1	76.1
2. I find this brand interesting in a sensory way	2.4	5.9	15.3	39.8	36.6	8.3	76.4
3. This brand does not appeal to my senses	20.0	22.5	17.9	24.4	15.2	42.5	39.6
4. This brand induces feelings and sentiments	2.4	10.2	25.9	38.7	22.8	12.6	61.5
5. I do not have strong emotions for this brand	12.0	19.0	26.2	25.9	16.9	31.0	42.8
6. This brand is an emotional brand	5.0	12.0	29.6	27.5	26.0	17.0	53.5
7. I engage in a lot of thinking when I encounter this brand	4.3	9.6	27.6	33.4	25.1	13.9	58.5
8. This brand stimulates my curiosity and problem solving	3.7	9.7	21.6	36.7	28.3	13.4	65.0
9. This brand does not make me think	16.6	19.2	24.9	22.0	17.3	35.8	39.3

7. Perceptions of Destination Satisfaction and Loyalty in Monongahela National Forest Area

Visitors' destination satisfaction with each individual destination attribute as well as their overall experience are presented in Table 6. Respondents were most satisfied with "natural attractions" in the area with responses on the two categories "somewhat satisfied" and

Table 6. Perceptions of Destination Satisfaction in Mon National Forest Area.

Items	Extremely dissatisfied (%)	Somewhat dissatisfied (%)	Neutral (%)	Somewhat satisfied (%)	Extremely satisfied (%)	First two	Last two
1. Natural attractions	1.6	1.9	9.3	36.1	51.1	3.5	87.2
2. Heritage and cultural assets	1.1	3.8	17.8	41.8	35.4	4.9	77.2
3. Rural tranquility and authenticity	1.6	1.9	15.2	36.2	45.0	3.5	81.2
4. Hospitability and friendliness of local people	2.1	4.0	16.5	39.3	38.1	6.1	77.4
5. Diversity and uniqueness of local products	2.4	4.0	19.2	40.1	34.3	6.4	74.4
6. Accessibility	.8	4.2	17.6	39.1	38.3	5.0	77.4
7. Security and safety	1.6	3.0	14.6	37.0	43.8	4.6	80.8
8. Infrastructure	1.6	4.0	22.9	40.4	31.1	5.6	71.5
9. Resource conservation	1.3	2.6	16.2	38.3	41.7	3.9	80.0
10. Festivals and events	1.9	5.0	25.5	33.8	33.8	6.9	67.6
11. Local food/eatery	1.6	4.3	19.4	39.4	35.3	5.9	74.7
12. Prices	1.1	5.1	17.9	41.7	34.1	6.2	75.8
13. Outdoor recreation opportunities	1.0	2.6	13.9	37.8	44.7	3.6	82.5
14. Entertainment and night life	2.2	5.9	26.6	32.2	33.0	8.1	65.2
15. Crowding	1.6	5.4	21.0	39.4	32.5	7.0	71.9
16. Shopping	2.4	6.4	26.0	35.4	29.8	8.8	65.2
17. Lodging	2.2	3.2	19.7	39.9	34.9	5.4	74.8
18. Overall experience	1.6	2.1	11.5	35.7	49.0	3.7	84.7

"extremely satisfied" combined being 87.2%, followed by "outdoor recreation opportunities" (82.5%), "rural tranquility and authenticity" (81.2%), "security and safety" (80.8%), and "resource conservation" (80.0%). Two attributes "entertainment and night life" and "shopping" are tied to be least satisfied (65.2%), followed by "festivals and events" (67.6%) and "crowding"

(71.9%). Overall, 84.7% of respondents were either somewhat satisfied (35.7%) or extremely satisfied (49.0%) with their overall visit experience in the area.

It is worth noting that responses on satisfaction are comparable to those on images and competitiveness. For example, two items "entertainment and night life" and "festivals and events" were rated among the lowest on the satisfaction measure in a way they were rated in the measures of images and competitiveness.

Tables 7 and 8 present destination loyalty measured by behavior loyalty and behavioral intentions. Loyalty, in the marketing literature, has been defined in three dimensions: attitudinal, behavioral intention, and actual behavior. Attitudinal loyalty refers to expressed liking for a destination/establishment or festival/event without overt intentions, while behavioral intention is defined by intention to revisit, recommend, and say positive things about a person's experience. In addition, willingness to pay more and likelihood to switch are also included in some studies to measure behavioral intention. Finally, behavior loyalty refers to the actual purchase of a product/service (e.g., proportion of nights/visitors/dollars spent at a particular brand or property, frequency of visits, and actual patronization of a destination) (Deng & Pierskalla, 2018). While behavioral intentions have been widely examined in the tourism literature, few have asked if respondents have actually recommended the destination, have said something positive about the destination, and have planned to revisit the destination. Arguably, this study, for the first time, simultaneously examined the two types of destination loyalty: behavioral intentions and behavior loyalty (will vs. have).

As shown in Table 7, majority of respondents have recommended the area to their family and relatives (81.3%), have said positively about the area (84.5%), and have planned to revisit

(70.2%) since their most recent trip to the area. The lower percentage on the item "have made a plan to visit" indicates that people were more likely to recommend the area and speak positively about the area than to say they would visit the area again.

Table 7. Destination Loyalty to the Monongahela National Forest Area (behavior loyalty).

	Yes	No
Items	(%)	(%)
1. I have recommended the area to my friends and family since my most recent trip to the area	81.3	18.7
2. I have said something positive about the area since my most recent trip to the area	84.5	15.5
3. I have made a plan to visit the area again since my most recent trip to the area	70.2	29.8

Behavioral intentions presented in Table 8 show similar response patterns to behavior loyalty in Table 7 except for the revisit item. Specifically, over 80% of respondents mildly agreed or strongly agreed that they will recommend the area (85.1%), will speak positively about the area (86.1%), and will visit the area again (83.7%). Once again, the higher percentage for the item "will visit" as opposed to the lower percentage for the item "have made a plan to visit" substantiate that it is easier to say than to do.

Table 8. Destination Loyalty to the Monongahela National Forest Area (behavioral intentions).

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
1. I will recommend the area to my friends and family	3.1	2.6	9.3	36.6	48.5	5.7	85.1
2. I will say something positive about the area	2.1	3.5	8.2	33.3	52.8	5.6	86.1
3. I will visit the area again	1.9	2.7	11.6	30.6	53.1	4.6	83.7

To further understand visitors' overall experience in the destination, respondents were asked to indicate the most negative aspect as well as most positive aspect of their most recent visit to this area. Results are presented in Tables 9 and 10. A total of 252 respondents provided 264 valid responses on things that have most negatively affected their overall experience.

These responses are grouped into 18 categories (Table 9). The topmost negative aspect is

related to Infrastructure/facilities/transportation/drive time (e.g., supporting facilities are not perfect, infrastructure and connectivity is lacking; it is a bit of drive, the traffic is not very convenient), accounting for 13.6% of all responses. The second most negative aspect is price/cost (8.7%) (e.g., food is expensive, I spent too much money, the price of things bought here is too expensive, prices are going up), followed by people/visitors being not friendly and hospitable (8.0%) (language conflict with a local tourist; there were a couple of hikers who were extremely rude-not from the area; one of people that live in the area was quite rude), crowding (7.6%) (e.g., too many people, a lot of people go which leads to lot of congestion; too crowded, large flow of people), bad weather (7.2%) (e.g., cold, terrible weather, rainy and windy), and responses related to management (6.4%) (e.g., public implementation is not perfect; the park rangers had a lot of questions and talked too much; hard to find a bathroom; did not get along with some of the rules).

Table 9. Most negative aspects of visitors' most recent visit to the area.*

No.	Category	Sample negative comments	Counts**	Percent
1	Infrastructure/facilities/ transportation/drive	supporting facilities are not perfect, infrastructure and connectivity is lacking; it is a bit of drive, the	36	13.6
	time	traffic is not very convenient.		
2	Price/cost	Food is expensive, I spent too much money, the price of things bought here is too expensive, prices are going up	23	8.7
3	People/visitors	Language conflict with a local tourist, there were a couple of hikers who were extremely rude-not from the area, the people, one of people that live in the area was quite rude	21	8.0
4	Crowding	Too many people, a lot of people go which leads to lot of congestion, crowding and accessibility, too crowded, large flow of people	20	7.6
5	Weather	Cold, terrible weather, weather, rainy and windy	19	7.2
6	Management	Public implementation is not perfect, the park rangers had a lot of questions and talked too much, hard to find a bathroom, I did not get along with some of the rules	17	6.4
7	Sanitation	Littering is serious, the environment is poor, a lot of trash on ground in park along with a lot of intoxication of campers that were noisy and vulgar language. These people looked to be homeless.	15	5.7

8	Bugs	The bugs, the mosquito bites, too many bugs, bugs are the most negative aspect, climate change, fire season deterioration and forest pest flow season	15	5.7
9	Food	Lack of buffet restaurants, not enough food choices, I had hoped to more diversity in the food places around	13	4.9
10	Safety	Lots of sketchy areas surrounding, felt unsafe, some places in this area are a little unsafe and a little dangerous, is a dangerous area, there was a wasp next the place we were told to check in	9	3.4
11	Shopping	I didn't like that I had to go out of my way to get the everyday things I needed because of the lack of options, Shopping is not convenient without more infrastructure, shopping is not particularly convenient	8	3.0
12	Time not enough	Couldn't stay longer, I only wish we would have stayed in the area, too much to see in the little time we had	7	2.7
13	Nightlife	Not a lot of nightlife activities, the night life is boring, not much nightlife, there was not much to do at night	7	2.7
14	COVID	COVID restrictions, the locals are anti-maskers, the pandemic has forced me to be cautious, not everything is open due to COVID	7	2.7
15	Cell coverage	Low cell coverage, some of the roads are in poor state, and there is not a lot of cell phone reception if an emergency were to occur, lack of cell service	5	1.9
16	Political	Republicans, Trump supporters, political flags and banners around the area	4	1.5
17	Activity/attraction	Not enough activities, there was really no diversity in the place, lack of attractions, long drive with same scenery	4	1.5
18	Others	Tired, got lost, feeling unhappy/not what I expected, my sleep schedule was interrupted and I have struggled to get back on track, not good, it was when me and my daughter want out for a long rid. Every now and again, I get lost, I couldn't do many things, I have allergies to some of the area bothered me, there was a bad smell, heat, not a good thing to do, seeing a lizard, getting to campsite	34	12.9
Total		g, g g	264	100.0

^{*}some respondents provided more than one negative aspects; **the category "others" include all responses on a single negative aspect less than 3 counts.

Table 10 presents 614 most positive things experienced by 534 respondents during their most recent visit to the area. These responses are outlined into 19 categories. The top most positive experience is related to scenery/nature (e.g., I like the old growth forest; beautiful view, beautiful scenery, the area was beautiful, the scenery was beautiful and the air seemed to be

much fresher than in the city where I live), accounting for 35.2% of all responses. The second most positive aspect is related to outdoors (11.1%) (e.g., love the outdoors, hiking, fishing, got to be outdoor for a while, being outside, the adventure, there is so many places to go! many outdoor activities), which is closely followed by tranquility and relaxing (10.9%) (e.g., peacefulness, I loved the sights and sounds and I liked getting away from the city, relaxing, lots to see and take pictures of-definitely an experience to have again). Other positive aspects include friendly/hospitable people/communities (7.3%), everything (5.9%), family and friends (5.5%), fun/interesting (4.4%), and quality service (2.4%). In addition, there are 35 positive responses (on a single negative aspect less than 3 counts) are grouped as "others", accounting for 5.7% of total responses.

Table 10. Most positive aspects of visitors' most recent visit to the area. *

No.	Category	Sample positive comments	Counts**	Percent
1	Scenery/nature	I like the old growth forest, beautiful, the view, nature, beautiful scenery, the area was beautiful, the scenery was beautiful and the air seemed to be much fresher than in the city where I live	216	35.2
2	Outdoors	Love the outdoors, hiking, fishing, got to be outdoor for a while, being outside, the adventure, there is so many places to go! I could probably explore for hours, and find new things, quiet camping, many outdoor activities	68	11.1
3	Tranquility/relaxing	Peacefulness, I loved the sights and sounds and I liked getting away from the city, relaxing, lots to see and take pictures of-definitely an experience to have again, the atmosphere, it is very peaceful, beautiful nature	67	10.9
4	People/community	Nice people, they are friendly and amazing, friendliness of people there, local residents are hospitable and warm, people in the area are quite welcoming, the friendliness and courtesy of the community, the locals are actually pretty friendly, despite political difference, the overall welcoming of the community and the area in general	45	7.3
5	Everything	Everything, entire trip, all of it	36	5.9
6	Family/friends	Eating dinners with family, enjoying my children have a great time, we had a great family outing, spending time with my loved ones and it was my	34	5.5

		youngest grandsons first time there, great time for my family to be together		
7	Fun/interesting/like	Fun, interesting, enjoyable, like it, good	27	4.4
8	Service/lodging	Good service attitude, service is good, the hotel was great, I like the scenic spots, environment and accommodation in the area, lodging was great, staff are very friendly	15	2.4
9	Sanitation	The sanitation is very good, nice environment, cleanness	13	2.1
10	Food	Local food is very good, the food is very delicious	8	1.3
11	Local culture/custom	The calmness and culture really made a positive impact on my stay, the natural landscape, including the local cultural landscape, gives me pleasure and comfort in mind, The local customs are very interesting, and the entertainment is also fun	8	1.3
12	Safety	The safety of my trip was a positive one, the security measures in this place are in place and beautiful	7	1.1
13	Wildlife view	Wildlife, the most positive aspect is that we found food the animals would normally eat and it was good but we only tried the fruits	7	1.1
14	Weather	Temperature, nice weather and clean, had good weather	7	1.1
15	Location	The location, have a very good location	6	1.0
16	Parking/facilities	Parking, public facilities are complete, there are many scenic spots and complete facilities	6	1.0
17	Nightlife	Good nightlife, the nightlife is great	5	0.8
18	Price	Price, it is very cheap affordability and nice	4	0.7
19 Total	Others		35 614	5.7 100.0

^{*}some respondents provided more than one negative aspects; **others include responses on a single negative aspect less than 3 counts.

8. Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism

Respondents were also asked to indicate how much they disagreed or agreed with 15 statements measuring the impacts of the COVID 19 pandemic on recreation and tourism in the Monongahela National Forest and surrounding areas (Table 11). These 15 items were created based on recent studies on COVID-19 and tourism (da Silva Lopes et al., 2021; Joo et al., 2021; Rahman et al., 2021; Wang et al., 2021). Example items are "Covid-19 reduces the possibility of travelling with groups", "People's travel preferences and behaviors have been changed due to the pandemic", and "Number of COVID-19 cases in the forest area may increase with influx of

tourists".

Compared to responses on destination satisfaction, images, and competitiveness, visitors' responses on the COVID-19 impacts on recreation and tourism in the area seemed to be more diverse with responses on the two categories "mildly agree" and "strongly agree" combined

Table 11. Perceptions of the Impacts of COVID-19 Pandemic on Recreation and Tourism.

Items	Strongly disagree (SD) (%)	Mildly disagree (MD) (%)	Neutral (N) (%)	Mildly agree (MA) (%)	Strongly agree (SA) (%)	SD+MD	MA+SA
1. Covid-19 reduces the possibility of	7.6	6.9	17.7	38.2	29.6	14.5	67.8
travelling with groups	,	0.5	17.17	20.2	2>10	2.00	0.40
2. I prefer to avoid traveling to urban	9.7	11.8	22.5	35.1	20.9	21.5	56.0
areas due to COVID-19 pandemic							
3. Number of daily COVID-19 cases is	10.8	9.5	27.1	30.8	21.9	20.3	52.7
a key factor that affects my intention							
to travel to the Monongahela							
National Forest							
4. There is a low likelihood of	6.1	8.7	30.0	30.6	24.6	14.8	55.2
contracting COVID19 when travelling to							
the Monongahela National Forest area							
5. The Monongahela National Forest will	2.3	6.8	24.3	39.9	26.7	9.1	66.6
become more popular for city dwellers							
post the COVID-19 pandemic							
6. People may choose to stay in Airbnb	3.4	6.9	28.7	37.0	24.0	10.3	61.0
over hotels/motels while traveling to the							
forest area during the pandemic							
7. Camping has become more popular	3.1	11.8	28.2	33.8	23.2	14.9	57.0
across the U.S. due to the pandemic. This							
popularity may fade away post the							
pandemic							
8. People's travel preferences and	1.9	3.4	20.8	35.9	38.0	5.3	73.9
behaviors have been changed due to the							
pandemic							
9. Tourism in the forest area was hit	3.7	9.7	31.1	31.7	23.8	13.4	55.5
hard by the pandemic							
10. New forms of tourism may emerge in	2.9	4.2	24.6	41.5	26.7	7.1	68.2
the forest area due to the pandemic							
11. Recreation economy/tourism	10.0	19.2	27.4	25.8	17.7	29.2	43.5
industry in the forest area will never							
come back to the pre-pandemic level							
12. Recreation/tourism in the forest area	2.6	4.8	25.8	43.0	23.8	7.4	66.8
will end up being more resilient and							
sustainable post the pandemic							
13. People will care about safety and	2.4	4.5	19.5	36.1	37.5	6.9	73.6
hygiene while travelling more than they							
used to due to the pandemic	_	_		_			
14. COVID-19 increases the possibility	3.9	7.7	23.7	36.9	27.9	11.6	64.8
of travelling alone or with family							
15. Number of COVID-19 cases in	4.2	8.5	29.3	37.0	20.9	12.7	57.9
the forest area may increase with influx							
of tourists							

ranging between 43.5% and 73.8% (as opposed to responses on the two upper categories ranging between 65.2% and 87.2% for satisfaction, between 58.8% and 87.8% for images and between 51.2% and 64.1% for competitiveness, respectively). This implies that respondents may hold a more diverse view of COVID-19 as it affects recreation and tourism than their perceptions of destination satisfaction, images, and competitiveness.

The top two items with highest responses on the "mildly agree" and "strongly agree" combined are item 8 "People's travel preferences and behaviors have been changed due to the pandemic" (73.9%) and item 13 "People will care about safety and hygiene while travelling more than they used to due to the pandemic" (73.6%). There are six other items that had responses over 60% in the two combined categories, including item 10 "New forms of tourism may emerge in the forest area due to the pandemic" (68.2%), item 1 "Covid-19 reduces the possibility of travelling with groups" (67.8%), item 12 "Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic" (66.8%), item 5 "The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic" (66.6%), item 14 "COVID-19 increases the possibility of travelling alone or with family" (64.8%), and item 6 "People may choose to stay in Airbnb over hotels/motels while traveling to the forest area during the pandemic" (61.0%).

Item 11 "Recreation economy/tourism industry in the forest area will never come back to the pre-pandemic level" had the lowest percent of responses on the two categories "mildly agree" and "strongly agree" combined (43.5%), suggesting that a good portion of respondents were pessimistic about the recovery of recreation and tourism in the area. That said, nearly 30% were optimistic as they either strongly disagreed (10.0%) or mildly disagreed (19.2%) with

the statement while 27.4% were not certain. Consistent with item 11 where 43.5% of respondents were not confident about the future of recreation and tourism in the area, most respondents (52.7%) thought that "Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest" (item 3). As with item 11, a similar percentage of respondents (27.1%) also chosen "neutral" as they responded to item 3.

9. Gap Analysis of Image, Competitiveness, and Satisfaction

To further understand the relationship between image, competitiveness, and satisfaction, a gap analysis was conducted using a method similar to importance-performance analysis (IPA) following Enright and Newton (2004). While there are different ways to determine the position of the crosshairs in a typical IPA, the mean-centered method (Deng et al., 2017) was used because of one advantage, that is, "all points will be automatically distributed, if plotted using Excel, across the four quadrants with the crosshairs being positioned as (0, 0) and the iso-rating line [45 degree diagonal line] positioned diagonally through the origin (0, 0), resulting in an effective spread of attributes in the matrix" (p. 225).

Figure 17 presents gap analysis of image and satisfaction whereas all 18 items in Table 2 (image) and Table 3 (competitiveness) are plotted in one of four quadrants defined by the mean-centered approach. Basically, all items are scattered somewhat along the 45-degree diagonal line, indicating a positive linear relationship between image and satisfaction, which is consistent with the literature (e.g., Ragab et al., 2019; Jebbouri et al., 2021). Specifically, items 1 (natural attractions), 3 (rural tranquility and authenticity), 7 (security and safety), 9 (resource conservation), 13 (outdoor recreation opportunities), and 18 (overall experience vs. competitiveness) are located in the high image-high satisfaction zone, suggesting that positive

images (above the mean value) on destination attributes related to the use and protection of resources, rural atmosphere, and security/safety are highly related to higher level of satisfaction on these attributes. In contrast, negative images (below the mean value) on diversity and uniqueness of local products (item 5), infrastructure (item 8), festivals and events (item 10), local food/eatery (item 11), entertainment and night life (item 14), crowding (item 15), shopping (item 16), and lodging (item 17) are related to lower level of satisfaction. This is particularly so for shopping which was rated lowest image and least satisfied. Thus, these attributes rated both on lower image and lower satisfaction are where higher priority should be placed in the future.

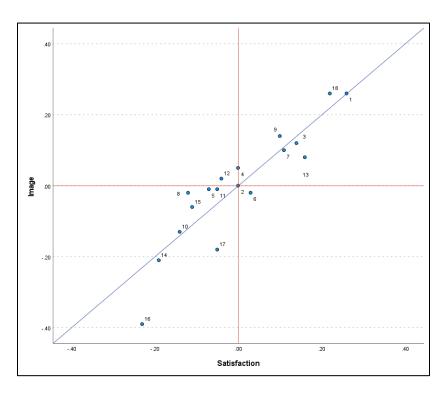


Figure 17. Gap analysis of image and satisfaction

Interestingly, item 2 "heritage and cultural assets" is located right in the origin (0, 0), which means its image matches satisfaction perfectly. Item 4 "hospitability and friendliness of local people" was rated higher on image but average on satisfaction, suggesting improvement on this

item is needed. Finally, item 6 "accessibility" was rated lower on image but higher on satisfaction, implying accessibility has little impact on satisfaction.

Figure 18 displays the results of gap analysis between image and competitiveness. As shown, the distribution patterns of the 18 items generally assemble those in Figure 17.

Specifically, items 3 (rural tranquility and authenticity), 4 (hospitability and friendliness of local people), 7 (Security and safety), 12 (prices), 13 (outdoor recreation opportunities), and 18 (overall experience) were perceived higher for both image and competitiveness, suggesting these items were well maintained and highly competitive, and thus can be considered as selling points of the area. As with Figure 17, items 5 (diversity and uniqueness of local products), 10 (festivals and events), 14 (entertainment and night life), 16 (shopping), and 17 (lodging) were in the low image and low competitiveness zone, and need to be improved upon to enhance their images and increase their competitiveness.

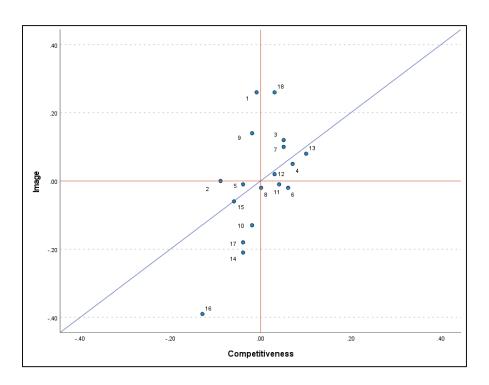


Figure 18. Gap analysis of image and competitiveness

10. Conclusion

Although developing recreation economy in gateway communities around public lands in the US is not a new phenomenon, it has drawn increasing attention nationwide because of the increasing popularity of outdoor recreation activities and resulting economic impacts to local communities. To ride on this momentum, the Monongahela National Forest, in partnership with West Virginia University and USDA Rural Development, has brought diverse stakeholders together to create a shared vision for the promotion and development of recreation economy for the region that involves 10 towns in eight counties. This regional approach for rural development can be better implemented with an understanding of how recreation economy is perceived from the perspective of visitors, particularly those from the major tourism markets of the region including Pennsylvania, Virginia, Maryland, Ohio, and D.C.

Survey results in this report provide useful information on visitors' profiles and their perceptions of destination values, branding, images, competitiveness, satisfaction, loyalty, and impacts of COVID-19. This knowledge-based information is critical not only for the development of sustainable recreation for the forest, but for the development of sustainable economies/societies of these rural communities, thus facilitating the linkage between community planning and development and forest planning and management, which is also a primary goal for the USDA.

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professionalism that made this survey successful. Special thanks to all those respondents for their participation in this survey.

Appendix A: Visitor survey questionnaire (Qualtrics version)



Section I: Background Information

Cover letter



Oct. 1, 2021

Dear Participant:

Thank you for assisting us in our research project about visitors' perceptions of recreation economy in the Monongahela National Forest area. 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 5 to 10 minutes to complete the survey.

The study is funded by the Claude Worthington Benedum Foundation. The results of this survey will 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. 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.

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,

Dr. Jinyang Deng West Virginia University

Professor

Recreation, Parks and Tourism Resources

Doug Arbogast

West Virginia University

Extension Specialist

Rural Tourism Development

3/8/2022 2:06 PM

You will be offered a reimbursement that is commensurate with the time spent on this survey if you qualify for the survey and complete the survey. If you agree to participate in this survey, please check "Yes" below:
○ Yes ○ No
Are you over 18 years old today?
○ Yes ○ No

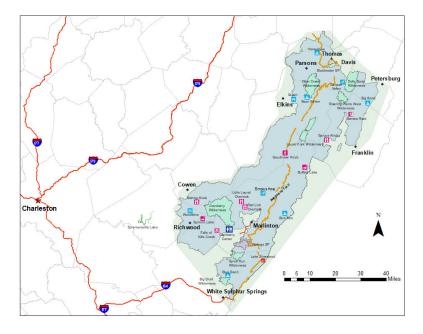
Section 1: Background Information

1. What state do you currently reside in?

Maryland
Virginia
Pennsylvania
Ohio
District of Columbia (D.C.)

O None of Above

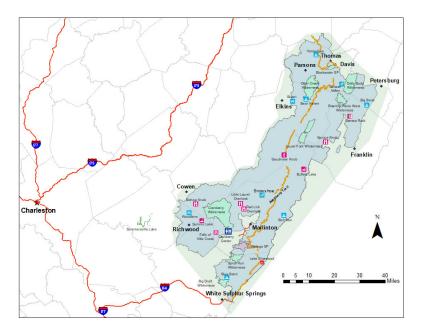
2. Below is a map that shows the Monongahela National Forest area in West Virginia (shaded region), which includes **the forest and 10 gateway towns**. This study only targets those who have visited any places in this area in the past 3 years. If your answer in the next question is "Yes", you are qualified for this survey. Otherwise, the survey will end.



3. Have you visited the Monongahela National Forest area (the area marked in the map) in the past 3 years?
○ Yes ○ No
4. Congratulations! You are qualified for this survey. Please write down the names of places that you have visited and/or stayed during your most recent trip to the region (Maximum 10 places. If you visited more than 10 places, please list the 10 most important ones).

6. What is your Zipcode?

5. Following the previous question, please click on the map 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).



Section 2: Trip Characteristics
Section 2: Trip Characteristics
1. Please check where appropriate to indicate your reason(s) for visiting the Monongahela National Forest area 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 Monongahela National Forest area in the past 3 years?
 ○ 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 Monongahela National Forest area in the previous 12 months? (Numbers only).

4. Including yourself, how many people were traveling with you during your most recent trip to the area?
O I traveled alone
O 2
O 3-5
○ 6-10○ More than 10
5. What activities did you participate in during your most recent trip to the Monongahela National Forest area?
6. During your most recent trip to the Monongahela National Forest area, 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).
O Less than \$100
○ \$101 to \$200

○ \$401 to \$500
○ \$501 to \$600
○ \$601 to \$700

○ \$901 to \$1000
O More than \$1001
7. Did you stay overnight in the Monongahela National Forest area (anywhere in the region defined above including 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 Monongahela National Forest area, how many nights did you stay in the area?
○ 1 ○ 2
O 3
O 4
O 5
○ More than 5
O Diagon indicate your main type (a) of accommodation in the Management of National Farest area during your most recent twin
9. Please indicate your main type(s) of accommodation in the Monongahela National Forest area during your most recent trip.
Friends and/or relatives
☐ Youth hostel ☐ RV
☐ Homestays
☐ Hotel/motel/inn
Second home
☐ Camping/tent ☐ Timeshare
Airbnb
☐ Bed & Breakfast
Rented house/apartment
Other (please specify)

Section 3: Perceptions of Perceived Values in the Mon National Forest Area

Section 3: Perceptions of Perceived Values in the Monongahela National Forest Area

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

St

- 1. Compared to the time I spent, the visit to the Monongahela National Forest area was worthy
- 2. Compared to the efforts I made, the visit to the Monongahela National Forest area was worthy
- 3. My trip to the Monongahela National Forest area was worth the price I paid
- 4. I think the Monongahela National Forest area provides a good deal
- 5. I think the Monongahela National Forest area provides good service
- 6. I think the Monongahela National Forest area provides me great value as compared to other rural destinations

SECTION 4: Perceptions of Destination Images in Mon National Forest Area

Section 4: Perceptions of Destination Images in the Monongahela National Forest Area

Listed below are phrases about your perceptions of destination images in the Monongahela National Forest area. Please indicate how much you disagree or agree with each phrase.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I was impressed by the natural attractions in the area	0	0	0	0	0
2. I was impressed by the heritage and cultural assets in the area	0	0	0	0	0
3. The area provides a good opportunity to experience rural tranquility and authenticity	0	0	0	0	0
4. Local residents are hospitable and friendly	0	0	0	0	0
5. Local products are diverse and unique	0	0	0	0	0
6. The area is easily accessible	0	0	0	0	0
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
7. I felt secure and safe during my recent trip to the area	0	0	0	0	0
8. The area has enough and adequate infrastructure	0	0	0	0	0
9. The area is well maintained and conserved	0	0	0	0	0
10. The area provides opportunities to experience festivals and events	0	0	0	0	0
11. The area provides opportunities to experience local food/eatery	0	0	0	0	0
12. Prices are reasonable	0	0	0	0	0
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
13. The area provides diverse and quality outdoor recreational activities	0	0	0	0	0
14. The area provides good opportunities to enjoy entertainment and night life	0	0	0	0	0
15. The area is not crowded	0	0	0	0	0
16. The area is good for shopping	0	0	0	0	0
17. The area has a wide choice of lodging	0	0	0	0	0
18. My overall image of the area was positive	0	0	0	0	0

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

O Yes

Section 5: Perceptions of Relative Competitiveness for the Monongahela National Forest Area

1. Have you visited a rural destination (s) similar to the Monongahela National Forest Area in the past three years?

	Much worse	Somewhat worse	About the same	Somewhat better	Much better
1. Natural attractions	0	0	0	0	0
2. Heritage and cultural assets	0	0	0	0	0
3. Rural tranquility and authenticity	0	0	0	0	0
4. Hospitability and friendliness of local residents	0	0	0	0	0
5. Diversity and uniqueness of local products	0	0	0	0	0
6. Accessibility	0	0	0	0	0
	Much worse	Somewhat worse	About the same	Somewhat better	Much better
7. Security and safety	0	0	0	0	0
8. Infrastructure	0	0	0	0	0
9. Resource conservation	0	0	0	0	0
10. Festivals and	0	0	0	0	0
events 11. Local food/eatery	0	0	0	0	0
12. Prices	0	0	0	0	0
	Much worse	Somewhat worse	About the same	Somewhat better	Much better
13. Outdoor recreation opportunities	0	0	0	0	0
14. Entertainment and night life	0	0	0	0	0
15. Crowding	0	0	0	0	0
16. Shopping	0	0	0	0	0
	0	0	0	0	0
17. Lodging			0	0	0

SECTION 6: Perceptions of Branding

Section 6: Perceptions of Branding for 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?



\circ	Ye
\sim	

2. Listed below are phrases about branding for recreation economy in Monongahela National Forest area. Please indicate how much you disagree or agree with each phrase by reference to the logo below.



	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
This brand makes a strong impression on my visual sense or other senses	0	0	0	0	0
2. I find this brand interesting in a sensory way	0	0	0	0	0
3. This brand does not appeal to my senses	0	0	0	0	0
4. This brand induces feelings and sentiments	0	0	0	0	0
5. I do not have strong emotions for this brand	0	0	0	0	0
6. This brand is an emotional brand	0	0	0	0	0
7. I engage in a lot of thinking when I encounter this brand	0	0	0	0	0
8. This brand stimulates my curiosity and problem solving	0	0	0	0	0
9. This brand does not make me think	0	0	0	0	0

SECTION 7: Perceptions of Destination Satisfaction in Mon National Forest Area

Section 7: Perceptions of Destination Satisfaction in Mon National Forest Area

1. Listed below are phrases about tourism attributes in the Monongahela National Forest area. Please indicate how dissatisfied or satisfied you were with each of them for your most recent visit in the area.

Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
O	O	O	O	Satisfied
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
		Neither satisfied		
Extremely dissatisfied	Somewhat dissatisfied	nor dissatisfied	Somewhat satisfied	Extremely satisfied
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
	Extremely dissatisfied C C C C C C C C C C C C C C C C C C	Extremely dissatisfied Compared to the compar	Extremely dissatisfied O O O O O O O O O O O O O O O O O O	Commentate dissatisfied Somewhat dissatisfie

SECTION 8: Perceptions of the Impacts of COVID-19 Pandemic

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

SECTION 8: 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
Covid-19 reduces the possibility of travelling with groups.	0	0	0	0	0
2. I prefer to avoid traveling to urban areas due to COVID-19 pandemic.	0	0	0	0	0
3. Number of daily COVID-19 cases is a key factor that affects my intention to travel to the Monongahela National Forest.	0	0	0	0	0
4. There is a low likelihood of contracting COVID-19 when travelling to the Monongahela National Forest area.	0	0	0	0	0
5. The Monongahela National Forest will become more popular for city dwellers post the COVID-19 pandemic.	0	0	0	0	0
	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.	0	0	0	0	0
7. Camping has become more popular across the U.S. due to the pandemic. This popularity may fade away post the pandemic.	0	0	0	0	0
8. People's travel preferences and behaviors have been changed due to the pandemic.	0	0	0	0	0
9. Tourism in the forest area was hit hard by the pandemic.	0	0	0	0	0
10. New forms of tourism may emerge in the forest area due to the pandemic.	0	0	0	0	0
	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.	0	0	0	0	0
12. Recreation/tourism in the forest area will end up being more resilient and sustainable post the pandemic.	0	0	0	0	0
13. People will care about safety and hygiene while travelling more than they used to due to the pandemic.	0	0	0	0	0
14. COVID-19 increases the possibility of travelling alone or with family.	0	0	0	0	0
15. Number of COVID-19 cases in					

Section 9: Destination Loyalty to the Monongahela National Forest Area

Section 9: Destination Loyalty to the Monongahela National Forest Area

Listed below are phrases about your destination loyalty to the
Monongahela National Forest area. Please check Yes or No to indicate
how loyal you were with the area.

	Yes	No
I have recommended the area to my friends and family since my most recent trip to the area	0	0
2. I have said something positive about the area since my most recent trip to the area	0	0
3. I have made a plan to visit the area again since my most recent trip to the area	0	0

2. To follow up with the question above, please indicate the likelihood that you will remain loyal to the area.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I will recommend the area to my friends and family	0	0	0	0	0
2. I will say something positive about the area	0	0	0	0	0
3. I will visit the area again	0	0	0	0	0

SECTION 10: Socio-demographics

Section 10: Socio-demographics

O Graduate school degree

1. Gender
○ Female○ Male○ Prefer not to say
2. Age
 ○ 18-24 ○ 25-34 ○ 35-44 ○ 45-50 ○ 51-60 ○ 61-69 ○ 70+ ○ 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

4. What was your approximate household income from all source	es, 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 + Prefer not to tell 	
5. Do you have any other comments?	
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