Pitkin County Maroon Bells Survey Report

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The Maroon Bells Scenic Area is a pop	ular wilderness destination, and in	recent years, has experience	ed signifi	cant visitor growth, resulting in high
levels of traffic congestion and related			-	
management strategies, the Volpe Ce	nter, in partnership with the Roarir	ng Fork Transportation Auth	ority (RF1	A) and Pitkin County, conducted a
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include that respondents were evenly				
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Introduction

From September 8 through September 17, 2018, the Roaring Fork Transportation Authority (RFTA) administered surveys to Maroon Bells Scenic Area (MBSA) shuttle users to inform the potential implementation of a new MBSA shuttle ticket reservation system. The questions revolved around the following four key topics:

- Visitor demographics: Size of group (number adults/children), zip code of residence, and household income category.
- **Trip planning**: When visitors made the decision to visit Maroon Bells, information sources used prior to the visit, the most helpful source of information, awareness of the shuttle, and any previous visits to Maroon Bells.
- **Trip characteristics**: Number of nights spent away from home, where the visitor's vehicle is parked, difficulty finding parking, approximate time visitors boarded the shuttle to and from the Maroon Bells, activities participated in during the visit, and likelihood of visiting again in the future.
- **Opinions and attitudes related to a shuttle ticket reservation system**: Opinion of a ticket reservation system, impact of reservation system on visitors' likelihood of visiting, visitor needs related to a new system, and likelihood of using a satellite parking lot.

Methodology

RFTA bus drivers handed out the surveys on the shuttle buses that provide service from the MBSA to Aspen Highlands. Visitors were asked to complete the survey on their return trip (i.e., from the MBSA to Aspen Highlands, immediately following their visit). In order to collect data from a range of visitors, RFTA staff administered the surveys on both weekdays and weekends in the morning and in the afternoon. The full survey instrument is included in Appendix B. Table 1 shows the number of surveys collected by date and, for reference from the parking garage data, the number of vehicles entering the parking garage on the survey dates.

Survey Date	Number of Completed Surveys	Number of Vehicles Entering Parking Garage	
Saturday, September 8, 2018	91	326	
Sunday, September 9, 2018	86	267	
Tuesday, September 11, 2018	97	193	
Wednesday, September 12, 2018	96	197	
Thursday, September 13, 2018	96	265	
Saturday, September 15, 2018	83	708	
Sunday, September 16, 2018	77	450	
Monday, September 17, 2018	13	337	

Table 1. Completed Surveys by Date

The survey response rate was 91 percent with 639 completed surveys (of 700 surveys that were distributed). However, some respondents did not answer every question. For some of findings presented below, the percentages are based on those who provided a response (i.e., those who left a question blank were excluded from the analysis). Sample sizes are included for each question.

Survey Findings

Visitor Demographics

Group Size

Nearly one-half of visitors (47 percent) reported being in a two person group. Sixteen percent were in four person groups, 14 percent were in three-person groups, and 14 percent were in groups of five or more people. Five percent of visitors were traveling alone and four percent declined to respond. These numbers are shown in Figure 1 below.

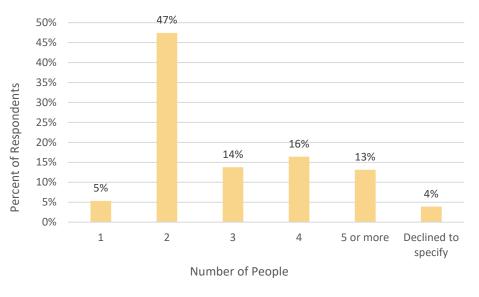


Figure 1. Group Size

Residence

Overall, Maroon Bells visitors hail from 38 different states and from 11 countries (overall four percent of visitors were international). Nearly one-half of visitors (43 percent) are Colorado residents. A significantly smaller number of visitors reside in other states, including Texas (six percent), Florida (six percent), California (six percent), and New York (four percent). In addition, two percent each reside in Missouri and Illinois. One percent or less (which equates to nine people or fewer) visited from 31 other states, and five percent declined to provide a response (see Appendix A for full list of states).

Table 2 presents respondents' residence by region. With a large share of visitors being Colorado residents, nearly half of all visitors reside in the Rocky Mountain Region. About one-fifth of visitors came from the Southern Region (20 percent) as well as the Eastern Region (19 percent). Far fewer respondents visited from other regions of the country.

Table 2. Residence by 0.3. Forest Service Region (N = 635		
Region	Percentage of Respondents	
Rocky Mountains	47%	
Southern Region	20%	
Eastern Region	19%	
Pacific Southwest	6%	
Southwestern Region	1%	
Intermountain	1%	
Pacific Northwest	1%	
Northern Region	*	
Alaska	*	
International	4%	

Table 2. Residence by U.S. Forest Service Region (N = 639)

* Less than 0.5 percent.

Income Category

The survey asked respondents to provide information about their household's income category (Table 3). One-third of respondents declined to respond (33 percent). About one-third of respondents reported household income of \$100,000 or higher and another third of respondents indicated their annual household income is less than \$100,000.

Table 3. Household Income (N = 639)		
Income	Percentage of Respondents	
Less than \$34,999	4%	
\$35,000 - \$49,999	5%	
\$50,000 - \$74,999	11%	
\$75,000 - \$99,999	11%	
\$100,000 - \$149,000	15%	
\$150,000 - \$199,999	6%	
\$200,000 or more	14%	
Do not wish to answer	33%	

Trip Planning

Decision to Visit Maroon Bells

A majority of respondents decided to visit the MBSA within a week of their visit: just over one-third (37 percent) indicated that they decided to visit the MBSA in the last week and an additional quarter (24 percent) said they had decided to visit the MBSA on the same day as their visit. Fifteen percent reported deciding to visit in the last month, 17 percent made their decision one to six months ago, and only six percent decided to visit more than six months ago. A full breakdown of these numbers is shown in Table 4 below.

Table 4. When did	you decide to visit the Maroon Bells Scenic Area? (N = 635)

Time of Decision	Percentage of Respondents
Today	24%
In the last week	37%
In the last month	15%
1 to 6 months ago	17%
More than 6 months ago	6%

Information Sources

Nearly all respondents (96 percent) sought information on Maroon Bells prior to their visit and visitors consulted a variety of sources. The source visitors cited most often (51 percent of respondents) was "friends/relatives/word of mouth." About one-quarter said they consulted the US Forest Service website (26 percent) and a similar proportion also utilized other websites (23 percent) or "previous visits" (23 percent). About one-fifth of respondents used social media (19 percent) or travel guides/tour books/brochures (18 percent). Fewer respondents cited the Aspen/Snowmass Chamber Resort Association (eight percent), the Aspen Snowmass ticket office (eight percent), or said "other" source (eight percent). A full breakdown of these information sources can be found in Table 5 below.

to obtain mornation about Maroon bens scenic Area: (N - 655)		
Source	Percentage of Respondents	
Friends/relatives/word of mouth	51%	
U.S. Forest Service website	26%	
Previous visits	23%	
Other website	23%	
Social media	19%	
Travel guides/tour books/brochures	18%	
Aspen/Snowmass Chamber Resort association	8%	
Aspen/Snowmass Ticket office	8%	
Other	8%	
Did not obtain info prior to this visit	4%	

Table 5. Prior to your visit, what information sources, if any, did you use	
to obtain information about Maroon Bells Scenic Area? (N = 639)	

A similar proportion of respondents—about four in 10—indicated that they used either one source to plan their visit (37 percent) or two sources (40 percent). An additional 15 percent reported consulting three sources prior to their visit and seven percent of respondents used four or more sources. The number of sources used is shown in Figure 2 below.

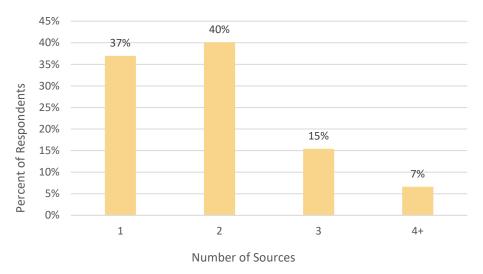


Figure 2. Number of Sources Consulted (N = 639)

Respondents who consulted information about the MBSA prior to their visit were asked to indicate the source that was most helpful. Nearly half of respondents did not provide a response. Fourteen percent reported that the "other" source they used was most helpful and a similar proportion found the U.S.

Forest Service website most helpful (12 percent). Fewer than 10 percent of respondents cited any of the other response choices as most helpful (see Table 6).

Table 6. Of the sources used, which did you find the most helpful? (N = 639)		
Source	Percentage of Respondents	
Other	14%	
U.S. Forest Service website	12%	
Other website	7%	
Friends/relatives/word of mouth	6%	
Social media	5%	
Travel guides/tour books/brochures	5%	
Aspen/Snowmass Chamber Resort Association	3%	
Aspen/Snowmass Ticket Office	2%	
Previous visits	2%	
Did not obtain	1%	
Did not specify	45%	

Awareness of Maroon Bells Shuttle

A majority of respondents (70 percent) reported that when planning their trip, they were aware of the shuttle bus that takes visitors from Aspen Highlands to Maroon Bells. Thirty percent were not aware of it.

A previous survey, conducted by the Aspen Chamber Resort Association in 2016, asked visitors what impact having to take the Maroon Bells shuttle to access the MBSA had on their interest in visiting the MBSA. This survey found that the shuttle had no impact on 65 percent of respondents' interest in visiting the MBSA. The survey also found that for 18 percent of respondents, having to take the shuttle increased their interest while only 15 percent reported that the shuttle decreased their interest. When asked about their overall impression of the shuttle bus service, 80 percent of respondents reported having a favorable impression.

Previous Visits

Thirty percent of visitors made a previous visit to Maroon Bells. Among those making a previous visit (Table 7), a majority (81 percent) have visited one to five times in the last five years. An additional eight percent reported visiting six to 10 times and 10 percent are frequent visitors, having visited more than 10 times in the last five years.

Table 7. How many times have you visited in the last 5 years? (Based on those who have visited Maroon Bells before, N = 188)					
Number of Times Percentage of Responden					
	1 to 5 times	81%			
	6 to 10 times	8%			
	More than 10 times	7%			
	Declined to specify	3%			

Trip Characteristics

Number of Nights Away from Home

A large majority of the Maroon Bells visitors (86 percent) were spending one or more nights away from home on this trip whereas 14 percent were on a day trip (Figure 3). About four in ten respondents were spending one (14 percent), two (17 percent) or three nights (11 percent) away from home. An additional

27 percent of respondents were spending four to seven nights away from home and 14 percent were away from home eight or more nights.

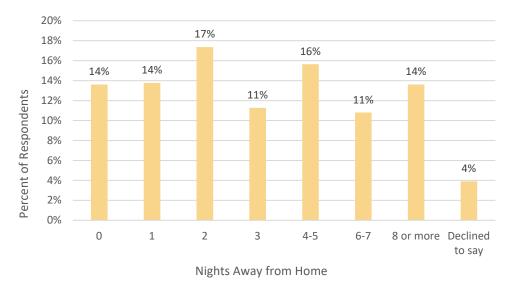


Figure 3. Number of Nights Away from Home

Parking

A majority of respondents parked their vehicle at Aspen Highlands parking deck (69 percent). In addition, 17 percent parked their vehicle in Aspen, five percent of respondents indicated they parked at an "other" location or that they did not arrive in the area by vehicle, and four percent parked at the Buttermilk satellite parking lot, which was open on two of the eight survey days (September 15 and 16). This data is summarized in Table 8 below.

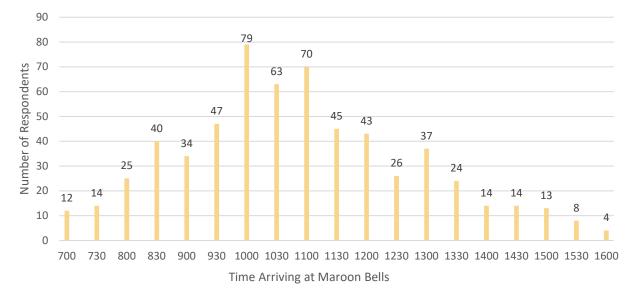
Table 8. Where is your vehicle currently parked? (N – 625)				
Parking Location	Percentage of Respondents			
Aspen Highlands parking deck	69%			
Aspen	17%			
Buttermilk satellite parking lot	4%			
Other	5%			
I did not arrive in the area by vehicle	5%			

Table 8. Where is your vehicle currently parked? (N = 625)

Of those who parked a vehicle, few respondents (10 percent) reported having any difficulty finding parking. Weekend visitors were somewhat more likely than weekday visitors to have trouble finding parking (12 percent vs. seven percent). Among those respondents who parked at Aspen (or at some "other" location), a majority (81 percent) took the Castle Maroon bus to Aspen Highlands.

Time of Day Boarded the Shuttle

The survey asked respondents to record the time of day they boarded the shuttle at Aspen Highlands for their trip to the MBSA as well as the time they boarded at the MBSA for their return trip to Aspen Highlands. The survey found that shuttle boardings to the MBSA rise steadily through the morning, tend to peak between 10:00 AM and 11:00 AM and then steadily decline after 11:00 AM. These findings align with RFTA data for the same week (i.e., actual boarding times recorded on ridership sheets). Figure 4 below shows respondents' boarding times when traveling to the MBSA by 30-minute increments. The data are organized such that each labelled category includes boardings from the preceding 30 minutes



(e.g., the 730 bucket includes all passengers boarding from 701 to 730; the 800 bucket includes all passengers from 731 to 800, etc.).



The departure boardings (i.e., when respondents boarded the shuttle at MBSA to return to Aspen Highlands) tend to have two distinct peaks at noon and 1:00 PM, but departures remain relatively high between 1:00 PM and 3:00 PM. Figure 5 below shows respondents' boarding times when leaving the MBSA by 30-minute increments. These findings align with exit time data from the MBSA parking garage, which show a high number of exits after 1:00 PM. The data are organized such that each labelled category includes boardings from the preceding 30 minutes (e.g., the 1100 bucket includes all passengers from 1031 through 1100; the 1130 bucket includes all passengers from 1101-1130).

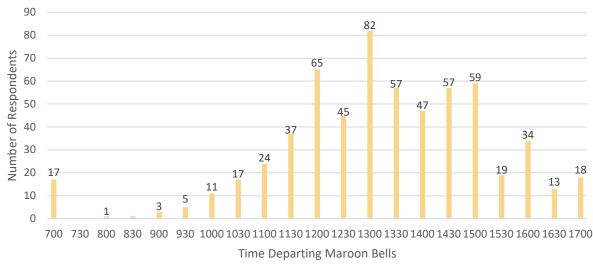


Figure 5. Shuttle Boarding Times from Maroon Bells (to Aspen Highlands) (N = 612)

Time Spent

By calculating the difference between the two boarding times on each survey, it is possible to obtain a rough estimate of time spent visiting Maroon Bells. On average, respondents spent approximately 103 minutes (or one hour, 43 minutes) inclusive of the shuttle ride to the MBSA. According to parking garage data for the entire season (for vehicles parked less than 24 hours), vehicles are parked for an average of 199 minutes (or three hours, 19 minutes). The difference between these two durations can at least in part be accounted for by employees who park for their entire shift and by visitors who buy shuttle tickets at Highlands, visit shops, wait in line, take the shuttle back to the parking garage, and find their way to their cars.

Overall, about two-thirds of respondents spent one to three hours at the MBSA, with 21 percent spending one-and-a-half to two hours. Only 10 percent spent less than an hour and eight percent spent four or more hours at the site (with seven hours being the maximum). Figure 6 below shows the amount of time spent within the MBSA by percent of respondents.

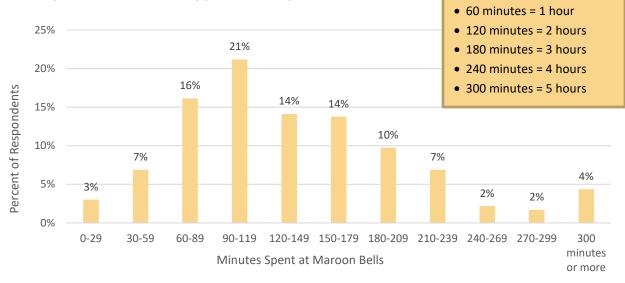


Figure 6. Time Spent at Maroon Bells (N = 595)

The project team analyzed MBSA parking garage entry and exit data for the same days the survey was administered. Figure 7 shows the amount of time spent parked by percent of vehicles entering and exiting the parking garage over the survey period. On average, the parking garage data show that visitors spent 262 minutes (or four hours, 22 minutes) away from their cars, and a notable percentage of vehicles (18 percent) were parked in the garage for more than five hours, including many vehicles that were parked for over 24 hours. Assuming that each vehicle contains 2.8 people, note that the surveys captured a small fraction of the people who parked at the parking garage (as shown in Table 1).

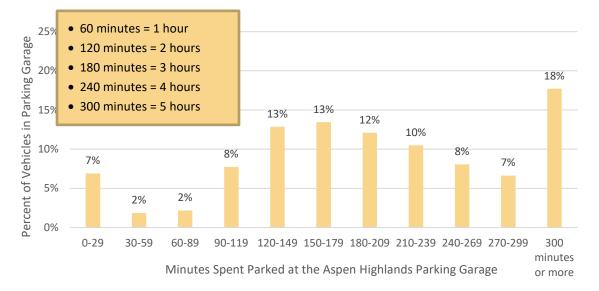


Figure 7. Time Spent at Maroon Bells – Parking Garage Data (N = 2,743)

When comparing the information presented in Figure 6 and Figure 7, the share of visitors within each duration period differs between the shuttle rider survey and the vehicle parking garage data. Specifically, the shuttle rider survey shows a greater share of visitors staying for shorter periods (i.e., 30-59 minutes, 60-89 minutes, and 90-119 minutes), as compared to the vehicle parking data. The parking garage data (as compared to survey respondents) show that vehicles were significantly more likely to park for longer periods of time (i.e., 240-269 minutes, 270-299 minutes, and 300+ minutes). A somewhat larger share of vehicles also were parked for 0-29 minutes; this may have included people who were stopping at Aspen Highlands only to obtain information.

These differences can be at least partially explained by the differences in the two populations. Many of the people who parked their car in the garage did not visit MBSA and were therefore not surveyed. More specifically, those who parked and were not surveyed likely included employees at Aspen Highlands, backpackers and campers, all of whom are likely to be parked for longer periods than day visitors to MBSA. Additionally, the measures are different; the survey asks about the time the respondent boarded the shuttle to and from MBSA whereas the parking garage data necessarily includes a larger time window. The self-reported boarding times in the survey may also have some error (i.e., with accurately recalling boarding times).

Activities

When asked about some of the activities they engaged in at the MBSA, a majority of visitors (77 percent) indicated that they had participated in a walk/short hike. Far fewer respondents cited the other response options including: day hike (22 percent), backpacking (two percent), or camping (one percent). Four percent participated in an "other" activity. Table 9 below shows what activities most respondents participated in at the MBSA.

did you participate in the following activities? (N = 639)				
Activity Percentage of Respondent				
Walking/short hike (an hour or so)	77%			
Day hiking (three or more hours) 22%				
Backpacking	2%			
Camping	1%			
Other	4%			

Table 9. During your visit to the Maroon Bells Scenic Area.

Likelihood of Future Visits

Most respondents are likely to visit Maroon Bells again, with nearly two-thirds reporting they are "very likely" to do so and an additional 23 percent indicating they are "somewhat likely." Ten percent said they are "not too likely" to visit again and only three percent indicated they are "not at all likely" to visit in the future. Table 10 below shows the likelihood of respondents returning to the MBSA by percent of respondents.

Response	Percentage of Respondents
Very likely	64%
Somewhat likely	23%
Not too likely	10%
Not at all likely	3%

Table 10. How likely are you to visit the Maroon Bells Scenic Area in the future? (N = 628)

New Ticket Reservation System

The survey asked respondents the extent to which they favored or opposed a ticket reservation system for Maroon Bells. The question wording is provided below:

Due to growing visitation, it may be necessary to use a ticket reservation system to avoid overcrowding and to preserve the Maroon Bells Scenic Area. Before making your trip, you would purchase a ticket (or tickets) that would enable you to board the shuttle bus to Maroon Bells at a specified time (for example, 10:00 AM shuttle). If all the seats were filled for your preferred time or on your preferred date, you would have to select a different time or date. For your return shuttle trip, the ticket would not be timed. How strongly do you favor or oppose this ticket reservation system?

Opinion is evenly divided on a ticket reservation system. About one-third of respondents favor the new system, one-third are opposed, and another one-third neither favor nor oppose it (Table 11). About onequarter of respondents have strong opinions about the issue, and again, the intensity of respondents' opinions on both sides is similar, although those who strongly oppose the new system slightly outnumber those who are strongly in favor (14 percent vs. 11 percent, respectively). On both sides of the issue, about one-fifth are more moderate in their views.

ngry would you lavor of oppose this ticket reservation system				
Response	Percentage of Respondents			
Strongly oppose	14%			
Somewhat oppose	20%			
Neither favor nor oppose	33%			
Somewhat favor	21%			
Strongly favor	11%			
	Response Strongly oppose Somewhat oppose Neither favor nor oppose Somewhat favor			

Table 11. If a ticket reservation system were implemented, how strongly would you favor or oppose this ticket reservation system? (N = 600)

The survey then asked respondents who reported that they "somewhat" or "strongly" oppose the described ticket reservation system an open-ended question on why. One hundred eighty nine individuals provided feedback, comprised of 205 categorized responses (i.e., in some cases the same individual provided multiple responses that were coded in different categories). Among those who opposed the ticket reservation system, a large share of the responses (slightly more than one-half) referenced the degree of pre-planning/lack of flexibility (N = 51) and the adverse effect on spontaneity (N = 49) (see first two categories of Table 12). About one in 10 of those opposing the system mentioned

their concern that unforeseen delays, such as weather or traffic, could affect their ability to use their reserved ticket (N = 23), and a similar number commented that the system would be too burdensome/inconvenient (N = 21). Fewer respondents indicated that the system may be needed only in certain situations, such as peak weekends (N = 12) and that lack of awareness of the system could pose a problem (N = 11). In addition, a similar number indicated that the ticket reservation system was evidence of overregulation (N = 9). Some respondents used the comment box to voice their support for the current system, rather than describing why they were opposed to a ticket reservation system (N = 10). Table 12 provides a summary of responses.

Table 12. Reasons for Opposing the Ticket Reservation System (N = 189)				
Category	Number of Responses	Percent of Responses		
Excessive pre-planning/lack of flexibility	51	28%		
Adverse effect on spontaneity	49	26%		
Unforeseen delays (i.e., impacting ticket use)	23	13%		
Too burdensome/inconvenient	21	12%		
Situational need	12	7%		
Lack of awareness of system	11	6%		
Support current system	10	6%		
Overregulation	9	5%		
Other	10	6%		
Total	205	_		

Table 12 Peasons for Opposing the Ticket Peservation System (N = 180)

A more detailed description of the categories is provided below, each followed by a representative visitor response:

 Excessive pre-planning/lack of flexibility (51): respondents were concerned about the level of preparation/lack of flexibility needed to visit the MBSA under a reservation system. Respondents were concerned their availability would not always match up with times that the shuttle had available space.

> We live in state, but coming here is a full day round trip for us. It is hard to pick a set time in advance since we take a scenic drive here (independence pass). It would make visiting more difficult."

• Adverse effect on spontaneity (49): respondents felt a reservation system is too restrictive and would affect the spontaneous nature of vacation or spur of the moment trips. The ability to visit the MBSA on any given day without planning was important to guests.

> "I randomly decided to come over independence [pass]. It would not accommodate my spontaneous travels and visits."

Unforeseen delays (i.e., impacting ticket use) (23): respondents were concerned that factors, such as weather and unexpected traffic, would result in last minute changes to their plans or an inability to make their reserved time spot.

> for just one day. To commute for hours to specifically visit and miss your opportunity would be tragic." you manage to miss your reservation, then you may not be able to visit at all if you're here

• Burdensome/inconvenient (21): respondents felt a reservation system would be unnecessarily tedious and burdensome. Respondents noted that the concept of a nice easy trip being compromised was a concern.

"Ease of access is important. Ticketing would make it somewhat less easy."

• Situational need (12): respondents indicated they would use a reservation system, but it should be situational, such as only used during the peak season. This category was also where people noted additional alternatives, such as a permit system.

"Maybe use a ticket system for weekends and/or holidays or busy times."

• Lack of awareness of system (11): respondents were concerned that visitors would not be aware of a ticket reservation system before their visit (i.e., they would arrive at the MBSA and not be able to visit because they did not have a ticket).

"I was unaware of the [current] bus/ticketing system. Therefore pre booking would have thrown my plans off as I wouldn't have had a reservation."

• Support current system (10): respondents preferred the current system as is.

"It was convenient not to plan... When we got here we hopped on."

• Over-regulation (9): respondents felt that requiring a reservation system was overstepping the bounds of the Forest Service's mission. A couple of respondents also mentioned the "corporate" nature of the ticket reservation system or cited the free market or the economy.

"It is a national park [sic] and we should have access to it when we come to Aspen without making a reservation."

• Other (10): comments were placed in this category if they did not fit into one of the other categories (and the number of comments on the topic was insufficient to merit its own category); or if the comment did not apply to the question.

"My first visit was 50 years ago."

Effect of a Ticket Reservation System on Likelihood of Visiting

A majority of respondents (58 percent) reported that the new ticket reservation system would have no impact on their likelihood of visiting the MBSA in the future. However, 24 percent said that the system would make them less likely to visit and only five percent said it would make them more likely to visit. Thirteen percent were unsure. These responses are summarized below in Table 13.

Table 13. If a ticket reservation system were put into place, how would it affect your likelihood of visiting the Maroon Bells Scenic Area in the future? (N = 600)

Response	Percentage of Respondents
Less likely to visit	24%
No impact on my decision to visit	58%
More likely to visit	5%
Not sure	13%

Not surprisingly, a large majority of respondents who are strongly opposed to the ticket reservation indicated that the new system would make them less likely to visit Maroon Bells (71 percent). Those who are somewhat opposed to the system are more divided in their views: 42 percent reported that the ticket reservation would make them less likely to visit but a similar proportion said it would have no impact (36 percent). Among those who strongly favor the ticket reservation, 26 percent said it would make them more likely to visit in the future, but a majority said it would have no impact (58 percent). This relationship of responses is shown in Table 14 below.

	Strongly Oppose	Somewhat Oppose	Neither favor nor oppose	Somewhat Favor	Strongly Favor
Less likely to visit	71%	42%	16%	3%	1%
No impact on visit likelihood	12%	36%	74%	83%	58%
More likely to visit	0%	2%	1%	7%	26%
Not sure of impact on visit	17%	20%	9%	7%	15%
Total percent	100%	100%	100%	100%	100%
Number of respondents	84	115	200	126	69

Table 14 Polationship between Ticket Percentation System Attitudes and Likelihood of Visiting MPCA

Visitor Needs Related to a Ticket Reservation System

Respondents were asked a series of questions to better understand what is important to them in a ticket reservation system. The questions were presented in a five point Likert scale format. The findings for each statement are presented below and a summary of the percent of responses is shown in Table 15.

- 1. Having the ability to change my plans within a few days of my visit is very important to me. A majority of respondents (53 percent) strongly agreed that it is very important to be able to change plans within a few days of their visit and an additional third somewhat agreed (34 percent). Eleven percent neither agreed nor disagreed and only two percent somewhat disagreed (zero percent strongly disagreed).
- 2. To help control overcrowding at Maroon Bells, I am willing to limit how much time I spend there. A slight majority of respondents agreed that they would be willing to limit their time spent at the MBSA to help control overcrowding: 14 percent strongly agreed and an additional 37 percent somewhat agreed. One-fifth of respondents neither agreed nor disagreed (21 percent). Nearly 30 percent of respondents disagreed that they would be willing to limit their time at the MBSA to control overcrowding: 20 percent somewhat disagreed and eight percent strongly disagreed.
- 3. Frequent shuttle service to and from Maroon Bells is important to me. Nearly all respondents agreed that frequent shuttle service is important; 49 percent strongly agreed and 39 percent somewhat agreed. Eleven percent neither agreed nor disagreed and no respondents disagreed (zero percent).

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Ability to change plans (N = 600)	53%	34%	11%	2%	0%
Willingness to limit time spent at Maroon Bells (N = 600	14%	37%	21%	20%	8%
Frequency of shuttles to and from Maroon Bells (N = 606)	49%	39%	11%	0%	0%

Table 15. Attitudes on visitor needs related to a ticket reservation system

Respondents were also asked about their likelihood of using a new satellite parking lot under various conditions. The findings from each scenario are presented below and Table 16 summarizes the percent of responses for each question.

- Visitors can take a shuttle directly to Maroon Bells: This was the most popular of the possible options. Nearly three-quarters of respondents (72 percent) reported they would be "very likely" to use the satellite lot and an additional 17 percent said "somewhat likely" if they could take a shuttle directly to Maroon Bells (i.e., no transfer). Only four percent said not too likely and two percent not at all likely.
- 2. Visitors have to transfer shuttles at Aspen Highlands: The likelihood of using the satellite parking dropped significantly if respondents have to transfer to another shuttle at Aspen Highlands. Overall, though, respondents were fairly evenly divided in their likelihood of using the satellite lot under such conditions: 15 percent of respondents reported being very likely and 30 percent said somewhat likely; similarly, 32 percent said "not too likely" and 15 percent said "not at all likely." Seven percent reported that they were not sure.
- 3. The satellite lot is located down-valley: Opinions were also fairly evenly divided on this question, and relative to the other items, a greater proportion of respondents were unsure how likely they would be to use the lot (14 percent). If the satellite lot was located down-valley, 29 percent indicated they would be somewhat likely to use the lot and 17 percent said very likely. On the other hand, 26 percent reported they would be not too likely and 14 percent said not at all likely.

	Very likely	Somewhat likely	Not too likely	Not at all likely	Not sure
You can ride the shuttle directly to Maroon Bells (N = 571)	72%	17%	4%	2%	5%
You need to change shuttles at the Aspen Highlands (N = 561)	15%	30%	32%	15%	7%
The lot is located down valley not on the way from Aspen to Maroon Bells (N = 545)	17%	29%	26%	14%	14%

Table 16. Likelihood of using a satellite parking lot under the following conditions

Survey respondents were also asked a general open-ended question on "what is important to you in having a positive transportation experience at the Maroon Bells Scenic Area." There were 316 individuals who responded and 379 total comments categorized (Table 17). About one-half of responses referenced some attribute of a shuttle system as being important with the most frequent mentions including frequent buses (N = 57), timeliness/reliability of service (N = 28), lack of overcrowding/seat availability (N = 22), narration/information on bus (N = 22), convenience/ease of use (N = 16), friendly/courteous driver (N = 16), and clean comfortable bus (N = 16). About 22 percent used the openended question to indicate their support for the current system. Fewer than one in 10 of those who responded mentioned other factors such as environmental preservation (N = 22), adequate information/signage (N = 13), parking concerns (N = 10), safety (N = 10) or pet/dog access (N = 8).

•		•
Category	Number of Responses	Percentage
Shuttle service attributes	229	72%
Current system	70	22%
Environmental preservation	22	7%
Adequate information/signage	13	4%
Parking concerns	10	3%
Safety	10	3%
Pet/dog access	8	3%
Other	17	5%
Total	379	

Table 17. Factors Important to a Positive Transportation Experience (N = 316)

A more detailed description of the response categories, along with example visitor responses, are provided below.

- Shuttle service attributes (229): this large category encompasses all responses related to respondent preferences regarding a shuttle service.
 - Frequent buses (57)

"Frequency of buses back and forth."

• Timeliness/punctuality of service (28)

"On time and consistent travel accommodations."

• Flexibility (24): respondents want flexible (and more) options. These options consist of being able to access MBSA earlier (or later) in the day as well as people only wanting to take the bus in one direction or with a mix of other travel such as a bicycle.

"We ride our bikes up but want to take the bus down."

• Overcrowding/seat availability (22)

"Having enough buses to service crowds without a long wait."

• Narration/information on bus (22)

"A good, informative driver."

"Frequent shuttles and guides that narrate."

• Convenience/ease of use (16)

"Convenience is a big part. If it isn't convenient than people will not want to use it."

• Friendly/courteous driver (16)

"The bus should be well maintained with excellent and friendly drivers."

• Clean, comfortable bus (16)

"Comfort, climate controlled, availability of transportation up and back."

"Clean bus!"

• Cost concerns (11)

"Affordable and easy to find online."

"Quick, easy, cheap, frequent."

• Other shuttle service attribute or opinion (17)

"I would appreciate being able to buy tickets for the bus online in advance regardless of a specified time."

• Current system (70): this category was comprised largely of positive feedback about the current shuttle service including comments on how people would like to see it continued. About half of the comments specifically referenced a positive experience due to a RFTA bus driver or MBSA staff. There were only a few negative comments; a couple of visitors mentioned they could not hear the narration on the bus because there was poor sound quality in the back or because people were speaking over the driver.

"The drive to Aspen Highlands was easy on a Tuesday morning and I hope the experience can be duplicated."

"Loved the ease of use and commentary!"

• Environmental preservation (22): respondents indicated that transportation options should maximize environmental preservation and benefits. Some respondents mentioned the environment as a defense for potential shuttle options.

"Ease of getting there, better for environment if public transit is in place."

• Information/signage (13): respondents commented on the insufficient signage at MBSA (e.g., related to bus schedule and locations, trails) as well as the importance of easily accessible online information.

"Adequate signage giving info about cost of the bus, times, etc."

"Correct info on the website."

 Parking concerns (10): comments were related to parking issues. Respondents were primarily concerned about the limited parking, but a few respondents also mentioned the need for reserved overnight parking, advance information if lots are full, and better parking location information.

"A better parking system, permits in advance for overnight hikers and a parking space."

"Parking is limited, downtown has no free parking."

• Safety (10): these comments were from respondents who prioritized safe shuttle service and a peaceful transportation experience.

"Clean, safe seating."

"Friendly staff and safe transportation."

• Pets/dogs (8): while not a large category, some respondents were very specific in their concerns about access for their pets. While a few people thought pets should not be allowed in the confined spaces of the shuttle, others were pleased that their pets could ride the shuttle. A couple of respondents also insisted dogs be allowed access to MBSA trails.

"Allow dogs always."

"Limit dog in bus. Dog on way up smelt horrible!"

• Other (17): this category included unique statements that were not widely stated or responses that were not applicable to the question.

"Water – the fountain can't be used to fill bottles."

"Maybe if buses are limited an easy bike rental with supplies would help."

Appendix A: Respondent Count by State and Region

Charles	Destau	Design design Count
State	Region	Respondent Count
Colorado	Rocky Mountains	278
Texas	Southern Region	40
Florida	Southern Region	39
California	Pacific Southwest	37
Declined to answer	<u> </u>	30
New York	Eastern Region	29
International	_	26
Illinois	Eastern Region	14
Missouri	Eastern Region	12
Georgia	Southern Region	9
Pennsylvania	Eastern Region	9
Michigan	Eastern Region	8
New Jersey	Eastern Region	8
Massachusetts	Eastern Region	7
North Carolina	Southern Region	7
Wisconsin	Eastern Region	7
Indiana	Eastern Region	6
Washington, DC	Eastern Region	6
Arizona	Southwest Region	5
Connecticut	Eastern Region	5
Kansas	Rocky Mountains	5
Oregon	Pacific Northwest	5
Tennessee	Southern Region	5
Virginia	Southern Region	5
Alabama	Southern Region	3
Louisiana	Southern Region	3
Nebraska	Rocky Mountains	3
Ohio	Eastern Region	3
Oklahoma	Southern Region	3
Utah	Intermountain	3
Washington	Pacific Northwest	3
South Carolina	Southern Region	3
Arkansas	Southern Region	2
lowa	Eastern Region	2
Minnesota	Eastern Region	2
New Mexico	Southwest Region	2
Alaska	Alaska	1
Hawaii	Pacific Southwest	1
North Dakota	Northern Region	1
South Dakota	Rocky Mountains	1

Appendix B: Survey Instrument

We want your input so we can better design transportation management strategies for Maroon Bells. Please respond to this brief survey; your feedback is important.

- 1. Approximately when did you decide to visit the Maroon Bells Scenic Area? (Please select one.)
 - \Box Today
 - \Box In the last week
 - \Box In the last month
 - \Box 1 to 6 months ago
 - \Box More than 6 months ago
- 2. Prior to your visit, what information sources, if any, did you use to obtain information about Maroon Bells Scenic Area? (In the first column, please check all that apply.) Of the sources you used, which ONE was most helpful? (In the second column, please select one response.)

	Sources Used (Check all that apply)	Most Helpful (Check one)
U.S. Forest Service website		
Other website (please specify):		
Social media (e.g., Facebook, Instagram)		
Travel guides/tour books/brochures		
Aspen/Snowmass Chamber Resort Association (in Aspen)		
Aspen/Snowmass ticket office (at Aspen Highlands)		
Previous visits		
Friends/relatives/word of mouth		
Other (please specify):		
Did not obtain information prior to this visit		

- 3. When planning your visit to the Maroon Bells Scenic Area, were you aware of the shuttle bus system that takes visitors from Aspen Highlands to Maroon Bells?
 - \square No
 - □ Yes
- 4. Have you visited Maroon Bells Scenic Area before today? (Check one.)
 - \Box No (this is my first visit) GO TO QUESTION 5

 \Box Yes \rightarrow Not including this visit, approximately how many times have you visited in the last five years? (*Check one.*) \Box 1 to 5 times \Box 6 to 10 times \square More than 10 times

- 5. How many total nights are you spending away from home on this trip? _____ nights
- 6. Where is your vehicle currently parked?
 - □ Aspen Highlands parking deck
 - □ Buttermilk satellite parking lot

 $\Box \text{ Aspen} \rightarrow \text{ If parked in Aspen, did you take the Castle Maroon bus to Aspen Highlands?}$ $\Box \text{ Yes } \Box \text{ No}$

- □ Other (*please specify*): _____
- □ I did not arrive in the Aspen area by vehicle GO TO QUESTION 8
- 7. If you parked a vehicle, did you have difficulty finding a parking space?
 - 🗆 No
 - □ Yes
- 8. Please provide the following information about your visit today:
 - a. Approximate time you boarded the shuttle to go to Maroon Bells: _____ AM/PM (Circle one)
 - b. Approximate time you boarded the shuttle to leave Maroon Bells: _____: ___ AM/PM (Circle one)
- 9. During your visit to the Maroon Bells Scenic Area, did you participate in any of the following activities? (*Check all that apply.*)
 - □ Walking/short hike (e.g., an hour or so)
 - □ Day hiking (three or more hours)
 - □ Backpacking (number of nights inside Maroon Bells: _____)
 - □ Camping (number of nights inside Maroon Bells: _____)
 - □ Other (*please specify*): _____
- 10. How likely are you to visit the Maroon Bells Scenic Area in the future? (Please select one.)
 - □ Very likely GO TO QUESTION 12
 - □ Somewhat likely GO TO QUESTION 12
 - \Box Not too likely
 - \Box Not at all likely

\rightarrow IF NOT TOO LIKELY OR NOT AT ALL LIKELY:

11. Can you explain why you are not likely to visit again?

- 12. Due to growing visitation, it may be necessary to use a ticket reservation system to avoid overcrowding and to preserve the Maroon Bells Scenic Area. Before making your trip, you would purchase a ticket (or tickets) that would enable you to board the shuttle bus to Maroon Bells at a specified time (for example, 10 a.m. shuttle). If all the seats were filled for your preferred time or on your preferred date, you would have to select a different time or date. For your return shuttle trip, the ticket would not be timed. How strongly do you favor or oppose this ticket reservation system?
 - □ Strongly oppose
 - □ Somewhat oppose
 - □ Neither favor nor oppose GO TO QUESTION 14
 - □ Somewhat favor GO TO QUESTION 14
 - □ Strongly favor GO TO QUESTION 14

→ IF SOMEWHAT OPPOSE OR STRONGLY OPPOSE:

13. Why do you oppose a ticket reservation system?

14. If a ticket reservation system such as the one described above was put into place, how would it affect your likelihood of visiting the Maroon Bells Scenic Area in the future? (*Please select one.*)

- \Box Less likely to visit
- □ No impact on my decision to visit
- □ More likely to visit
- \Box Not sure
- 15. To help us understand your needs and to make your experience visiting Maroon Bells a positive one, please tell us the extent to which you agree or disagree with the following statements. *(For each item, please check one box.)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Having the ability to change my plans					
within a few days of my visit is very					
important to me.					
To help control overcrowding at					
Maroon Bells, I am willing to limit					
how much time I spend there.					
Frequent shuttles to and from Maroon					
Bells is very important to me.					

- 16. Please tell us more about what is important to you in having a positive transportation experience at the Maroon Bells Scenic Area:
- 17. A satellite parking lot, located approximately four to six miles from Aspen Highlands (a 10-15minute shuttle ride) may be added to provide additional parking. In comparison with parking in Aspen or Aspen Highlands, parking at the satellite lot would be free; however, you would still be required to purchase a shuttle ticket. Please tell us how likely you are to use this satellite parking lot under each of the following conditions. *(Check one box for each item.)*

	Very likely	Somewhat likely	Not too likely	Not at all likely	Not sure
You can ride a shuttle directly from the satellite lot to the Maroon Bells without stopping.					
You need to change to a different shuttle at Aspen Highlands before going to Maroon Bells.					
The lot is located down-valley (i.e., west of Aspen, towards Snowmass, and not on the way from Aspen to Maroon Bells).					

Now just a few final questions so we can better understand who our visitors are.

18. How many people are in your group today, including yourself?

Adults (18 and older): ______ Children (under 18): _____

19. Where do you live?

City:	State:	
Zip:	Country (<i>If not U.S.</i>):	

20. Which category best represents your annual household income (before taxes) last year?

- □ Less than \$34,999
- □ \$35,000 \$49,999
- □ \$50,000 \$74,999
- □ \$75,000 \$99,999
- □ \$100,000 \$149,999
- □ \$150,000 \$199,999
- □ \$200,000 or more
- \Box Do not wish to answer