VISITOR SATISFACTION ALONG THE HIGHWAY 7 CORRIDOR TO ROCKY MOUNTAIN NATIONAL PARK*

Final Report to Rocky Mountain National Park

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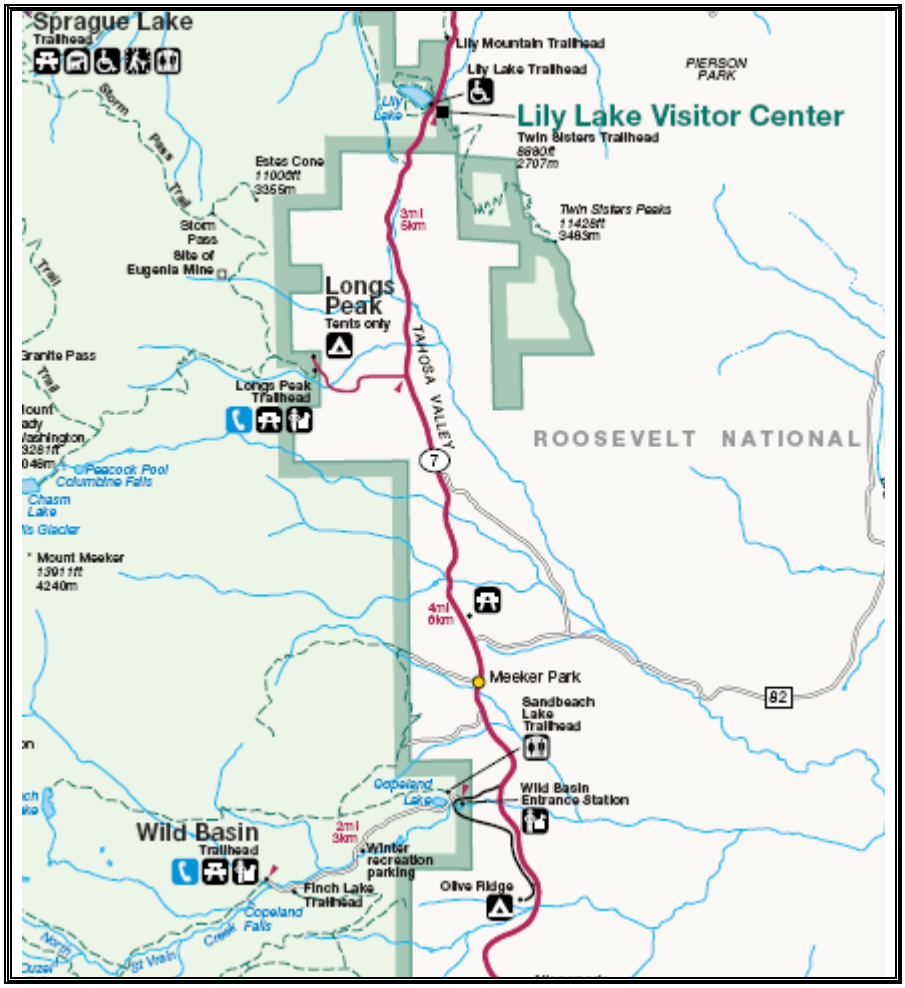
1. Introduction

In the spring of 2003, the authors of this report began planning with Rocky Mountain National Park (RMNP) for a survey of visitors to the southeastern area of RMNP, to assess overall visitor satisfaction with their park experience, and to determine visitor opinions about specific visitor resources. This study is intended to provide planning information for the Rocky Mountain National Park managers, as they seek to balance resources with increasing visitor numbers and development pressures from population growth along the park's southeastern boundary.

Figure 1. Map of the Highway 7 Corridor



During 2003 and throughout the spring of 2004, the researchers met with a number of park staff and concurred on the survey instruments to be administered along the southeastern park areas. They agreed to station interviewers in the parking areas at Lily Lake, Longs Peak, and Wild Basin. (See Figure 1.) Additionally, sampling strategies were discussed, as well as issues relating to interviewer safety.

The three survey instruments were informally pre-tested on park volunteers at each site and revised accordingly. The revised questionnaires were then formally pre-tested on up to nine park visitors at each of three sites, and revised again according to the suggestions of the interviewers and the research team. (See final version in Appendix A.) The authors are responsible for all decisions regarding the sampling method and the survey instruments.

By June 2004, the survey instruments were submitted to the Office of Management and Budget for final approval, and that approval was granted by August. In September 2004, training of volunteer interviewers began, both by the principal investigator and by Park Ranger Cherie Yost of RMNP. Volunteer interviewers were given instruction guides (see Appendix B), were talked through the questionnaire and its purpose, and were given time to practice the questionnaire. Interviewing commenced during the first week in October, 2004, and was completed on October 2, 2005, thereby covering a full twelve months.

The initial research design had envisioned that all of the interviewing would be accomplished by RMNP volunteers. By the summer of 2005, however, it was clear that volunteers would not be able to accumulate the desired total number of completed interviews. Therefore during August and September, hired interviewers were recruited and trained, following the same training format that was just described.

Approximately 1,371 visitors to Rocky Mountain National Park were contacted for possible interviews for this research, and approximately 1,283 visitors to Rocky Mountain National Park were interviewed, yielding a completion rate of 93%. For this study's analyses, an additional 21 cases were unusable due to incomplete data, so that the final number of cases for most analyses runs around 1,264 individuals.

2. Methods of the Study

We sought to interview roughly the same number of people at each of the three park sites, and obtained the following number of interviews: Lily Lake – 438, Longs Peak – 412, and Wild Basin – 413. Interviewing ran for one year, even during the coldest days of December through February. We had many fine interviewers, including Mike Coburn, Jim Cope, Piper Taylor Grandjean, Steven Kennedy, Alice Knox, and Forest Weldon. The interviewers were greatly assisted by Cheri Yost, who oversaw the training and arranged for lodging.

Working with the office of research at Rocky Mountain National Park, and in particular with Terry Terrell, we attempted to vary the days and times throughout the 52 weeks of ongoing interviews. We did not include notable holidays in our sampling of days (Christmas, Memorial Day weekend, or July 4), since these days were unavailable to this project. However, New Year's Day did fall into the sampling frame and we had one volunteer who

managed to complete three interviews that day in the Longs Peak area. Additionally, we varied the time of interviews into three blocks: morning, mid-day, and afternoon. Typically, these blocks covered 7 AM – 11 AM, 11 AM – 2 PM, and 2 PM – 6 PM. The times shifted slightly from summer to winter to accommodate visitation times, as well as daylight hours.

As noted above, the initial research plan was for all of the interviewing to be accomplished by RMNP volunteers, but to accumulate the desired total number of completed interviews it proved necessary to used hired interviewers during August and September, 2005. As a consequence, the majority of completions from all three sites were obtained during that two month period. This is also a time of very high visitation to RMNP, and accordingly the original sampling plan had been to concentrate much of the interviewing in this period. The analyses reported here have not been weighted to reduce the preponderance of high-season visitors in the data.

To prevent the contamination of one group of visitors affecting the responses of another group, we instructed the interviewers to wait an interval of one "group" of visitors between their interviews, and to alternate between male and female visitors for potential participants. Again these rules were relaxed during the winter months when very few visitors could be counted at a particular location.

Throughout the interviewing there was great enthusiasm by many of the park visitors to the idea of the project, and most respondents appeared to give careful consideration to the interview questions. Additionally, park rangers and park volunteers were always helpful to the interviewers, answering questions, providing assistance with directions, and access to the researcher dorms.

3. Survey Instruments

The study was designed to address the following questions:

1. *What are the levels of satisfaction with the park resources in the three visitor areas along the Highway 7 corridor of RMNP?*
2. *Are there some resources with which the visitors to RMNP are significantly less satisfied than other resources?*
3. *Are there relationships among demographic characteristics and satisfaction with park resources?*
4. *And finally, are there specific suggestions from the public as to how to improve the facilities at the three areas in RMNP?*

We asked the RMNP visitors a series of questions that focused on satisfaction with the resources of each of the three areas. These resources included roads into the area, parking, water, toilets, campgrounds, availability of personnel, and other similar items. The visitors were asked to rate their satisfaction with these resource items from very dissatisfied (scored 1) to very satisfied (scored 5). The higher the average score across all visitors, the higher the satisfaction with that resource.

The visitors were also asked how the park service personnel should manage its resources and fees to address any dissatisfaction indicated by the visitor. Again, a wide array of park conditions were considered, such as roads, parking, water, kiosks, etc. The resource items were scored yes, add more (scored 4), leave alone (scored 3), and reduce (scored 2). There were very few "reduce" options taken by the visitors: no more than 8 visitors ever said "reduce" to any of the items. The higher the average score on these items, the greater the percentage of visitors who wish the park service to expand or add to the park resource.

At the conclusion of the attitude survey, we also asked a series of questions to obtain demographic information on the park's visitors. Questions included state of residence, age group, income group, ethnicity and race, education level, and gender.

The questionnaires for the three areas of the Highway 7 corridor are essentially identical except for four questions that reflect the specifics of each area (see Appendix A). For Lily Lake visitors, there was a question about the visitors' center at Lily Lake. For Wild Basin, there was a question about the distance to campsites in that area. And for Longs Peak and Wild Basin, visitors were asked about their satisfaction with the number of campsites. And finally, a question about noise in the campground was asked of Longs Peak visitors only.

4. Results on Satisfaction

4.1. Levels of Satisfaction

Our first step in the data analysis was to determine what the mean values were for the visitors to RMNP on the satisfaction questions. Table 1 presents those results, with the items listed in the order they were asked of the respondents.

Judging from the high mean values, most visitors are quite satisfied with of the majority of the resources at Rocky Mountain National Park. Therefore, to analyze these mean values it is helpful to set a criterion level that divides the results into more and less satisfied. We set a criterion value of 4.0 for satisfaction with a park resource. This level indicates the change in the sample of visitors from the mostly satisfied to the somewhat satisfied range (3.9 and below). Means below this criterion are highlighted in red in the table.

From the data in Table 1, RMNP visitors from 2005 to 2006 were less satisfied with park literature, availability of water, and the distance to the campgrounds in Wild Basin. Levels of dissatisfaction were not constant across the three areas of the park.

The availability of water received the lowest satisfaction scores of all the resources that were itemized in the questionnaires. Although individuals are typically aware that backcountry implies wilderness in many parks, the visitors to RMNP were nonetheless dissatisfied that potable water was not available or, in the case of Longs Peak, was not prominently presented to the visitors. Several of the visitors commented that the spigot at Longs Peak faded into the background (see open-ended comments, Appendix D).

Table 1. Satisfaction Survey Questions, with Number of Respondents, Mean, Median, and Minimum and Maximum Values (all three areas of the Highway 7 corridor)

Survey Questions	N		Mean	Median	Range	
	Valid	Missing			Minimum	Maximum
Could you tell me how satisfied you were with the following in this area of the park? (on a scale of 5 to 1, with 5 being completely satisfied, 4 being somewhat satisfied, 3 being neither satisfied nor dissatisfied, 2 somewhat dissatisfied, or 1 completely dissatisfied with that part of your visit)						
…roads into the area?	1264	0	4.69	5.00	1	5
…the restrooms?	1262	2	4.52	4.00	1	5
…the information kiosks?	1263	1	4.52	4.00	1	5
…parking space for cars?	1263	1	4.05	4.00	1	5
…the number of picnic areas?	1264	0	4.38	4.00	1	5
…the facilities in the picnic areas?	1264	0	4.10	4.00	1	5
…availability of drinking water?	1264	0	3.22	3.00	1	5
…availability of park literature/ exhibits?	1264	0	3.96	4.00	1	5
…scenic road pull-outs?	1264	0	4.34	5.00	1	5
…trail signs for hiking?	1263	1	4.62	5.00	1	5
…pedestrian safety in parking lots?	1263	1	4.57	5.00	1	5
…availability of park personnel?	1263	1	4.42	5.00	1	5
…amount of access for disabled persons?	1263	1	4.16	4.00	1	5
…the quality of educational exhibits/ signs?	1264	0	4.27	4.00	1	5
…backcountry toilets?	1264	0	4.08	4.00	1	5
…the number of developed hiking trails?	1264	0	4.75	5.00	1	5
…the location of the visitor center? (only for Lily Lake visitors)	437	827	4.30	5.0	1	5
…the numbers of camping sites?(only for Wild Basin and Longs Peak)	827	437	4.33	4.00	1	5
…the distance to the camping sites from the parking areas? (Wild Basin only)	413	851	3.90	4.00	1	5
…the noise level in the Longs Peak campground? (only those who camped at Longs Peak campground)	109	303	4.17	5.00	1	5
…the availability of ranger led programs?	1264	0	4.14	4.00	1	5

Indeed, so obvious was the interviewees' desire for water that our interviewers began carrying bottled water in half liter bottles to all the sites, and offered the water to the visitors during the interviews. We gave the visitors the water whether they agreed to the interview or

not, since several families had complaining children, or adults who were profusely sweating with red faces.

Turning to differences in the observed mean values for the different areas of the park, there are several reasons that these resource items would score differently in different areas. First, the expectations of visitors may differ across areas, as one area is known for climbing (Longs), another known for outstanding hiking (Wild Basin), and a third known for its lake view (Lily Lake). Second, different types of individuals may go to different areas, and therefore, want or need different resources. In the case of Lily Lake, for example, many visitors had hoped to find a visitor center with facilities for families. Finally, besides differing expectations and needs, the park experience may differ across the sites; for example, a visitor at Longs Peak may be more likely to hike too far for his or her fitness level than a visitor to Lily Lake.

A comparison of mean satisfaction levels across the three areas of the park is presented in Table 2. (The items have been re-ordered into three clusters, for reasons discussed below.) Based on analysis of variance to test for statistically significant differences, the findings indicate that only two of the seventeen items common to all three questionnaires generated satisfaction levels that were similar across the three areas of Highway 7. Scenic road pullouts and park exhibits were similarly rated in all three areas, while the other fifteen satisfaction items were rated differently in the three southeastern areas of the park. Therefore, further analysis should look at these items by each area of RMNP. If we failed to look at the items separately for each area, we might be missing differences that cancel themselves out when the areas are grouped together.

For example, the overall mean satisfaction level with backcountry toilets was 4.1, but when the data are examined by area of the park, we find that only the Lily Lake visitors were dissatisfied with the item. Visitors were basically satisfied with backcountry toilets at both Longs Peak and Wild Basin. Similarly, the overall mean satisfaction level for disabled access was 4.2, but that average is driven by the greater satisfaction with access for the disabled at Lily Lake (4.6) while at both Longs Peak and Wild Basin there was some dissatisfaction (3.9).

To no one's surprise, satisfaction with parking was lowest at Longs Peak. And, the Longs Peak area also had the lowest level of satisfaction with the number of picnic sites. Satisfaction levels of visitors to the Wild Basin area were typically in the middle range between Lily Lake and Longs Peak, with the exception of roads into the area, which received lower scores. Here the visitors reported almost a half point lower on satisfaction with roads than in the other two areas, a difference of nearly 10%. But on the other hand Wild Basin visitors reported the highest satisfaction on the measure of pedestrian safety, as well as on trail signs.

Table 2. Analysis of Variance of Mean Levels of Satisfaction by Item, Across the Three Areas of the Park

Satisfaction with:	Lily Lake (437)	Wild Basin (413)	Longs Peak (412)	Overall (1262)	F	significance level
Kiosks	4.4	4.6	4.6	4.5	9.15	.000
park literature	3.6	4.1	4.3	3.9	114.57	.000
availability of park personnel	4.2	4.5	4.6	4.4	16.92	.000
Exhibits	4.0	4.0	4.0	4.0	.311	.733
ranger programs	4.0	4.4	4.0	4.1	93.24	.000
Roads	4.8	4.4	4.8	4.7	57.84	.000
Restrooms	4.6	4.5	4.4	4.5	6.32	.002
Parking	4.2	4.0	3.7	4.0	18.55	.000
# of picnic areas	4.5	4.4	4.2	4.4	29.38	.000
picnic facilities	4.6	4.3	4.3	4.4	55.18	.000
pedestrian safety	4.5	4.7	4.6	4.6	9.93	.000
access for disabled	4.6	3.9	3.9	4.2	163.94	.000
availability of water	2.6	3.3	3.9	3.2	233.78	.000
trail signs	4.5	4.8	4.6	4.6	16.17	.000
backcountry toilets	3.7	4.0	4.5	4.1	123.05	.000
developed trails	4.9	4.8	4.7	4.8	2.95	.053
scenic pulloffs	4.3	4.3	4.3	4.3	.072	.930

By viewing satisfaction with various park resource items by area of the park, it is possible to see how the average satisfaction level may be moderately high, while this same park resource could be scored low in one area and high in another. This effect of averaging always needs to be considered when evaluating different areas with different natural resources, locations, and visitors.

To examine the levels of satisfaction with park facilities concisely without losing essential information, we next looked at whether these items could scale together. That is, is there some underlying dimension around which items might cluster to provide a holistic picture of satisfaction with park facilities? Such measures will be useful in discussing what types of visitors are more or less satisfied with the various resources of the Highway 7 area.

4.2. Creating Scales

The seventeen resource variables that were common to all three areas of the Highway 7 corridor were analyzed for common variance using factor analysis and reliability analysis. The factor analysis suggested that there were **three** underlying dimensions to satisfaction

with the resource variables—satisfaction with park information, with frontcountry park resources, and with backcountry park resources.

The **Park Information Scale** consisted of satisfaction with informational kiosks, park literature, availability of park personnel, park exhibits, and park programs. That is, these five items seem to indicate one kind of experience in the park – getting or having information about the park. For each of the three areas of the Highway 7 corridor, visitors to RMNP were satisfied to very satisfied with the information available at Lily Lake, Wild Basin, and Longs Peak. However, the scale value for Lily Lake was the lowest, suggesting that although Lily Lake was the easiest to access from the Highway, the information about or at Lily Lake was not as satisfactory as at other locations.

The **Frontcountry Park Scale** was composed of resources and conditions used for short day trips: satisfaction with the roads in the area, parking, pedestrian safety in the parking lots, picnic areas, facilities at the picnic areas, restrooms, and facilities for the disabled. The Wild Basin area had the lowest scale score on satisfaction with these frontcountry items, primarily due to low satisfaction with roads in the area and facilities for the disabled. The road into the backcountry summer parking area is narrow, pot-holed, and has few pull-offs. Several visitors commented on the park's lack of investment in the maintenance of the road over the years, let alone improvement (see Appendix D). Similarly, it was suggested that there could at least be a short nature trail for older or somewhat handicapped visitors to walk along and listen to nature, while other members of a party might take a longer hike. The restrooms, while receiving praise for the Purell dispensers by some visitors, also received some criticism for being awkwardly located, with no sidewalk to them.

The score for Longs Peak was also low for the frontcountry scale, with a low score on the facilities for the disabled and a moderate score for satisfaction with picnic areas. While the Longs Peak area received higher satisfaction scores on restrooms, visitors noted the few picnic tables made available for families. As in Wild Basin, there was dissatisfaction with facilities or short trails available for the disabled. But most notable for the Longs Peak area was the dissatisfaction with parking, which received the lowest score of the three areas. This issue is well known to park officials, but the survey results present in more quantifiable terms just how dissatisfied visitors to the park are with the parking at Longs Peak. This item had the lowest level of satisfaction of all items in the Longs Peak area.

The third scale, which we have termed the **Backcountry Park Scale**, consists of items associated with longer hikes in the backcountry, either as starting points (such as scenic road pull-offs), or dealing with the trails themselves, such as trail signs, developed trails, backcountry toilets, and water available for hikers. The mean scores across all three areas vary from a low of 4.0 for Lily Lake, to 4.3 for Wild Basin, and 4.4 for Longs Peak. While Longs Peak received the highest average score on the backcountry scale, the open-ended comments (see Appendix D) for Longs Peak suggest concerns about the backcountry toilets, problems with signage, and the lack of water. It may be that a selection factor is operating. Those individuals who would travel any distance up the Longs Peak trail may be more tolerant of difficulties in the backcountry. Thus poorer conditions might not be met with as much dissatisfaction as in other areas of the park, since the expectations of most visitors would an awareness of backcountry conditions.

Table 3. Mean Scale Scores for Park Information, Frontcountry, and Backcountry Scales

Satisfaction Scale	Scale Items	Park Area		
		Lily Lake	Wild Basin	Longs Peak
Park Info Scale	kiosks park literature availability of park personnel exhibits ranger programs Average level of satisfaction on Park Info scale	**4.1**	**4.4**	**4.3**
Frontcountry Park Scale	roads restrooms parking # of picnic areas picnic facilities pedestrian safety access for disabled Average level of satisfaction on Frontcountry scale	**4.5**	**4.2**	**4.3**
Backcountry Park Scale	water trail signs backcountry toilets developed trails scenic pulloffs Average level of satisfaction on Backcountry scale	**4.0**	**4.3**	**4.4**

The fact that Lily Lake received the lowest overall score on the backcountry scale is mostly due to the relatively low individual scores on availability of water and backcountry toilets. Since Lily Lake attracts families with children, the fact that there was no water available and no toilets on the Twin Sisters Trail probably affected parents' satisfaction with that area of the park.

To prepare these scales for the next set of analyses (directed at the question of who or what groups of visitors are satisfied or dissatisfied with park resources), we eliminated two items from the scales that did not differ significantly across the areas of the park (exhibits and scenic road pull-offs). The final scale measures for each area of the park and the Cronbach's alpha (reliability coefficient) values are presented below. Generally, an alpha value of .6 or higher is taken to indicate a reliable scale, and all of the scales used here approach or exceed that criterion.

Table 4. Cronbach's Alpha for Final Items in Park Info Scale, Frontcountry Scale, and Backcountry Scale (all three park areas)

Scale	Items in Scale	Lily Lake	Wild Basin	Longs Peak
Park Info Scale	kiosks	4.4	4.6	4.6
	park literature	3.6	4.1	4.3
	availability of park personnel	4.2	4.5	4.6
	ranger programs	4.0	4.4	4.0
	Average level of satisfaction on Park Info scale (Cronbach's alpha)	**4.1 (.56)**	**4.4 (.53)**	**4.4 (.61)**
Frontcountry Park Scale	roads	4.8	4.4	4.8
	restrooms	4.6	4.5	4.4
	parking	4.2	4.0	3.7
	# of picnic areas	4.5	4.4	4.2
	picnic facilities	4.6	4.3	4.3
	pedestrian safety	4.5	4.7	4.6
	access for disabled	4.6	3.9	3.9
	Average level of satisfaction on Front Country scale (Cronbach's alpha)	**4.5 (.62)**	**4.2 (.71)**	**4.3 (.63)**
Backcountry Park Scale	water	2.6	3.3	3.9
	trail signs	4.5	4.8	4.6
	backcountry toilets	3.7	4.0	4.5
	developed trails	4.8	4.8	4.7
	Average level of satisfaction on backcountry scale (Cronbach's alpha)	**3.9 (.62)**	**4.2 (.60)**	**4.4 (.62)**

Only three of the nine scale means were affected by deleting the satisfaction with exhibits and scenic road pull-offs from their computation. For Longs Peak, the scale value increased from 4.3 to 4.4 once the exhibits variable was deleted. For both Lily Lake and Wild Basin, the backcountry scores went down 0.1 from 4.0 to 3.9 for Lily Lake, and from 4.3 to 4.2 for Wild Basin.

We now turn to the analysis of what types of individuals are more or less satisfied with park resources. The reason to provide this information is to aid management in its attempts to decide what kinds of programs or adjustments should be made to the management of the park and its resources.

4.3. Demographic Characteristics and Satisfaction

Who is satisfied or dissatisfied with the park resources? Using the three scales developed from the inventory of satisfaction with park resources (Park Information Scale, Frontcountry Park Scale, and Backcountry Park Scale), we examined the relationships between the three scales and the key demographic information gathered in the survey. (See also Appendix C.)

We regressed each of the three scales onto the seven independent variables that may provide some explanation in analyzing which groups of park visitors are more or less satisfied with the park resources. In all of these analyses we controlled for area of the park with two variables (one for Lily Lake and a second for Wild Basin). The visitors to Longs Peak are always the omitted category, so comparisons of Lily Lake and Wild Basin are always with respect to Longs Peak values.

4.3.1. Education and Satisfaction

Table 5 presents the results of regressing the satisfaction scales onto the education of the visitors, controlling for area of the park.

Table 5. Regression of Satisfaction Scales onto Education of Visitor, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Education	-.006	-.011 *	-.014 **
Lily Lake	-.250 ***	.262 ***	-.413 ***
Wild Basin	.027	.051 #	-.172 ***

Note: For discussion of the notation regarding statistical significance (#, *, **, and ***), see text, section 4.3.2. The entries in the table can be interpreted as the effect of each variable (listed in the rows) on the mean values of each scale (in the columns). For example, with area of the park held constant, each additional year of education reduced mean satisfaction with backcountry resources by .014 point on the 5 point scale. Therefore, the more educated were a little less satisfied. Similarly, with education held constant, Lily Lake visitors had a mean backcountry satisfaction that was .413 point lower than Longs Peak visitors. Controlling for education, Wild Basin visitors had a mean backcountry satisfaction only .172 point lower than Longs Peak visitors, or in other words .241 point higher than Lily Lake visitors (.413 - .172 = .241).

4.3.2. A Note on Statistics

For those who remember their college statistics, the following brief discussion will be redundant, but perhaps useful to others. There are three important statistical criteria when reading the tables.

First, look for statistical significance. A pound sign (#) means that we are 90% certain that the relationship cannot be attributed to random chance. (In statistical jargon: treating the completed interviews as a simple random sample of park visitors, we can reject the null

hypothesis of no relationship, with 90% confidence.) One asterisk (*) means that we are 95% certain of the relationship. Two asterisks (**) means that we are 99% certain, and three asterisks (***) means that we are 99.9% certain. We usually strive for at least 95% confidence in a test of statistical significance, but the 90% level is also presented here, to avoid overlooking borderline but potentially important relationships. Sometimes a pattern of relationships is as meaningful as strict statistical significance.

A second criterion in statistics is to look for the sign of the coefficient: is it positive or negative? A negative sign means an inverse relationship; one variable is increasing, while the second variable is decreasing. A positive coefficient means that both variables are increasing (or decreasing) together. In addition, the signs for the park area variables have to be interpreted in relation to the omitted category, Longs Peak. Thus, in the table above, Lily Lake visitors are less satisfied than Longs Peak visitors with park information and backcountry resources (negative coefficients), but they are more satisfied than Longs Peak visitors with frontcountry resources (positive coefficient). With respect to education, the negative coefficient in the table indicates that the more education someone has, the less satisfied is the visitor.

The effect of education, however, is not great for any of the three scales. **And this is the third criterion, the magnitude of the coefficient.** For example, those who have more education tend to be less satisfied with backcountry resources, but the difference is only .014 per year of education on the backcountry satisfaction scale, and only .011 on the frontcountry scale. By far the biggest effects on satisfaction come with area of the park, with Lily Lake visitors being substantially less satisfied on park information and backcountry resources than visitors to any other area. Wild Basin visitors are less satisfied with backcountry resources than are Longs Peak visitors, but not as dissatisfied as are Lily Lake visitors.

4.3.3. Age and Satisfaction

The regression of satisfaction scales onto age is presented in Table 6 below.

Table 6. Regression of Satisfaction Scales onto Age of Visitor, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Age	.002	.000	-.001
Lily Lake	-.271 ***	.263 ***	-.408 ***
Wild Basin	.013	.098 #	-.172 ***

These regression values tell us first that a visitor's age is ***not*** significantly related to satisfaction with park information, frontcountry resources, or backcountry resources. None of the age coefficients for any one of the three resource scales is statistically significant once the area of the park is controlled. The effects of park area are very similar to those in the preceding table, and indeed quite similar to the differences in means observed in Tables 3 and 4. Since neither education nor age has a strong effect on any of the satisfaction scales, controlling for these demographic characteristics has little impact on the relative satisfaction levels across park areas.

4.3.4. Race, Ethnicity, and Satisfaction

Table 7 presents the influence of the visitor's race on satisfaction levels. Although only 4 percent of the park's visitors were not white, the race variable nonetheless was statistically significant for two of the three resources scales (park information and backcountry resources). For all three scales, whites were more satisfied than were non-whites. The effect of race is small, but it is generally consistent across all three resource scales, controlling for area of the park.

Table 7. Regression of Satisfaction Scales onto Race of Visitor, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Race (white)	.111 *	.071 #	.101 *
Lily Lake	-.249 ***	.262 ***	-.413 ***
Wild Basin	.027	.048 #	-.175 ***

We also created a variable called ethnicity and examined ethnicity with each of the seventeen satisfaction items. The variable ethnicity was created by combining the visitors who responded "yes" to being of Hispanic origin and those who were not white on the race variable. This yielded 89 respondents, or 7% of the sample. Given the ethnic and racial make-up of Colorado, which is now 26.7% minority, the 7% figure in this survey is itself of social interest. In talking with the field manager and several of the interviewers after the survey work was completed, there is no indication that the interviewers missed or were turned down by minorities at any greater rate than for non-minority visitors.

The 2001 report on a national telephone survey conducted by Northern Arizona University (see http://www1.nature.nps.gov/socialscience/products.cfm#Comprehensive_Survey) for the National Park Service found that about 14% of visitors to national parks in the preceding two years were of a minority ethnic and/or racial heritage. And those researchers reported that non-whites and Hispanics felt more uncomfortable in the parks than whites.

Among those minority individuals who had not visited the parks in the past two years, a considerable number reported that they really were not certain what there is to do in the national parks, and that they felt uncomfortable being in a place where there were not many other people like themselves.

Because of the importance of race and ethnicity in American history, we analyzed the ethnicity variable with each of the seventeen original satisfaction items. We found that four of the seventeen items yielded a significant ethnicity effect (at the $p<.05$). Those items were scenic road pull-offs (with which minorities were more satisfied), as well as restrooms, park literature, and ranger programs (on all three of which, minorities were less satisfied).

While there is no obvious mechanism linking any of these items to ethnicity, we could hazard a guess that the two information variables (ranger programs and park literature) in some way involve a type of park story or record. If so, then Hispanics and African Americans as well as Asians and American Indians who visit the park may want different information in the park record. They may want ranger programs that focus on social and historical markers for the park such as: When did the first black person enter the park area? Where did Native Americans typically cross the area that becomes the park? Did any Asians work in any of the mines or in any of the early businesses in Estes or Granby, etc.? What park terms come from Native American languages, etc.? These questions are only suggestive since the survey did not ask about these particular issues directly.

4.3.5. Gender and Satisfaction

Table 8 presents the results of the gender analysis. Similar to the 2001 report just cited, this study found no gender effect. This means that males and females were similarly satisfied or dissatisfied with park resources, controlling for area of the park.

Table 8. Regression of Satisfaction Scales onto Gender of Visitor, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Gender	.048	.026	.013
Lily Lake	-.263 ***	.256 ***	-.418 ***
Wild Basin	.015	.042	-.179 ***

4.3.6. Previous Visits and Satisfaction

Table 9 presents the results relating the number of previous trips to the park to satisfaction with park resources. As with the gender analysis, there was no significant effect from number of trips on satisfaction once area of the park was controlled.

Table 9. Regression of Satisfaction Scales onto # of Trips of Visitor, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
# of trips	.000	.000	.000
Lily Lake	-.249 ***	.263 ***	-.415 ***
Wild Basin	.028	.049 #	-.177 ***

4.3.7. State of Residence and Satisfaction

Table 10 provides an analysis of state of residence and satisfaction.

Table 10. Regression of Satisfaction Scales onto Colorado vs. Non-Colorado Visitors, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Colorado resident	.072 **	.040 #	.021
Lily Lake	-.255 ***	.259 ***	-.416 ***
Wild Basin	.026	.047 #	-.176 ***

We collapsed all states but Colorado into one category, so that the state analysis is for Coloradans versus all others. Coloradans make up most of the park volunteers, are the park's physical neighbors, and use park services more than others.

The data in Table 10 suggest that Coloradans are somewhat more satisfied with the park resources than are non-Coloradans, but the effect is only statistically significant for the park info scale. This may indicate that those individuals who live near the park gather information about RMNP over time from local papers, or from more visits to the park. Hence, those individuals who are not from Colorado are at somewhat of a disadvantage in obtaining information about different areas of the park. While this effect is only statistically significant for park info, it is nonetheless in the positive direction for frontcountry and backcountry resources as well. Indeed, for the frontcountry items, the effect of state is nearly statistically significant at p=.064.

4.3.8. Fee Status and Satisfaction

Table 11 presents the relationship between paying an entrance fee and satisfaction. Those individuals who paid a fee (NPS pass, Golden Eagle Passport, RMNP pass, one-day pass, etc.) are more satisfied than those who did not pay, once area of the park is controlled. The greatest effect is on the park info scale, which is statistically significant with more than 99% confidence. The effect is also significant at the 95% confidence level for the backcountry scale. The effect is still positive, but weak and non-significant, for the Frontcountry Park Scale.

Table 11. Regression of Satisfaction Scales onto Paid an Entrance Fee, Controlling for Area of the Park

REGRESSION MODEL	PARK INFO SCALE	FRONTCOUNTRY SCALE	BACKCOUNTRY SCALE
Paid fee	.084 **	.002	.025 *
Lily Lake	-.251 ***	.261 ***	-.415 ***
Wild Basin	-.007	.046	-.186 ***

Note that the causal order of this relationship is ambiguous. Are visitors who feel more positively toward the national parks more likely to pay for entrance (or buy a pass)? Or does paying for entry lead people to value the park experience more positively? These questions are important for park managers to consider when setting and enforcing park fees. If the former is the case, then higher or more rigidly enforced entrance fees would likely result in reduced visitation by those who are not predisposed to view national parks favorably. But on the other hand, if the latter is the case, then a stricter fee structure could increase satisfaction without reducing visitation.

4.4. Summary of Results from the Satisfaction Scales

First, there is high overall satisfaction with virtually all the items that were investigated in this study. Partial exceptions include the availability of water, the availability of park exhibits and information, and the distance to the campground from parking areas in Wild Basin, but even for these items, mean satisfaction is well above the half-way point on a 5-point range (see Table 1).

Second, although there is high overall satisfaction, averaging across all three areas on the Highway 7 corridor masks some noteworthy differences. When the satisfaction questions are compared across the three areas of the park, we find that there are significant differences for all questions except for those regarding exhibits and scenic pull-offs (Table 2). This means that satisfaction levels differ importantly by area of the park.

Third, the satisfaction items can be grouped into three broad categories: park information, frontcountry resources, and backcountry resources (Table 3).

Fourth, when we examine satisfaction with park resources by the general categories of park information, frontcountry resources, and backcountry resources, we find the following: 1) visitors to Wild Basin and Longs Peak are more satisfied with park information than visitors to Lily Lake, 2) visitors to Lily Lake are more satisfied with the frontcountry resources than the visitors to the Wild Basin or Longs, and 3) visitors to Longs Peak are more satisfied with the backcountry resources than the visitors to Lily Lake or Wild Basin (Table 4).

Finally, when we examine the demographic characteristics of park visitors with satisfaction items by area of the park, the most notable findings are:

- age, gender, and number of previous trips to the park haves no effect on satisfaction (Tables 6, 8, and 9)
- education has a slight negative effect on satisfaction (Table 5)
- white visitors are significantly more satisfied than non-whites (Table 7)
- Colorado residents are significantly more satisfied than non-Coloradans (Table 10)
- paying a fee is positively related to satisfaction (Table 11)

5. Park Resource Management Attitudes

5.1 Park Resource Management Data

Knowing the levels of satisfaction with specific park resources is only part of the information needed for park management. Indeed, a visitor's dissatisfaction with a specific resource does not always translate into a desire to change that resource, much less to an acknowledgement that resource improvement will take time and money.

We asked a series of questions on park resource management immediately after the satisfaction items. These park management questions reflected the same concerns as the questions on satisfaction with park resources.

The mean values in Table 12 could theoretically vary from 2 to 4, with four being "add more" or some variant of that expression, three being "leave as is," and two being "reduce." There were virtually no responses for "reduce" a park resource. Therefore, we took a simple average of the responses to indicate the visitors' feelings as to whether a resource should be left as is or improved by addition or greater access. Since there is essentially only a difference of 1 between the two response categories, the mean values will always fall between 3 and 4, and the decimal fraction will indicate the approximate proportion who favor increasing or adding to a resource. (See also the open-ended comments in Appendix E.)

Table 12. Park Management Questions, with Number of Respondents, Mean, Median, and Minimum and Maximum Values (all three areas of the Highway 7 corridor)

Survey Questions	N		Mean	Median	Range	
	Valid	Missing			Minimum	Maximum
How would you suggest that the Rocky Mountain National Park service think about managing its resources in the future? Would you add more (=4), leave as is (=3), reduce or eliminate (=2)?						
…parking lot facilities?	1237	27*	3.41	3.00	2	4
…scenic pull-offs?	1264	0	3.20	3.00	2	4
…hiking trails?	1264	0	3.15	3.00	2	4
…number of campgrounds?	1264	0	3.20	3.00	2	4
…number of campsites in each campground?	1264	0	3.19	3.00	2	4
…rest and water facilities?	1264	0	3.32	3.00	2	4
…rangers to direct visitors to underused areas of the park?	1263	1	3.27	3.00	2	4
…encourage more people to come to the park?	1263	1	3.28	3.00	2	4
…access for the disabled?	1264	0	3.44	3.00	2	4
…interpretive programs?	1264	0	3.40	3.00	2	4
…park staff to answer my questions?	1263	1	3.22	3.00	2	4
…number of picnic areas?	1263	1	3.17	3.00	2	4
…educational exhibits/signs?	1264	0	3.32	3.00	2	4

* The number of missing cases is high on this item because some climbers who were dropped off, and therefore did not use a parking lot, declined to answer the item.

The means in Table 12 therefore vary from 3 to 4, and a mean value of 3.30 or higher (highlighted in red in the table) suggests that at least 30% of the respondents favor adding to a resource. As suggested by the responses in Table 12, 30% or more of the visitors to the

Highway 7 corridor during the 2004-2005 interviewing time believed that water, interpretive programs, education exhibits, access for disabled, and parking should be increased.

Access for the disabled and parking space received the highest mean scores of 3.44 and 3.41, meaning that about 44% of the visitors believe that access for the disabled should be increased, and similarly 41% believe that parking space should be augmented. Visitors apparently do not believe that they need more trails, picnic areas, scenic pull-offs, or campgrounds (although the Longs Peak visitors do want more campsites in the campground).

If we compare the results here with the satisfaction results in Table 1, we find that drinking water and exhibits are both indicated as items of dissatisfaction and items that the visitors believe should be increased. Another rather low item in Table 1 was parking space for cars, which at 4.05 in Table 1 just missed the cut-off of less than 4.0. In Table 12, parking lot facilities did make the cut-off for park management improvements with a mean of 3.41.

As with the analysis of satisfaction items, we next break the overall park management attitudes by area of the Highway 7 corridor. And here too, there are statistically significant differences by area of the park on most items (Table 13). However, when viewed in relation to the cut-off value of 3.3 or greater, we find considerable agreement across the three areas of the Highway 7 corridor on what the visitors would change. Parking lot facilities and interpretive programs are highly rated by visitors for change or increase, as all three areas have mean scores on these questions of 3.3 or higher. Rest and water facilities scored high in Lily Lake and Wild Basin, and access for the disabled scored high in Wild Basin and Longs Peak.

Visitors to Longs Peak believe that the park should manage its resources so as to add more campsites. The Lily Lake visitors were alone by a considerable margin in suggesting that the park should encourage more people to visit, as almost 60% of the visitors surveyed at Lily Lake agreed to this suggestion. The visitors at Wild Basin and Longs Peak did not support the idea of increasing visitors to the park, as only 5% of the Wild Basin visitors and about 18% of the Longs Peak visitors suggested encouraging that. In fact, the Longs Peak visitors had the greatest number of responses (8) who suggested that the number of visitors be decreased.

Table 13. Analysis of Variance of Mean Values on Park Management Questions, Across the Three Areas of the Park

Survey Questions	Lily Lake (437)	Wild Basin (413)	Longs Peak (412)	Overall (1262)	F	significance level
How would you suggest that the Rocky Mountain National Park service think about managing its resources in the future? Would you add more (=4), leave as is (=3), reduce or eliminate (=2)?						
…parking lot facilities?	3.37	3.37	3.49	3.4	6.32	.002
…scenic pull-offs?	3.26	3.15	3.19	3.2	9.16	.000
…hiking trails?	3.17	3.11	3.16	3.1	2.66	.070
…number of campgrounds?	3.18	3.18	3.25	3.2	5.23	.005
…number of campsites in each campground?	3.18	3.07	3.33	3.2	5.17	.005
…rest and water facilities?	3.34	3.36	3.26	3.3	3.52	.030
…rangers to direct visitors to underused areas of the park?	3.18	3.37	3.27	3.3	5.86	.003
…encourage more people to come to the park?	3.59	3.05	3.18	3.3	45.66	.000
…access for the disabled?	3.25	3.65	3.42	3.4	16.53	.000
…interpretive programs?	3.35	3.40	3.44	3.4	4.14	.036
…park staff to answer my questions?	3.29	3.19	3.17	3.2	12.83	.000
…number of picnic areas?	3.14	3.10	3.14	3.2	3.05	.048
…educational exhibits/signs?	3.41	3.26	3.29	3.3	14.38	.000

5.2. Park Fees

Finally, we asked visitors to the park, "To support these changes and improvements would you favor an increase of $3 for park entrance fees? ... for campground fees?" The responses to these questions are in Table 14.

Table 14. Mean Levels on Fee Questions by Area of the Park

Questions To support these changes or improvements, would you favor… Increase (=4), leave as is (=3), reduce or eliminate (=2)?	combined	Lily Lake	Wild Basin	Longs Peak
…increasing entrance fees by $3?	3.55	3.52	3.53	3.59
…increasing camping fees by $3?	3.49	3.52	3.50	3.44

The overall response to the increased fee questions was that about half of the visitors favored increasing entrance and campground fees to help support improvements to the park. Approximately 55% of all the visitors supported increasing entrance fees by $3, while almost 60% of the visitors to the Longs Peak area favored that increase. About half the visitors favored increasing camping fees by $3, with the lowest mean response at Longs Peak.

The results of these questions must be offered with the caveat that we did not use an econometric model giving a lowest and highest estimate of increased fees (a bid vector). Therefore, we cannot state that the visitors would favor an increase of only $3 since we have no information on other increases they might favor. What these responses suggest is that the visitors recognize that there will be some costs to improving park resources, and that they are willing to pay some amount for those added improvements.

To link this part of the study with earlier parts, we examined the relationship between the three satisfaction scales and willingness to increase park entrance fees (using both ordinary least squares regression and logistic regression models). In brief, with area of the park controlled, there are significant statistical effects relating satisfaction with willingness to increase fees. Those visitors who are more satisfied were more likely to agree to increase funding for park entrance, regardless of the area along the Highway 7 corridor. This finding reflects a dilemma faced by park managers; park resources need to be available to increase the satisfaction of park visitors, but managers must secure funding to improve or increase park resources, and local funding is linked to those visitors who are more satisfied.

5.3. Summary of Park Management Questions

The attitudes of visitors with respect to park management mirror to a large extent the satisfaction with specific park resources. Parking lot facilities, rest and water facilities, access for the disabled, interpretive programs, and education exhibits/signs were all items that scored above the respective cut-offs and were thus highlighted in our discussions. While the cut-off levels are to some extent arbitrary, the value 3.30 suggests that at least 30% of the respondents believe these items should receive more space, attention, or time.

The analysis of park management attitudes by area of the Highway 7 corridor also reveals some notable idiosyncratic variations, such as the call for an increase of campsites for Longs Peak visitors, and increasing exhibits and information for the Lily Lake visitors.

But an item that suggests a great deal of support for RMNP is the fact that over 50% of the visitors said that they would support increasing entrance fees to help improve park resources. Similar support (just under 50%) was found for increasing camping fees. These findings are important because they signal the support of visitors and their perception of funding difficulties in the national parks.

6. The Park Experience

6.1. Park Experience Data

One final set of data that we believe is important to report and discuss concerns the characteristics of the average park visit. We report these data for all park visitors together in Table 15, and separately for each area along the Highway 7 corridor in Tables 16-18. The survey questions included in this section come from various parts of the instrument, and taken together represent what might be called the activity level of the visitors.

The median number of trips to RMNP was 4, with the mean a hefty 15.5. This is due to the few individuals who reported up to 600 prior visits to the park over the past two years. The average visit to the park for individuals who stayed for only one day is 5.8 hours. For those people staying at least one full day, the average time in the park is 5.2 days, while the median number of days in the park is 3.0.

The average time spent hiking or climbing (or, in winter, skiing or snowshoeing) was about 5.4 hours, and the average distance covered was about 6.9 miles. This last variable is widely dispersed however, from .1 miles to 90 miles.

The number of people encountered on the trails varied from none to 1000, and the median value was 25.

Several questions about feelings were also included in the survey to tap the visitors' senses about their park experience. While the large majority of visitors reported that they did not feel at all crowded (median of 1), this attitude varied considerably by location along the Highway 7 corridor. Indeed, Lily Lake visitors did not notice any crowding at all, which may be why they were the only visitors to agree that the park service should encourage more people to visit. But the responses at Wild Basin particularly, and at Longs Peak, suggest that visitors feel a need for more solitude.

And with respect to the experiences of sight, sound, and smell, most visitors reported that they came to the park with the expectation that they would notice the smells and sounds of nature. Thus, the importance of the soundscape and scent of nature to visitors should not be underestimated. Indeed, most visitors reported that they were expecting to sense nature through smell and sound, but many still said that they were surprised by the scents and sounds, and especially by the touch of nature, such as touching the trunk of a tree or feeling the rush of stream water. This further suggests the importance of such experiences to the visitors.

Putting the information from distance hiked and time spent at the site together with satisfaction with park resources, we find that those who spent more time in the park were likely to be more satisfied with the park resources. Lily Lake visitors hiked the least distance and stayed the least time on average, but we know from earlier analyses that Lily Lake visitors also tended to have lower satisfaction rates with park information, backcountry toilets, pedestrian safety, availability of water, and availability of park personnel. In this case,

it seems likely that a causal order could be argued that Lily Lake visitors were less satisfied with park resources and hence stayed at this site a shorter period of time due to the lack of resources they had expected to be available.

Table 15. Characteristics of the Park Visit, with Number of Respondents, Mean, Median, and Minimum and Maximum Values (all three areas of the Highway 7 corridor)

Survey Questions	N		Mean	Median	Range	
	Valid	Missing			Minimum	Maximum
Including this trip, how many times have you visited RMNP in the past two years?	1252	12	15.53	4.00	1	600
On this trip, how long do you expect your current visit to the park to last (hours, if less than one day)?	600	664	5.83	5.00	1.00	24.0
On this trip, how long do you expect your current visit to the park to last (days, if one or more)?	649	615	5.20	3.00	0	150.0
Could you estimate the time you spent hiking/skiing/snowshoeing/climbing (in hours)? (if at all)	1180	84	5.39	4.00	.20	80.0
What was the total distance you covered (in miles)? (if any)	1177	87	6.88	6.00	.10	90.0
About how many people did you encounter on the trail…? (if applicable)	1171	93	56	25	0	1000
How crowded did you feel while hiking etc. ….? (if applicable)	1192	72	2.40 (not very to somewhat)	1.00	1	7
When you came to the park, did you come with the expectation that you would notice the smells of nature?	1239	25	1.57 (yes, and somewhat surprised)	1.00	1	5
When you came to the park, did you come to the park with the expectation that you would notice the sounds of nature?	1253	11	1.27 (yes, and somewhat surprised)	1.00	1	5
When you came to the park did you come with the expectation that you might dip your hands or feet into a stream…?	1254	10	2.57 (hadn't really thought about)	3.00	1	6

Table 16. Lily Lake: Characteristics of the Park Visit, with Number of Respondent, Mean, Median, and Minimum and Maximum Values

Survey Questions	N		Mean	Median	Range	
	Valid	Missing			Minimum	Maximum
Including this trip, how many times have you visited RMNP in the past two years?	429	8	15.81	4.00	1	500
On this trip, how long do you expect your current visit to the park to last (hours, if less than one day)?	172	265	3.52	3.00	1.00	12.0
On this trip, how long do you expect your current visit to the park to last (days, if one or more)?	253	184	6.28	4.00	1.0	120.0
Could you estimate the time you spent hiking/skiing/snowshoeing/climbing (in hours)? (if at all)	375	62	1.83	1.00	.20	30.0
What was the total distance you covered (in miles)? (if any)	373	64	2.22	1.00	.10	30.0
About how many people did you encounter on the trail…? (if applicable)	376	61	13.80	11.00	0	100
How crowded did you feel while hiking, etc. ….? (if applicable)	380	57	1.55 (not very to somewhat)	1.00	1	7
When you came to the park, did you come with the expectation that you would notice the smells of nature?	437	0	1.77 (yes, and somewhat surprised)	1.00	1	5
When you came to the park, did you come to the park with the expectation that you would notice the sounds of nature?	426	11	1.30 (yes, and somewhat surprised)	1.00	1	5
When you came to the park did you come with the expectation that you might dip your hands or feet into a stream…?	418	19	2.67 (hadn't really thought about it)	2.00	1	6

Table 17. Wild Basin: Characteristics of the Park Visit, with Number of Respondents, Mean, Median, and Minimum and Maximum Values

Survey Questions	N		Mean	Median	Range	
	Valid	Missing			Minimum	Maximum
Including this trip, how many times have you visited RMNP in the past two years?	409	4	19	5.00	1	600
On this trip, how long do you expect your current visit to the park to last (hours,if less than one day)?	199	214	4.7	4.00	1.00	12.00
On this trip, how long do you expect your current visit to the park to last (days, if one or more)?	210	203	5.0	3.000	1.0	150.0
Could you estimate the time you spent hiking/skiing/snowshoeing/ climbing (in hours)? (if at all)	411	2	8.03	4.00	.50	80.0
What was the total distance you covered (in miles)? (if any)	411	2	9.38	6.00	.20	51.0
About how many people did you encounter on the trail…? (if applicable)	411	2	44	35	0	300
How crowded did you feel while hiking, etc. ….? (if applicable)	411	2	4.44 (I felt crowded)	2.00	1	7
When you came to the park, did you come with the expectation that you would notice the smells of nature?	411	2	1.52 (yes, and I was still surprised)	1.00	1	5
When you came to the park, did you come to the park with the expectation that you would notice the sounds of nature?	411	2	1.23 (yes, and I was still surprised)	1.00	1	5
When you came to the park did you come with the expectation that you might dip your hands or feet into a stream…?	410	3	2.74 (hadn't really thought about it)	3.00	1	6

Table 18. Longs Peak: Characteristics of the Park Visit, with Number of Respondents, Mean, Median, and Minimum and Maximum Values

Survey Questions	N		Mean	Median	Minimum	Maximum
	Valid	Missing				
Including this trip, how many times have you visited RMNP in the past two years?	414	0	12	3.00	1	450
On this trip, how long do you expect your current visit to the park to last (hours, if less than one day)?	229	185	8.5	9.0	1.00	24.0
On this trip, how long do you expect your current visit to the park to last (days, if one or more)?	186	228	4.25	3.0	.0	48.0
Could you estimate the time you spent hiking/skiing/snowshoeing/ climbing (in hours)? (if at all)	410	4	9.7	8.0	.50	72.0
What was the total distance you covered (in miles)? (if any)	410	4	12	12.0	.25	90
About how many people did you encounter on the trail…? (if applicable)	410	4	109	50	0	1000
How crowded did you feel while hiking, etc. ...? (if applicable)	410	4	3.25 (pretty crowded)	3.00	1	7
When you came to the park, did you come with the expectation that you would notice the smells of nature?	408	6	1.92 (yes, and I was still surprised)	1.00	1	5
When you came to the park, did you come to the park with the expectation that you would notice the sounds of nature?	405	9	1.46 (yes, and I was still surprised)	1.00	1	5
When you came to the park did you come with the expectation that you might dip your hands or feet into a stream…?	408	6	2.81 (hadn't really thought about it)	3.00	1	6

7. Conclusion

The comparisons of visitor responses by area of the park presented in this study should give managers considerable information for planning purposes. The very high level of cooperation to the survey by park visitors suggests that visitors hope park managers will value their concerns. The consistency between satisfaction levels and opinions about the management of park resources suggests a high reliability in the findings of this study. The park experience data provide managers with the outlines of how long and how extensive the park experience is for visitors.

Appendix A. Questionnaires

Appendix B. Sampling Notes for Volunteers

For Rocky Mountain National Park – Visitor Experience Survey in the Highway 7 Corridor, Wild Basin and Lily Lake 2004–2005

Surveys are often the most efficient and simplest method to obtain information from human respondents in the shortest amount of time. Organizations often use surveys to assess client satisfaction with services. The Rocky Mountain National Park administration has decided that it needs information regarding visitor satisfaction with park services in order to help prioritize its future allocation of resources, and the direction of the development of more visitor services.

Visitor experience surveys will be taken in three distinct areas of RMNP along the Highway 7 corridor. Each area has its own attractions and its own problems with development and use. The 14 minutes or less (based on pre-testing) we expect that this interview to take with RMNP visitors should not burden the average visitor to the park.

Respondent universe: The respondent universe is all adult (18+ years of age) visitors to RMNP, Highway 7 corridor, August 1, 2004 - June 30, 2005. The interviewing is spread over a large time frame to insure different park activities during different seasons of the year.

Sampling plan/procedures: Sampling for this project includes sampling by season, day of the week, time of day, place, gender, and the nth party to pass a certain point. We expect to contact approximately 2300 visitors to obtain a minimum number of 1951 responses. However, based on pre-testing response rates, we expect 2100 completed surveys, which will provide an adequate number of respondents in the case of missing or bad data (91.3% response rate). This will yield a 95% confidence level. All visitors to the three areas of the park (Wild Basin, Longs Peak, and Lily Lake) will have an equal opportunity to be chosen within the stratified random sampling frame.

Since visitors to RMNP are greatest during the summer months and early fall, we shall attempt a heavy sampling during August, September, and October, obtaining approximately 30 interviews in each location during each of the next fourteen weeks, for a total of 420 at each site by the end of October. For the rest of the year, we will conduct approximately 40 interviews per month at each site, although knowing the ebb and flow of activities in the park, there will be more interviewing in October, and then in January, February and March.

We will employ a multistage sampling frame, sampling by weekends versus weekdays (25% of the sample each on Saturday and Sunday, 10% on each of the weekdays); sampling by time of day divided into three groups (before noon, 12 - 3PM, and after 3 PM).

Interviewers will be stationed at the three areas as follows: for Wild Basin, one mile past the ranger entry station at the main parking area at the trailhead to Blue Bird and Thunder Lakes; for Longs Peak, at the trailhead to Longs Peak trail; and for Lily Lake, at the parking lot at the lake across the highway. Interviewers should attempt to contact every fourth party which passes during the summer surveying time (August, September, and October), alternating between male and female when possible, coming out or at the end of their activities. Upon completing an interview, the counter begins again, so that the fourth party is sampled after a completed interview. At other times of the year, the interviewers should attempt to contact every third party that passes.

Finally, every two weeks, checks will be made to assure that the sampling procedure is working with respect to gender, percent completed, and refusals at each site. This will help to minimize response bias.

Instrument administration: The surveys will be administered by trained volunteers at RMNP. The surveys will be given in the open air, and all precautions will be taken to assure the safety and well-being of the interviewers. Interviewers will be instructed to seek shelter at the beginning of any thunderstorm, and to take reasonable precautions with respect to car traffic in the parking lots.

Expected response rate/confidence levels: Based on pre-tests at all three sites, the response rate will be over 90% as visitors seemed to be genuinely interested in assisting in this research.

Strategies for dealing with potential non-response bias: Attempt records will be kept to match non-respondents with respondents based on gender, number of people in party, site, and time of day.

Return of completed surveys: Completed surveys and attempt sheets must be returned to the Beaver Meadows offices as promptly as possible. Pre-addressed mailing envelopes will be provided at each site. These envelopes are addressed to the attention of: Cheri Yost, Research Volunteer Coordinator, McGraw Ranch. This is important during the summer months as the number of completed surveys becomes large, and the researchers need time to enter the survey data into a machine data file. During the winter months, two or three completed surveys may become easily misplaced, as a small number of surveys may be lost in other personal papers. So please return the completed surveys as soon as possible.

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Appendix C. Demographic Characteristics

We present here the percentage distributions for the demographic characteristics of the sample of visitors to Rocky Mountain National Park. The data are for the sample from October 2004 to October 2005.

Table 19. Education Level Distribution by Highway 7 Area

Education Level	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
8th grade or less	3	0	2	5
	.7%	.0%	.5%	.4%
9th – 11th grades	1	1	2	4
	.2%	.2%	.5%	.3%
High School diploma	26	18	23	67
	6.1%	4.7%	5.8%	5.5%
Some college or technical school	81	70	82	233
	18.9%	17.1%	20.8%	18.9%
College degree	145	128	135	408
	33.8%	32.2%	34.3%	33.4%
Some graduate school	37	39	28	104
	8.6%	9.6%	7.1%	8.5%
Graduate school degree	136	148	122	406
	36.2%	31.0%	33.0%	100.0%
Total	429	406	394	1227
	100.0%	100.0%	100.0%	100.0%

As we might expect, there is little difference in education among the three areas of the Highway 7 corridor. The Lily Lake area has a slightly more educated group of visitors than either Wild Basin or Longs Peak, but we might expect that since Lily Lake visitors tend to be a little older (see Table 21), and would therefore have completed all their schooling.

Table 20. Age Distribution of Visitors by Highway 7 Area

Age Group	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
less than 20 years	8	7	13	28
	1.9%	1.9%	3.3%	2.3%
20-29	40	56	111	207
	9.3%	13.7%	28.2%	16.8%
30-39	52	77	105	234
	12.1%	18.2%	26.6%	18.8%
40-49	100	104	78	282
	23.3%	25.3%	19.8%	22.9%
50-59	107	106	59	272
	24.9%	26.0%	15.0%	22.2%
60-69	88	42	25	155
	20.5%	11.1%	6.3%	12.8%
70+	34	16	3	53
	7.9%	3.8%	.8%	4.3%
Total	429	408	394	1231

The distribution of visitors by age is what we might expect knowing the terrain and appeal of 14-footers for younger visitors. The Longs Peak age distribution is decidedly younger than the age distribution of visitors to either Lily Lake or the Wild Basin area. Lily Lake has the oldest distribution of visitors compared to Wild Basin and Longs Peak.

Table 21. Race of Visitors by Highway 7 Area

Race	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
American Indian or Alaskan	5	4	3	12
	1.2%	1.0%	.8%	1.0%
Asian	7	7	12	26
	1.7%	1.9%	3.1%	2.2%
Black or African American	3	3	3	9
	.7%	.7%	.8%	.7%
Native Hawaiian or other Pacific Islander	2	1	0	3
	.5%	.2%	.0%	.2%
White	405	391	372	1168
	96.0%	95.9%	95.4%	95.8%
Total	422	406	390	1218
	100.0%	100.0%	100.0%	100.0%

Whites are such a predominant presence as visitors in the park that only 4 to 5 percent of the visitors are of any other race.

Similarly, when a comparison is made by Hispanic and non-Hispanic visitors, we find very few visitors who would identify themselves as being of Hispanic descent.

Table 22. Hispanic Heritage of Visitors by Highway 7 Area

Hispanic or Latino (a)	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
Hispanic	12	8	5	25
	3.1%	1.9%	1.3%	2.1%
neither Hispanic nor Latino (a)	378	405	385	1172
	96.4%	98.1%	98.7%	97.7%
Total	390	413	390	1193
	100.0%	100.0%	100.0%	100.0%

With respect to gender, we found differences by area of the park. While males were 61.3% of the survey respondents overall, 77.2% of the visitors to Longs Peak were males.

Table 23. Gender of Visitors by Highway 7 Area

Gender	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
Male	222	227	304	753
	51.7%	56.2%	77.2%	61.3%
Female	207	175	90	472
	48.3%	43.8%	22.8%	38.7%
Total	429	402	394	1225
	100.0%	100.0%	100.0%	100.0%

We now turn to the last of the demographic variables, recoded for ease of presentation here. The first of these is "number of trips to the park."

Table 24. Number of Visits to RMNP by Highway Area

Number of trips to RMNP	Highway 7 Area			Total
	Lily Lake	Wild Basin	Longs Peak	
1	119	90	104	313
	27.4%	22.2%	26.3%	25.3%
2	65	65	56	186
	15.0%	16.1%	14.2%	15.1%
3-4	63	44	64	171
	14.5%	10.7%	16.2%	13.8%
5-6	45	41	50	136
	10.4%	10.0%	12.7%	11.0%
7-15	31	48	29	108
	7.2%	11.6%	7.4%	8.8%
16-24	34	49	48	131
	7.8%	11.9%	12.2%	10.6%
25+	77	69	44	190
	17.7%	17.3%	11.1%	15.5%
Total	434	406	395	1235
	100.0%	100.0%	100.0%	100.0%

The greatest numbers of survey respondents are first time visitors to the park, and they represent approximately one fourth of the visitors surveyed. Another 15% are visiting for the second time. Interestingly, over 17% of the visitors to both Lily Lake and Wild Basin have visited the park 25 or more times. However, only 11.1% of the visitors to Longs Peak have visited 25 or more times, suggesting that more hikers return than climbers.

The Wild Basin area with its proximity to the Denver, Boulder, and Ft. Collins may be attracting a good number of return urban visitors. The Lily Lake area is also easily accessible during the winter, and a number of winter visitors had a specific snowshoe walk they said the like to take immediately after a new snowfall.

Table 25. Colorado Residency by Highway 7 Area

Colorado v. non-Colorado	Highway 7 Areas			Total
	Lily Lake	Wild Basin	Longs Peak	
Colorado residents	239	262	240	741
	54.7%	60.9%	60.5%	58.6%
All others	198	168	157	523
	45.3%	39.1%	39.5%	41.4%
Total	437	430	397	1264
	100.0%	100.0%	100.0%	100.0%

Nearly 60% of the visitors to the park are Colorado residents; an even higher proportion would not have been surprising, given the park's location in the middle of the state. The Lily Lake area seems to have the highest percentage of visitors from out of state, suggesting that ease of access is important to those who have traveled long distances.

Finally, we asked visitors to the park whether they paid and how they paid for access to the park.

Table 26. Fee Paid Status by Highway 7 Area

Paid Fee for Visit	Highway 7 Area			Total
	Lily Lake	Wild Basin	Longs Peak	
Paid fee	213	346	190	749
	48.7%	86.5%	47.9%	61.3%
No fee paid	224	56	207	487
	51.3%	13.5%	52.1%	38.7%
Total	437	402	397	1236
	100.0%	100.0%	100.0%	100.0%

For this analysis we collapsed all manners of fee payment (RMNP pass, NPS pass, Golden Eagle, Golden Age or Golden Access, and daily-use fee) into one category to compare with those who said they paid no fee whatsoever. The overall totals suggest that 39% of the visitors to the Highway 7 area of RMNP pay no access or user fee. Those persons who visit the Wild Basin area are more likely to have purchased some type of visitor permit, while only half of the visitors to the Longs Peak and Lily Lake areas purchase a pass. This may well be because the Wild Basin area has a ranger entrance station monitored in the summer and fall.

To sum up, the visitors to the Highway 7 corridor vary by age and area visited, but education does not differ substantially across areas. More males tend to visit Longs Peak than females, and for no area were females in the majority. The park is visited almost exclusively by non-Hispanic white. Except at Wild Basin, a majority of visitors do not pay for entrance to the park. Finally, about 60% of the park visitors to the Highway 7 area are Coloradans, and about 40% of all visitors have visited the park only 1 or 2 times.

Appendix D. Satisfaction Open-Ended Comments

D.1. Lily Lake Surveys

did not like dirt parking lots
LL12-unhappy with parking lots, potential to back into someone
LL13-More available park personnel
LL4,11-display the difficulty of hikes
LL8-have water please
LL5-have a better sign indicating there is parking near the Twin Sisters trailhead
LL21-open visitor's center
LL19-visitor center not open
LL19-too dangerous, need more signage
LL5-parking lot too crowded
L4-update trail maps to include new trail to Estes Cone
LL21-Vistor's center needs to be open so info on wildflower hikes is available, plus no signage for it on Lily Lake side
LL21-open visitor center
LL21-visitor's center not open
LL8-have water
LL11-didn't know could drive to trailhead for Twin Sisters
LL5-Lily Lake needs more parking
LL20-blinking lights on road would be nice, also lower speed limit
LL4-need info on boating
LL11-need sign to say parking closer to Twin Sister trailhead and to say trailhead to Estes Cone
LL11-improve info (distances) on signs at trailhead
LL8-have water!
LL11-signs identifying various peaks
LL19-if its not open it doesn't matter
LL21-visitor center closed
LL11-have more info on altitudes, distances
LL8-would like drinking water available
LL8-need water
LL8-water
LL15-more info on history is needed
LL19-having the visitor center for Lily Lake across the road at Twin Sisters is confusing
LL19-visitor center for Lily Lake is confusing because is across from Lilly Lake; didn't realize it was a visitor center
LL8-water not available in winter
LL14-snow and ice
LL4-didn't pay attention-been here before
LL20-brighten taping on road; mark road to indicate pedestrian crossing coming up
LL8-add water
LL7-visitors' center closed

LL20-put more signs along road to indicate upcoming crossing
LL12-parking lot surface needs repair
LL7-new picnic tables
LL7-water availability
LL3-update the bathrooms LL15-increase educational signs
LL5-not enough, so have to cross street
LL19-Visitors' center closed, need brochures
LL12-enlarge parking lot-saw one back into another
LL8-have water
LL8-have water
LL8-need water
LL11-want signs showing mileage around lake from different start points and trails
LL20-wants pedestrians to have right of way and flashing light when pedestrians are crossing--apply state law
LL11-improve signage at Estes Cone Junction with Lily Lake
LL20-pedestrian activated traffic signal?
LL10-more pullouts down towards Estes Park
LL11-ignore possibilities--no map of area with all hiking possibilities
LL8-add safe drinking water (fountain)
LL16-add backcountry toilets at Estes Cone
LL11-need map with distances--need Estes Cone info, distance around lake
LL20-Add a flashing caution light
LL16-didn't see any
LL9,LL18,LL19,LL20, LL21-visitors' center is closed
LL20-real dangerous
LL8-water, have it available
LL20-aweful busy
LL6-spaced well
LL20-no place to safely walk across highway 7--crosswalk or something significant
LL5-on holiday
LL4-new signs
LL4-add space, reduce blind corners for safety
LL21-open visitors' center-more staffers and personnel
LL10-comming up Highway 7 not many and hard to access
LL11-trails could be better marked at "west side" intersection
LL7-benches are great
LL8-suggest have water
LL11-better trail marking (Twin Sisters trail)
LL9-visitors' center closed
LL19-better to have it on Lily Lake side
LL21-closed
LL11-trail badly marked on ridge of Lily Ridge-lost trail on a rocky slope. some markers needed
LL21-visitors' center closed
LL8-water spigot
LL8-add drinking water
LL9-add park literature in Spanish and other languages

LL5-more parking spaces
LL5-want more parking
LL8-add drinking water
LL5-more parking
LL8-would like drinking water
LL19-visitors' center should be opened
LL8-add drinking water
LL8-add drinking water
LL5-add more spaces
LL2-little fast
LL1-limited
LL11-need a sign on the south side of lake
LL20-risky2
LL11-signage re plant names
LL16-add some
LL19,20-visitors' center should be on lake side of road or have under/overpass
LL16-add sparingly
LL5-add more
LL21-open it
LL2-construction
LL5-add more
LL8-add some
LL19,20-put a stop sign in
LL19,20-just think the cars are going to fast, maybe a underpass or walkway
LL8-more water
LL14-maybe more rocks on trails should be removed to make it more accessible for people with disabilities
LL5-maybe more parking for everyone, else less for disabled when everything else is so full
LL8-no drinking water
LL9-didn't see any literature
LL8-more drinking water
LL8-should be some drinking water
LL20-pedestrian walkway--over or underpass
LL8-would like to have available drinking water
LL5-more parking
LL18,19-visitors' center closed
LL21-open the visitors' center
LL9-add more
LL20-needs better signage or flags
LL4-would like more historical/geological info
LL14-fishing pier needs repair
LL8,LL9-in visitors' center which is closed
LL15-need more signage on plants/geology--a self help guide
LL5-need more spaces
LL9-open Lily Lake visitors' center LL11-trail signs (i.e. for Estes Cone/Storm Pass) need to be placed more obviously
LL9-visitors' center closed

LL8-need a spigot if visitors' center is closed
LL23-visitors' center needs to be opened
LL10-need more pull-outs
LL13-need someone keeping an eye on "idiots" (who don't follow the rules)
LL5-with handicapped
LL20-install lights
LL8-need water-spigot
LL8-open visitors' center or provide spigot
LL7-could have pale/barbecue set-up
LL5-add more
LL5-have more parking
LL3-place to wash hands
LL5-more parking
LL5-announce availability of parking more clearly
LL19-move visitors' center
LL10-widen road near pull-out
LL5-more handicapped parking at listed sites
for people who have not been here it's confusing, most don't realize it's part of the Park. It's confusing
LL9-haven't noticed
LL11-update
LL8-nice if out here
LL20-warning pedestrian signs
LL23-open visitors' center
LL5-more parking
LL9-signs only in English
LL8-put some drinking water in
LL5-need more spaces or satellite parking
LL8-provide drinking water
LL5-expand the lot
LL8-put a drinking fountain or spigot in
LL8-put a drinking fountain in
LL8-have a big spout and no-freeze system, put them in waterproof boxes LL10-don't know how to improve
LL8-put a drinking fountain in
LL18-never had one
LL8-have a bubbler
LL23-keep it open on Sundays and the weekend
LL3-perfer to use visitors' center restrooms
LL23-not open
LL23-but not open
LL8-needs drinking water
LL18-unaware of it
LL8-didn't see water
LL3-outhouse at trailhead. we were not at the lake
LL3-doors need to operate for disabled
LL20-need more visible pedestrian safety help

LL20-pedestrian signal
LL5-popular spot, so more parking needs to be bigger
LL23-open visitors' center--publish fact it is closed
LL4-need more parking spaces
internet access is great
LL20-slower speeds when approaching and more crosswalks and sings to tell about pedestrians
LL8-couldn't find water
LL6-less picnic areas
LL8-add drinking water
LL8-no drinking water
the federal government should give more money to improve park
LL23-would like visitors' center open more often
LL10-concerned about safety on pull-outs
LL8-better signs for drinking water
LL5-offer more parking and maybe space lanes so people don't park in two spaces
LL18-more information about when they are held
LL20-errect sign to make sure people drive slowly
LL8-no drinking water
trail down the road disappears
LL5-more parking
LL8-need water
LL18-ranger programs not needed
LL8-want drinking water
LL8-make more water available
LL23-visitors' center is not open
LL5-add more parking LL8-add new drinking water station
LL6-need more picnic areas
LL8-add water fountain
LL19-move visitors' center to lake side
LL23-keep visitors' center open in both summer and winter
LL8-need a drinking fountain, extremely thirsty
LL8-add water fountains
LL21-closed
LL9-open visitors' center and provide multiple language information
LL8-open visitors' center
LL8,9-open visitors' center
LL8-open visitors' center
LL4-was no information, provide some

D.2. Wild Basin Surveys

speed entrance passes
not enough parking
more trail markers - didn't see any
2-way road
cleaner picnic areas
more disability accessible trails
improve road
people are sneaking dogs onto trails
stinky bathroom
mileage on maps needs to be checked
need water in winter too
update the exhibits
haven't seen any park personnel
more rangers
more ranger led programs
more ranger programs
don't like metal signs
need more rangers for trail help
need toilet at Bluebird Lake
never encountered park personnel ever
need more mile markers on trails
parking if you get here early
should be more programs
parking filled at 9:30 AM
like campsite regulations; add more
make more DA access to 1st waterfall
provide park shuttle
Ozuel Falls privy was very smelly; no paper
WB18-front country campsites
WB8-put pump near trailhead
WB13-didn't see any in 20 miles on the trails
WB2-needs to be graded
WB15-have educational
WB4-distances need to be shown
WB5-more parking closer to the trailhead
WB3-better restrooms and more
WB13-put some more Park Rangers on the trail
traffic
renew yearly pass through the mail
Shuttle service for day use
No Tourists
More shuttles and no horses
More Rangers in off season
More parking or shuttles
Shuttles for early morning ascents

More access roads; east inlet creek
More protection than development
Put in public vote
Too early in year to rate items
WB5-add more parking
WB5-have shuttle bus from entrance station
WB8-add a spigot water at the trailhead
WB3-add more restrooms
WB16-add shelters to the backcountry toilets for privacy
WB2-fix potholes
need more backcountry toilets
more water fountains
more handicapped spaces
should have pumped toilets before Labor Day
add more parking space
add drinking water
WB4-add info about mileage
WB13-add more water
WB2-pave roads, or at least fill in holes
WB2-pave road
WB17-add more trails
WB2-widen road
WB2-pave road
WB5-add more parking
WB5-get more parking
WB4-needs more topographical information
WB6-add more further up the trail WB8-put more water on the trail
WB20-more information about Ranger-led programs
elevation marks or maps-more info about trails
WB14-paved paths
WB5-offer a shuttle bus and make side trails if you have to park far away
WB5-could have more parking
WB8-bring a big thing of water
WB5-more parking, shuttle
WB5-more parking info before paying to come in
add more trail options
spend more money on parks in the US
WB16-more backcountry toilets, improve toilets
WB16-doesn't like any
WB8-make water available
WB16-near Calypso was bad
WB15-like more educational signs
WB8-want drinking water available
WB2-make them wider
WB5-needs more parking
WB16-have more scattered about
WB9-would like Japanese on literature

WB16-toilet at ouzel falls too primitive
WB2-don't know
WB8-put drinking water in lot
WB8-have drinking water in the parking lot
WB8-would like water available
WB6-more
WB8-needs some at trailhead
WB2-widen a little
WB8-noticed signs, so that's good
WB16-stinks
WB8-should have some in the parking lot
WB3-toilet needs to be pumped or moved
WB16-need one at Calypso
WB8-was looking for water since they had it here before
WB8-need water
WB4-enlarge parking
WB17-completely satisfied with number of trails, would like some trails connected to form a loop for a different return
WB2-widen the roads coming in
WB3-improve the smell
WB8-put a spigot in
WB-add interpretive stations, at pullouts for instance
access from lower Wild Basin parking
WB8-add water
permit parking
overnight horse trailer access
WB14-do not approve in every place, its ok keeping the places where they can go in good shape.
WB7-need new picnic tables
WB14-not easily accessible for disabled persons
info station after entrance
plowed to ranger station
ban alcohol in picnic areas
ice was dangerous in spots
didn't know water was available
programs at Aspen Glenn
backcountry toilets smelled bad
WB18-a few more up higher
WB8-have water at the trailhead
WB8-more drinking water
more snowshoeing
WB8-add drinking water WB18-add more campsites
WB7-replace old tables
WB10-didn't see any pull-outs
WB5-add more parking
WB5-need more parking spaces
add water fountains

add more campsites on east side
WB8-put some water in
WB9-more signs that tell you "you are here"
WB4-more educational/informational kiosks and signs
WB10-need more pull-outs
WB11-put mile markers near the pean
WB3-better toilets
WB9-use kilometers and miles, use international symbols and estimated time of arrival
WB2-smoother roads
WB4-like to see distances on the maps at the trailhead
WB10-add more
WB16-add more
WB9-make it more available
WB8-add
WB20-more Ranger-led programs (only one per week available)
add water and bathrooms
WB2-widen road
WB16-more toilets
need more information to make good hiking trail choices
WB12-no pedestrian walkways, not well marked

D.3. Longs Peak Surveys

need drinking water
mileage signs wrong -Estes Con
less smelly restrooms
more water
more disabled access
signs to Estes Cone are bad
more self service permit station
more smiles would be nice
mileage markers on trails
more signs on the road
need more emergency huts
open more huts in the winter
winter trail markers above tree line
signoff H7 ahead of turn
need pullout by the church
cars driving in campground all night
scenic pull-offs - trees too big
need to "know" to make camp reservations
missed Jim's Grove
more parking space
hiking miles to go signage
sign at Eugenia mine
increase distance from parking to campground
some bottlenecks on trails
signage on H7, need more
water fountain, not just spigot
Estes Cone needs signs - by waterfall
air dryers in restrooms
info on getting to TH from other city
more direction to Chasm Lake
shuttle service
trails could be smoother
too many cars along the road
add more parking space
more parking for high traffic areas
more parking
have a water spigot
drinking water at end of trail
expand parking
limit number of people
parking is smelly
regulate entrance into the area
shuttle bus
shuttle bus

a ramp up the curb
higher campsites for climbers
more frequent signs
too noisy last night
some soap in toilets
too tight from Keyhole to summit
#18-camping sites ++
put toilet by North inlet trail
more picnic areas
trail sign reflective material for night
more parking spaces
more water fountains
more parking space
more camp sites
more parking space
more parking space
more parking space
more parking space
more parking space
more parking space
more parking space
more parking space
more campsites
more parking space
accuracy on trail distances
ambiguity of parking along fence
elevation trail signs- each 1000' rise
history of longs peak at trailhead
stepping stones @ tree line & above
more developed trails
controlled parking
hand sanitizers in toilets
better shelter at higher elevations
more clear path to top of Estes Cone
more exhibits
more signs/mistook Peacock Pool for CL
need more exhibits
drainage areas should be marked
didn't see any toilet facilities
more parking spaces
greater enforcement of noise ordinance
add more drinking water
more parking spaces
not enough parking
water pipe not noticeable
need to add more water, campsites
more parking space needed

more parking space
more parking spaces
more parking
more parking
need more parking
more info on signs - elev. and mileage
need more parking and camping spaces
need more scenic pull-offs
more parking
more parking near trailhead
need more parking
add more trailhead parking
rough trails
LP5-should add more spaces
LP5-more parking
LP8-add more water, make it easier to find
LP5-add more parking
LP5-add parking or a shuttle
LP5-improve roadside parking
LP15-need more
LP5-more parking alternatives for overflow and or signage
add parking
LP5-add more space or institute a quota
more parking
happy there were backcountry toilets, but wish they were cleaner
more parking
add parking
more trails that converge
more interactive programs
more parking
more parking
LP3-remodel and add soap, clean it regularly
LP5-add parking
LP5-add parking
LP5-institute quota
LP5-add shuttle system
LP5-add parking
not enough parking
LP8-thought I saw one but wasn't drinking area
add more parking
LP9-Ranger Station should be open
LP4-needs a map
more mile markers
couldn't find water
LP8-add more drinking water
LP5-add parking
LP13-add more

not enough parking
parking
paid parking might control flow
shuttle service
more parking
more toilets and parking
add parking
LP5-arrived at 5am and only one parking spot
LP17-full
LP5-need lots more
LP5-more parking
should offer day pass
no more roads in the Park
expand parking
put a light near water
develop more trail loops
bigger toilet seats and ramps
another campground
maps of plants, animals signs, and geology
make backcountry toilet closer to stop
LP11-Chasm Lake confusing
LP4-mileage missing
LP16-not working well, don't get clean enough
more camping other than boulder field
campsite at trailhead
more parking and shuttle

Appendix E. Park Resource Management Open-Ended Comments

E.1. Lily Lake Surveys

LL35-put table by cabin
LL37-Taxes should cover facilities, no more fees
Would like more ranger led evening programs
LL23-open visitors center
LL23-open visitors center
LL37-increase weekly fee
LL29-more benches for elderly people
LL23-open Lily Lake visitors center
LL35-more trash barrels in picnic area on far side of lake
LL23-open Lily Lake Visitor Center
LL23-open visitor center
LL23-open visitor center
LL23-open visitor center
LL29-need water
LL23-open visitor center
LL29-have water
LL23-open visitor center
LL23-make sure its closing is noted in parks literature
LL23-open visitor center
LL23-open visitor center
LL23-open visitor center
LL29-have water
LL36-more educational signs
LL24-crossing path from Lily Lake to visitor's center to be paved and not muddy. Safety crossing should be marked for pedestrians. Lot to be paved
LL29-need water
LL34-need better campsite arrangements--reservations: proof of reservation
LL36-leave visitors' center open more months
LL23-very helpful visitor center
like Lily Lake how it is
LL26-add a few more trails
LL35-better access to picnic tables further in and have picnic tables not so exposed
LL28-water
LL28-have water
trail maps too hard to read
programs for children's amusement?
LL29-add drinking water
LL26-possible to clear away icy spots on trail
more entrance stations to collect fees
LL29-add water

LL37/36-it's ok to raise fees of non-Colorado residents
LL36-better signs for Twin Sisters trailhead--especially where to park
LL29-didn't see water
LL23-open it
LL23-but open it
LL23-open!
LL24-did like public transportation system at Bear Lake
LL31-get word out more
LL36-more info needed for small children-what can they do? other parks have it Yellowstone, Acadia
LL29-need water in summer
LL24-more parking needed in summer
LL25-add parking at Lily Mtn. trail head
LL31-no in high season
add more wood piers jutting into lake for views
LL29-restroom needed on northwest (far side) of lake
LL23-open please
keep development slow
give the Park more funding
LL32-good place
LL23-open it!
LL23-move location to lake side
LL23-open it!
preservation, maintain integrity
pay the rangers more, improve ranger's living facilities
more active marketing for donation to support park and its facilities
receive donations
LL25-more places to view beauty spots.
LL23-open it
LL23-open it
LL29-add water
LL23-keep open
LL23-open
LL23-open it
LL23-open it
no drilling for oil in the parks
LL23-open it
LL26-add trail to Lily Mountain
LL28-add tent only sites
LL23-open it
LL25-make more recognizable
LL23-open it
LL23-open visitors' center
LL28-add more picnic areas on the other side of Park (note: interviewing was on the lake side)
LL32-felt really strong about space for disabled persons
LL36-map to show what animals are in the area

LL38-once you've paid fee to enter park, don't increase additional fees such as camping
LL37-more volunteers
LL31-advertising to other parts of the country--package vacations
a better dumping station
LL23-open it
LL29-have drinking water available
LL30-expand the National Park Service and add more rangers because they are one of the best parts of the National Park System. I'm so impressed with the Ranger programs
LL23,29-open it
LL23-isn't open so don't know
LL37-if Park entrance fees go up, annual pass should be discounted or remain same--pushes incentive to buy annual pass
LL24-for camping especially
LL37,38-if you have to
LL23-open visitors' center
LL23-open it
extend no pets so there is more room for pets (whole park)
Bear Lake, eliminate cars and use clean shuttles--would be willing to pay more for this service
LL23-open visitors' center
LL23-open visitors' center!
for Lily Lake trail permit dogs
LL24-increase in summer
daily pass
make people pay to reserve and increase reservation fees because people make reservations and then don't show up
LL36-provide paper maps
give military money to the national parks, bring troops home
LL37-create daily pass for five or ten dollars
LL37-federal government needs to pay more and stop diminishing funds towards national parks
LL36-need signs that ID plants and animals
LL37-have a day pass available
LL37-increase fee for golden age passport
LL29-more water facilities
LL30-don't wait too long before closing an abused area of the park. alternate closing and opening areas to help with multiple trailing
LL37-daily park pass that is cheaper than weekly pass
reduce resources throughout
LL37-Colorado residents should get in free, to compensate people from out of state would pay more
LL34-open visitors' center
LL23-open visitors' center
LL23-open it
LL34-open visitors' center
LL37-lower fee for 1,2, and 3 day visits
LL32-more parking

relax fishing regulations
LL36-some signage not in best places
LL29-have drinking water
LL26-grading path to eliminate water
LL29-none available
LL29-more water
LL26-add to one going down to canyon
LL29-add more water
LL36-put more information at trail that leads to Moraine Park view
LL36-have signs/programs about the flood (1949) and the history of the lake
LL36-what peaks are in area, flora/fauna?
LL23-eliminate
LL37-increase by five dollars
LL26-extnd to top of knob to the northeast
LL30-at least one Ranger
LL24-more buses or maintain buses by Bear Lake
LL30-open center
LL29-needs water
LL24-add on Lily Lake side
LL36-ID peaks and ranges
LL23-open it
LL29-nearer to Twin Sisters
LL27-Rv ones closer to road
LL31-with more restrictions as to limit damage to Parks
LL38-only if improved
LL32-parking
higher fines for people messing it up
LL32-need more accessible trails for handicapped (but Lily Lake good)
LL24-rest of Park need more parking--Bear Lake no parking
LL32-parking for disabled
LL29-add water
LL25-widen scenic pull-offs
LL26-grade path to eliminate water puddles
LL29-more water
LL29-add more water
LL33-need something in winter on west side
LL29-no water
LL23-open visitors' center
LL38-increase for RV only, open tent sites up
LL34-increase staffing at peak times
more signs warning traffic about pedestrians
LL29-need water
LL36-how about signs to ID trees, flowers etc.
Hidden Valley no sign
Improve trail to Windcliff

E.2. Wild Basin Surveys

reduce the elk
raise entrance fees to reduce visitors
shuttle service to WB in the summer
in off season move ranger programs
improve trails & camping areas
signs should include elevation
good idea to have more park staff
no rangers is a problem
staff WB entrance to increase revenues
more trails means adding more parking
need brochures at info kiosks
handicap parking spaces not used
need more help with parking
getting crowded; don't encourage more
offer 1 day entrance for reduced rate
excellent programs for 3rd graders
WB24-add more at blue bird
fund raisers, donation boxes, sponsor animals
WB35-more trail markers
adding few more trails with concomitant increase in parking
don't develop more; minimalist development
don't try to make it too accessible
WB22-main visitors' center at Bear Creek more hours: early and late
WB22-water access
WB28-more rain shelters
would like wider road
WB35-interpretive signs or programs for fire evolution and glacial history
WB37-reduce the one-day fee
more emphasis on bicyclists, cut down on traffic congestion
The protection of the environment should be the number one priority, all funding should go to that
More rangers at strategic locations
Need more access during late hours
Increase senior pass
WB36-for a seven day fee 50$, 20$ is too cheap for benefits of Park
WB33-more Park Rangers
WB23-replace traffic cones in parking lot with tree stumps
keep it "wild"
change picnic area in front, back to campground
WB36-should offer daily rates
reduce the amount of vehicle traffic
would like a "punch pass" for park entrance fees
encourage visitors to be prepared
designate it as wilderness
less horse droppings

WB31-restrooms and educational things
need better Park staff
don't allow horses or alpacas in
enforce a "packing up" rule for campers
education is the key to preserve the wilderness
WB23-run shuttle buses
manage the horse leftovers better, have designated horse trails
WB25-more energy needs to go into trails, they are eroding and deteriorating
WB36-increase fees only for out of state, not for Colorado
Bush Administration not giving enough to Parks
showers in campgrounds
busing, contribution boxes
WB23-early arrival
WB29-depends on the use
WB36-wouldn't be adverse to a 5-10 dollar fee for seniors annually
prohibit horses on trails
raise fees
allow dogs on leashes
allow fewer people in
thinks the policy on bikes should be changed, lower fees if people want to bike
more tax dollars instead of fees
happy with they way it is, don't see need for increased fees
want to see additional funding methods besides raising my fees
sell monthly passes instead of weekly
WB37-showers
WB36-increase fees for a seven day pass. Need to offer a day pass--20$ is steep for only one day
WB30-already crowded
WB28-post that there is no available water
In favor of paying for what you get
WB25-only if a good destination
WB36,37-not in favor of raising fees because it could keep people from coming
WB36-ought to have single day permit
WB36-yes for seven day pass
add more to kiosk-"you are here"
congressional appropriations
horse poop-smelly
fees should be based on how many people in party
more public transportation in the Park
transportation to different roads
shuttle service
more cross marketing at Bear Lake, inform people that Wild Basin is as pretty but less busy
leave the fish alone, don't sterilize the streams lakes or rivers, that is "stupid"
increase care & stewardship
RMNP is a treasure
federal government ignores fed parks
increase parking-but must retain rustic nature

raffle for campsites
WB36,37-pay more taxes
More visitors in underused areas
WB35-signs to locate peaks on hikes
educate people about eco-impact

E.3. Longs Peak Surveys

CC rangers too strongly order
maybe ask for donations
Longs needs a fee to limit #
get to bkc permit by phone
special permits for BCK camper
add another trail over CD
divert funding from military
increase $ of annual pass only
more bilingual signs on trails
more hike-in camping
more affordable camping
more disability access
have people show permits during Elk rut
too many inexperienced over treeline
increase fees only if needed
the redo of Bear Lake road not necessary
climbers need more support; longer camping
more signs on trails
include Indian Peaks Wilderness in the park
plenty of web access
limit park traffic
use quotas on some of the trails
more staff in early AM
bring back the wolf population
no more development
more work on trails
open new trail areas
keep horse trails separate
winter regulations could be extended
add shuttles during crowded periods
LP23 -just a small ranger station
really-don't encourage more people to come to park
LP24-add more on access road
permits for backcountry
LP23-change fee
LP37-yes, for yearly
LP33-add literature
LP26-signs to campground confusing when hiking
shuttle service
constant care, volunteers to maintain the trail
add educational signs about ecosystems, flora/fauna. and weather systems on trails
LP36-improve the Enos Mills stuff
less impact the better
LP33-make more adult oriented
Fee for Longs Peak

more educational displays for hikers and visitors
simple campsite at Longs designed for hikers
invader species due to manure
put info outside ranger office
offer guided tour
more picnic areas lower down
too many elk
paved road into Wild Basin
keep manure off hiking trails
change hikers
concerned that people aren't prepared to climb-not enough food and water
LP31-as long as infrastructure stays