A FRONT COUNTRY VISITOR STUDY
FOR
GRAND STAIRCASE-ESCALANTE
NATIONAL MONUMENT

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Steven W. Burr, Dale J. Blahna, Doug Reiter,
Erin C. Leary, and Nathan M. Wagoner

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EXECUTIVE SUMMARY

Introduction

The purpose of this project was to gather data from front country visitors to the Grand Staircase-Escalante National Monument (GSENM). The study was conducted by the Institute for Outdoor Recreation and Tourism (IORT) at Utah State University. The main objectives were: to provide baseline data concerning front country recreation use and visitor characteristics, images, and perceptions of the Monument; and to investigate the relationship between visitation and other Monument values, the Monument travel management plan, and local community services.

According to the BLM, approximately 600,000 people visit the GSENM every year, and recreational use is increasing. BLM managers believe most visits occur in the Front Country and Passage zones, which comprise only about 6% of the Monument (116,372 acres) on its periphery and along major transportation routes. The management plan calls for a continuation of this concentrated visitor use pattern. The concentration of visitors on a relatively small portion of the GSENM can help managers meet the dual goals of providing opportunities for recreation while protecting most of the area from many recreational impacts. The success of the zoning strategy, however, is dependent on understanding and monitoring visitor use patterns and perceptions of crowding, understanding the relationship between visitor behavior and the natural environment, and using information and education to increase visitor appreciation for the GSENM and to reduce visitor impacts.

Intercept interviews were administered at developed sites in the Front Country zone and at key dispersed use areas in both the Front Country and Passage zones of the Monument. Mail surveys were conducted with a subset of respondents who agreed to participate. The study was conducted between March 2004 and March 2005. The surveys were designed to collect data related to:

1. visitor characteristics and trip and use patterns;
2. visitor images and expectations, and perceptions of crowding and satisfaction related to the Monument as a whole and visitor centers, overlooks, and specific recreation sites on the Monument;
3. visitor knowledge of informational and educational messages at visitor centers and waysides;
4. visitor perceptions of the importance of and satisfaction with Monument and community based services and service workers; and
5. visitor group expenditures, and the secondary economic effects of those dollars in Garfield and Kane counties.

Results include descriptive statistics of all variables for the Monument as a whole and for the 27 specific interview sites. Other analyses included: 1) importance-performance analyses of 24 Monument and 14 community service items; 2) GIS mapping of site use levels in relation to travel management zones identified in the GSENM plan; and 3) IMPLAN analyses of the secondary economic effects of visitor expenditures.

Research Methods

Intercept surveys were conducted between March and October 2004. Visitors were selected using a random, systematic selection of dates at 27 different sites: 19 recreation sites on the Monument, five Monument-affiliated visitor centers, and three Monument overlooks on Scenic Byway 12. These surveys contained similar visitor background and use questions, but had different attitude questions relating to each site type. Visitors were approached by researchers after completing activities at each recreation site, except campers who were approached at their campsites. Of the 2,306 respondents contacted, 2,062 (89%) agreed to be interviewed: 602 (83% response) at visitor centers, 887 (90%) at overlooks, and 573 (96%) at recreation sites.

Follow up mail surveys were conducted using a modified version of Dillman's Total Design Method; responses were solicited through March 2005. Of the 2,062 intercept respondents, 1,751 (85%) were asked to participate in the follow-up mail survey. Of the 1,170 (67%) respondents who said they would be willing to complete a mail survey, 1,148 valid names and addresses were obtained, and 766 completed surveys were received for a 68% response rate, and representing 44% of all intercept respondents who qualified for the mail survey. Overlook visitors were less likely than visitor center and recreation site visitors to complete the surveys.

Key Findings from the Intercept Survey

Visitor Characteristics

- Visitors to the GSENM came from throughout the United States and the world. About 14% were from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% the visitors were from 39 other states, and international visitors comprised the remaining 23%.

- Well over 50% of the visitors had two people in their group and were traveling in the same vehicle.

- Slightly more than sixty percent of visitors were visiting the GSENM for the first time, and over half expected to see and experience natural features during their visit, with 44% expecting to see and experience landscapes and scenery.

- While 88% of visitors said they had heard of the GSENM, only 38% correctly identified the BLM as the management agency. About one-quarter of the international visitors indicated they had not heard or were unsure if they had heard of the GSENM. Almost 65% of international visitors did not know which agency was responsible for the management of the Monument compared to one-third of the visitors from other states and about one quarter of Utahns.

- The most frequently mentioned information source for first hearing about the Monument were reports about the initial designation by President Clinton's proclamation in 1996, followed by maps and brochures, guidebooks, and friends or family.

- The main sources of information used by visitors to plan their Monument trip were maps/brochures and guidebooks (29% for each). Almost one-quarter received information at a visitor center, while slightly less than one-quarter utilized the Internet. Other frequently mentioned sources were personal knowledge based on previous trips, friends and family, and driving by or road signs.

- Only about 15% of the respondents first visited the GSENM before 1996. While half of repeat visitors first visited the Monument prior to 1996, if the first time visitors are included with those visitors who first visited the Monument after 1996, about 85% of all visitors would have visited between 1996 and 2004.

- Almost two-thirds of repeat visitors who had first visited the Monument before 1996 said the number of their visits since the designation had stayed the same, 28% said they increased, and 7% said their visits had decreased.

- The average length of stay in the Monument area is over three days. Almost 90% of visitors planned to stay in the Monument area a full day (12 hours) or more. Close to 30% of visitors indicated they were staying one day, one-fifth indicated two days, about one-third said three to five days, and slightly less than one-fifth indicated they were staying six or more days. Visitors who indicated they were staying one day or longer, on average, stayed about four days; the average stay was 3.4 hours for visitors who said their visit would be less than one day.

- While recreation is the main reason for visiting the area for three quarters of the respondents, only 20% said the Monument was their primary destination, including 38% interviewed at recreation site, 22% at visitor centers, and 7% at overlooks. Approximately one-third of the recreation visitors whose main destination was not the GSENM identified a national park as their primary destination.

General Impressions of Visitors

- Well over four-fifths of visitors characterized their overall impression of the GSENM by using dynamic superlatives such as "awesome," "spectacular," and "beautiful." About one-fifth mentioned in some way the Monument's scenery, unique landscape, natural features, or ecology of the area. Slightly more than ten percent mentioned something favorable about the Monument's management or facilities, such as good roads, clean restrooms, and nice campgrounds. Less than five percent were somewhat critical of current management, as alluding to poor roads, lack of information, and poor trail signs.

Levels of Visitor Satisfaction

- There was a very high level of satisfaction among GSENM visitors—97% of visitors were either very satisfied or satisfied with their trip at the time of the intercept survey, less than three percent said they were somewhat satisfied, and less than one percent expressed some level of dissatisfaction.

- Positive comments were most often related to physical features like scenery and geology. Only about 3% to 7% of the visitors mentioned management related factors like visitor services, recreation opportunities, numbers of people, quiet and solitude, roads and signage.

- Forty-two visitors (2.5%) gave negative responses, mostly related to roads or signage, but 33 of those still said they were satisfied with their overall experience.

- There was also a high level of satisfaction among GSENM visitors with visitor services in surrounding "gateway" communities—90% of visitors were either very satisfied or satisfied with the visitor services in the communities, 8% were somewhat dissatisfied, and a little over 2% expressed some level of dissatisfaction.

- Respondents were more satisfied with "service workers" than the "quality of services." Most visitors who gave reasons for their satisfaction levels said they were pleased with the friendly and helpful service they received. The largest number of negative comments were related to limited service availability (n = 45), limited gas and food services (n = 27), limited business hours and Sunday closures (n = 21), and lack of information (n = 19).

Visitor Perceptions of Crowding and Need for Use Restrictions

- Monument-wide, visitors saw an average of nine people at the site where they were interviewed, although this ranged greatly depending on the type of site and day of visit.

- The number of other people seen was highest for campgrounds (median = 20), followed by trailheads (10), scenic attractions (6), overlooks (6), visitor centers (4), and roadside stops (3).

- The top seven sites which accounted for most of the highest number of other people seen were: Calf Creek Campground (median = 40), Calf Creek Trailhead (34), Whitehouse Campground (30), Devils Garden (16), and Cottonwood pull-off, Anasazi Visitor Center, and Whitehouse Trailhead (14). The medians for all other sites were under ten.

- Most visitors felt the number of other people they saw was about what they expected. This pattern holds true for all of the types of sites but is the most prominent for respondents at visitor centers and overlooks. Of the individual sites, Calf Creek

trailhead is the only site where the majority of visitors felt the number of people they saw there was more than they had expected.

- There was little evidence for crowding. A large majority of visitors (80%) said the number of people they saw had no effect on their overall experience at the survey site. However, of those who said the number of people they saw did have an effect on their experience, a larger percent felt this added to their experience rather than detracted from it.

- Indications of potential crowding (sites where less than 80% said the number of people they saw was "about right" and more than 15% said they saw "too many" people) were found at five sites: Calf Creek Trailhead (27% saw too many people), Calf Creek Campground (26%), Devils Garden (25%), Dry Fork Trailhead (19%), and Whitehouse Trailhead (18%). Even at these sites, however, relatively few people said the number of people they saw detracted from their visit, or that they felt there should be use restrictions.

- Almost 90% of visitors felt the number of people should not be restricted at the site, about ten percent felt restrictions were needed, and less than two percent had no opinion one way or the other on the issue.

Monument Site Types: Trailheads, Scenic Attractions, Roads, and Campgrounds

- Based on the number of completed interviews, trailheads were found to have the highest rate of visitation (46%), followed by scenic attractions (36%), roadside pull-offs (14%) and campgrounds (5%).

- The largest percentage of first time visitors also occurred at trailheads, followed by scenic attractions.

- The highest rate of first time visitors occurred at Calf Creek trailhead, followed by Grosvenor Arch and Paria Movie Set. First time visitors outnumbered repeat visitors by about three to one at these survey sites. High first time visitor use also occurred at Escalante River trailhead, Devils Garden, and Dry Fork and Wire Pass trailheads.

- The four most common visitor activities were hiking, photography, scenic driving, and viewing natural features. The most popular activities at the four types of Monument sites varied only slightly. Photography was among the top three most activities for all four site types, and viewing natural features ranked within the top three activities at three of the four sites: roads, trailheads, and scenic attractions. Scenic driving was a primary activity on roads and at scenic attractions, and hiking was a key activity for visitors at trailheads and campgrounds.

Visitor Center Site Specific Variables

- Approximately 29% (602) of the visitors were interviewed at one of the five Monument-affiliated visitor centers. Almost half of these visitors first found out about the visitor center by driving by or seeing a road sign.

- About two-fifths of the visitors chose to stop to get general information about the area, one-fifth to get information specifically about the Monument, one-fifth to get maps or brochures, and one-fifth had other reasons for stopping. This was different at the Boulder Visitor Center—Anasazi State Park, however, where 85% stopped to see the archeological displays and ruins.

- Over half of the visitors viewed the interpretive and educational displays in the visitor center, including 85% in Boulder, 66% in Big Water, 60% in Kanab, 47% in Cannonville, and 33% in Escalante. Over 90% rated the quality of displays as very good or good.

- Almost 62% percent of these visitors said they learned something new from the displays they had viewed, ranging from 74% in Big Water, 69% in Boulder, 53% in Kanab, 51% in Cannonville, and 48% in Escalante.

- While most visitors who viewed educational displays were able to accurately identify the primary interpretive topic or theme of the visitor center where they were interviewed, the results varied dramatically, ranging from 94% in Boulder and 87% in Big Water, to 33% in Cannonville and 19% in Kanab.

- About 86% of visitor center respondents had contact with visitor center staff and 87% of those respondents said this contact increased or greatly increased their overall experience at that visitor center. At four of the five visitor centers, the contact rate was over 90% and over three-quarters of visitors felt the information they received would be very useful or quite useful for the rest of their trip. In Boulder, however, only 66% of the visitors had contact with staff, and 31% felt the information they received would have no effect on the rest of their trip.

Key Findings from the Mail Survey

Visitor Background and Trip Characteristics

- Almost two-thirds of visitors identified a western state (including Alaska, but not Hawaii) as the point of origin for their trip, about 30% began their trips in other U.S. states, and slightly over six percent indicated their visit to the Monument began in another country. Utah provided a starting point for about 18% of the visitors. States bordering Utah (Idaho, Wyoming, Nevada, Arizona, and Colorado) served as origins for about one-quarter of trips.

- More than one-third of the visitors took a commercial flight as part of their trip, and more than half of them arrived in Las Vegas.

- Visitors to the GSENM are a highly educated group; almost 70% have a bachelor's, graduate, or professional degree, and slightly over 20% have some college or a technical/associate's degree. Only about 7% of Monument visitors had a high school diploma or less.

- A majority of visitors indicated they came from cities or suburbs. About 43% of respondents grew up in a large city with a population of 100,000 or more, or in a suburb of a large city. Visitors who grew up in small cities of 25,000-100,000 made up an additional 22% of respondents. Respondents from medium-sized towns (5,000-25,000 people) and small towns (less than 5,000 people) made up about one-quarter of the visitors. Visitors raised in rural areas made up only 7% of total respondents.

- Most of the visitors who stayed in the Monument area camped overnight and about one-third stayed in local motels or bed and breakfasts (37%). Campers were about evenly divided between Monument camping areas and other nearby camping areas. Most who camped on the Monument stayed in undeveloped sites, while most respondents who camped in other areas stayed in more developed campsites. Only about 2% stayed in private homes.

- Over 80% of visitors stopped in at least one Monument area Visitor Center and over half visited more than one.

- Eight of the fifteen gateway communities in the area had visitation rates between about 30% and 75%. The two most visited communities had visitation rates of nearly 75% (Bryce Canyon Area and Escalante), three had rates near 50% (Boulder, Kanab, and Page), and three had roughly 30% visitation rates (Tropic, Cannonville, and Panguitch). The percentage of respondents purchasing gas, food, lodging, and shopping in the various communities differed greatly.

Monument Impressions

- As with the intercept survey, Monument trip satisfaction rates on the mail survey were very high, with almost 91% of Utahns, 92% of visitors from other U.S. states, and 94% of international visitors stating they were very satisfied or satisfied.

- Visitors perceived many benefits from visiting GSENM related to experiencing solitude and nature, novelty of a new area and new experience, skills and accomplishment, and social interaction and social status. Perceived benefits for visitors seem to differ somewhat based on their residence in Utah, other states, or other countries.

Importance-Performance Analysis: Monument Management and Other Community and Local Services

- Related to Monument Management, visitors expressed high levels of importance and satisfaction with Brochures and Maps, Helpfulness of Monument Employees, Cleanliness of Restroom Facilities, Conditions of Monument Trails, and Safety Information.

- Monument Trailhead Markers, Directional Signs to Monument Destinations, and Wildlife related information are also important to visitors, but some visitors were less satisfied with these, indicating a need for more management attention.

- Related to Other Community and Local Services, visitors expressed high levels of importance and satisfaction with Monument Visitor Information Services, Federal and State Agency Campgrounds, Lodging Services, Campgrounds in the Monument, and Service Stations.

- Eating and Drinking Establishments, Grocery and Convenience Stores, and Emergency Medical Services seem to need the most attention, based on their relatively high importance to visitors and lower satisfaction scores.

- There are a relatively high number of Other Community and Local Services items in the "low priority" category, including Privately Owned Campgrounds, Sporting Goods and Outdoor Equipment Stores, Souvenir Stores, Gift Shops and Galleries, and Guide and Outfitting Services. This partially reflects the fact relatively few people need or use these services, but these findings, especially because of the relatively low satisfaction ratings, are important for local economic development in gateway communities. The results could reflect the relative newness of the Monument and the lack of experience of community businesses serving the number and diversity of visitors attracted by the new Monument.

Satisfaction with Service Workers and Quality of Service Provided in Surrounding Communities

- Over 90% of visitors were either very satisfied or satisfied with the friendliness and helpfulness of service workers in surrounding communities; 96% of the follow up comments were positive; of 556 comments, only 20 were critical of service workers in general, 16 addressed BLM service workers, and 13 addressed specific private sector services.

- About 86% of visitors were either very satisfied or satisfied with the quality of service provided in surrounding communities. Of the 469 follow up respondents, 89 provided mixed positive and negative responses and 20 simply made negative responses. Most negative comments addressed gas and food services, especially lack of options and quality of food, poor or limited selection, high prices, limited hours of service and Sunday closures.

Visitor Expenditures and Economic Impact in the Monument Area

- The average amount spent per group of three visitors in the Monument area was just under $500. Average international group expenditures ($614.90) were almost $260 more than Monument visitors from Utah ($356.14) and about $115 more than visitors from other states ($500.43).

- Utah visitors spent an average of $74 per person, compared to $200 for visitors from other states, and $246 for international visitors. Most of this difference was due to lower spending levels by Utahns in lodging, restaurants, and souvenir shops.

- More than $20.6 million is directly spent in Kane and Garfield Counties in 21 different industrial sectors by visitors whose main destination is the Monument. This spending directly supports more than 430 full-time equivalent jobs with almost $10 million in employment value added on. When considering indirect and induced effects, the total industry output impact would be about $25.4 million in 86 sectors, employment would support more than 500 jobs in 70 sectors, and value added would increase the effect of that money by about $12.5 million in 81sectors.

- The Monument also contributes a greater amount to the local economies as a secondary destination for visitors whose primary destination is Bryce Canyon National Park, Zion National Park in Washington County, or other national and state attractions in Garfield County and Kane County, and Coconino County in Arizona.

Comparison of Visitor Use Levels and Management Zones

- Overall, visitors stopped at 14 towns and 98 recreation sites, including 78 different sites on the Monument and the five visitor centers.

- Most of the "high" use sites are visitor centers or sites located in the Front Country and Passage zones. Bull Valley Gorge is the only "high" use site located entirely in the Primitive or Outback zones.

- While visitors were sampled only in Front Country and Passage zone sites, it is evident the primary recreation opportunities at some of these sites actually occur in adjacent Outback or Primitive zones. Thus, two additional classifications or transition area "subzones" were identified for analysis: a Front Country Transition zone and a Passage Transition zone.

- Front Country and Front Country Transition zones get a larger percentage of first time visitors (64% and 56% respectively) compared to the Passage (44%) and Passage Transition zone (42%). The Front Country and Passage Transition zones had the higher percentage of international visitors (24% and 23% respectively) compared to Passage (16%) or the Front Country Transition zones (12%).

- Of the eleven sites identified as "transition zone" sites, three are in the Front Country zone (Calf Creek, Escalante River, and Whitehouse trailheads) and eight are in the Passage zone (Wolverine Loop Road and seven trailheads: Deer Creek, Dry Fork, Egypt, Harris Wash, Lick Wash, Lower Hackberry, and Wire Pass).

- GIS mapping results suggest Bull Valley Gorge and the eleven "transition zone" sites need additional management and research attention. The BLM should consider conducting additional analysis of the visitor experiences, use patterns, and impacts in these transition zone areas, and possibly add an additional zone or "subzone" to reflect the unique character of the transition sites. These sites will require additional management actions (site hardening, zoning changes, additional informational and educational resources, etc.) to protect the quality of the experience, minimize backcountry impacts, and retain the viability of the current zoning pattern.

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PART I: INTRODUCTION

The purpose of this project was to gather data from front country visitors to the Grand Staircase-Escalante National Monument (GSENM). The study was conducted by research scientists and students affiliated with the Institute for Outdoor Recreation and Tourism (IORT) at Utah State University. This study was funded by the Grand Staircase-Escalante National Monument, Bureau of Land Management (BLM). The main objective of this study was to provide baseline data concerning front country recreation uses and the interaction between visitor uses and other Monument values.

The Monument was designated to protect nearly 1.9 million acres of southern Utah in a "primitive, frontier state" and to provide outstanding opportunities for scientific research and education (U.S.D.I. Bureau of Land Management, 1999). To meet these goals, it is critical to protect the natural conditions of the Monument. At the same time, however, traditional uses are acceptable as long as they do not conflict with the primary purposes of the Monument. Recreation is one of the most pervasive of these traditional uses.

Visitor intercept surveys were administered at developed sites in the Front Country zone and at key dispersed use areas in both the Front Country and Passage zones of the Monument. Three slightly different versions of intercept surveys and one mail survey were developed and administered during 2004. The surveys were designed with four goals in mind:

1. Collect baseline data of visitor characteristics and use patterns for the purpose of long-term monitoring of recreation use trends;
2. Collect visitor expectation and satisfaction data useful for long term monitoring to help BLM managers understand visitor interests and preferences, and the *reasons* visitors do what they do;
3. Collect data on visitor images of the Monument and knowledge of scientific research results to provide baseline data for long term evaluation of informational and educational messages at visitor centers and waysides, and through community education programs;
4. Collect data on the relationship between tourism, visitor and hospitality services, and local community development;
5. Identify Monument site use levels using GIS maps and compare use with management zones.
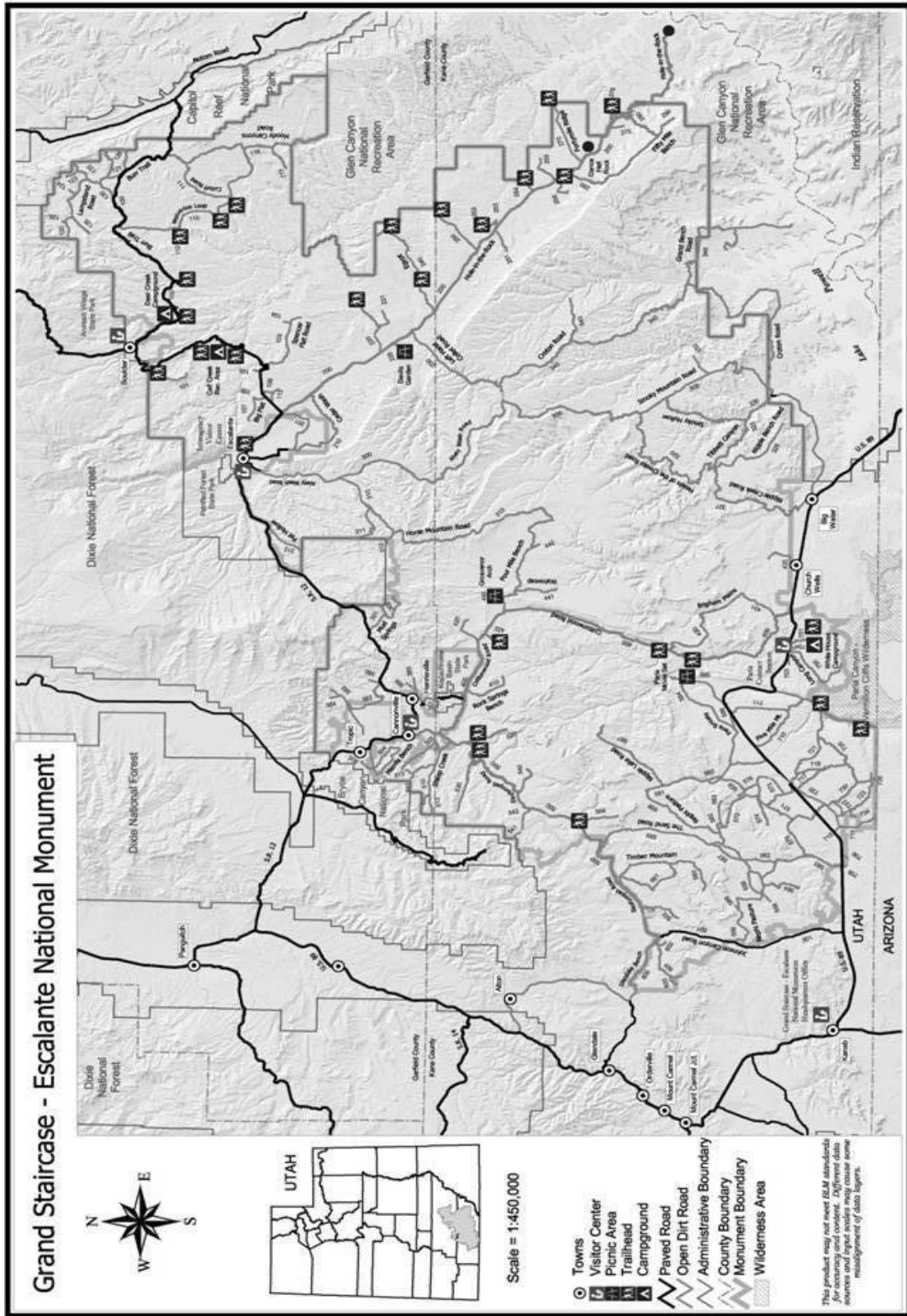
Figure 1: Map of the Grand Staircase-Escalante National Monument and Surrounding Area (http://www.ut.blm.gov/monument/Visitor_Information/maps/roadmap.html; July 8th , 2004)

Project Overview

Study Site

On September 18, 1996, President Clinton exercised his presidential right granted through the Antiquities Act of 1906 and proclaimed nearly 1.9 million acres in southern Utah as the Grand Staircase-Escalante National Monument (GSENM). The GSENM is the first national monument to be administered and managed by the Bureau of Land Management (BLM) and became the first national monument in the BLM's new National Landscape Conservation System. The GSENM contains many outstanding natural features including sandstone canyons, arches, desert terrain, and riparian areas on the Colorado Plateau. The GSENM is very remote; it was the last place in the continental United States to be mapped (U.S.D.I. Bureau of Land Management, 1999). The Monument is surrounded by a number of other federally managed, specially protected lands including: Glen Canyon National Recreation Area to the southeast, Capitol Reef National Park to the northeast, and Bryce Canyon National Park to the northwest, all units within the National Park System; the Dixie National Forest to the north and west, and the Paria Canyon-Vermillion Cliffs Wilderness Area on the Utah-Arizona state line, managed by the BLM (Figure 1). Other major visitor attractions near the GSENM are Grand Canyon National Park, Zion National Park, and Lake Powell within the Glen Canyon National Recreation area.

The GSENM itself is made up of three distinct physiographic regions: the Escalante Canyons in the northeast portion of the GSENM, the Kaiparowits Plateau making up the middle portion of the GSENM, and the Grand Staircase in the southwest portion of the GSENM. Each of these regions contains extraordinary historical, cultural, and geological features. It is from the names of these physiographic regions that the GSENM gets its name, Grand Staircase-Escalante National Monument. Unfortunately, the name can be misleading and visitors may come looking for an actual "grand staircase" on a human scale. The "grand staircase" is actually geological, made up of the Chocolate, Vermillion, White, Gray, and Pink Cliffs as they ascend in elevation from south to north across the western side of the GSENM, and can only be seen if one looks north onto the GSENM from around the Highway 89 area just north of the Arizona-Utah border.

The intent behind the designation of this vast area of land was to protect it in a "primitive, frontier state" and to "provide outstanding opportunities for scientific research and education" (U.S.D.I. BLM, 1999: iv). At the time of the designation, the BLM had never before been given the responsibility of managing a national monument. With the designation, the BLM became responsible for managing the area for recreation as well as most other traditional uses. Due to this added responsibility, the managers of the GSENM felt it was important to support research that would help them understand how to best manage the area for both front country and backcountry recreation visitors.

In 1999, a backcountry visitor use survey was conducted by Dr. Mark Brunson and Lael Palmer through the Institute for Outdoor Recreation and Tourism (IORT) at Utah State University. One focus for this survey was to examine recreationists' relationship with a newly designated national monument (Palmer, 2001). Since this backcountry visitor baseline data had been collected, it was also important for the BLM to conduct a study which would contribute baseline data on front country recreation visitors.

According to the BLM, approximately 600,000 people visit the GSENM every year, and recreational use is increasing. BLM managers believe that most visits occur in the Front Country and Passage zones, which comprise only about 6% (116,372 acres) of the Monument at the periphery and along major transportation routes (Figure 2). The management plan for the GSENM calls for a continuation of this concentrated visitor use pattern. The concentration of visitors on a relatively small portion of the GSENM can help managers meet the dual goals of providing recreation while protecting most of the area from many recreational impacts. The success of the zoning strategy, however, is dependent on understanding and monitoring visitor use patterns and perceptions of crowding, understanding the relationship between visitor behavior and the natural environment, and using information and education to increase visitor appreciation for the GSENM and to reduce visitor impacts.
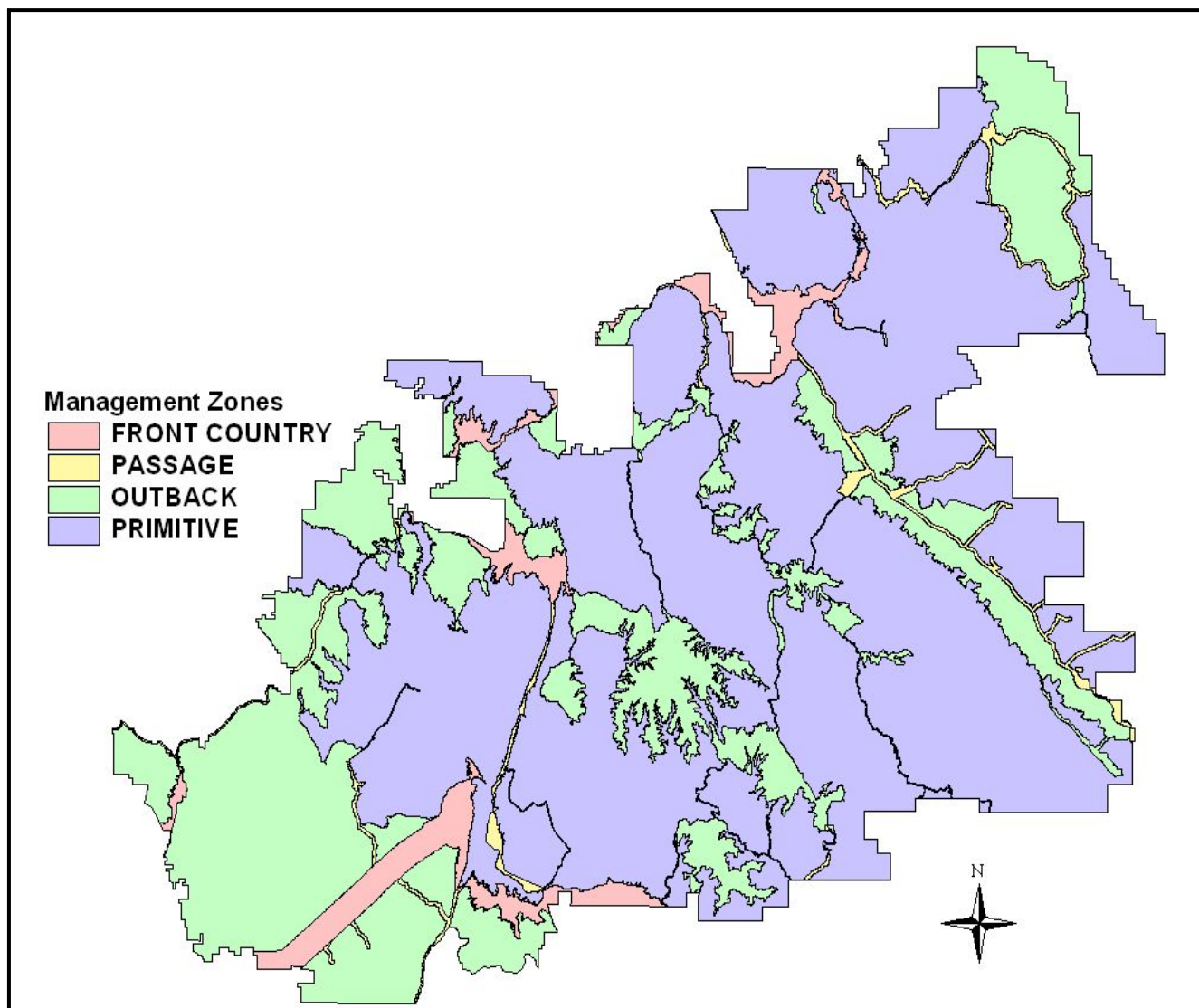
Figure 2: Map of the Grand Staircase-Escalante National Monument Management Zones

Background Literature

The social sciences lag behind the biophysical sciences in providing data that are relevant for ecosystem-based management (Lee, 1993; Blahna, 1995). In the past, research on recreation use in protected areas has been hindered by narrow, site-specific data collection efforts which have proved to be of marginal value for protected area planning and management (Borrie, McCool, & Stankey, 1998). Furthermore, while backcountry recreation experiences have been widely studied (Hammit & Cole, 1998) few research efforts have focused on dispersed, motorized recreation activities. Likewise, we know that recreation experiences can be enhanced by the presence of biological or cultural resources (Knight & Gutzwiller, 1995; Wang, Anderson, & Jakes, 1996), but little or no research has specifically examined these interactions on the Colorado Plateau, or compared the interests and values of visitors to dispersed and developed sites. Visitor interaction with local communities is also a key concern for Monument staff, but there are few large-scale studies of these interactions. Through the use of the front country visitor surveys, baseline data was collected in order to examine these issues.

There are also large gaps in our understanding of the link between science literacy and informational and educational programs of protected areas. Science literacy is a critical element of positive environmental attitudes and behavior, and enhancement of scientific literacy among the public is a primary objective of the Monument. Yet there are very few large-scale studies of whether national monuments, parks, and other protected areas are effective in meeting this mandate. Baseline data collected through the front country visitor surveys helps also to look at this issue.

Many rural economies in the West have diversified from being based solely on extractive resource industries (e.g., grazing, timber production, and mining) to include an emphasis on service industries, especially those related to visitor and hospitality services associated with tourism. Successful communities are focusing on developing services that emphasize open space and remoteness, scenic beauty, outdoor recreation opportunities, and other amenity resources (Drabenstott & Smith, 1995). Amenity resources refer to those aspects of the rural environment in which residents and visitors alike may find beauty, pleasure, and experiences that are unique to that locale. A destination's place uniqueness can be developed and marketed to visiting tourists. Tourism, as a development industry, relies on the development and utilization of natural, historical, cultural, and human resources in the local environment as tourist attractions and destinations. Tourism creates recreational uses for natural and human-made amenity resources and converts these into income producing assets for local residents, thus contributing to the local economy and community development (Willits, Bealer, & Timbers, 1992). Data was also collected through the front country visitor surveys that provide for a limited evaluation of and an analysis of the relationships between visitors and hospitality services provided in the "gateway" communities surrounding the GSENM.

Research Methods

Research Questions

The Monument provides an outstanding setting for collecting social science data to help address the research and literature gaps identified previously, and to provide baseline data for evaluating the long-term effectiveness of the zoning strategy contained in the management plan. The survey instruments that were developed addressed six primary research questions.

1. What are the primary visitor and use characteristics associated with recreation in dispersed areas in the Front Country and Passage Zones of the Monument?
2. What are the primary visitor and use characteristics associated with recreation in the developed sites in the Front Country Zone of the Monument?
3. How do the presence and condition of cultural, biophysical, and managerial resources affect the experience and satisfaction of visitors to the dispersed and developed areas of the Monument?
4. What knowledge and images do visitors at developed sites in the Front Country Zone have of the resources and opportunities of the National Monument and of the surrounding communities?
5. What are the visitation use levels at various recreation attractions within the Monument by visitors to the Front Country Zone?
6. What needs, expectations, and preferences do visitors in the Front Country Zone have of the surrounding communities, as Monument "gateways" providing visitor and hospitality services?

Survey Design and Sampling Design

For Phase I of this study, the survey instruments and sampling design were initially developed in collaboration with Monument staff. A two-step sampling design was developed and implemented: a short on-site intercept survey, and a more detailed mail survey. During Phase I the survey instruments and sampling design were pilot tested. From the results of the first year pilot study during the 2003 visitation season, the survey instruments and sampling design for Phase II were developed for 2004.

Three intercept survey instruments were used in this study: recreation site in the Monument, Monument visitor center, and Scenic Byway 12 overlook surveys. These surveys contained many similar questions, but differed slightly for each type of site. The last two pages of the recreation site survey included questions regarding visitors' expectations, impressions, and activities participated in while at that survey site, while the last two pages of the visitor center survey included questions regarding visitors' impressions of and satisfaction with the facility, displays, and staff at the visitor center survey site. The overlook survey consisted of the same questions asked in the main sections of the recreation site and visitor center surveys. However, a trip route mapping exercise that was included in the other surveys was omitted from the overlook survey due to the amount of time it took to complete in relation to the typical amount of time visitors actually spent at the overlooks.

The main sections of the three intercept surveys contained questions regarding group size, length of stay, residence, overall trip route (mapping exercise), activities participated in, impressions, expectations, and satisfactions while visiting the Monument (see Appendix A for copies of the intercept surveys). The recreation site and visitor

center surveys included a mapping exercise where the intent was to attain the most accurate description of the respondent's trip route up to the point when the visitor was surveyed, as well as the visitor's planned trip route following the interview. During this exercise, visitors were asked to point out any sites or visitor centers they had already stopped at, as well as those they were planning to stop at and where they were planning to go once they left the Monument area..

During the intercept survey data collection effort, 1,751 visitors were asked if they would be willing to participate in a more detailed follow-up mail survey. A mailing list was compiled of all visitors who agreed to participate in the mail survey and provided an address (n = 1,148). A three wave mailing design was employed following the outline provided by Dillman (2001). A mail survey accompanied by a cover letter was sent to all visitors on the mailing list as the first wave mailing. Two weeks later, as the second wave mailing, a postcard reminder was sent to all visitors who had not completed and returned the survey sent in the first wave. About one to two weeks following the postcard reminder, another blank survey with an updated cover letter was sent to any remaining visitors who had not yet returned a completed survey.

The mail survey included more detailed questions regarding visitor characteristics, past experience, expectations, satisfactions, Monument images, and expenditures. The survey instrument itself was nine pages long and included a mapping exercise similar to the one used in the intercept survey. A copy of the mail survey instrument can be found in Appendix B.
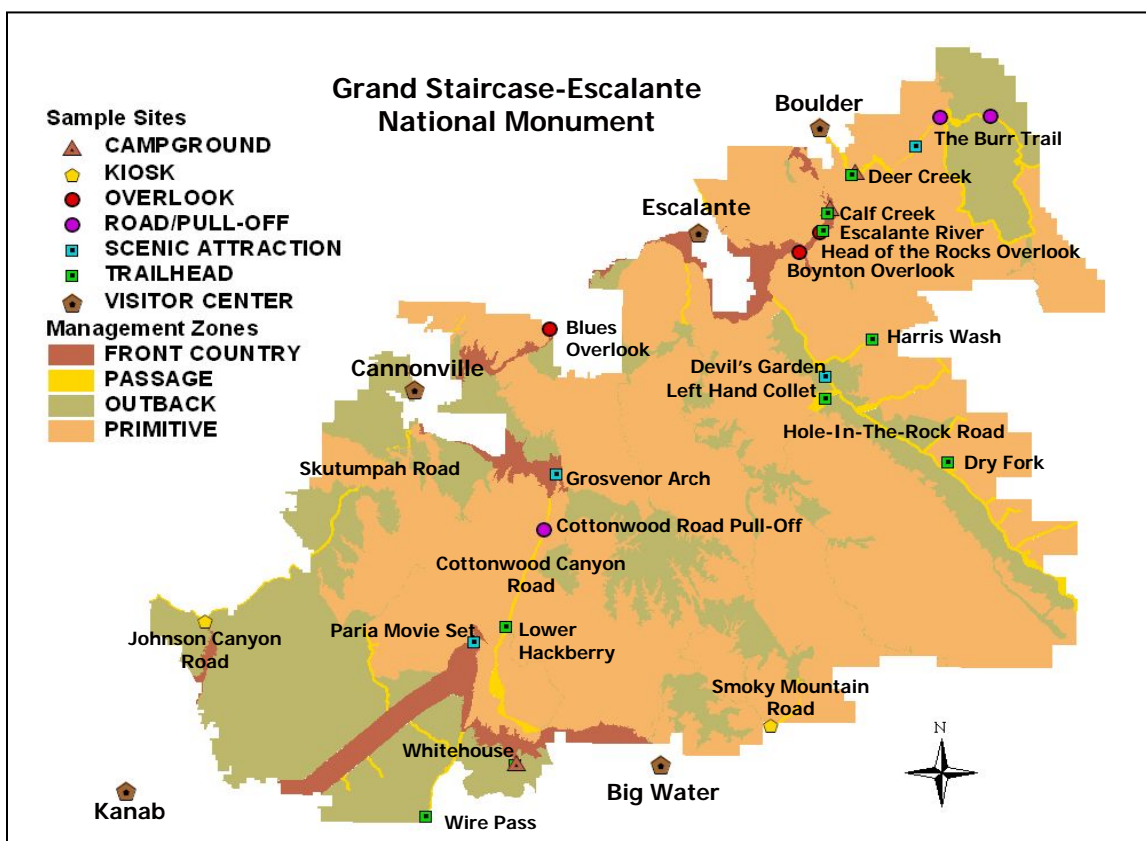
Figure 3: Grand Staircase-Escalante National Monument Visitor Use Survey Sites

Data Collection Process

Data were gathered from visitors from late March through mid October in 2004, using a random systematic selection of dates. Intercept surveys were conducted at 27 pre-determined sites within the Front Country and Passage Zones of the GSENM (Figure 3). Surveys were conducted at five visitor centers and three overlooks adjacent to the Monument, and 19 recreation sites (trailheads, scenic attractions, roads, and campgrounds) located directly on the GSENM. A listing of intercept survey contact sites by each type of location and a complete sampling schedule with dates are included in Appendix C. Visitors to the three campgrounds (Calf Creek, Deer Creek, Whitehouse) were sampled during the same time block as the respective trailheads at these locations. Visitors were approached by researchers after completing activities at each site, while campers were approached at their campsites. Researchers conducted intercept surveys in an interview style with those visitors who agreed to participate in the study.

**PART II: RESULTS OF THE GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT
FRONT COUNTRY VISITOR INTERCEPT SURVEY**

Survey Response

    As shown in Table 1, there were 27 locations where the intercept surveys were administered. Of the 2,306 respondents contacted, 2,062 (89.4%) agreed to be interviewed (Table 2). This included 83% (n = 602) at visitor centers, 90% (n = 887) at overlooks, and 96% (n = 573) at recreation sites.

    Of the 2,062 respondents who agreed to the intercept interview, 1,751 (84.9%) were asked if they would be willing to receive and complete the follow-up mail-back survey. Overall, 555 respondents were not asked if they would be willing to participate in the mail survey because they refused to participate in the intercept survey (n = 244) or they were overlook visitors who told the interviewer that they were just passing through or commuting to work (n = 311), allowing the visitor to skip the section asking for mailing information and participation in the mail survey. Of the 1,170 (66.8%) respondents who said they would be willing to complete a mail survey (581 refused), 1,148 gave the interviewer their name and a useable mailing address. Of those, 766 respondents completed and returned the survey for a response rate of 67.6% (Table 2).

Visitor Characteristics: Intercept Survey

Demographics

    Of the 2,062 visitors who participated in the intercept survey, about 67% (n = 1,382) were males. The average age of all survey participants was 50 years. Visitors to the Monument came from throughout the United States and the world. International visitors comprised about 23% (n = 471) of the sample (Figure 4), and of this, 38.2% were from Germany (n = 180), 12.7% from the Netherlands (n = 60), and 9.1% from Canada (n = 43).
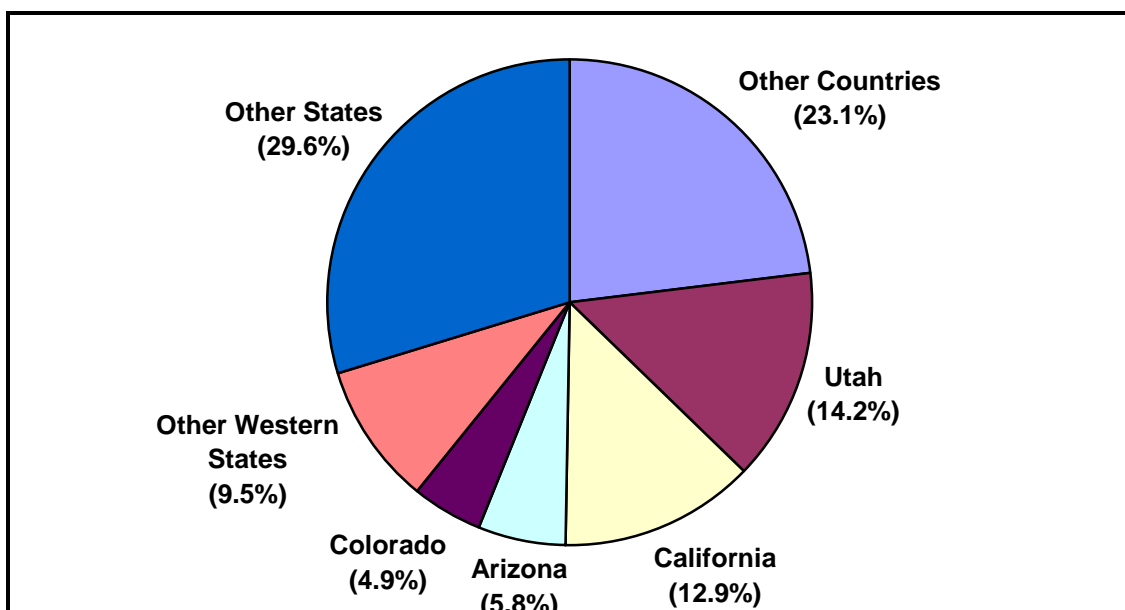
Figure 4: Visitors' Place of Residence (n = 2,050)

Table 1: Intercept Survey Sites

Monument Recreation Sites				Visitor Centers	Overlooks
Trailheads	*Scenic Attractions*	*Roads*	*Campgrounds*		
Calf Creek	Devils Garden	Burr Trail	Calf Creek	Big Water	Blues
Deer Creek	Grosvenor Arch	Cottonwood Road Pull-off	Deer Creek	Boulder	Boynton
Dry Fork	Left Hand Collet	Johnson Canyon Road kiosk	Whitehouse	Cannonville	Head of the Rocks
Escalante River	Paria Movie Set	Smokey Mountain Road kiosk		Escalante	
Harris Wash				Kanab	
Lower Hackberry					
Whitehouse					
Wire Pass					

Table 2: Sampling Days and Intercept and Mail Survey Response Rates

		Monument Recreation Sites				Visitor Centers	Overlooks	
		Trailheads	*Scenic Attractions*	*Roads*	*Campgrounds*			Total
Days in sampling period	weekend	25	14	19	9	30	15	45
	weekday	56	35	42	25	63	38	96
Number of contacts		272	213	84	28	724	985	2,306
Completed intercept surveys	weekend	103	66	28	17	230	264	708
	weekday	157	139	53	10	371	623	1,353
	total	260	205	81	27	602[1]	887	2,062
Intercept response rate		95.6%	96.2%	96.4%	96.4%	83.1%	90.1%	89.4%
Number of addresses		193 (74.2%)	149 (72.7%)	61 (75.3%)	22 (81.5%)	395 (65.6%)	328 (56.9%)[2]	1,148[3] (65.6%)
Mail surveys returned		132	99	40	13	263	219	766
Mail survey response rate		68.4%	66.4%	65.6%	59.1%	66.6%	66.8%	66.7%

[1]One survey was missing the date it was completed.

[2]Of the 887 overlook respondents, 311 were not asked if they would like to do a mail survey.

[3]Of the 2,306 visitors contacted, 555 (24.1%) were not asked to participate in the mail survey because they refused the intercept survey (n = 244; 10.6%) or were overlook visitors who indicated that they were just passing through or going to work (n = 311; 13.5%). Of the 1,751 who were asked if they would do a mail survey, 581 (33.2%) said no and 1,170 (66.8%) said yes. Of those who said yes, 22 (1.9%) gave invalid addresses (undeliverable).

As also shown in Figure 4, 14.2% (n = 290) of the intercept visitors were from Utah, 12.9% (n = 265) from California, 5.8% (n = 118) from Arizona, 4.9% (n = 100) from Colorado, and 9.5% (n = 194) from other western states (Nevada, Montana, New Mexico, Oregon, Idaho, Washington, Wyoming, and Alaska). The rest of the visitors were from 39 other states (n = 607; 29.6%). All together, the sample included visitors from all 50 states and the District of Columbia. Of those visitors who were from Utah, 10.3% (n = 30) resided within either Kane or Garfield counties and would be considered local residents to the Monument area (Table 3). Utah visitors resided in 21 out of the 29 counties in the state. The top three Utah counties represented were Salt Lake (n = 95; 32.8%), Utah (n = 35; 12.1%), and Washington (n = 33; 11.4%).

Table 3: Counties Where Monument Visitors from Utah Reside

County	Percent	n[1]
Box Elder	1.7%	5
Cache	2.1%	6
Davis	6.6%	19
Duchesne	0.7%	2
Garfield	5.5%	16
Grand	1.4%	4
Iron	4.5%	13
Juab	0.3%	1
Kane	4.8%	14
Millard	0.7%	2
Morgan	0.3%	1
Salt Lake	32.8%	95
Sanpete	1.0%	3
Sevier	1.4%	4
Summit	2.8%	8
Tooele	1.4%	4
Utah	12.1%	35
Wasatch	1.4%	4
Washington	11.4%	33
Wayne	2.8%	8
Weber	4.5%	13

[1]Total n = 290

When visitors were asked how many people were in their group for the trip, 12.6% (n = 223) said they were alone, 56.3% (n = 996) indicated a group size of two, 20.7% (n = 366) said three or four, 6.2% (n = 109) indicated five or six, and 4.2% (n = 75) said seven or more (Figure 5). Following a similar pattern, when asked how many people were traveling in the same vehicle as the respondent, the majority (n = 1,018; 57.6%) of respondents said that there was a total of two people traveling in the same vehicle (Figure 6).
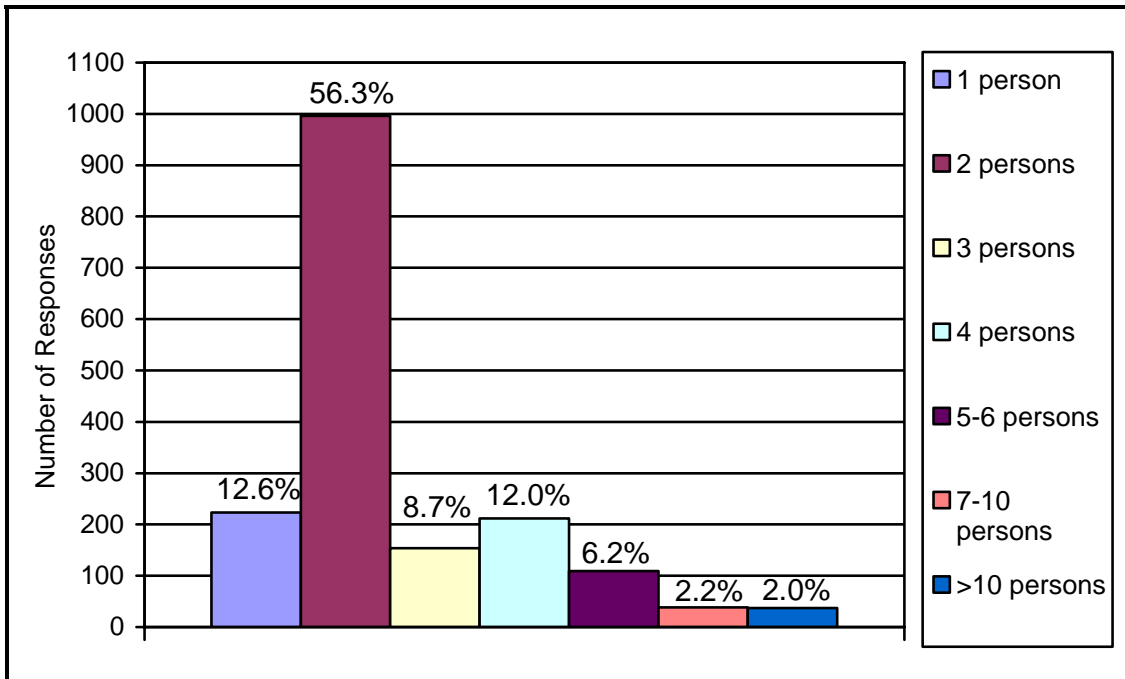
Figure 5: Number of People Per Group (n = 1,769)
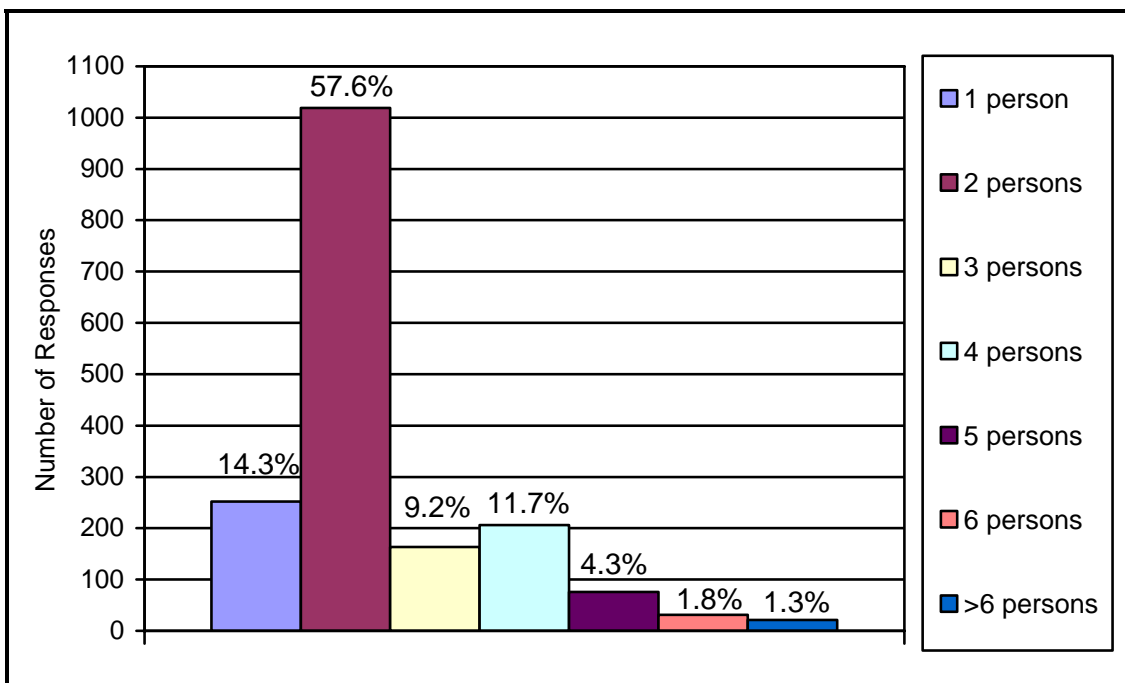
Figure 6: Number of People Per Vehicle (n = 1,768)

Respondents were asked if this was the first time they had visited the Monument. Slightly more than sixty percent (60.6%; n = 1,062) indicated they were first time visitors (Figure 7). When first time visitors were asked what they expected to see and experience during their visit to the Monument area, 572 (54.5%) gave a response concerning natural features, 463 (44.1%) said landscape and scenery, and 151 (14.4%) had no expectations or did not expect anything (respondents were given the opportunity to provide multiple answers). A complete list of all of the general categories that the responses fell within and their subsequent subcategories can be found in Appendix D.
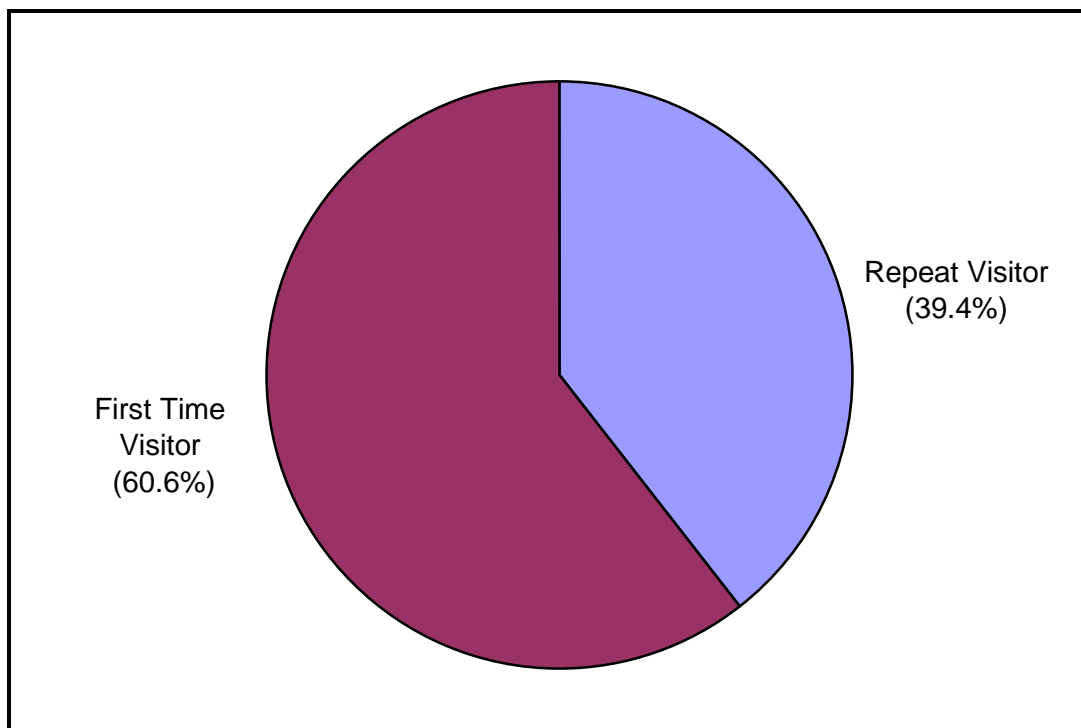
Figure 7: First Time Visitors and Repeat Visitors to the Monument (n = 1,752)

Knowledge of the Monument's Management Agency

Visitors were asked if they had heard of the Grand Staircase-Escalante National Monument and 88.0% (n = 1,814) said they had heard of it (Table 4). Of those 1,814, 1,806 were then asked if they knew the agency that manages the Monument and 58.7% (n = 1,061) said yes (eight responses were not recorded). When those 1,061 visitors were asked to identify the agency, 74.3% (n = 788) correctly identified the BLM. In other words, only 788 (38.2%) of the 2,062 respondents had heard of the Monument and indicated they knew which agency managed it, and correctly identified the BLM as the management agency (Table 4). Noteworthy is that about one-quarter of the international visitors (26.2%) indicated they had not heard of the GSENM or were unsure if they had heard of it. Also noteworthy is that almost 65% of international visitors did not know which agency was responsible for the management of the Monument, while over one-third (37.3%) of the visitors from other states didn't know, and over one quarter (28.4%) of Utahns didn't know.

Table 4: Knowledge of the GSENM's Management Agency

		Overall	Utah	Other States	International
Heard of GSENM?	Yes	88.0%	97.9%	90.9%	73.8%
	No/Unsure	12.0%	2.1%	9.1%	26.2%
If yes, do you know which agency manages GSENM?	Yes	58.7%	71.6%	62.7%	35.1%
	No/Unsure	41.3%	28.4%	37.3%	64.9%
Bureau of Land Management (BLM)[1]		74.3%	82.4%	73.8%	64.5%
National Park Service (NPS)		11.8%	5.9%	12.3%	19.0%
Department of the Interior		3.4%	2.0%	3.8%	1.7%
U.S. Government		2.5%	2.5%	2.6%	2.5%
Forest Service		1.9%	3.4%	1.8%	0.0%
State Parks		1.5%	0.5%	1.0%	6.6%
Other agencies or combined agencies		4.6%	3.3%	4.7%	5.7%

[1] 38.2% (788 out of 2,062) of respondents had heard of GSENM, indicated they knew which agency managed it, and correctly identified the BLM as the management agency.

Monument and Trip Information Sources

Visitors who had heard of the Monument were asked how they *first* found out about the Monument. As shown in Table 5, the most frequently mentioned information source for first hearing about the Monument were reports about the initial designation by President Clinton's proclamation in 1996 (20.6%), followed by maps and brochures (16.2%), guidebooks (13.5%), and friends or family (11.5%). However, 15.4% (n = 272) of the visitors gave a response other than the response categories listed on the survey. The other sources of information where visitors *first* heard about the Monument are organized into several general categories: clubs (n = 4; 1.5%), community (n = 21; 7.7%), do not know (n = 18; 6.6%), educational sources (n = 15; 5.5%), familiar with the area (n = 35; 12.9%), media sources (n = 51; 18.8%), miscellaneous answers (n = 6; 2.2%), Monument

designation (n = 10; 3.7%), personnel in surrounding areas (n = 7; 2.6%), planning for the trip (n = 6; 2.2%), travel agency/information center (n = 20; 7.4%), travel literature/literature about the area (n = 24) 8.8%), and traveling (n = 67; 24.6%). These general categories and their subcategories can be found in Appendix E.

Table 5: Information Sources Used to First Find Out About the Monument[1]

Information Source	Overall (n = 1,761)	Utah (n = 279)	Other States (n = 1,141)	International (n = 331)
Clinton Designation	20.6%	52.3%	17.5%	4.2%
Maps/Brochures	16.2%	3.6%	18.4%	19.3%
Guidebook	13.5%	0.4%	10.3%	35.3%
Friends/Family	11.5%	15.8%	12.0%	6.3%
Internet	6.9%	0.7%	7.3%	10.9%
Driving By/Road Signs	6.9%	5.0%	7.7%	5.7%
Magazine	4.0%	0.7%	4.9%	3.9%
Newspaper	2.9%	5.0%	2.6%	2.1%
Visitor Center	2.2%	0.0%	2.7%	2.1%
Other	15.4%	16.5%	16.5%	10.0%

[1] Respondents only checked one information source.

Interestingly, but perhaps not surprising, over half of the Utahns (52.3%) indicated they first found out about the Monument through the media blitz surrounding the original Clinton designation, compared to 17.5% of visitors from other states and only 4.2% from other countries. Maps and brochures were not used much as the initial information source by Utahns (3.6%) compared to visitors from other states (18.4%) and countries (19.3%). Similarly, less than one percent of Utahns first found out about the Monument from internet sources compared to 7.3% from other states and 10.9% from other countries. More than one-third of international visitors (35.3%) used a guidebook compared to less than one percent of Utahns. Also, Utahns were more likely to have first heard of the Monument from friends and family (15.8%) than visitors from other states (12.0%) and international visitors (6.3%).

When respondents were asked what sources of information they had used to plan their *current* Monument trip, the largest percentage of responses were in the maps/brochures (29.1%) and guidebooks (29.1%) categories (Table 6). Almost one quarter received information at a visitor center, while 23.1% utilized the internet. Other frequently mentioned sources were knowledge based on previous trips (16.3%), friends and family (12.5%) and driving by or road signs (7.4%). For this question, visitors were allowed to give more than one response as to what sources of information they had utilized. Again, for this question, visitors were allowed to give answers other than those provided on the survey and these responses (n = 325) were organized into several general categories: clubs (n = 3; .9%), community (n = 44; 13.5%); do not have any information (n = 38; 11.7%), educational sources (n = 12; 3.7%), familiar with the area (n = 28; 8.6%), media sources (n = 23; 7.1%), personnel in surrounding areas (n = 14; 4.3%),

travel agency/information center (n = 80; 24.6%), travel literature/literature about the area (n = 40; 12.3%), and traveling (n = 46; 14.2). The general categories and subcategories created for the alternative answers for this question can be found in Appendix E.

Table 6: Where Did You Get Information About the Monument to Plan This Particular Trip?

Information Source	Overall (n = 1,803)	Utah (n = 284)	Other States (n = 1,166)	International (n = 342)
Maps/Brochures	29.1%	17.6%	32.4%	26.6%
Guidebook	29.1%	13.7%	26.5%	50.9%
Visitor Center	23.8%	22.2%	24.9%	21.6%
Internet	23.1%	10.6%	24.0%	30.2%
Previous Trip Experience	16.3%	33.5%	14.6%	7.9%
Friends/Family	12.5%	22.5%	11.2%	7.9%
Driving By/Road Signs	7.4%	9.2%	8.1%	3.8%
Magazine	4.5%	1.1%	6.1%	1.8%
Government Agency Office	2.6%	3.9%	2.5%	1.8%
Newspaper	1.4%	1.4%	1.6%	0.6%
Other	18.0%	18.0%	19.8%	12.3%

[1] Respondents could select more than one information source.

In planning for their trip, Utahns were more likely to find previous trip experience to the area more useful (33.5%) than visitors from other states (14.6%) and countries (7.9%) (Table 6). Also, word-of-mouth information from friends and family was an important source of information for Utahns (22.5%) compared to those living in other states (11.2%) and countries (7.9%). More than half of international visitors (50.9%) used guidebooks compared to about one-quarter of visitors from other states and 13.7% of Utahns. Similarly, international visitors (30.2%) and visitors from other states (24.0%) used internet sources for trip planning compared to only 10.6% of Utahns. Maps and brochures also appear to be important trip planning aids for all visitors.

In comparing first time visitors to repeat visitors to the Monument, there are differences evident in the sources of information where the visitor *first* found out about the Monument. First time visitors were more likely to say maps/brochures (n = 174; 19.8%) or guidebooks (n = 165; 18.8), while repeat visitors were more likely to say the Clinton designation (n = 239; 37.2%) or friends/family (n = 72; 11.2%) (Table 7).

When comparing first time visitors with repeat visitors to the Monument, first time visitors were more likely to use guidebooks (n = 299; 33.3%), maps/brochures (n = 283; 31.5%), visitor centers (n = 254; 28.3%), and the internet (n = 220; 24.5%) when they *planned* their trip, while repeat visitors were more likely to rely on information from a previous trip/experience (n = 237; 35.8%), maps/brochures (n = 162; 24.5%), guidebooks (n = 161; 24.3%), and visitor centers (n = 150; 22.7%) (Table 8).

Table 7: Comparison of First Time and Repeat Visitors First Finding Out About the Monument

	First Time Visitors (n = 878)		*Repeat Visitors* (n = 643)	
	percent	n	percent	n
Friends/family	12.8%	112	11.2%	72
Driving by/road signs	4.8%	42	9.5%	61
Maps/brochures	19.8%	174	8.1%	52
Magazine	5.2%	46	2.5%	16
Newspaper	1.8%	16	4.4%	28
Guidebook	18.8%	165	5.3%	34
Internet	8.8%	77	2.8%	18
Visitor center	2.8%	25	1.1%	7
Clinton designation	11.2%	98	37.2%	239
Other	14.0%	123	18.0%	116

Table 8:

Comparison of First Time and Repeat Visitors on Information Sources for Current Trip

	First Time Visitors (n = 899)		*Repeat Visitors* (n = 662)	
	percent	n	percent	n
Friends/family	13.1%	118	13.0%	86
Driving by/road signs	7.0%	63	8.9%	59
Maps/brochures	31.5%	283	24.5%	162
Magazine	5.9%	53	3.2%	21
Newspaper	1.7%	15	1.5%	10
Guidebook	33.3%	299	24.3%	161
Internet	24.5%	220	20.4%	135
Visitor center	28.3%	254	22.7%	150
Government agency office/personnel	2.7%	24	3.5%	23
Previous trip/experience	3.0%	27	35.8%	237
Other	18.7%	168	16.9%	112

Visitor Use Characteristics: Intercept Survey

Prior Visitation

All repeat visitors to the Monument were asked the year they had first visited (n = 678). Responses ranged from the years 1939 to 2004, with the median year being 1994. As shown in Figure 8, over half of repeat visitors (52.9%) first visited the Monument prior to 1996, while 47% first visited between 1996 and 2004. However, if the first time visitors are included with those visitors who first visited the Monument after 1996, 85.2% of all visitors would have visited between 1996 and 2004; only 14.7% of all visitors first visited before 1996. Only one visitor could not remember the year they first visited the Monument.
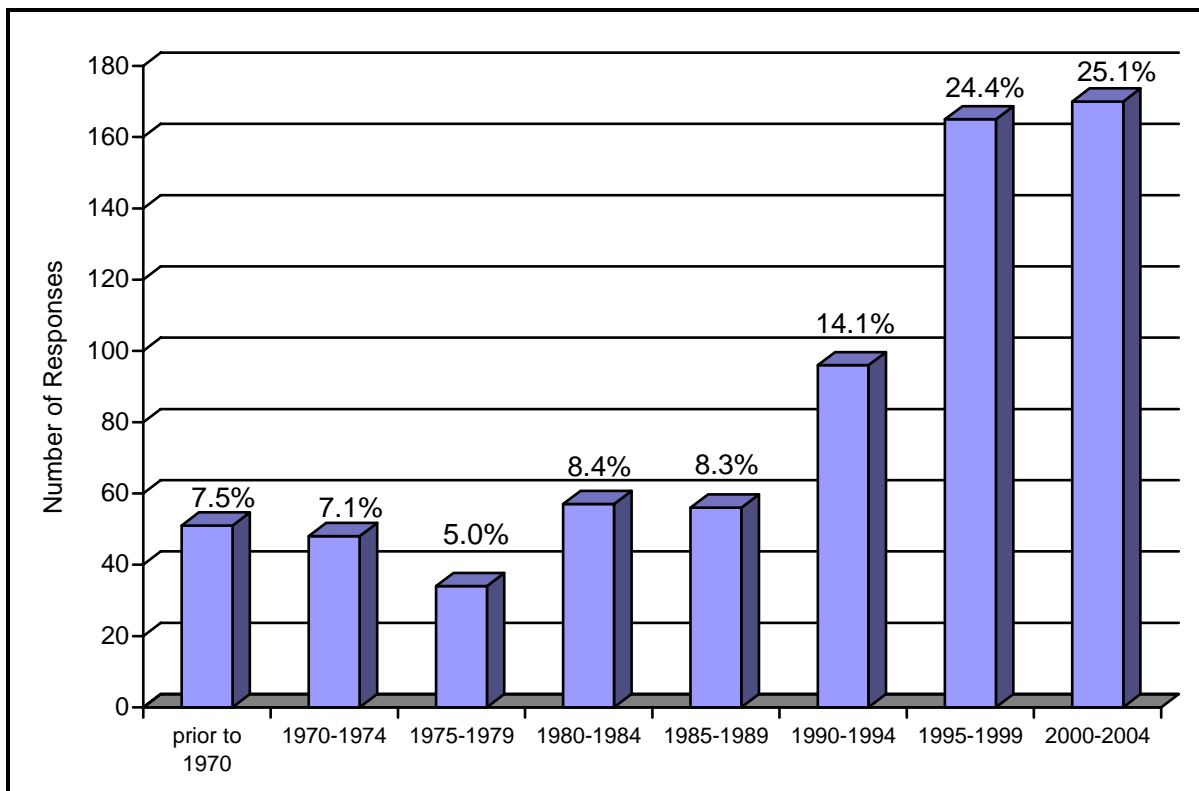
Figure 8: Return Visitors' First Year Visiting the Monument (n = 678)

When repeat visitors who had first visited the Monument before 1996 were asked if the number of their visits had changed since the Monument was designated in 1996, 64.6% said their visits had stayed the same, 28.2% said increased, and 7.2% said their visits had decreased (Figure 9). These same visitors were also asked the number of times they typically visit the Monument in a year and 54.7% said less than once a year, 24.2% said once a year, 10.0% said twice a year, 11.1% said they typically visit more than twice a year (Figure 10).
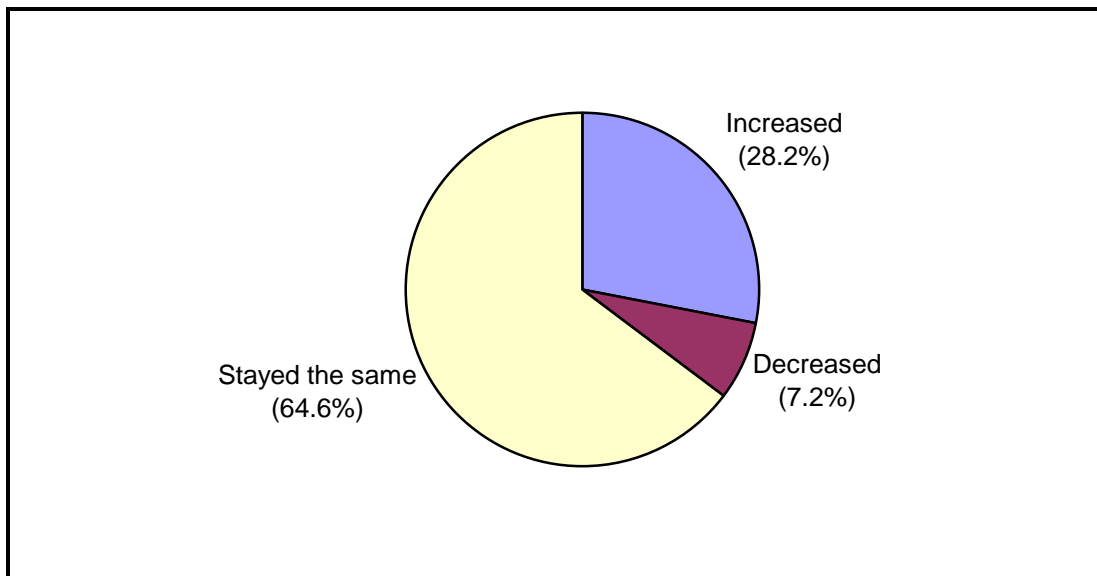
Figure 9: Return Visitors' Change in Visitation Rate Since Monument Designation in 1996 (n = 373)
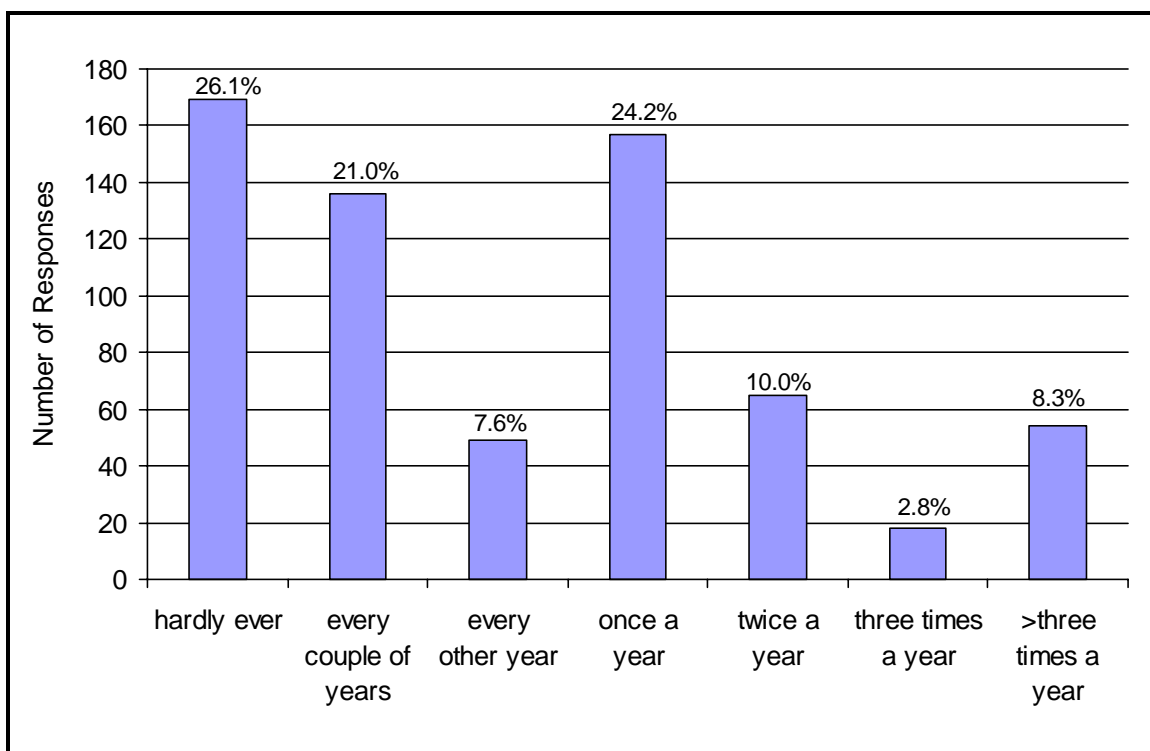
Figure 10: Return Visitors' Number of Visits in a Typical Year (n = 648)

Visitation

Visitors were asked how long they were planning to stay in the Monument area. Of the 1,727 who answered this question, 87.6% (n = 1,513) were staying one day or more while the rest were only visiting from one to twelve hours. As shown in Figure 11, 29.1% of visitors indicated they were only staying one day, 20.7% indicated they were staying two days, 32.1% said three, four, or five days, 18.1% indicated they were staying 6 or more days. Visitors who indicated they were staying one day or longer, on average, stayed 3.6 days visiting the Monument. Of the 214 visitors who said that they were visiting the Monument for less than one day, 74.8% indicated they were staying for four hours or less, with the other 25.2% staying 5 to 12 hours. The average amount of hours these visitors visited the Monument was 3.4 hours (Figure 12).
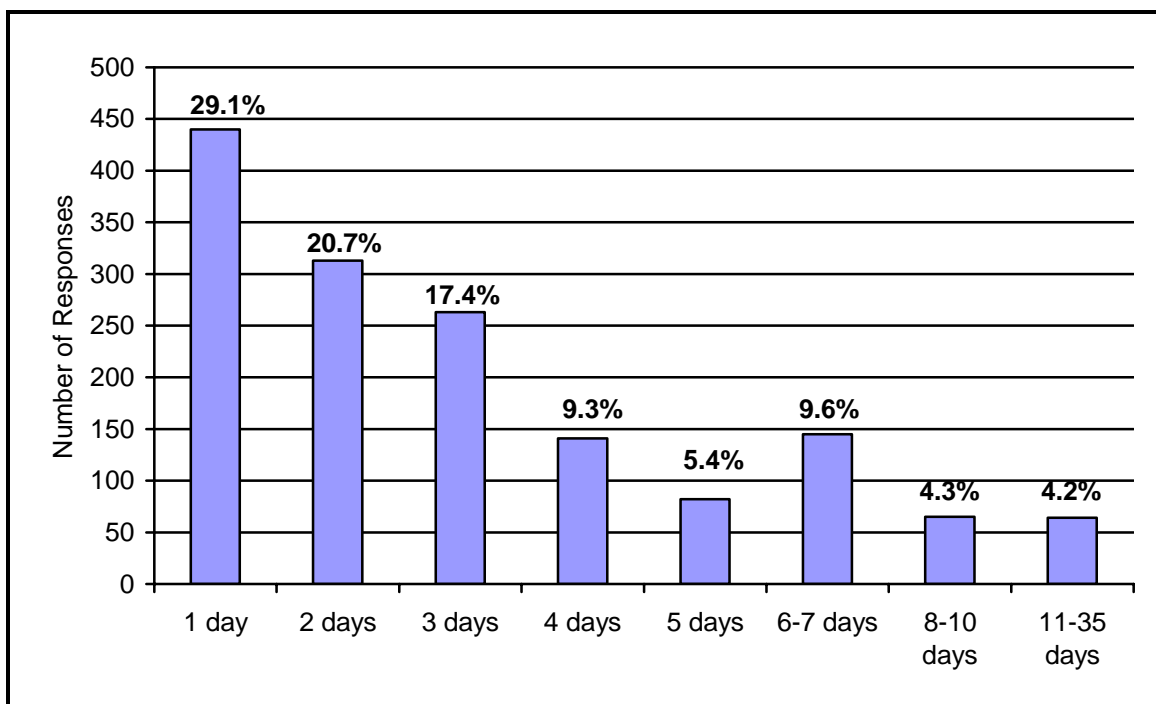
Figure 11: Number of Days Visitors Visited the Monument (n = 1,513)
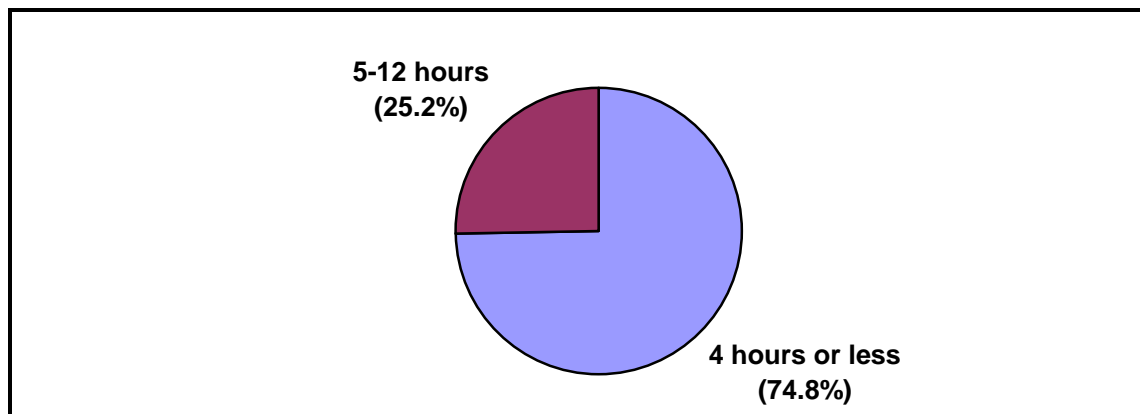
Figure 12: Number of Hours Visitors Spent in the Monument (n = 214)

Visitors were also asked why they were visiting the Monument area. Recreation was the primary reason by far with 77.2% (n = 1,566) of visitors providing this response. However, 57.1% (n = 1,158) of the visitors responded they were visiting for recreation but that the Monument *was not* their main destination; while 20.1% (n = 408) responded they were visiting for recreation and the Monument *was* their main destination (Table 9).

Table 9: Reasons for Visiting the Monument Area

	Overall (n = 2,029)	*Survey Type*		
		Recreation Sites (n = 568)	Visitor Centers (n = 591)	Overlooks (n = 870)
Primarily for recreation – the Monument is my main destination	20.1%	37.9%	21.8%	7.4%
Primarily for recreation – but my main destination is <u>NOT</u> the Monument	57.1%	56.0%	65.0%	52.4%
Primarily for business, family, or other reasons; the Monument was a side trip	2.4%	3.3%	3.7%	0.8%
Working or commuting to work (overlook only)	0.1%	0.0%	0.2%	0.1%
Just passing through (overlook only)	15.2%	0.0%	0.0%	35.4%
Other	5.2%	2.8%	9.3%	3.9%

The 1,158 visitors who said the Monument was not their main destination were asked what was their main destination. The most frequently mentioned response for this question was a tour of the National Parks (n = 370; 32.0%). Interestingly, 87 (7.5%) of the visitors responded they had no real main destination or were just traveling. The next most frequently mentioned responses were Bryce Canyon National Park (n = 70; 6.0%), southern Utah (n = 63; 5.4%), both Bryce Canyon and Zion National Parks (n = 43; 3.7%), a tour of the Southwest (n = 37; 3.2%), Grand Canyon National Park (n = 28; 2.4%), a tour of the West (n = 27; 2.3%), Capitol Reef National Park (n = 22; 1.9%), both Bryce Canyon and Capitol Reef National Parks (n = 17; 1.5%), Lake Powell (n = 14; 1.2%), and Las Vegas, NV (n = 14; 1.2%).

Monument Impressions: Intercept Survey
General Impression
Respondents were asked about their general, overall impression of the Monument and the responses received were analyzed by separating these into thematic categories (Appendix D). Responses were categorized under multiple themes if it was necessary. About 83% (951) of the 1,150 responses given contained dynamic superlatives such as "awesome," "spectacular," and "beautiful." About 19.4% (n = 223) of visitors mentioned in some way the Monument's scenery, unique landscape, natural features, and ecology of the area. Eleven percent (n = 127) of the responses mentioned something favorable about the Monument's management or facilities such as good roads, clean restrooms, and nice

campgrounds. Another 3.7% (n = 42) were somewhat critical of the current management of things, such as poor roads, lack of information, and poor trail signs, while 2.5% (n = 29) of visitors provided specific suggestions for improvement.

Satisfaction with Trip to Monument

Visitors were asked how satisfied they were with their trip to the Monument up to the time they were interviewed by ranking their degree of satisfaction on a 6-point Likert scale ranging from "very dissatisfied" to "very satisfied."

Table 10: Visitors' General Satisfaction with Their Trip to the Monument So Far

	Very Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
Respondents (n = 1,708)	77.5% (1,324)	19.3% (329)	2.7% (46)	0.4% (7)	0.1% (1)	0.1% (1)

Of the 1,708 respondents who answered this question, 96.8% (n = 1,653) indicated they were either "very satisfied" or "satisfied" with their trip to the Monument so far. Less than 3% of these visitors said they were somewhat satisfied (n = 46; 2.7%) and less than 1% of the visitors expressed some level of dissatisfaction (n = 9; 0.6%) (Table 10). This question was followed by another that asked visitors to specify in what ways they were satisfied or dissatisfied with their trip to the Monument. Of the 1,708 respondents who gave an answer for the main question regarding their satisfaction with this trip, 96.6% (n = 1,650) responded to the follow-up question. In the following sections, the distinction will be made between those who ranked their satisfaction level as "overall satisfied" (very satisfied, satisfied, or somewhat satisfied), and those who ranked their satisfaction level as "overall dissatisfied" (very dissatisfied, dissatisfied, or somewhat dissatisfied).

Responses addressed a wide range of reasons respondents had positive and negative opinions with their trip to the Monument up to the point they were interviewed. Responses are organized into several categories including satisfaction with scenery, recreation, and visitor services. It should be noted a few respondents who identified themselves as "overall satisfied" in the main satisfaction question, also addressed areas where improvements could be made in their response to the follow-up question. For example, one respondent who was "very satisfied" in the main question said he was "disappointed about not getting information on a permit and was not able to get one." Such responses will be distinguished from others.

Beauty and Scenery of the Monument

Of the 1,650 respondents who answered the follow-up question, in general, there were 900 (54.4%) who identified beauty, scenery, or unique landform characteristics as being the reason they were satisfied with their trip to the Monument. More specifically the following indicate why respondents were satisfied: 243 because of the scenery, 449 because of the beauty, 120 because of the landscape, six because of the flowers, five making reference to the Monument as "God's creation," 42 because of the uniqueness of the Monument, and 35 indicated they were satisfied because it was clean.

Generally Impressed

Another 301 respondents were generally impressed with the Monument. Of these, most said the Monument was what they expected it to be, but 5.7% said the Monument was more than they expected. Positive comments from 85.7% of these respondents generally included descriptors such as "excellent," "spectacular," and "I love it."

Weather

One hundred twenty-seven respondents answered the follow-up question with a comment on the weather. Of those 127, 106 said the weather was "good." The responses of the remaining 19 respondents were broken down as follows: eight said it was rainy, four said it was cold or cool, six said it was windy, two said it was hot, and one said the weather was "bad."

Campgrounds/Hiking/Recreation

Almost 7% of the respondents (n = 110) enjoyed their visit to the Monument for the recreation opportunities it provides; 26 enjoyed their camping experience, 59 enjoyed it for the hiking, 11 for the slot canyons, and 14 mentioned other recreational activities like bike riding, rock climbing, and four-wheeling.

Visitor Services

Slightly over 6% (n = 106) of the 1,650 respondents who answered the follow-up question were impressed with the visitor services provided at the Monument. Of these 106 respondents, 28 were impressed with the visitor centers. One respondent said, "The visitor centers are all helpful. I got all my questions answered." Twenty-three respondents had positive comments about information and education at the Monument. Thirteen respondents said the liked the way the Monument was managed and organized, saying things like, "I like the BLM 'hands-off' management; unimproved is good." Eight respondents said they liked the services they found, while eighteen liked the facilities. One respondent said they liked the "classy outhouses." Eleven said the Monument was well kept, while five said they were disappointed with visitor services, and one saying they wanted "more shade outside for elderly."

Number of People

About another 6% (n = 103) commented on the number of people they encountered in the Monument. Eighty-seven percent (n = 90) of these respondents said they enjoyed the Monument because there were few people, 6.8% (n = 7) said there were too many people, and 5.9% (n = 6) of the respondents liked the Monument because there was "no traffic."

Quiet/Solitude

Almost 6% said they were satisfied because they were able to experience quiet or solitude in the wilderness setting. Of those 98 respondents, 37 described it as "quiet," "peaceful," or "serene." Thirty-four of the respondents used words like "solitude" and "remoteness" and an additional 27 called it "wild" or "natural." One respondent said he liked the Monument because his group was "looking for remoteness and solitude."

People

Almost 5% of the respondents (n = 78) enjoyed the Monument because of people they encountered with 62 saying they liked the friendly people and the other 16 said the people they met were helpful.

Geology/Rocks

There were 66 respondents to the follow-up question who said they were impressed with the geological rock formations. One of the respondents said, "It is the most scenic and extraordinary viewing of rock formations. It is just magnificent." Another liked it because they were "both geologists."

Roads

Sixty-five respondents to the follow-up question made comments on the roads in the Monument. Eighty-three percent of them said the roads were "good" and 17% said the roads were "bad." One respondent said, "The thing that was dissatisfying was the roads that were washed out on the Hole-in-the-Rock road."

Signage

Almost 3% (n = 43) made comments about the signs in the Monument. About 70% said the signs were good and the other 30% said they were bad. Of those who felt the signs were good, five liked the trail signs, three liked the signs at the pullouts and viewing areas, eight liked the information boards, and 14 liked the signs in general. Of those who felt the signage was bad, three wanted better direction signs, four wanted better information signs, and six felt the signs were inadequate in general.

Other Responses

When asked why they were satisfied with their trip to the Monument, seventeen confused the GSENM with other National or State Parks, or made comments about Utah in general. For example, two different respondents said, "Kodachrome State Park is great!" and "Utah is the prettiest state." Less than 1% (n = 14) of the people who expressed they were satisfied with their trip to the Monument indicated it was due to the people with whom they were visiting. Another 16 said they were happy with the accessibility of the Monument, while three respondents said they would like "more access." Only five said anything about the surrounding towns as being reasons for having had a good experience at the Monument. All made reference to liking small towns, with one respondent saying "smaller towns are nice."

Negative Impressions

Of the 1,653 respondents who answered the follow-up question, 42 (2.5%) gave negative comments about the Monument, although 33 of these were still satisfied with their experience at the Monument, indicating they could have been more satisfied. For example, one respondent said they were "disappointed about not getting information on a permit and were unable to get one." Yet this respondent indicated they were "very satisfied" with their trip to the monument. Only nine respondents who answered the follow-up question indicated they were less than satisfied with their trip to the Monument.

Satisfaction with Visitor Services in Surrounding Communities

Visitors were also asked to rank their degree of satisfaction with visitor services in the communities surrounding the Monument on another 6-point Likert scale ranging from "very dissatisfied" to "very satisfied."

Table 11: General Satisfaction with Visitor Services in Gateway Communities

	Very Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
Respondents (n = 1,448)	56.6% (819)	33.4% (484)	7.6% (110)	1.6% (23)	.6% (8)	.3% (4)

Of the 1,448 respondents who answered this question, 90.0% (n = 1,303) indicated they were either "very satisfied" (n = 819; 56.6%) or "satisfied" (n = 484; 33.4%) with the visitor services in the gateway communities surrounding the Monument, while only 2.5% (n = 35) said they were either "somewhat dissatisfied," "dissatisfied," or "very dissatisfied" (Table 11). This question was followed by another question asking visitors to explain in what ways they were satisfied or dissatisfied with the visitor services in the surrounding gateway communities. Of the 1,448 respondents who answered the main satisfaction question, 93% (n = 1,343) answered the follow-up question. In the following sections, the distinction will be made between those who identified themselves in the main satisfaction question as being overall "satisfied" (very satisfied, satisfied, or somewhat satisfied), and those who identified themselves as being overall "dissatisfied" (very dissatisfied, dissatisfied, somewhat dissatisfied). Responses addressed a wide range of why, in general, respondents revealed positive and negative opinions with the services provided by the communities. It should also be noted several of the respondents gave multiple responses indicating why they were satisfied or dissatisfied with the services. These responses were separated into their corresponding categories.

Friendly and Helpful Service Providers

The most frequently mentioned responses (n = 602) referred to the people respondents encountered in purchasing services or goods in the neighboring communities. Nearly 14% (n = 187) said they found the people providing services to be both friendly and helpful. Another 173 respondents (12.9%) indicated people were friendly and another 242 (18.0%) said people were helpful or provided good information.

Services

Of the 1,343 respondents who answered the follow-up question, in general there were 254 (18.9%) who indicated they were satisfied in general with the services they used. These respondents offered comments such as, "more than adequate," "they were pretty good," or "I got what I needed."

Services: Satisfied, but...

Of the respondents who answered the follow-up question, 142 (10.6%), said they were satisfied with the services overall, but they also indicated there was something with

which they were not satisfied. Of these, 24 were dissatisfied with the food or gas in some way; 42 said they would like more services because of a limited selection; seven were dissatisfied with the overnight accommodations; 14 said there was a lack of information available; 16 indicated they were not satisfied with the business hours, including a number of business services being closed on Sunday; two respondents indicated the attitude of the people serving them was unsatisfactory; 15 indicated prices were too high; four said they were not satisfied in general, and 18 gave other reasons for being dissatisfied other than those listed above.

Gas/Food Services

Of those respondents who answered the follow-up question, 3.1% (n = 41) indicated they were satisfied with the gas and/or food services they used. One respondent said they were satisfied because "gas is cheaper than in California" and another said they had a "wonderful lunch."

Lodging and Food Services

Approximately 2.5% (n = 33) of the respondents indicated they were satisfied with both lodging and food services. One respondent answered this question by saying "good room, good meal."

General

Six percent (n = 85) of the respondents answering the follow-up question indicated they were satisfied in general. These comments gave an indication there was a general satisfaction with their trip, but not necessarily satisfaction with services. Fourteen of these respondents did specify specific things they were satisfied with which do not fall into any other category. For example, one respondent was satisfied because they found "good brochures."

Services in Specific Towns

There were 14 respondents who mentioned Escalante in their responses. Of these, seven were satisfied; three in general, one with the food, two with the helpfulness and friendliness of the people, and one with overnight accommodations. Seven were satisfied in general, but found the following less satisfactory: one didn't like the food; one was unsatisfied with the overnight accommodations; two were not satisfied with the selection of services; and two had reasons for being dissatisfied for other than those listed. One respondent indicated they were dissatisfied with the services in Escalante.

Sixteen respondents were satisfied with the services in Kanab. Eleven respondents were satisfied in general; one with the people, one with overnight accommodations, and one with the food. Two respondents indicated they were satisfied with the services but that in Kanab the food was not so good, and one other respondent wanted to call home but two of the pay phones were out of order.

Fourteen respondents (1.0%) indicated they were happy with the service in Boulder. Nine of these respondents were satisfied in general, three with the food and two were satisfied with everything but the prices.

Eight respondents indicated they were satisfied with the services in general in Torrey. Another five said they were satisfied with the services in Tropic; three were

satisfied in general and two were satisfied with everything except the gas station that ran out of gas and the restaurant that was not open. Twelve indicated they were satisfied with the services in Page. Another five were satisfied with the services in Panguitch, while one respondent was satisfied with everything except for the price and quality of food. Eight also indicated satisfaction with Cannonville services.

Areas Managed by Other Agencies

Twenty-eight respondents indicated they were satisfied with services provided by other management agencies such as Bryce Canyon and Zion National Parks; 13 were satisfied with Bryce Canyon, four others where satisfied with everything except for Bryce Canyon, five were satisfied with Zion, and six were satisfied with other areas managed by the state of Utah, such as Utah State Parks.

Didn't see or use help

Of the 1,343 respondents answering the follow-up question, only about 2% (n = 26) did not use any services or did not see any to use.

Dissatisfied

Twenty-six respondents(1.9%) indicated they were dissatisfied with the services they used: three were dissatisfied in general; six with the food, three with overnight accommodations; five with information; four because of a lack of services; one because of the attitude of those serving them; one because of high prices; and three for reasons other than listed.

Crowding Variables: Intercept Survey

Respondents from all survey sites were asked a series of questions regarding the number of other people they saw at the survey site, how this number matched their expectations, how they felt about the number they saw, and what effect this number had on their overall experience at that site. An additional two question were asked only at Monument recreation sites that assessed respondents' feelings regarding use restrictions at the survey site.

Visitors were first asked to estimate the number of other people they saw while at the survey site. Overall, the average number of other people respondents saw was 8.84 people and the median was five people. Table 12 shows the mean and median found for each survey site separated by the type of site. The largest median numbers found for each type of site were at Calf Creek trailhead (median = 25), Devils Garden (median = 8), Cottonwood Road pull-off (median = 10), Calf Creek campground (median = 35), Boulder Visitor Center (median = 10), and Head of the Rocks overlook (median = 8).

Visitors were next asked to evaluate how well the number of people they saw accurately matched their expectations before visiting the survey site. As shown in Table 13, overall the majority of respondents felt that the number of other people they saw was about the same as they had expected. This pattern holds true for all of the types of sites but is the most prominent for respondents at visitor centers and overlooks. Of the individual sites, Calf Creek trailhead is the only site where this pattern did not hold true and the majority of respondents felt the number of people they saw was more than they had expected. Just the opposite was found at four other individual sites: Dry Fork

trailhead, Left Hand Collet, Smoky Mountain Road kiosk, and Deer Creek Campground (Table 13). Although the category "no expectations" was not provided as an option, this category was written in by 7.4% of respondents overall. The type of site with respondents who did not have any expectations about the number of people they would see there was overlooks with 12.5% of respondents writing in this category.

Table 12: Number of Other People Seen at Specific Survey Sites

Specific Site Types	Site Name	mean	median	min	max	n
Trailheads	Calf Creek trailhead	33.91	25	2	150	91
	Escalante River trailhead	5.11	4	0	22	53
	Wire Pass trailhead	8.52	9	0	20	42
	Dry Fork trailhead	9.86	9	0	25	36
	White House trailhead	13.71	12	0	30	17
	Lower Hackbury trailhead	3.00	0.5	0	17	8
	Deer Creek trailhead	4.50	1	0	15	6
	Harris Wash trailhead	6.80	9	0	11	5
	Overall Trailheads	**17.01**	**10**	**0**	**150**	**258**
Scenic Attractions	Grosvenor Arch	6.43	6	0	25	74
	Paria Movie Set	5.79	6	0	30	71
	Devils Garden	15.88	8	0	100	51
	Left Hand Collet	3.00	3	0	6	2
	Overall Scenic Attractions	**8.60**	**6**	**0**	**100**	**198**
Roads	Burr Trail	7.60	6	0	30	25
	Johnson Canyon Rd. kiosk	1.88	1	0	6	26
	Cottonwood Road pull-off	14.44	10	0	100	18
	Smoky Mountain Rd. kiosk	1.38	1	0	3	8
	Overall Roads	**6.62**	**3**	**0**	**100**	**77**
Campgrounds	Calf Creek Campground	40.16	35	5	150	19
	Deer Creek Campground	5.14	4	0	20	7
	White House Campground	30.00	30	30	30	1
	Overall Campgrounds	**30.70**	**20**	**0**	**150**	**27**
Visitor Centers	Boulder Visitor Center	14.15	10	0	70	164
	Escalante Visitor Center	4.52	3	0	25	188
	Cannonville Visitor Center	2.55	2	0	12	100
	Kanab Visitor Center	1.67	1	0	12	60
	Big Water Visitor Center	3.99	3	0	20	76
	Overall Visitor Centers	**6.51**	**4**	**0**	**70**	**588**
Overlooks	Blues Overlook	4.84	4	0	30	195
	Head of the Rocks Overlook	9.44	8	0	54	188
	Boynton Overlook	6.73	5	0	50	211
	Overall Overlooks	**6.97**	**6**	**0**	**54**	**594**

Table 13: Expectations About the Number of Other People Seen at Specific Survey Sites

Specific Site Types	Site Name	more than expected	about the same as expected	less than expected	no expectations	n
Trailheads	Calf Creek trailhead	48.4%	29.7%	20.9%	1.1%	91
	Escalante River trailhead	11.3%	50.9%	37.7%	-	53
	Wire Pass trailhead	28.6%	47.6%	23.8%	-	42
	Dry Fork trailhead	16.7%	38.9%	44.4%	-	36
	White House trailhead	35.3%	58.8%	5.9%	-	17
	Lower Hackbury trailhead	14.3%	57.1%	28.6%	-	7
	Deer Creek trailhead	33.3%	33.3%	33.3%	-	6
	Harris Wash trailhead	40.0%	60.0%	0.0%	-	5
	Overall Trailheads	**30.7%**	**41.6%**	**27.2%**	**0.4%**	**257**
Scenic Attractions	Grosvenor Arch	31.1%	47.3%	18.9%	2.7%	74
	Paria Movie Set	18.6%	41.4%	37.1%	2.9%	70
	Devils Garden	26.9%	34.6%	30.8%	7.7%	52
	Left Hand Collet	33.3%	0.0%	66.7%	-	3
	Overall Scenic Attractions	**25.6%**	**41.2%**	**29.1%**	**4.0%**	**199**
Roads	Burr Trail	17.9%	53.6%	28.6%	-	28
	Johnson Canyon Rd. kiosk	11.1%	44.4%	29.6%	14.8%	27
	Cottonwood Road pull-off	33.3%	50.0%	16.7%	-	18
	Smoky Mountain Rd. kiosk	12.5%	25.0%	62.5%	-	8
	Overall Roads	**18.5%**	**46.9%**	**29.6%**	**4.9%**	**81**
Campgrounds	Calf Creek Campground	31.6%	52.6%	10.5%	5.3%	19
	Deer Creek Campground	28.6%	28.6%	42.9%	-	7
	White House Campground	0.0%	100%	0.0%	-	1
	Overall Campgrounds	**29.6%**	**48.1%**	**18.5%**	**3.7%**	**27**
Visitor Centers	Boulder Visitor Center	17.8%	58.9%	18.4%	4.9%	163
	Escalante Visitor Center	13.8%	63.0%	16.9%	6.3%	189
	Cannonville Visitor Center	3.1%	59.2%	23.5%	14.3	98
	Kanab Visitor Center	0.0%	61.4%	33.3%	5.3%	57
	Big Water Visitor Center	10.7%	62.7%	20.0%	6.7%	75
	Overall Visitor Centers	**11.3%**	**61.0%**	**20.4%**	**7.2%**	**582**
Overlooks	Blues Overlook	12.6%	52.6%	18.9%	15.8%	190
	Head of the Rocks Overlook	21.8%	45.2%	20.2%	12.8%	188
	Boynton Overlook	18.3%	56.7%	15.9%	9.1%	208
	Overall Overlooks	**17.6%**	**51.7%**	**18.3%**	**12.5%**	**586**
Overall Total		**18.6%**	**51.8%**	**22.1%**	**7.4%**	**1732**

Respondents were next asked to rate their feelings about the number of other people they saw on a 5-point Likert scale ranging from "far too few people" to "far too many people." As shown in Table 14, overall, the majority of respondents felt the number of other people they saw was about the right number of people and this pattern remains consistent for each type of survey site.

Lastly, respondents were asked to rate the effect the number of people seen had on their overall experience at the survey site. As shown in Table 15, overall, the majority of respondents said the number of people they saw had no effect on their overall experience at the survey site. However, of those who said the number of people they saw did have an effect on their experience, a larger percent felt this added to their experience rather than detracted from it.

The 82 respondents who selected "detracted from" were asked a follow-up question about why the number of people seen detracted from their experience. However, only 74 actually provided a reason. Of those 74 respondents, 43 (58.1%) said it detracted from their experience because of too many people at the site, 34 (45.9%) said it was due to the behavior of the other people, five (6.8%) said it was due to management issues, three (4.1%) said that it was because there were too few people at the site, and two (2.7%) said it was due to environmental issues. When responses were separated by the type of survey site, the only site where the majority of respondents did not identify crowding as the reason the number of people detracted from their experience was scenic attractions where the majority of respondents named the behavior of the other visitors as the reason.

Table 14: Feelings About the Number of Other People Seen at Specific Survey Sites

Specific Site Types	Site Name	far too many	somewhat too many	about the right number	somewhat too few	far too few	n
Trailheads	Calf Creek	6.6%	20.9%	70.3%	0.0%	2.2%	91
	Escalante River	7.5%	7.5%	81.1%	1.9%	1.9%	53
	Wire Pass	2.3%	11.6%	81.4%	4.7%	0.0%	43
	Dry Fork	0.0%	19.4%	75.0%	5.6%	0.0%	36
	White House	5.9%	11.8%	70.6%	11.8%	0.0%	17
	Lower Hackbury	0.0%	0.0%	87.5%	12.5%	0.0%	8
	Deer Creek	0.0%	0.0%	100.0%	0.0%	0.0%	6
	Harris Wash	0.0%	0.0%	100.0%	0.0%	0.0%	5
	Overall	**4.6%**	**14.3%**	**76.8%**	**3.1%**	**1.2%**	**259**
Scenic Attractions	Grosvenor Arch	1.3%	5.3%	88.2%	3.9%	1.3%	76
	Paria Movie Set	1.4%	4.2%	80.3%	11.3%	2.8%	71
	Devils Garden	11.5%	13.5%	75.0%	0.0%	0.0%	52
	Left Hand Collet	0.0%	33.3%	66.7%	0.0%	0.0%	3
	Overall	**4.0%**	**7.4%**	**81.7%**	**5.4%**	**1.5%**	**202**
Roads	Burr Trail	0.0%	14.3%	75.0%	7.1%	3.6%	28
	Johnson Canyon Road kiosk	0.0%	3.7%	81.5%	7.4%	7.4%	27
	Cottonwood Road pull-off	0.0%	5.6%	94.4%	0.0%	0.0%	18
	Smoky Mountain Road kiosk	0.0%	12.5%	75.0%	0.0%	12.5%	8
	Overall	**0.0%**	**8.6%**	**81.5%**	**4.9%**	**4.9%**	**81**
Campgrounds	Calf Creek	15.8%	10.5%	73.7%	0.0%	0.0%	19
	Deer Creek	0.0%	0.0%	100.0%	0.0%	0.0%	7
	White House	100.0%	0.0%	0.0%	0.0%	0.0%	1
	Overall	**14.8%**	**7.4%**	**77.8%**	**0.0%**	**0.0%**	**27**
Visitor Centers	Boulder	3.0%	3.7%	76.8%	14.0%	2.4%	164
	Escalante	1.6%	4.3%	83.8%	8.1%	2.2%	185
	Cannonville	0.0%	0.0%	73.2%	21.6%	5.2%	97
	Kanab	0.0%	0.0%	80.0%	16.4%	3.6%	55
	Big Water	0.0%	3.9%	68.8%	20.8%	6.5%	77
	Overall	**1.4%**	**2.9%**	**77.7%**	**14.5%**	**3.5%**	**578**
Overlooks	Blues	1.6%	2.6%	87.8%	5.8%	2.1%	189
	Head of the Rocks	1.1%	6.3%	86.2%	4.2%	2.1%	189
	Boynton	1.5%	5.8%	85.0%	6.3%	1.5%	206
	Overall	**1.4%**	**5.0%**	**86.3%**	**5.5%**	**1.9%**	**584**
Overall Total		**2.4%**	**8.0%**	**81.1%**	**6.2%**	**2.3%**	**1731**

Table 15: Effect of the Number of Other People Seen on Overall Experience

Specific Site Types	Site Name	added to experience	had no effect on experience	detracted from experience	n
Trailheads	Calf Creek trailhead	24.2%	67.0%	8.8%	91
	Escalante River trailhead	13.2%	79.2%	7.5%	53
	Wire Pass trailhead	16.3%	76.7%	7.0%	43
	Dry Fork trailhead	30.6%	61.1%	8.3%	36
	White House trailhead	35.3%	47.1%	17.6%	17
	Lower Hackbury trailhead	37.5%	62.5%	0.0%	8
	Deer Creek trailhead	33.3%	66.7%	0.0%	6
	Harris Wash trailhead	0.0%	80.0%	20.0%	5
	Overall Trailheads	**22.4%**	**69.1%**	**8.5%**	**259**
Scenic Attractions	Grosvenor Arch	15.8%	81.6%	2.6%	76
	Paria Movie Set	18.3%	77.5%	4.2%	71
	Devils Garden	13.5%	67.3%	19.2%	52
	Left Hand Collet	33.3%	33.3%	33.3%	3
	Overall Scenic Attractions	**16.3%**	**75.7%**	**7.9%**	**202**
Roads	Burr Trail	21.4%	71.4%	7.1%	28
	Johnson Canyon Rd. kiosk	14.8%	85.2%	0.0%	27
	Cottonwood Road pull-off	27.8%	66.7%	5.6%	18
	Smoky Mountain Rd. kiosk	12.5%	87.5%	0.0%	8
	Overall Roads	**19.8%**	**76.5%**	**3.7%**	**81**
Campgrounds	Calf Creek Campground	21.1%	57.9%	21.1%	19
	Deer Creek Campground	28.6%	71.4%	0.0%	7
	White House Campground	0.0%	100.0%	0.0%	1
	Overall Campgrounds	**22.2%**	**63.0%**	**14.8%**	**27**
Visitor Centers	Boulder Visitor Center	15.4%	79.6%	4.9%	162
	Escalante Visitor Center	11.3%	84.9%	3.8%	186
	Cannonville Visitor Center	18.0%	82.0%	0.0%	100
	Kanab Visitor Center	17.5%	80.7%	1.8%	57
	Big Water Visitor Center	13.0%	87.0%	0.0%	77
	Overall Visitor Centers	**14.4%**	**82.8%**	**2.7%**	**582**
Overlooks	Blues Overlook	12.9%	84.5%	2.6%	194
	Head of the Rocks Overlook	10.2%	86.6%	3.2%	187
	Boynton Overlook	15.0%	80.2%	4.8%	207
	Overall Overlooks	**12.8%**	**83.7%**	**3.6%**	**588**
Overall Total		**15.6%**	**79.6%**	**4.7%**	**1739**

Of the 567 Monument recreation site respondents who answered the question regarding the need for use restrictions at the survey site, 502 (88.5%) respondents felt the number of people should not be restricted, 56 (9.9%) felt that restrictions were needed at the site, and nine (1.6%) respondents did not know one way or the other on the issue. Ninety-one percent (n = 51) of the 56 respondents feeling restrictions at the survey site were needed actually provided explanations. The top explanations provided supporting use restrictions are presented in Figure 13, showing the most represented response category was found to be related to 'too many people/crowded. Interestingly, 55.6% (n = 279) of respondents who answered "no" to this question gave responses related to other people visiting the site and 69.9% (n = 195) of those said specifically they gave this response because there were not too many people at the survey site.
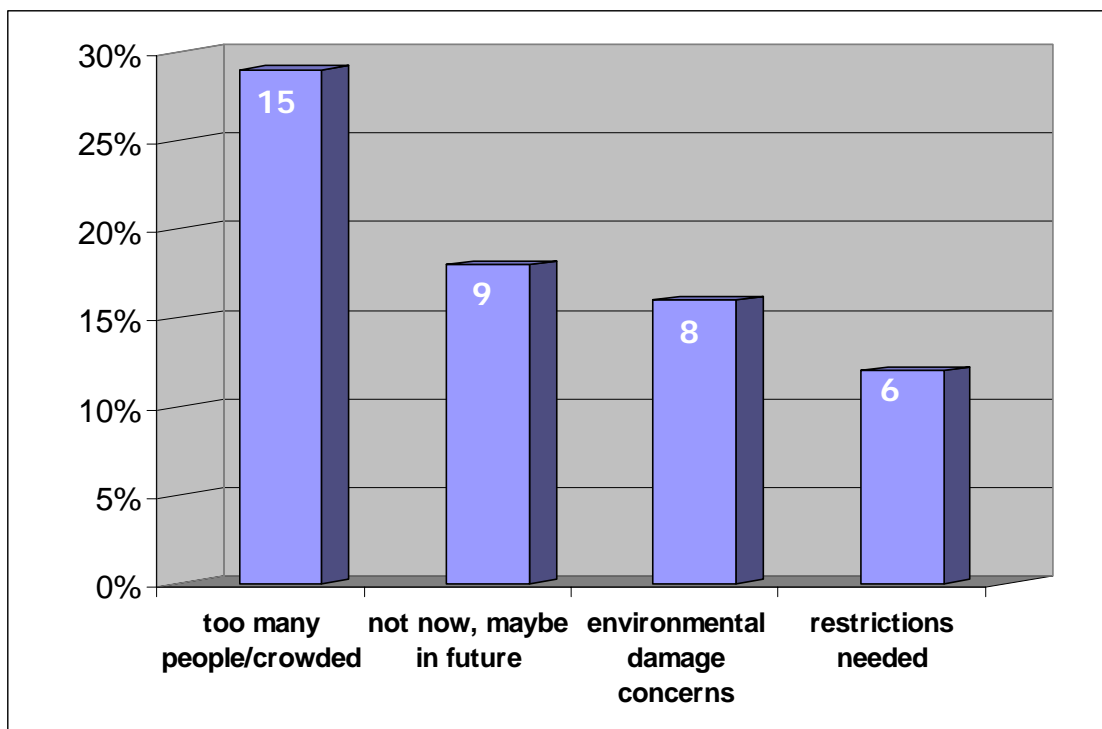
Figure 13: Top Explanations for Supporting Use Restrictions

Site Type Variables

As described previously, three intercept survey instruments were used in this study: recreation site in the Monument, Monument visitor center, and Scenic Byway 12 overlook surveys. All three types of surveys contained the same questions within the main body of the survey instrument. The only difference between the surveys was that the recreation site and visitor center surveys contained additional questions in the last two pages of each survey that were specific to the type of site where the survey took place. The last two pages of the recreation site survey instrument included questions regarding visitors' expectations, impressions, and activities participated in at that particular survey

site. The last two pages of the visitor center survey included questions regarding visitors' impressions of and satisfactions with the facility, displays, and the staff at that particular visitor center survey site. On a side note, the overlook survey contained only the questions asked in the main section of the other two types of survey instruments. The next two sections of this report contain the results of the specific type of site variables from the recreation site and visitor center survey instruments.

Monument Recreation Site Specific Variables

Visitors to the different Monument recreation sites (displayed in Table 16) in this study were given a survey that slightly differed from the visitor center and overlook surveys. The Monument recreation site surveys contained a section of questions unique to the survey. The first couple of questions in this section of the survey asked visitors if they had visited this site before and what activities they participated in while at that site.

Table 16: Visitors Surveyed at Different Monument Recreation Sites

Specific Site Types	Site Name	% of total (n = 573)	% of type	n
Trailheads (n = 260, 45.4%)	Calf Creek trailhead	15.9%	35.0%	91
	Escalante River trailhead	9.4%	20.8%	54
	Wire Pass trailhead	7.5%	16.5%	43
	Dry Fork trailhead	6.3%	13.8%	36
	White House trailhead	3.0%	6.5%	17
	Lower Hackbury trailhead	1.4%	3.1%	8
	Deer Creek trailhead	1.0%	2.3%	6
	Harris Wash trailhead	0.9%	1.9%	5
Scenic Attractions (n = 205, 35.8%)	Grosvenor Arch	13.3%	37.1%	76
	Paria Movie Set	12.7%	35.6%	73
	Devils Garden	9.2%	25.9%	53
	Left Hand Collet	0.5%	1.5%	3
Roads (n = 81, 14.1%)	Burr Trail	4.9%	34.6%	28
	Johnson Canyon Rd. kiosk	4.7%	33.3%	27
	Cottonwood Road pull-off	3.1%	22.2%	18
	Smoky Mountain Rd. kiosk	1.4%	9.9%	8
Campgrounds (n = 27, 4.7%)	Calf Creek Campground	3.3%	70.4%	19
	Deer Creek Campground	1.2%	25.9%	7
	White House Campground	0.2%	3.7%	1

Table 17 shows the breakdown of first time visitors and repeat visitors (total n = 572) to each type of survey site, as well as to each specific Monument recreation survey site. Overall, trailheads (n = 260) were found to have the highest rate of visitation at 45.5%, followed by scenic attractions at 35.6%. The largest percentage of first time visitors also occurred at trailheads at 32.9%, followed by scenic attractions at 28.8%. Of the specific survey site locations, Calf Creek trailhead (n = 91) was found to have the highest rate of visitation at 15.9%, and the largest percentage of first time visitors at 11.9%. Grosvenor Arch had the second highest rate of visitation at 13.3% with 11.4% first time visitors, followed by the Paria Movie Set at 12.7% visitation and 10.8% first time visitors. Interestingly, overall, first time visitors outnumbered repeat visitors by about three to one (74.3% first time; 25.7% repeat) at these Monument recreation survey sites.

Table 17: First Time and Repeat Visitation at Monument Recreation Sites

Specific Site Types	Site Name	First Time Visit		Repeat Visit	
		% of total (n = 572)	n	% of total (n = 572)	n
Trailheads (n = 260; 45.5%)	Calf Creek trailhead	11.9%	68	4.0%	23
	Escalante River trailhead	6.5%	37	3.0%	17
	Wire Pass trailhead	4.5%	26	3.0%	17
	Dry Fork trailhead	5.6%	32	0.7%	4
	White House trailhead	1.6%	9	1.4%	8
	Lower Hackbury trailhead	1.2%	7	0.2%	1
	Deer Creek trailhead	0.9%	5	0.2%	1
	Harris Wash trailhead	0.7%	4	0.2%	1
Total		32.9%	188	12.6%	72
Scenic Attractions (n = 204; 35.6%)	Grosvenor Arch	11.4%	65	1.9%	11
	Paria Movie Set	10.8%	62	1.9%	11
	Devils Garden	6.3%	36	2.8%	16
	Left Hand Collet	0.3%	2	0.2%	1
Total		28.8%	165	6.8%	39
Roads (n = 81; 14.2%)	Burr Trail	3.0%	17	1.9%	11
	Johnson Canyon Rd. kiosk	3.3%	19	1.4%	8
	Cottonwood Road pull-off	2.6%	15	0.5%	3
	Smoky Mountain Rd. kiosk	1.0%	6	0.3%	2
Total		9.9%	57	4.2	24
Campgrounds (n = 27; 4.7%)	Calf Creek Campground	1.7%	10	1.6%	9
	Deer Creek Campground	0.7%	4	0.5%	3
	White House Campground	0.2%	1	0.0%	0
Total		2.6%	15	2.1%	12
Overall Total		74.3%	425	25.7%	147

Types of Recreation Activities

Table 18 illustrates the percentage of visitors who participated in different types of recreational activities for the four types of Monument recreation sites: roads, trailheads, scenic attractions, and campgrounds. For this question, respondents were allowed to list multiple answers regarding the type of activities they participated in at the survey site. The three most common activities participated in by visitors to the four types of Monument recreation survey sites varied only slightly.

Table 18: Types of Recreational Activities at Different Monument Recreation Sites

Types of Recreational Activities	Site Type			
	Roads (n = 81)	Trailheads (n = 260)	Scenic Attractions (n = 204)	Campgrounds (n = 27)
Hiking	48.1%	92.7%	43.1%	88.9%
Camping	17.3%	23.1%	6.4%	88.9%
Scenic Driving	70.4%	24.6%	50.5%	48.1%
Exploring Slot Canyons	32.1%	25.8%	8.3%	22.2%
Picnicking	18.5%	15.8%	14.7%	11.1%
Nature Hike (less than ¼ mile)	11.1%	3.5%	27.5%	7.4%
Nature Hike (¼ mile to 1 mile)	13.6%	3.1%	13.2%	7.4%
Nature Hike (more than 1 mile)	14.8%	23.5%	7.4%	25.9%
Photography	69.1%	72.3%	85.3%	59.3%
Visiting Historic Sites	21.0%	8.8%	30.4%	3.7%
Viewing Plants/Animals	38.3%	44.6%	31.4%	40.7%
Viewing Natural Features	55.6%	55.4%	47.1%	40.7%
Viewing Rocks	43.2%	51.9%	47.1%	40.7%
Wildlife Viewing	25.9%	22.3%	17.6%	29.6%
Rock Climbing	4.9%	4.6%	7.8%	11.1%
Canyoneering	1.2%	6.9%	3.4%	3.7%
Fishing	1.2%	0.4%	0.0%	11.1%
Horseback Riding	2.5%	0.0%	1.0%	0.0%
Bicycle Riding	0.0%	1.9%	1.0%	3.7%
Motorcycle/Dirt Bike Riding	0.0%	0.8%	0.0%	0.0%
4X4/ATV Driving	8.6%	2.3%	2.0%	0.0%
Family Reunion	2.5%	0.8%	1.5%	3.7%
Other	6.2%	7.3%	2.9%	11.1%

Photography fell within the top three most popular activities for all four types of Monument recreation sites: roads (n = 56; 69.1%), trailheads (n = 188; 72.3%); scenic attractions (n = 174; 85.3%), and campgrounds (n = 16; 59.3%). Viewing natural features as an activity was found to rank within the top three most popular activities by visitors to three of the four types of Monument sites: roads (n = 45; 55.6%), trailheads (n = 144; 55.4%), and scenic attractions (n = 96; 47.1%). Scenic driving and hiking were found to be of the three most popular activities for two of the four types of Monument recreation

sites. Scenic driving was popular for visitors to roads (n = 57; 70.4%) and scenic attractions (n = 103; 50.5%), while hiking was popular for visitors to trailheads (n = 241; 92.7%) and campgrounds (n = 24; 88.9%). Camping was only found to be one of the top three popular activities for visitors to campgrounds (n = 24; 88.9%), while the same was true for visitors to scenic attractions with the activity viewing rocks (n = 96; 47.1%). A complete list of qualitative responses given for other recreation activities is in Appendix F.

Expectations

The next three questions in this section of the survey asked visitors to explain what their expectations for that survey site were, to what extent their expectations about that specific site were met, and in what ways was that site better or worse than they had expected. In this report, responses are organized into several categories and separated by the actual site to which the responses were referring. The following sections of this report contain these results regarding respondents' expectations for the Monument recreation survey sites. It should be noted that the responses provided may be represented by multiple categories. A complete list of the responses given for each site organized into appropriate categories can be found in Appendix F.

Smokey Mountain Road Kiosk

Very few visitors were intercepted at this survey site overall. Of the eight respondents who provided an answer to the expectation question, three (37.5%) expected to see some type of scenery, three (37.5%) expected there to be recreational opportunities (e.g., ATV driving and photography), one (12.5%) expected there to be water in the area, and one (12.5%) was expecting to find solitude at this site. However, there were two (25.0%) respondents who were expecting to see specific sites in the area; one was Alstone Point and the other was Lake Powell.

Whitehouse Trailhead

Seventeen visitors to Whitehouse trailhead gave responses regarding what they had expected to experience at this site. The most popular response at 41.2% (n = 7) had to do with natural features in the area (e.g., canyons/slot canyons and rocks/rock formations). Four (23.5%) respondents gave what was categorized as a general response; they did not know the site was there (n = 1) or they were expecting just what they saw (n = 3). Four (23.5%) respondents expected to see some type of landscape or scenery, three (17.6%) respondents expected there to be recreation opportunities, and three (17.6%) respondents expected to find solitude at this site. One (5.9%) respondent answered that she expected to see a specific site while at that survey location—Paria Canyon.

Lower Hackberry Trailhead

Very few visitors were intercepted at this survey site overall. Of the eight respondents who provided an answer to the expectation question, two (25.0%) expected to see just what they saw at the site, two (25.0%) expected to see natural features such as canyons, and two (25.0%) expected to find solitude at this site. The remaining categories

that responses fell within each contain only one response (12.5%): landscape/scenery, personal feelings, recreation opportunities, and miscellaneous (e.g., find cows).

Wire Pass Trailhead

The category containing expectations regarding landscape/scenery held the most responses at 45.2% (n = 19). This was followed closely by the category containing expectations about seeing natural features in the area that had a count of 14 respondents (33.3%), as well as the category containing general responses that had a count of 12 (28.6%) respondents. The general response category contained subcategories such as "no expectations" (two), "same as in pictures" (three), "unexpected" (one), and "what I saw" (six). Each of the categories regarding expectations about recreation opportunities and social issues (less people, not crowded, and solitude) had three (7.1%) responses. Lastly, ten respondents (23.8%) named specific sites they were expecting to see, such as Buckskin Gulch (one) and The Wave (nine).

Paria Movie Set

Of the 67 respondents who provided an answer to what they had expected to experience at this survey site, 22 (32.8%) gave general responses (a challenge, no expectations, safety, and what I saw), four (6.0%) mentioned something regarding the facilities, 13 (19.4%) gave responses regarding the landscape and the scenery of the area, five (7.5%) expected to see natural features, four (6.0%) expected recreation opportunities, and five (7.5%) gave responses regarding social issues (less people, peace and quiet, and solitude). Thirty-four respondents indicated they expected to see specific sites at this location, such as the Pareah Town Site (n = 13) and Paria Movie Set (n = 21).

Johnson Canyon Road Kiosk

Twenty-six respondents provided an answer for the expectation question. Of those 26 respondents, 11 (42.3%) expected to experience the landscape and scenery of the area, seven (26.9%) expected to see natural features, seven (26.9%) expected recreation opportunities, three (11.5%) expected fewer people, and one (3.8%) expected to see a rest stop. Nine (34.6%) respondents gave general answers to this question which included, getting wood (one), information (one), and no expectations (seven), while one (3.8%) expected to see a movie set.

Cottonwood Road Pull-off

Of the 17 respondents who answered this question, 11 (64.7%) said they expected to see the landscape and scenery of the area, five (29.4%) said they expected recreation opportunities, three (17.6%) expected to see natural features, and one (5.9%) said he expected peace and quiet. There were four (23.5%) respondents who gave general responses such as no expectations (two) and they expected what they saw (two).

Grosvenor Arch

The majority of respondents to this site overwhelmingly said they expected to see natural features (n = 41; 56.9%). This was followed by 18 (25.0%) respondents expecting

to see the landscape and scenery of the area, 15 (20.8%) respondents expecting recreation opportunities, two (2.8%) respondents expecting to see historical opportunities (Native American and land), and one (1.4%) respondent expecting educational opportunities (interpretation). Three (4.2%) respondents responded with expectations about the facilities, three (4.2%) respondents mentioned social issues (few people and peace and quiet), and 13 (18.1%) respondents only provided general responses.

Devils Garden

Of the 52 respondents who answered the expectation question, 19 (36.5%) said they expected to see natural features, 14 (26.9%) said they expected recreation opportunities, eight (15.4%) expected to see landscape and scenery of the area, seven (3.5%) expected social issues relating to other people, and one (1.9%) mentioned the site condition. There were 21 (40.4%) respondents who gave general responses such as no expectations, same as previous experience, and they expected what they saw.

Left Hand Collet

Only three respondents provided answers to what they expected at this site. Two (66.7%) expected to see the landscape and the scenery of the area, while one (33.3%) expected enjoyment at the site. All three respondents provided answers containing general responses such as no expectations and what they saw.

Harris Wash Trailhead

Of the five respondents who answered this question, three (60.0%) expected to see the landscape and scenery of the area, three (60.0%) expected to see natural features, two (40.0%) expected solitude at this site, and one (20.0%) expected recreation opportunities such as canyoneering.

Dry Fork Trailhead

An overwhelming majority of respondents to this site expected to see natural features (n = 28; 77.8%) such as canyons (27) and rocks (one). Of the 36 respondents to this site, nine (25.0%) expected to see the landscape and scenery of the area, seven (19.4%) expected to find recreation opportunities at this site, two (5.6%) expected to find social issues such as more people (one) or solitude (one) at this site, and one (2.8%) expected to see historical Native American artwork.

Escalante River Trailhead

The majority of respondents to this site expected to see the landscape and scenery of the area (n = 28; 54.9%). Of the 51 respondents who answered this question, 14 (27.5%) expected to see natural features, eight (15.7%) expected to find peace and quiet (five) and solitude (three) at this site, five (9.8%) expected to find recreation opportunities, five (15.7%) expected to see historical Native American artwork and remains, two (3.9%) expected to find educational information, and one (2.0%) expected to find a bike trail at this site. There were three (5.9%) respondents who were only visiting the site in order to scout for future trips, and eight (15.7%) respondents who gave

general responses such as no expectations, expecting a new experience, and expecting what they saw.

Calf Creek Trailhead

A majority of respondents to this site indicated that they expected to see three main things: natural features (n = 54; 60.7%), the landscape and scenery of the area (n = 35; 39.5%), and recreation opportunities (n = 27; 30.3%). Of the 89 respondents who answered the expectation question, eight (9.0%) expected to find social issues regarding people, four (4.5%) expected to see Native American sites, three (3.4%) expected different trail conditions, two (2.2%) expected to find a good personal experience, and one (1.1%) expected to find education information. There were 16 (18.0%) respondents who provided general responses such as no expectations (eight) and what they saw (eight).

Deer Creek Trailhead

All six respondents who answered the expectation question said they expected to find recreation opportunities at this site. Additionally, three (50.0%) respondents expected to see the landscape and scenery of the area and one (16.7%) respondent expected to find peace and quiet at this site.

The Burr Trail

The majority of respondents who were intercepted along the Burr Trail said they expected to see the landscape and scenery of the area (n = 14; 51.9%). Of the 27 respondents who answered the expectation question, six (22.2%) expected to find social issues related to other people, five (18.5%) expected to see natural features, four (14.8%) expected to find recreation opportunities, and three (11.1%) expected to find different road conditions. There were seven (25.9%) respondents who gave general responses about what they expected to see such as no expectations (five) and what they saw (two).

Calf Creek Campground

Of the 19 respondents who answered the expectation question at this site, six (31.6%) expected to see the landscape and scenery of the area, six (31.6%) expected to find peace and quiet (five) and happy people (one), four (21.1%) expected to find a campground, three (15.8%) expected to see natural features, and three (15.8%) expected to find recreation opportunities. There were four (21.1%) respondents who gave general responses about what they expected and two (10.5%) respondents expected to find inexpensive local communities (one) and Mormons (one).

Deer Creek Campground

An overwhelming majority of respondents at this site said they expected to see the landscape and scenery of the area (n = 6; 85.7%). Of the seven respondents who answered the expectation question, three (42.9%) expected to find recreation opportunities, two (28.6%) expected to find peace and quiet (one) and solitude (one), one

(14.3%) expected to see natural features, and one (14.3%) expected to find a campground at this site. Only one (14.3%) respondent had no expectations for this site.

Expectations Met

Next, the respondents were asked to what extent their expectations were met at the specific recreation site where they were surveyed. Overall, of the 550 respondents who answered this question, 49.6% (n = 273) said that the site was either "much better" or "better" than they had expected, 47.1% (n = 259) said that the site was "about the same" as they had expected, and only 3.3% (n = 18) said that the site was "worse" than they had expected. None of the 550 respondents said that the site was "much worse" than they had expected. The responses as to what extent the respondents' expectations were met organized by the different survey locations is presented in Appendix F.

Visitor Center Site Specific Variables

All respondents who were interviewed at one of the five Monument Visitor Centers (Table 19) were asked a series of questions about their experience as well as their impressions of the visitor center. The series of questions began with a question asking visitors how they found out about that particular visitor center. Overall, 46.6% (n = 279) of visitors indicated they first found out about the visitor center they were interviewed at by driving by or seeing a road sign for the visitor center. This category was the most common response visitors gave at all five visitor centers (Table 20). The Boulder Visitor Center/Anasazi State Park was the only visitor center where this response was found to be significantly lower than fifty percent, at 26.5% of visitors giving this response. For this question, visitors were asked to only give one response. However, those visitors who provided an answer that was not a part of the established categories for this question were able to give an "other" answer.

Table 19: Visitor Center Survey Respondents

Visitor Center	Survey Respondents	
	Number (n)	Percent
Escalante	198	32.9%
Boulder	164	27.3%
Cannonville	101	16.8%
Big Water	78	13.0%
Kanab	60	10.0%
Total	601	100.0%

Table 20: Information Sources Respondents Used to Find Out About Visitor Center[1]

Information Sources	Overall	Visitor Center				
		Escalante	Boulder	Cannonville	Big Water	Kanab
Driving By/Road Sign	46.6%	52.0%	26.2%	49.5%	66.7%	53.3%
Previous Visit	7.2%	12.1%	7.9%	5.1%	0.0%	1.7%
Map	9.8%	6.6%	20.7%	9.1%	2.6%	1.7%
Guidebook	6.0%	6.1%	12.2%	2.0%	2.6%	0.0%
Internet	4.0%	4.5%	3.7%	4.0%	5.1%	1.7%
Family/Friend	4.8%	3.0%	8.5%	5.1%	3.8%	1.7%
Another Visitor Center	7.2%	3.0%	7.9%	9.1%	9.0%	13.3%
Other	12.0%	8.6%	11.6%	13.1%	9.0%	26.7%

[1]Total Respondents = 599

All of the "other" responses were separated by the visitor center where the interview took place and organized into categories. The most common "other" response to how visitors found out about the Big Water Visitor Center and the Cannonville Visitor Center was from government personnel. Visitors at the Big Water Visitor Center specifically named the Glen Canyon Dam staff (n = 3; 42.9%), while Cannonville Visitor Center respondents specifically named the staff at Bryce Canyon National Park (n = 6; 46.2%). Six of the sixteen Kanab Visitor Center respondents who provided an "other" response said they found out about the visitor center through the local community. For the Escalante Visitor Center, the most common "other" answers visitors gave for finding out about the visitor center were the local community (n = 3; 16.7%), media sources (n = 3; 16.7), and government personnel at the Escalante Petrified Forest State Park and Bryce Canyon National Park (n = 3; 16.7%). Lastly, the most common "other" answer provided by visitors to the Boulder Visitor Center/Anasazi State Park was from a travel agency or an information center (n = 5; 26.3%). For a complete list of categories see Appendix G.

Visitors were next asked why they chose to stop at the particular visitor center. Unlike the previous question that limited visitors to providing only one response, in this question visitors were able to provide multiple responses. Overall, 42.4% (n = 254) of all visitor center respondents chose to stop at the visitor center to get general information about the area (Table 21). This response was followed by 21.2% (n = 127) of visitors choosing to stop to get information specifically about the Monument and 20.5% (n = 123) choosing to stop to get maps or brochures. As shown in Table 21, 61.5% (n = 48) of Big Water Visitor Center visitors stopped to get general information about the area, 38.4% (n = 38) of Cannonville Visitor Center visitors stopped to get road and weather conditions, 36.7% (n = 22) of Kanab Visitor Center visitors stopped to get maps and brochures, and Escalante Visitor Center visitors stopped to get hiking information (15.2%; n = 30), information about the Monument (30.8%; n = 61), and permits (13.6%; n = 27).

Table 21: Why Respondents Chose to Stop at Visitor Center[1]

Reasons For Stopping	Overall	Visitor Center				
		Escalante	Boulder	Cannonville	Big Water	Kanab
Get general information about area	42.4%	47.1%	18.3%	49.5%	61.5%	55.0%
Get road/weather conditions	19.4%	19.7%	3.7%	38.4%	23.1%	25.0%
Get hiking information	10.4%	15.2%	3.0%	12.1%	10.3%	11.7%
Get information about GSENM	21.2%	30.8%	12.8%	22.2%	11.5%	23.3%
Get maps/brochures	20.5%	24.2%	6.7%	22.2%	25.6%	36.7%
Get permits	5.2%	13.6%	0.0%	1.0%	1.3%	3.3%
Other	41.6%	21.2%	84.8%	34.3%	24.4%	25.0%

[1]Total Respondents = 599

Two hundred forty-nine visitors (41.6% of the 599 total respondents) who answered why they chose to stop at the visitor center also gave "other" reasons why they chose to stop there. Visitors to the Boulder Visitor Center/Anasazi State Park (n = 140) gave the largest percentage of "other" answers at 84.8%, and the majority of visitors to this visitor center who provided an "other" response indicated they stopped there to view the archeological displays and ruins (n = 102; 72.9%). The most popular "other" responses given by visitors to the other four visitor centers were as follows: Big Water Visitor Center—eat/take a break (n = 4; 21.1%) and view the displays (n = 4; 21.1%); Kanab Visitor Center—curiosity (n = 4; 26.7%); Cannonville Visitor Center—looking for a visitor center (n = 6; 17.6%); and Escalante Visitor Center—curiosity (n = 5; 11.9%), looking for a visitor center (n = 5; 11.9%), passport stamp (n = 5; 11.9%), and to use the restroom (n = 5; 11.9%). For a complete list of all "other" responses given by visitors to the five visitor centers see Appendix G.

Visitors interviewed at the five visitor centers were asked a series of questions regarding the interpretive and educational displays at the visitor centers and any contact the respondents may have had with the visitor center staff. Of the 576 visitors who were asked if they had viewed the interpretive and educational displays, 57.6% (n = 332) said they in fact had viewed the displays at the visitor center (Table 22). The Boulder Visitor Center/Anasazi State Park had the largest percentage of visitors who had viewed the interpretive and educational displays at 85.3% (n = 139). Of all of the displays at the Boulder Visitor Center/Anasazi State Park, 41.2% (n =56) of respondents indicated the excavated ruins were their favorite display at that visitor center. The Big Water Visitor Center had the second highest percentage of visitors who said they had viewed the displays at 65.8%, followed by Kanab at 60.0%, Cannonville at 47.0%, and Escalante with the lowest at 33.9%. It must be pointed out, however, that at the time of data collection the Escalante Visitor Center was in temporary quarters (a double-wide trailer) that was located next to the visitor center's future, permanent site, and did not really have any displays *per se*, although a series of beautiful photographs taken throughout the

Monument were displayed, along with other information. The favorite displays of visitors to these four visitor centers were as follows: Escalante Visitor Center—the photography displays (n = 21; 36.2%); Cannonville Visitor Center—the Native American display (n = 16; 34.8%); Kanab Visitor Center—the geological displays (n = 10; 27.8%); and Big Water Visitor Center—the paleontology displays (n = 23; 50.0%). For a complete list of the displays respondents indicated to be their favorite for all five visitor centers see Appendix G.

Table 22: Visitors' Experiences with Educational Displays[1]

		Overall	**Visitor Center**				
			Escalante	Boulder	Cannonville	Big Water	Kanab
View interpretive and educational displays	Yes	57.6%	33.9%	85.3%	47.0%	65.8%	60.0%
	No	42.4%	66.1%	14.7%	53.0%	34.2%	40.0%
Learn something new from displays	Yes	61.8%	48.1%	68.9%	51.2%	73.5%	52.8%
	No	38.2%	51.9%	31.1%	48.8%	26.5%	47.2%
Impression of displays' quality	Very Good	58.4%	25.0%	62.8%	71.7%	67.3%	68.6%
	Good	32.1%	40.0%	32.8%	28.3%	30.6%	22.8%
	Average	8.0%	26.7%	4.4%	0.0%	2.1%	8.6%
	Poor	1.5%	8.3%	0.0%	0.0%	0.0%	0.0%
	Very Poor	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

[1]Total Respondents = 576

Those visitors who had viewed the displays were also asked if they had learned anything new from these and to rate the quality of the displays at the visitor center. Overall, almost 62% percent of visitor center visitors said they did learn something new from the displays they had viewed and 90.5% (n = 296) rated the displays' quality as "very good" or "good" (Table 22). The Big Water Visitor Center had the largest percentage of visitors who indicated they had learned something new from the displays they viewed (n = 36; 73.5%) and almost 98% rated the displays' quality as "very good" or "good". The Cannonville Visitor Center had an even larger percentage of respondents who thought the quality of displays was "very good" or "good" (n = 46; 100%). The Escalante Visitor Center was the only visitor center where visitors rated the quality of displays to be poor (n = 5; 8.3%), with 26.7% rating "average" but with 65% rating "very good" or "good". No visitor centers had respondents who rated the quality of the displays to be very poor.

Those visitors who indicated they had learned something new from the displays were also asked to determine what it was they learned that they did not know before they saw the display. Sixty-four percent (n = 23) of Big Water Visitor Center respondents

indicated they learned more about paleontology from the displays; 42.1% (n = 8) of Kanab Visitor Center respondents said they learned more about geology as well as Native American history and artifacts from the displays; 36.4% (n = 8) of Cannonville Visitor Center respondents indicated they learned more about Pioneer history from the displays; 57.7% (n = 15) of Escalante Visitor Center respondents said they learned more about recreation opportunities in the area from the displays; and 80.0% (n = 72) of Boulder Visitor Center/Anasazi State Park respondents indicated they learned more about Native American history and artifacts from the displays than they knew before stopping at the visitor center. For a complete list of what respondents to the five visitor centers felt they learned that they did not know before see Appendix G.

   The majority of visitor center respondents who viewed the educational displays in the visitor center, for the most part, were able to accurately assess what major topic or theme was in the visitor center (Table 23): Big Water Visitor Center—paleontology (n = 40; 87.0%; Cannonville Visitor Center—early American settlers (n = 13; 33.3%); and Boulder Visitor Center/Anasazi State Park—archeology and the history of the Anasazi people (n = 130; 94.2%). However, it seems that visitors were split between two types of themes at the Escalante Visitor Center: natural features in the Monument and maps (n = 17; 34.7%) and art and photos portraying the Monument area (n = 11; 22.4%). This is understandable since this visitor center, as previously mentioned, was in temporary quarters. Also, the majority of respondents to the Kanab Visitor Center identified archeology and the history of the Anasazi people to be the major theme of this visitor center. This may be because the temporary displays that were set-up in this visitor center during the sampling season consisted of pottery, artifacts, and photographs of the area. In this question, respondents were able to give answers other than the visitor center themes that were listed on the survey. Only 15.2% (n = 46) of all of the visitor center respondents actually provided themes that were not provided on the survey, and visitors to the Escalante Visitor Center provided the most of these out of the five visitor centers. For a complete list of the "other" themes visitors felt were the major topic of the displays at each of the five visitor centers see Appendix G.

Table 23: Respondents Interpretation of the Major Topic/Theme of the Displays

Major Topic/Theme	Visitor Center				
	Escalante (n = 49)	Boulder (n = 138)	Cannonville (n = 39)	Big Water (n = 46)	Kanab (n = 31)
Archaeology/History of the Anasazi people	34.7%	94.2%	17.9%	2.2%	58.1%
Early American settlers	0.0%	0.7%	33.3%	0.0%	0.0%
Natural features in the Monument and maps	0.0%	0.0%	15.4%	6.5%	19.4%
Paleontology/Dinosaurs	0.0%	0.0%	0.0%	87.0%	0.0%
Art/Photos portraying the Monument area	22.4%	0.0%	0.0%	0.0%	6.5%
Biology/Botany of the area	2.0%	0.0%	0.0%	2.2%	0.0%
Other	40.8%	5.1%	33.3%	2.2%	16.1%

When asked if the visitor had contact with visitor center staff during the visit, about 86% (n = 510) of visitors responded they did have contact with visitor center staff (Table 24). About 87% (n = 441) said the contact they had with the staff "greatly increased" or "increased" their overall experience at that visitor center (Table 24). However, about 12% (n = 61) of those visitors said the contact with the staff "had no effect" on their experience at that visitor center. Less than 1% said contact reduced their experience or did not know. Over 90% of the visitors to four out of the five visitor centers had some sort of contact with the visitor center staff. The exception to this was found at the Boulder Visitor Center/Anasazi State Park where only 65.9% (n = 108) of the respondents had contact with the visitor center staff. Almost 31% of visitors here also said their contact had no effect on their experience (n = 33; 30.8%), the greatest percentage found at all of the visitor centers for this response.

Those respondents who did have some sort of contact with visitor center staff, and rated what effect this contact had on their overall experience at the visitor center, were also asked to provide a reason why they chose the rating they did. The reasons visitors gave were separated by the visitor center where the interview took place, and placed in different response categories. A brief discussion of these results follows this section, while a complete list of these responses can be found in Appendix G.

Table 24: Visitor Contact with Visitor Center Staff[1]

		Overall	Visitor Center				
			Escalante	Boulder	Cannonville	Big Water	Kanab
Contact with staff	Yes	86.1%	94.8%	65.9%	94.9%	92.2%	91.7%
	No	13.9%	5.2%	34.1%	5.1%	7.8%	8.3%
Effect this contact had on overall experience at the Visitor Center	Greatly Increased	46.7%	41.1%	28.0%	47.8%	73.2%	65.5%
	Increased	40.6%	47.8%	39.3%	45.7%	23.9%	32.7%
	Had No Effect	12.1%	10.6%	30.8%	6.5%	2.8%	1.8%
	Reduced	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%
	Greatly Reduced	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Don't Know	0.4%	0.0%	1.9%	0.0%	0.0%	0.0%

[1]Overall, 510 visitors said they had contact with Visitor Center staff during their visit.

Big Water Visitor Center

Of the 58 respondents who provided a reason why they gave the rating they did, 3.4% (n = 2) said the contact had no effect on their experience, 25.9% (n = 15) said the contact increased their experience, and 70.7% (n = 41) said the contact greatly increased their experience. Those respondents who said the contact with the staff had no effect on their experience said they gave this rating because there was not much interaction with the staff (one) and because of the friendliness of the staff (one). Those respondents who said the contact with the staff increased their experience listed reasons for this rating because the staff were informative (six), the staff they talked to answered their questions (five), the staff were helpful (four), were friendly (two), were knowledgeable (two), and were enthusiastic (one),. Lastly, those respondents who said the contact with the staff greatly increased their experience gave reasons for this rating because the staff were helpful (17), were informative (15), were knowledgeable (eight), were friendly (eight), did a good job (five), the staff they talked to answered their questions (two), and the staff were enthusiastic (one).

Kanab Visitor Center

Of the 49 respondents who provided a reason why they gave the rating they did, 2.0% (n = 1) said the contact had no effect on their experience, 34.7% (n = 17) said the contact increased their experience, and 63.3% (n = 31) said the contact greatly increased their experience. Those respondents who said contact with staff had no effect on their experience gave this rating because they were just looking for directions (one). Those respondents who said contact with staff increased their experience listed reasons for this rating because the staff were helpful (nine), were informative (seven), the staff they talked to were friendly (three), the staff were knowledgeable (two), and the gift shop had

a good hiking book (one). Lastly, those respondents who said the contact with the staff greatly increased their experience gave reasons for this rating because the staff were helpful (14), were informative (nine), were friendly (seven), did a good job (five), were knowledgeable (four), the staff they talked to answered their questions (two), and the staff were enthusiastic (one).

Cannonville Visitor Center

Of the 83 respondents who provided a reason why they gave the rating they did, 2.4% (n = 2) said the contact had no effect on their experience, 47.0% (n = 39) said the contact increased their experience, and 48.2% (n = 40) said the contact greatly increased their experience. Those respondents who said contact with staff had no effect on their experience said that they gave this rating because there was not much interaction with the staff (one) and because of the friendliness of the staff (one). Those respondents who said the contact with the staff increased their experience listed reasons for this rating because the staff were informative (24), were helpful (13), were friendly (seven), were knowledgeable (two), the staff they talked to answered their questions (two), and the staff did a good job (one). Lastly, those respondents who said the contact with the staff greatly increased their experience gave reasons for this rating because the staff were informative (16), were helpful (15), were friendly (11), were knowledgeable (five), the staff they talked to answered their questions (five), and the staff did a good job (one).

Escalante Visitor Center

Of the 159 respondents who provided a reason why they gave the rating they did, 0.6% (n = 1) said the contact reduced their experience, 8.8% (n = 14) said the contact had no effect on their experience, 51.6% (n = 82) said the contact increased their experience, and 39.0% (n = 62) said the contact greatly increased their experience. The respondent who said contact with staff reduced their experience said he gave this rating because they were misinformed by the staff (one). Those respondents who said contact with staff had no effect on their experience said they gave this rating because there was not much interaction with the staff (one), because of the friendliness of the staff (one), the helpfulness of the staff (one), how informative the staff was (one), and because the map they wanted was not available (one). Those respondents who said contact with staff increased their experience listed reasons for this rating because the staff were informative (42), were helpful (28), were friendly (nine), were knowledgeable (six), the staff they talked to answered their questions (five), did a good job (five), and the gift shop had what they wanted (two). Lastly, those respondents who said contact with staff greatly increased their experience gave reasons for this rating because the staff were helpful (27), were informative (18), were friendly (12), did a good job (10), were knowledgeable (8), the staff they talked to answered their questions (one), and the staff were enthusiastic (one).

Boulder Visitor Center

Of the 80 respondents who provided a reason why they gave the rating they did, 25.0% (n = 20) said the contact had no effect on their experience, 46.1% (n = 37) said the contact increased their experience, and 28.8% (n = 23) said the contact greatly increased

their experience. Those respondents who said contact with staff had no effect on their experience said that they gave this rating because there was not much interaction with the staff (10), they had a bad impression of the staff (two), they only looked at the displays (two), because of the fee they had to pay (two), it just had no effect (two), because of the friendliness of the staff (one), and they were not planning to stop there (one). Those respondents who said contact with staff increased their experience listed reasons for this rating because the staff were informative (13), were friendly (11), were helpful (nine), the staff they talked to answered their questions (four), the staff were knowledgeable (three), were enthusiastic (one), did a good job (one), and they did not have much interaction with the staff (one). Lastly, those respondents who said the contact with the staff greatly increased their experience gave reasons for this rating because the staff were informative (11), were helpful (seven), were friendly (six), and the staff they talked to answered their questions (one).

Following the previous series of questions, respondents were asked a few questions regarding the usefulness of the information they got at the visitor center, if they needed any more information that was not available, and what that information was. Table 25 shows that, overall, 77.6% of respondents (n = 431) felt the information they received at the visitor center would be very useful or quite useful for the rest of their trip. This type of pattern is similar for four of five visitor centers; Boulder Visitor Center respondents generally felt information they got would be less useful for the rest of their trip, with slightly over 30% saying the information was somewhat useful and 15.5% saying slightly useful or not at all useful, the largest percentages for all the visitor centers.

Table 25: Usefulness of Visitor Center Information for the Rest of the Trip

	Overall	Visitor Center				
		Escalante	Boulder	Cannonville	Big Water	Kanab
Very Useful	51.5%	59.4%	25.4%	58.9%	63.5%	63.2%
Quite Useful	26.1%	25.1%	27.5%	29.5%	21.6%	26.3%
Somewhat Useful	14.8%	11.8%	30.3%	8.4%	6.8%	7.0%
Slightly Useful	2.9%	1.6%	5.6%	1.1%	5.4%	0.0%
Not at all Useful	3.6%	1.1%	9.9%	0.0%	2.7%	3.5%
Don't Know	1.1%	1.0%	1.3%	2.1%	0.0%	0.0%

Only 10.1% (n = 58) of all visitor center respondents felt they needed other information that was not available at the visitor center (Table 26). The Escalante, Big Water, and Kanab Visitor Centers had the largest percentage of respondents who felt they needed more information than was available at the visitor centers; however, only about 12% of the visitors at each visitor center said this. Of the 21 respondents who provided an answer to what type of information they needed and did not get at the Escalante Visitor Center, 38.1% (n = 8) said they needed more maps of Monument areas, 19.0% (n = 4) said they needed more recreation information, and 14.3% (n = 3) said they needed more maps and information for non-Monument areas. Of the Big Water Visitor Center respondents who provided an answer, 22.2% (n = 2) needed more maps and information

for non-Monument areas, 22.2% (n = 2) needed more recreation information, and 22.2% (n = 2) needed more information about the weather. Lastly, of the six Kanab Visitor Center respondents who provided an answer, 33.3% (n = 2) needed more information about the weather. For a complete list of the responses given for this question by visitors to each of the five visitor centers see Appendix G.

Table 26: Did Visitors Need Any Other Information That Was Not Available?

		Overall	**Visitor Center**				
			Escalante	Boulder	Cannonville	Big Water	Kanab
Need any other information?	Yes	10.1%	12.0%	7.7%	7.1%	12.2%	11.9%
	No	89.8%	88.0%	91.6%	92.9%	87.8%	88.1%
	Don't Know	0.2%	0.0%	0.6%	0.0%	0.0%	0.0%

Additional Comments on Intercept Survey

At the end of all three types of intercept surveys, visitors were asked if they had any additional comments they would like to make. A total of 1,887 individual comments were made by 1,160 respondents concerning a wide variety of issues and observations. The general results of this open-ended question can be viewed in Table 27. A content analysis of the responses resulted in the identification of seven general categories: natural setting, managerial setting, facilities, information, social setting, roads, and general comments, as presented in Table 27. Each of these categories also has several subcategories, and a listing of both of these can be found in Appendix H. Each of these categories and their relationship to visitors at each survey location type will be discussed below.

Table 27: General Categorization of Additional Visitor Intercept Survey Comments

	Recreation Site Visitors (n = 353)		Visitor Center Visitors (n = 271)		Overlook Visitors (n = 536)	
	Number of Comments	% of Total	Number of Comments	% of Total	Number of Comments	% of Total
Natural Setting	120	18.3%	86	20.1%	311	38.6%
Managerial Setting	151	23.1%	66	15.5%	117	14.5%
Facilities	156	23.8%	112	26.2%	133	16.5%
Information	52	7.9%	44	10.3%	54	6.7%
Social Setting	38	5.8%	23	5.4%	3	0.4%
Roads	62	9.5%	39	9.2%	53	6.6%
General Comments	76	11.6%	57	13.3%	93	11.6%
Total Comments	655	100%	427	100%	805	100%

Natural Setting

Comments included as part the category "Natural Setting" dealt with the areas of scenic beauty, visitors' trip quality, past and future visitation, the area's cleanliness, plant and animal life, and general comments about some aspect of the area. Where visitors were actually surveyed seemed to make a big difference in what and how often they commented in this category of responses. The most striking example of this was the percentage of Overlook Visitors comments that were about the area's scenic beauty (38.6%), versus Recreation Site and Visitor Center visitors (at 18.3% and 20.1%, respectively). Differences in the number of comments about the area's scenic beauty pushed the percentage of Overlook Visitor comments grouped into this category higher compared to visitors at the other two types of sites. One possible explanation for this could be that when asked the question, these groups of visitors were at overlooks viewing the scenery. This may have influenced them to make a comment on the aspect of GSENM that was staring them in the face, so to speak. The vantage point provided by the overlooks may have also influenced them to make the nearly 120 general comments about the area and its features. The number of subcategory responses of this type made by Overlook Visitors was far greater than the 40 comments made by Recreation Site Visitors and the 29 made by Visitor Center Visitors on similar topics. Overlook survey respondents also made large numbers of comments about how good their trip had been (n = 40) as well as the area's cleanliness (n = 22).

Visitor Center Visitors and Recreation Site Visitors had very similar patterns of comments about the Natural Setting. The largest single subcategory of responses for both Visitor Centers and Recreation Sites was general comments (n = 29 and n = 40, respectively), followed by positive comments on the quality of their trip (n = 20 and n = 28), and finally GSENM cleanliness (n = 10 and n = 23). Most comments from this section were rather generic in nature, for example: "very enjoyable," or "very, very pleased so far." The exception to this was the subcategory cleanliness, about which a number respondents offered pointed observations or suggestions such as, "sometimes broken glass is a problem," "sanitary facilities are not nearly as nice as in the national forest," or "someone ought to sweep off the rocks so that we can see the colors all the way across."

Managerial Setting

The comment category "Managerial Setting" received responses dealing with managerial performance; GSENM employees; preservation of wilderness; grazing/mining/drilling; motorized vehicle issues; permits and fees; and accessibility and freedom. There was less of a discrepancy in the number of responses made in each subcategory then was the case in the previous category of natural setting. However, a larger percentage of Recreation Site Visitor comments (23.1%) fall under this category than do Visitor Center Visitors (15.5%) and Overlook Visitors (14.5%). Managerial performance was the largest subcategory for each of the survey types, with a large majority of all comments being positive in nature. Typical responses of this type included "they do a good job, really nice," and "doing a good job." The subsequent rankings of

comment frequency indicate that Overlook Visitors seem to stand apart in terms of what they made mention of under this category.

Overlook Visitors took a different view of many issues than did the other two survey groups. The second most common area of comment for Overlook Visitors was alternative uses of GSENM (n = 20), such as grazing, mining, and drilling. While this was also commonly mentioned by Recreation Site Visitors (n = 21) in an almost exclusively negative way, Overlook Visitors were nearly equally split on whether this type of activity was good or bad in the Monument. Good examples of Overlook Visitors opposing views on extractive uses in the area include, "no oil wells, no thumper trucks, could be cleaner air, keep horse 'trains' out/including dude ranchers, leave it alone/keep it a monument," and "keep the cows, they don't bother anyone." Overlook Visitors also commonly mentioned the preservation of wilderness (n = 19) and GSENM employees (n = 13), though neither was mentioned in as large a percentage of comments as were found in the other two site types.

Visitor Center and Recreation Site Visitors made similar comments, with several notable exceptions. These two groups made mostly positive comments about the preservation of the area as wilderness; it was the second most common area of comment for both. Comments here were often similar to what this respondent stated: "[The] real value of the Monument is its ability to maintain wilderness. Keep it wild!" Or, a second person who said, "Keep it nice and pristine." Both of the survey types also had similar proportions of comments about the use of motorized vehicles in GSENM, with roughly half of those from each group who commented on the subject for these and half against. Recreation Site Visitors were much more concerned about the issues of fees (n = 7) and permits (n = 18) than were the other two types of survey respondents. This emphasis on these issues could be a result of the proximity of some of the Monument sites to fee and permit areas, which may have brought these issues to the front of visitors' minds. The majority of fee and permit responses for all three survey types were negative and included responses such as, "[The] permit system for Coyote Buttes is a great thing, but it needs to be changed so that if not all 20 permits are gone then you can come in the day of and receive a permit for that day instead of only the day before," and "It is not very fair to restrict the number of visitors to Coyote Butte to 20 a day!," and "I like that it is free. I don't like how the National Parks charge money." Recreation Site Visitors also made many more comments about freedom and the ability to access the area (n = 23) than did the other two visitor types (n = 2 for Visitor Center visitors and n = 8 for Overlook Visitors). For all of the survey types, the responses tended to support freedom and accessibility, and included statements such as, "Freedom to tour is how this area should remain," "Don't limit access to areas," and "Keep everything open."

Facilities

The category of "Facilities" contains comments made by respondents that dealt with issues of general area development, campgrounds, visitor centers, restrooms, overlooks, trails, parking, GSENM signage, and rest stops. This category was mentioned fairly consistently by all survey types, though it makes up a larger percentage of the

group comments for Recreation Site Visitors (23.8%) and Visitor Center Visitors (26.2%) than it does for Overlook Visitors (16.5%).

Only one subcategory was mentioned frequently by all three survey types, general development of the Monument. Though it was more commonly mentioned by Recreation Site Visitors (n=45) than Visitor Center or Overlook Visitors (n = 21 and n = 38 respectively), the consensus from nearly all of those who commented is that development of GSENM is not a good thing. Comments that illustrate what many visitors said include, "Do not over-sign or overdevelop this area," "Don't change a thing," or, "Preserve the land–undeveloped."

Interestingly, it is possible to clearly see the influence of location on the comments in this category. Besides general development, Recreation Site Visitors were concerned about the quality/upkeep of trails (n = 35); Overlook Visitors were concerned about the low level/quality of signs in the Monument (n = 21); and Visitor Center Visitors were most likely to comment on Visitor Centers (n = 56). Recreation Site Visitor comments on trails usually dealt with issue of poor signage, for example, "Mark trailheads better, a little confusing now." Overlook Visitor comments on signs, generally, were that these were confusing or missing, such as "More signs and elevation markers." Visitor Center Visitor comments were usually complementing some aspect of the building or staff, such as "They have done good with this Visitor Center [Kanab]. It has added to the community." Besides signs in GSENM, which was commented on by 32 Recreation Site Visitors, these subcategories are not commonly mentioned by respondents from the other locations. Once again, these differences could be the result of the type of sites that were on respondents' minds as they visited these locations (e.g., a Visitor Center Visitor would be more likely to think about visitor centers than someone who was hiking on trail).

Information

The comment category Information received responses dealing with on-line information, maps, brochures, general information, advertising, and education. This category of responses was mentioned fairly infrequently by all three of the survey types. The Visitor Center survey group, the group closest to the primary source of GSENM information in the area (i.e. visitor centers), made the largest percentage of their total comments (10.3%) in this comment section of any other group.

The largest subcategory of responses for Site Visitors (52), Visitor Center Visitors (44), and Overlook Visitors (54) was general information about the Monument. Responses concerning general Monument information were overwhelmingly negative for all of the survey group types and included statements such as, "*Not as easy to find information as other areas*," "*I would like to learn more about the areas history and see more available for people*," and, "*Not enough information. You have to know where you are going before you get there.*" Issues dealing with maps were also commented by multiple respondents, the large majority of which were negative. Site Visitors (11), Visitor Center Visitors (7), and Overlook Visitors (10) all made similar types of comments about their issues with maps, many of whom listed specific desired information that no map was able to provide, "*I wanted a map/EIS of a coal mine on the*

Kaiparowits, but they didn't have the information," or simply stated their opinion on the quality of GSENM maps, "*Better maps – the main brochure map is not very detailed."*

Several other types of Information were only listed frequently by one or two of the survey type groups. Education and interpretation were mentioned frequently by Site Visitors (12) and Overlook Visitors (7). Comments of this type generally were neutral and stated opinions such as, "*Should have information about how it's name came about*," and, "*Give people (an) idea of scope of the Grand Staircase-Escalante National Monument and where to see the "Staircase"*" How the area is advertised to the general public was the final common subcategory of Information comments. Overlook visitors were the group most likely to comment on the area advertisement (13), with nearly all of the comments either positive or neutral.

Social Setting

The comment category Social Setting combines comments that deal with solitude and crowding, local people and gateway communities, senior citizen and disability issues, and dogs. Between five and six percent of each survey group made comments dealing with the Social Setting.

Monument Site and Overlook visitors were the most alike in terms of the numbers and types of Social Setting comments they made. Both of these groups commented on solitude and crowding more frequently than any other subcategory (Site Visitors=15 and Overlook Visitors=21). Most of these comments were positive, often expressing the respondents satisfaction with the lack of other people in the Monument, "*[It was] nice to come out here and not see a lot of other people like you do everywhere else*," or made allusions to the area not being crowded, "*I appreciate so little traffic*." Gateway community and local residents were commented on by large percentages of each of the three survey type groups. Most of these community themed comments were negative, and included, "*The idiot county commissioners should stop wasting money opposing the Monument*," "*[It is difficult to find restaurants open until 10 or 11pm*," and, "It *has been difficult to acquire supplies and propane on Sunday*." Finally, comments about dogs in GSENM were the second most common type of response from Visitor Center respondents and were mentioned occasionally by the other two survey types. Interestingly, many visitors enjoyed being able to visit the Monument with their dogs, while others expressed some concern at seeing dogs in certain areas of the Monument.

Roads

The comment category Roads combines comments that deal with road development, road conditions, road signs, and road accessibility. About 10% of Site Visitor (9.5%) and Visitor Center Visitors (9.1%) made comments of this type. A smaller proportion of Overlook comments (6.6%) dealt with Road issues.

Road development and road conditions were mentioned frequently by all of the survey groups. Nearly all of the 19 comments made by Visitor Center respondents and the 23 made by Overlook respondents expressed satisfaction with road development in GSENM; for example, "*[I]would hope you leave the land as it is and [that you]leave road development at where it is now*." Monument Site respondents were less likely to

make positive comments about road development, with nearly half of the 28 comments made about road development being negative in nature. Typical negative comments for all three types of survey groups either stated the need to improve/pave the roads, "*Fix the wash board roads*," "*I wish one road in the backcountry was paved*," or to do just the opposite, "*No more pavement!*" Comments about road conditions were the single most common Roads related subcategory mentioned by Overlook respondents (23), and also received a number of comments from Visitor Center (8) and Monument Site (11) respondents. Over two-thirds of the comments for each of the groups were positive in nature, "*The roads are good*," "*The roads that are paved are in great condition*," but the minority negative comments were often quite insistent in their view of the road conditions, "*Have the roads in better condition for two wheel drive or low clearance vehicles. I can't access areas I want to see*."

Road signs and the ability to access Monument sites from roads were commented on by all survey type groups, but none with as great of frequency as Monument Site respondents (14). Of the 28 comments made by all of the survey group types, only one made positive mention of road signs in and around GSENM. Most visitors were displeased with the general lack of signage in area, often making comments such as this, "*Road signage lacking on Hwy 12/24 over. Over the summit there is no elevation sign. Even within the Monument, road signage is lacking*." Problems with road accessibility were most often mentioned by Site respondents (9) and Visitor Center respondents (5). These comments generally dealt with visitors' frustration over not being able to access a particular site, "*We expected to see the town site, yet we cant get to it in our car,*" or, "*It would be nice to have more access…roads accessible by driving vehicles and not just 4WD*."

General Comments

General comments concerning GSENM designation, the survey, presidential politics, other recreation areas, tourists, questions about the monument, and other assorted topics were made by 76 Site respondents, 57 Visitor Center respondents, and 93 Overlook respondents. Comments were placed in this category if they were considered to be of little relevance to GSENM managers or others reading this report. For a list of these comments broken down by type, see Appendix H.

PART III: RESULTS OF THE GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT
FRONT COUNTRY VISITOR MAIL SURVEY

Visitor Background and Trip Characteristics

Trip Origin

Respondents for the mail survey were asked from where their trip to the Monument originated. Of the 753 visitors to the Monument who answered this question, 64.4% (n = 485) identified a western state (including Alaska, but not Hawaii) as the point of origin for their trip, 29.4% (n = 221) began their trips in other U.S. states, and 6.2% (n = 47) indicated their visit to the Monument began in another country. Utah provided a starting point for 18.2% (n = 137) of the visitors answering the survey, followed by California (n = 99; 13.2%), Nevada (n = 61; 8.1%), Colorado (n = 57; 7.6%) and Arizona (n = 53; 7.0%). As a group, states that border Utah (Idaho, Wyoming, Nevada, Arizona and Colorado) served as origins for 24.0% (n = 181) of trips. A comparison of place of residence data from the intercept and trip origin data from the mail survey is shown in Table 28. These data suggest when visitors were asked about the origin of their trip not all of them identified the same place as their place of residence.

Table 28: Visitor Place of Residence and Trip Origin

	Visitor Place of Residence[1]	Trip Origin[2]
Utah	14.2%	18.2%
California	12.9%	13.2%
Arizona	5.8%	7.0%
Colorado	4.9%	7.6%
Nevada	1.6%	8.1%
Other Western States	7.8%	9.7%
Other States	29.3%	30.0%
Other Countries	22.9%	6.2%

[1]Place of residence data retrieved from intercept survey (n = 2,050).
[2]Trip origin data retrieved from mail survey (n = 753).

Respondents were also asked whether they had taken a commercial flight for their trip, and if they had, in what city their flight arrived. As shown in Table 29, more than one-third of the visitors (n = 272; 35.8%) did take a commercial flight, and more than one-half of them arrived in Las Vegas (n = 145; 53.7%), followed by Salt Lake City (n = 35; 13.0%), Phoenix (n = 18; 2.3%) and San Francisco (n = 16; 2.1%). It is noteworthy also that 25% of visitors taking commercial flights arrived in a number of other cities across the country. However, visitor arrivals in each of these cities represent 1% or less of those visitors who took a commercial flight. It should also be noted most of the arrival airports identified are within large metropolitan areas that host major airports. Additionally, most of these visitors flying in for their trip rented automobiles or recreational vehicles (RVs), or were part of organized bus tours.

Table 29: Commercial Flights and City Arrivals[1]

			Percent	Number
Did you take a commercial flight for your trip[2]		No	64.2%	488
		Yes	35.8%	272
"Yes"—City Arrival:			Percent	Number
Las Vegas, NV			53.7%	145
Salt Lake City, UT			13.0%	35
Phoenix, AZ			2.3%	18
San Francisco, CA			2.1%	16
Los Angeles, CA			1.8%	14
Denver, CO			1.6%	12
Cedar City, UT			0.5%	4
Other Cities[2]			25.0%	28

[1]Total n = 760

[2]Visitors also arrived in a number of other cities, including Amarillo, TX; Seattle, WA; San Diego, CA; Grand Junction, CO; Boise, ID; New York, NY; Atlanta, GA; Albuquerque, NM; Portland, OR; El Paso, TX; Colorado Springs, CO; Newark, NJ; and Orlando, FL; however, visitor arrivals in each of these cities represent 1% or less of those visitors who took a commercial flight.

Comparing Utahns, visitors from other states, and international visitors, only 2.7% (n = 3) of Utah visitors used a commercial flight, as would be expected. About one-third (33.9%) of visitors from other states used a commercial flight, and, as would also be expected, more than four-fifths of international visitors (81.6%) flew in from outside the U.S. (Table 30).

Table 30: Commercial Flights Taken for Monument Visit

Region Where Flight Originated	Flight Taken	Percentage of Visitors	Total Number of Visitors[1]
Utah	No	97.3%	111
	Yes	2.7%	
Other States	No	66.1%	552
	Yes	33.9%	
International	No	18.4%	103
	Yes	81.6%	

[1]Total n = 766

In comparing results summarized in Tables 28 and 29, some interesting contrasts emerge. Only 1.6% of visitors listed Nevada as their place of residence while 8.1%

considered their trip to have originated from the state. Table 29 shows a significantly higher number of travelers flew into Las Vegas, Nevada, than any other city (n = 145; 53.7% of all commercial flight arrivals). According to mail survey data, 87% of those claiming Nevada as their trip origin identified Las Vegas as the specific point of departure for their trip. As trip origin points are examined, it must be noted from where large numbers of Monument visitors are staging their trips. When data on commercial flights and overall visitor trip origins are taken into account, Las Vegas stands out as the single most utilized city for visitor arrivals and staging of trips to the Monument area. Las Vegas not only accounts for 53.7% of all commercial flights used during visitors' trips, but it also serves as a trip origin point for 7.0% of all Monument visitors.

Visitor Educational Background

The educational levels of Monument visitors eighteen and older is significantly higher than that seen in individuals twenty-five and older nationally (U.S. Census Bureau, Census 2000). Almost 70.0% of Monument visitors surveyed had a bachelor's, graduate, or professional degree (Figure 14), compared to only 24.4% in the U.S. population as a whole. Additionally, 20.8% percent had some college or a technical/associate's degree. Only 6.9% of Monument visitors had a high school diploma or less, as compared to 48.2% in the rest of the country (U.S. Census Bureau, Census 2000).
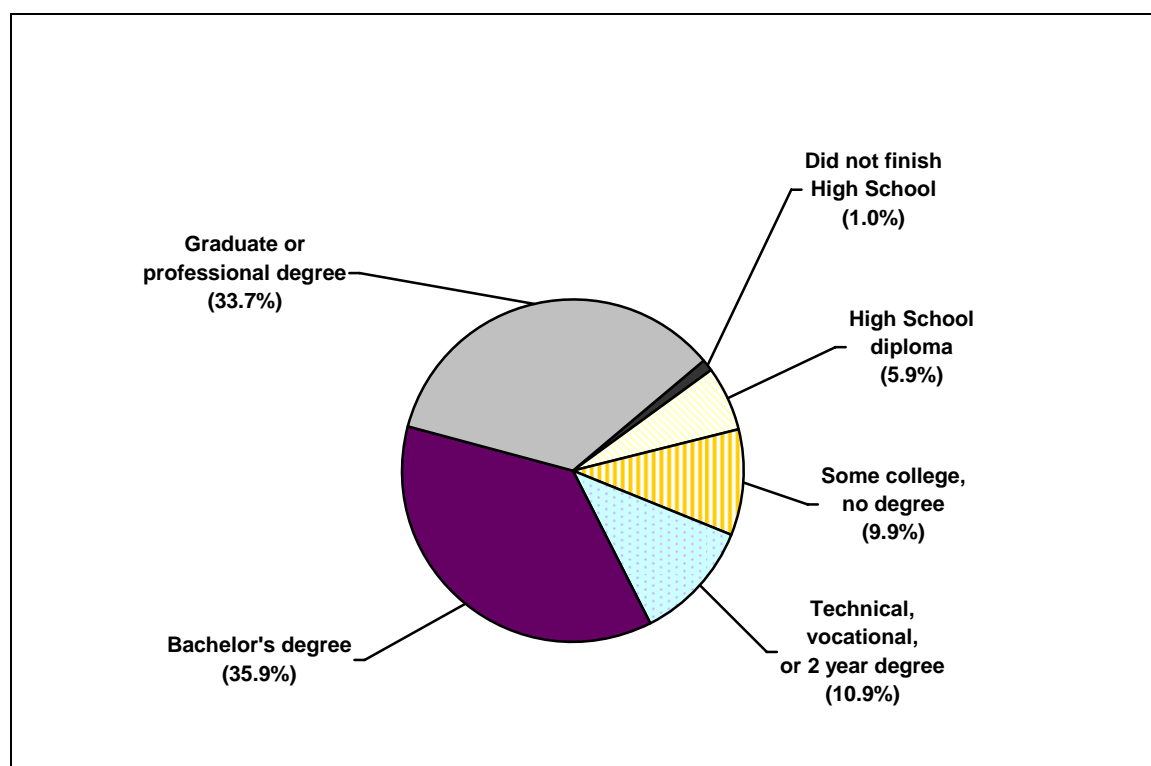
Figure 14: Monument Visitors' Highest Level of Education Completed

Visitor Roots

When Monument visitors were asked to describe the kind of community where they grew up, a majority indicated they came from cities and their suburbs. About 42.6% of respondents grew up in a large city with a population of 100,000 or more, or in a suburb of a large city. Visitors who grew up in small cities of 25,000-100,000 made up an additional 21.8% of respondents. Respondents from medium-sized towns (5,000-25,000 people) and small towns (less than 5,000 people) made up about one-quarter of the visitors. Finally, rural raised residents made up only 6.9% of total respondents.
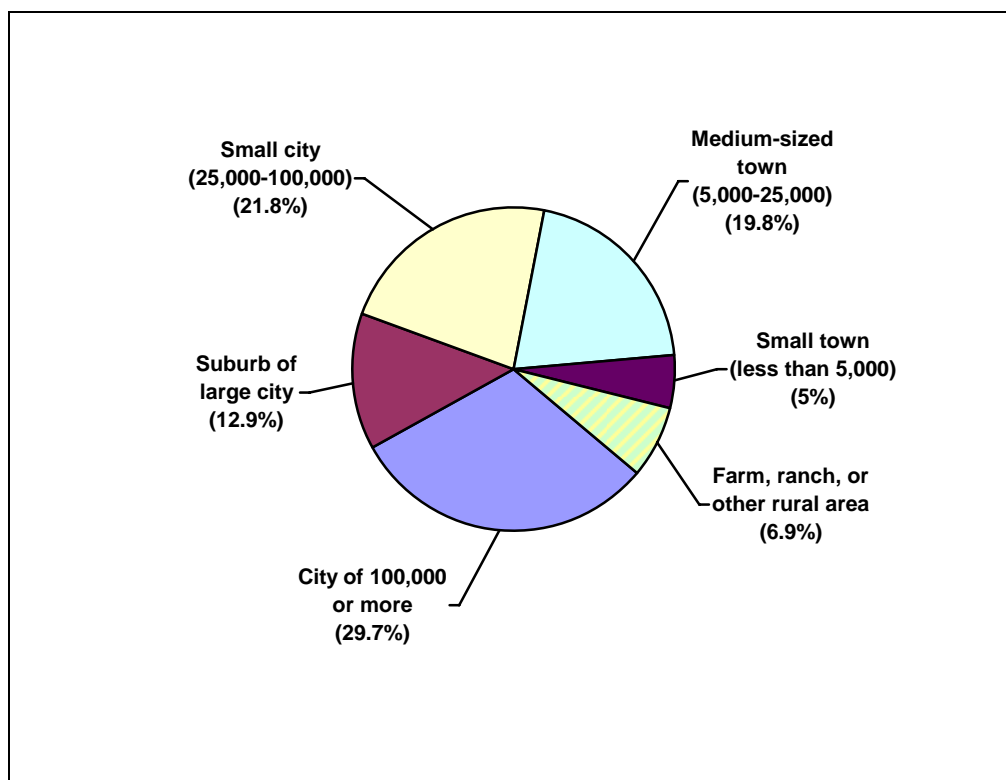
Figure 15:
Cities, Suburbs, Towns, and Rural Areas Where Monument Visitors Grew Up

Accommodations

Most of the visitors who stayed in the Monument area camped overnight (321; 41.8%) and about one-third stayed in local motels or bed and breakfasts (279; 36.4%) (Table 31). Campers were about evenly divided between Monument camping areas and other nearby camping areas. Most who camped on the Monument stayed in undeveloped sites, while most respondents who camped in other areas stayed in more developed campsites. Only 4.3% overnight visitors stayed in Bed & Breakfasts and only 2.2% stayed in private homes.

Table 31: Overnight Accommodations Used and Nights Stayed While Visiting

Accommodation	% (n)	# of Nights Spent				
		Median Nights Stayed	Mean Nights Stayed	Standard Deviation	Range	
					Low	High
Motels/Hotels	32.1% (246)	2.0	2.86	2.097	1	10
Developed Campground nearby	13.7% (105)	3.0	3.31	2.203	1	10[1]
Undeveloped Campground in the Monument	13.8% (106)	3.0	3.16	2.256	1	11
Developed Campground in the Monument	7.8% (60)	2.0	2.63	2.470	1	13
Undeveloped Site outside the Monument	6.5% (50)	2.0	2.54	2.395	1	12[2]
Bed-and-Breakfast	4.3% (33)	2.0	2.85	1.752	1	8
Private Home	2.2% (17)	2.0	4.24	4.008	1	16[3]

[1] Statistics shown are calculated without including one respondent who identified length of stay as 90 nights.
[2] Statistics shown are calculated without including one respondent who identified length of stay as 60 nights.
[3] Statistics shown are calculated without including one respondent who identified length of stay as 60 nights.

Visitor Center Stops

A large majority of visitors stop in at least one Monument area visitor center (VC) and over half visit more than one (Table 32). The Escalante VC is the most heavily visited by nearly double, as 60.5% of the respondents visited the Escalante center, compared to 34.0% for the Boulder VC, 25.5% the Kanab VC, and 22.9% the Cannonville VC. A surprisingly high number of respondents stopped at the Paria Canyon Contact Station, since this is a more specific purpose center than the others (backcountry contact and permits for Paria Canyon), but this probably reflects the fact that Paria Canyon hikes require permits and this station has been in place a lot longer than the other multi-purpose Monument visitor centers on the south side of the Monument. Relatively few also visited the Forest Service's Red Canyon VC, but this center was closed and being renovated during some of the data collection season for this study.

Table 32: Visitor Center (VC) Stops by Monument Visitors

	Percent	Number (n)
Did not stop at any VCs	18.9%	137
Stopped at one or more VCs	81.1%	577
Boulder VC/Anazasi State Park	34.0%	196
Kanab VC	25.5%	147
Red Canyon VC (USFS)	18.2%	105
Escalante VC	60.5%	355
Big Water VC	10.7%	62
Cannonville VC	22.9%	132
Paria Contact Station	17.5%	101
Stopped at Multiple VCs	52.7%	304

Stops and Activities in Monument Area Communities

Table 33 presents mail survey respondents' stops and activities in the surrounding communities in the Monument area, communities providing visitor services. Of the fifteen communities listed on the survey, five provided services for the southern area of the Monument while the other ten provided services for the northern area. Southern area communities included the Kanab, Page (in Arizona), Big Water, Fredonia (in Arizona), and Orderville; northern area communities included the Bryce Canyon Area, Escalante, Boulder, Tropic, Cannonville, Panguitch, Mount Carmel Junction, Henrieville, and Hatch. Eight of these fifteen communities had visitation rates between 29.0% and 74.0% by mail survey respondents. These relatively high-visitation communities included two with visitation rates of nearly 75.0% (Bryce Canyon and Escalante), three with visitation rates near 50.0% (Boulder, Kanab, and Page), and three with roughly 30.0% visitation rates (Tropic, Cannonville, and Panguitch).

The percentage of respondents purchasing gas, food, lodging, and shopping in the various communities differed greatly. Eight communities had gas purchase rates by over half of respondents. Three-fourths of the visitors to the high-visitation cities of Kanab and Page purchased gas. Between 50.0% and 61.0% of visitors who stopped purchased gas in

the communities of Bryce Canyon, Escalante, Tropic, Panguitch, Mount Carmel Junction, and Fredonia. Visitors who stopped in the other communities purchased gas less frequently (between 19.0% and 40.0%).

Visitor food purchases were highest in the communities of Kanab, Page, and Tropic, with over 70% of respondents stopping in these communities for food services. Four communities had food purchase rates of over 60.0% (Bryce Canyon, Escalante, Boulder, and Panguitch). All the remaining communities had food purchase rates of at least one-quarter, with the exception of Big Water (15.1%). High percentages of visitor food purchases seemed to mirror high percentages of gas purchases in the majority of communities, indicating a link between the two types of purchases.

Lodging was most common in Page (46.9%), Bryce Canyon (46.3%), and Kanab (40.7%). For the remaining communities, lodging rates ranged from 3.7% to 33.3%. Shopping was relatively low in most of the Monument area communities. The most shopping activity occurs in the Bryce Canyon area (40.8% of visitors), followed by Kanab and Orderville (30.4% and 29.6% of visitors respectively), and then in Escalante, Page, and Panguitch, where around one-quarter of visitors indicated they had shopped (23.0%, 27.7%, 23.9% respectively). Interesting is the town of Henrieville, where 13.2% of visitors (n = 68) indicated they had stopped, purchased gas (23.5%) and food (25%), purchased lodging (4.4%), and shopped (7.4%). However, none of these visitor services were provided in Henrieville, so perhaps these visitors were confusing Henrieville with nearby Cannonville, three miles to the west, where such services were offered.

Respondents were also asked to indicate if they had recreated, explored the town, or visited with friends and family in each community where they stopped (Table 33). Bryce Canyon Area had the highest percentage of visitors who recreated (69.6%), followed by Escalante (39.9%), Page (36.7%), Boulder (29.8%), and Cannonville (22.4%). Exploring Monument area communities was also uncommon. Only between one-fifth and one-third of visitors stopped and explored the towns of Tropic (21.2%), Henrieville (29.4%), Boulder (27.1%), Escalante 30.5%), Kanab (31.1%), Page (31.6%), and Panguitch (33.3%) (Again, there may be some visitor confusion about Henrieville here, as previously described.). In all the other communities, less than one-fifth of visitors indicated they explored a community. Very few respondents visited with friends or family in the communities. In fact, in every community except for Glendale (where two visitors stopped and visited with friends/family) less than 5.0% of visitors visited with friends or family.

Table 33: Community Stops and Activities

Community	No Stop (n)	Stop (n)	Activities While In Community[1]						
			Gas	Food	Lodging	Shopping	Recreate	Explore Town	Visit Friends Family
Bryce Canyon	25.9% (168)	74.1% (480)	50.4%	64.6%	46.3%	40.8%	69.6%	19.0%	1.5%
Escalante	27.4% (177)	72.6% (469)	58.8%	66.1%	27.3%	23.0%	39.9%	30.5%	2.8%
Boulder	49.4% (292)	50.6% (299)	34.8%	61.9%	18.1%	18.4%	29.8%	27.1%	3.7%
Kanab	54.4% (334)	45.6% (280)	72.5%	77.5%	40.7%	30.4%	15.4%	31.1%	3.9%
Page, AZ	57.8% (350)	42.2% (256)	79.7%	74.6%	46.9%	27.7%	36.7%	31.6%	0.8%
Tropic	66.7% (378)	33.3% (189)	50.8%	70.9%	33.3%	17.5%	12.7%	21.2%	1.6%
Cannonville	70.9% (380)	29.1% (156)	27.6%	30.8%	10.9%	3.8%	22.4%	15.4%	0.6%
Panguitch	71.2% (393)	28.8% (159)	61.0%	61.6%	26.4%	23.9%	10.1%	33.3%	2.5%
Mt.Carmel Junction	83.2% (462)	16.8% (93)	55.9%	43.0%	17.2%	10.8%	3.2%	6.5%	1.1%
Big Water	86.7% (474)	13.3% (73)	23.3%	15.1%	5.5%	5.5%	13.7%	12.3%	2.7%
Henrieville	86.8% (449)	13.2% (68)	23.5%	25.0%	4.4%	7.4%	4.4%	29.4%	4.4%
Hatch	90.7% (488)	9.3% (50)	40.0%	46.0%	8.0%	8.0%	8.0%	12.0%	0.0%
Fredonia, AZ	91.6% (502)	8.4% (46)	56.5%	28.3%	6.5%	17.4%	2.2%	8.7%	0.0%
Orderville	95.0% (512)	5.0% (27)	18.5%	25.9%	3.7%	29.6%	3.7%	18.5%	0.0%
Glendale	95.3% (508)	4.7% (25)	20.0%	24.0%	16.0%	16.0%	16.0%	12.0%	8.0%

[1] Percentages shown are those who stopped in the community.

Monument Impressions

Overall Visitor Satisfaction

Respondents were asked how satisfied they were with their trip to the Monument. As shown on Table 34, very few indicated somewhat dissatisfied, dissatisfied, or very dissatisfied. Nearly 5% of Utahns were dissatisfied compared to only 3% of visitors from other states and none from other countries. Over 90% indicated they were very satisfied or satisfied with their trip to the Monument.

Table 34: General Satisfaction with Monument Trip by State/Country

	Utah (n = 108)	Other U.S. States (n = 543)	International (n = 101)
Very Satisfied	51.9%	61.1%	57.4%
Satisfied	38.9%	30.9%	36.6%
Somewhat Satisfied	4.6%	5.2%	5.9%
Somewhat Dissatisfied	2.8%	1.8%	0.0%
Dissatisfied	1.9%	0.2%	0.0%
Very Dissatisfied	0.0%	0.7%	0.0%

Likes and Dislikes

The next question on the mail survey asked respondents to describe items they liked or disliked about the Monument. Almost 90% (688) of the 766 respondents answered the question. A complete listing of all responses is provided in Appendix I. The responses covered a wide variety of items, but most seem to capture several general themes.

The most frequently mentioned items (more than 214 respondents) fell under the category of liking the vast and stunning scenery, landscape vistas, and landforms. Although most of the responses were short and curt such as "enjoyed the scenery" and "natural beauty," a few respondents gave more in-depth responses. One respondent was struck by "*the immense area, the wide, wide vistas, the variety of rock colors, texture, and shape*" so much so they "*sometimes felt like we must be on another planet*" and "*the landscape felt almost surreal*." Besides the natural scenic attractions, several respondents also enjoyed the built western rural features. One respondent said he liked the "*scenic vistas, spectacular scenery, working ranches and small towns, lack of commercial sprawl*." He, along with several others, liked driving "*the highways through the Monument*" that also afforded him the "*opportunity to turn off and travel dirt roads for visits to other scenic sights*." Only one person complained about the scenery who said there are "*too many acreage(s) of non-monument type land*" and "*railed (fenced?) re-seeded areas*."

About 90 respondents like the wilderness values and solitude they encountered on the Monument. Many responses mentioned the remoteness, isolation, and seclusion. Several mentioned the contrast between the crowds they encountered at other National Parks and the solitude they found at GSE-NM. As an example of this, one respondent

said "*The scenery is exceptional but this is true of many monument and parks. I think the primitive nature of the Monument makes it possible to experience the scenery on a more spiritual or emotional level.*" Other respondents included suggestions to managers that they maintain that sense of wilderness, including one respondent who liked the "*beautiful canyons, poppies and mallow in bloom – covering many acres, remoteness of the area, road in much better shape than previous years, but please don't let it be improved.*" While another was struck by "*amazing long vistas which changed from sandstone to plateaus and canyons. Some easily accessed but much of it is formidable wilderness! Please preserve it as such*!" However, remoteness and solitude can be intimidating as one respondent pointed out by saying he disliked "*being alone and unable to change a tire. I wished cell phones worked throughout. I would have explored more.*"

Along similar lines, about 60 respondents liked the fact they did not encounter many people. Most of those respondents wrote they liked seeing few people around with no crowded conditions. One person said he likes the type of visitor that is drawn to the Monument by writing he liked the fact there were "*less tourists, [but a] special kind of tourist! Adventure feeling! Nature! Great place to take a photo! A place to explore! No tourist busses!*" Another said "*Liked the few people seen in the Monument slot canyons*" and it "*would not be fun with too many people.*" There was one respondent who complained about crowding in the campgrounds and another who worried about future conditions by saying he had a "*great experience but [the area] seems to be developing rapidly, [there were] more people than expected.*"

Another 60 respondents referred to man-made facilities in the Monument such as roads, campsites, picnic areas, etc. About twice as many comments were critical than were positive. Several people thought the roads were maintained well enough while others liked the fact there were a lack of signs and other built facilities and improvements. However, there were other respondents who suggested such things as paving more of the Monument roads, installing more restrooms, as well as constructing more developed campgrounds and road turn-outs. Many of the complaints about road conditions concerned rough and difficult roads and wash-boarding. One respondent felt unsafe driving along Highway 12 because of the lack of guardrails. Another person pointed out some of the visitors may be placing themselves at risk by exploring areas that are beyond their capabilities and skill levels. She thinks a good idea would be to install "*a ladder… at the entrance of Peek-A-Boo canyon. People are going to go to this popular spot and the safety is deeply disturbing for such an end destination location. People are scaling the wall who should not have tried.*"

About 40 respondents mentioned Monument information availability and content with about half positive and the other half negative comments. Several of the positive comments referred to encounters with Monument personnel, writing that the BLM rangers were friendly and well informed. Others like the fact information in the visitor centers about current weather and road conditions was useful. It appears most of the positive comments were about the exhibits in the visitor centers. Many of the negative comments about information shortcomings referred to lack of clear signage. Several respondents would have liked better interpretation of what they were looking at with one respondent saying "*The Monument is beautiful. I saw a lot, but I needed more*

information about what I was looking at. Visitor center was not a big help." Several other respondents mentioned the fact they were unaware they were in GSE-NM due to lack of signage.

Visitor Expectations of Monument Areas

Mail survey respondents were asked if any of the areas in the Monument they visited were different from what they had expected. Of the 747 respondents answering this question, approximately one-third (31.2%; n = 233) said that one or more areas had been different than they had expected (Table 35).

Table 35: Repeat and First Time Visitors' Differences in Expectations

Differences in expectation?	First time visiting Monument?		
	No	Yes	Total
No	33.2% (n = 248)	35.6% (n = 266)	68.8% (n = 514)
Yes	12.1% (n = 90)	19.1% (n = 143)	31.2% (n = 233)
Total	45.3% (n = 338)	54.7% (n = 409)	100% (n = 747)

If respondents answered "Yes, one or more areas was different than expected," they were asked to specify which areas were different and how these were different. The 233 respondents who stated an area was different made 267 comments in response, as they could comment on more than one difference in expectations for an area or areas. Results revealed a wide range of areas where respondents experienced something different than they expected and the differences in expectations identified included positive, negative and neutral responses.

Following, these responses have been organized into geographic areas. Responses directed towards the entire Monument area as a whole are organized into their own area. Highway 12, a National Scenic Byway and Utah's only All American Road, is the main travel route through the northern area of the Monument, and many of the Monument's scenic, recreation, and visitor center sites are located directly on or in very close proximity to Highway 12, so these sites are organized into a geographic area. Many of the Monument's roads and trails either cross or intersect Highway 12, and so these will be organized into separate geographic areas and addressed moving from east to west along Highway 12, from the Burr Trail area to the Cottonwood Road area. Responses from the southern area of the Monument are organized into the Paria area. Several responses specifically addressed the towns of Escalante and Boulder, Utah, and these responses are organized and presented separately from any geographic area. Respondents also gave feedback regarding National Parks, National Forests, and State Parks in the Monument area. These responses include references to Bryce Canyon National Park (n =

11), Kodachrome Basin State Park (n = 7), Anasazi State Park (n = 4), Red Canyon—Forest Service (n = 2), Petrified Forest State Park (n = 1), and Capitol Reef National Park (n = 1). The responses regarding differences in expectations at these locations are organized and presented in Appendix J.

Entire Monument Area

Of all of the areas identified by respondents, the greatest number of responses regarding differences in expectations was directed towards the entire Monument area as a whole. Approximately one-third of the responses (n = 71) addressed this area. Among those, 38 responses revealed positive differences in expectation, nine revealed negative differences in expectation, and 24 expressed differences in expectation that were neither positive nor negative in nature.

Of the 38 positive responses regarding the entire Monument, 12 involved a general lack of expectation followed by a pleasant surprise in the experience. The following statement is very representative of these responses: "The entire area was unexpected. I did not realize the spectacular sites we encountered were there when we planned our trip." Four responses focused on Monument development, and though all four were positive in nature, three praised the improvement of roads and access while the other praised the undeveloped nature of the Monument. Ten of the positive responses focused on the unexpected beauty and scenery of the Monument. Four responses addressed the size of the Monument and the respondents were surprised at the large size of the Monument. The remainder of the positive differences in expectation focused on geology/flora and fauna (n = 9).

Of the nine negative responses regarding the entire Monument, three involved a comparison of the GSENM to National Parks in the area. The following statement is representative of these responses: "Entire Monument: not exactly Zion or Bryce [National Parks]." Other notable negative differences in expectation include two responses regarding roads in the Monument. These responses both expressed disappointed with the condition of some Monument roads, calling them "not suitable for a car" and "narrow and scary." Other negative responses addressed social dimensions issues (n = 2), information (n = 1), size (n = 1), and wildlife (n = 1).

Of the 24 respondents who gave neutral responses regarding the entire Monument, a little more than one-third (37.5%) revealed only the experience was different than they had expected. Five neutral responses addressed the size of the Monument, with again these respondents surprised at the Monument's large size. Nearly one-third of the neutral responses revealed differences in expectation regarding climate and topography (e.g., cooler and wetter, incessant wind, more arid, stark landscape). Other neutral responses addressed information (n = 2) and development (n = 1).

Highway 12 (National Scenic Byway) Area

Highway 12 is a National Scenic Byway—All-American Road that runs from the town of Torrey to the north in Wayne County to the southwest junction with Highway 89 between Hatch and Panguitch in Garfield County. The center portion of Highway 12 runs along the northern boundary of the Monument between the towns of Cannonville and

Boulder in Garfield County. The area was identified as being different than expected in roughly fifteen percent (n = 40) of the comments received in answer to the question. The area includes Scenic Byway 12 itself, Hell's Backbone, Upper Calf Creek, Calf Creek, the Blues Overlook, and the Cannonville Visitor Center. For this area, 26 of the comments were positive, 11 were negative, and three were neutral.

Highway 12 was identified specifically by 21 respondents. Of these responses, 18 were positive, and three were negative. Approximately one half (n = 12) of these responses were general references to the surprising beauty and scenery along the highway (e.g., "beautiful-not desert," "very pretty, more beauty-overwhelming"). Other positives included five respondents who commented on the condition and nature of the highway (e.g., it was winding and narrow but this added to its beauty).

There were three negative responses directed towards Highway 12. Two focused on information, specifically calling for better roadside markers and road maps. The other response expressed a desire for a longer stop-over place, but did not specify where along highway.

Hell's Backbone is a scenic loop off of Highway 12 between Boulder and Escalante. Hell's Backbone received four responses, all of which were negative. These respondents were disappointed by the fact the loop was not as scenic, special, or spectacular as they had expected. One respondent also said the road was more difficult to drive than expected.

Calf Creek is located on Highway 12 approximately midway between Escalante and Boulder. The Calf Creek site consists of a campground, picnic area, and the trailhead to Lower Calf Creek Falls. There were twelve responses directed towards Calf Creek. Of those responses seven were positive, three were negative, and two were neutral. Of the seven positive responses, more than one half (n = 4) addressed the ease, beauty, and pleasantness of the Lower Calf Creek Falls trail. Other responses focused on vegetation; Calf Creek was an oasis in the desert, was more lush and intimate, had more trees, and the expectation was a more barren desert-like area. The three negative responses regarding Calf Creek all identified crowding as an issue. All three respondents suggested the site was too busy. Two of these respondents compared previous visits in the past, commenting that the site was much busier now.

The three other sites considered part of the Highway 12 Area received three comments. Upper Calf Creek Falls elicited a negative response from a visitor who was unable to find the trailhead. The Cannonville Visitor Center received a positive comment that described the visitor center as being, "more than… expected." The final comment was neutral and dealt with the size of the landscape and geology of the Blues Overlook

Burr Trail Area

The Burr Trail runs from the town of Boulder east to the western boundary of Capitol Reef National Park and then on down to the Water Pocket Fold. The Burr Trail area includes the Burr Trail itself, Deer Creek Campground/Trailhead, The Gulch, and the Wolverine Loop. With respect to differences in expectations, the area was commented on sixteen times, representing roughly 6.0% of the total comments received for this

question. The majority of comments on the area were positive (n = 8) or neutral (n = 5), with only a few negative responses (n = 3).

The Burr Trail was specifically addressed by ten respondents. Of their responses, six were positive, two were negative, and two were neutral. Four of the responses (40.0%) were general references to the beauty and stunning scenery along the trail. The rest of the responses regarded the road itself. One-fifth of respondents (n = 2) praised the establishment of a paved road. One respondent, however, expressed disappointment with the paving of the road because it "encourages more visitors." The other respondents expressed general surprise at the condition of the road (e.g., steeper, more paved).

The Gulch and Deer Creek are both located along the Burr Trail. The Gulch is a trailhead and Deer Creek consists of both a campground and a trailhead. The Gulch was mentioned by three respondents and Deer Creek was mentioned by two. The three respondents referring to The Gulch said they enjoyed the trail, hadn't expected water, and were surprised by the greenery and lushness late in the season. One respondent revealed The Gulch was drier and less well-traveled than expected. A response directed towards Deer Creek revealed frustration with the presence of recreational vehicles in the campground and suggested these not be allowed in that specific campground.

Wolverine Loop, accessed from the Burr Trail, was mentioned in two neutral comments. One respondent mentioned that the loop was much more expansive than expected. A second respondent described the road conditions and the difficulty they had encountered due to recent bad weather.

Escalante Canyon/River Area

The Escalante River originates in the Escalante Mountains north of the town of Escalante. The river travels southeastward through Escalante Canyon until it drains into Lake Powell. This area was mentioned in 11 comments (4.1% of total), seven of which were positive, while the remaining four were split between negative and neutral comments.

The Escalante River was specifically mentioned by six respondents. Most responses made positive reference to the beauty and abundance of vegetation along the river. One respondent was disappointed to see that petroglyphs described in a guidebook had been vandalized. Another respondent expected to see more campers and hikers along the river.

Escalante Canyon was mentioned by eight respondents. Half of the respondents (n = 4) made positive reference to the canyon's beauty and scenery. Two respondents commented on the number of people they saw. One of these respondents was surprised by how crowded it was, while the other felt more lonely than expected. The two other respondents felt unprepared for the weather and road conditions, and suggested that better travel and hiking information be provided.

The Escalante Valley was also mentioned in one comment. This response was negative in nature and dealt with the dense underbrush in the area.

Hole-in-the-Rock Road Area

The Hole-in-the-Rock Road is accessed from Highway 12 several miles east of the town of Escalante. The road runs southeast, parallel to the Escalante River, until it nearly reaches Lake Powell. The Hole-in-the-Rock Road area includes Hole-in-the-Rock Road itself, Devils Garden, Left Hand Collet/Dinosaur Tracks, Harris Wash, Egypt Trailhead, Dry Fork Trailhead, Hurricane Wash Trailhead, and Coyote Gulch Trailhead. This area was mentioned in approximately eleven percent (n = 29) of the comments received in this question.

There was one response directed towards the Hole-in-the-Rock Road itself. The respondents were happy to see free-grazing cattle ranches in open sky country.

Devils Garden was identified by six respondents. Four of the six responses (66.0%) were general positive comments (e.g., awesome, loved what we found). One respondent anticipated that the picnic area would be covered.

The dinosaur tracks were mentioned by four respondents. Two of these respondents revealed that they were unaware of the existence of the dinosaur tracks. Another respondent said the site was harder to reach than expected.

Dry Fork was mentioned by twelve respondents. Dry Fork includes the destinations Spooky Gulch and Peek-A-Boo Gulch, both slot canyons popular for hiking. Positive responses were limited to general references to the locations' unique topography. More than one-half of the negative responses (n = 5) focused on the difficulty of finding the trails at Dry Fork, or never finding them at all. Another respondent was not expecting to see names scratched on sandstone rock walls.

Hurricane Wash received one response regarding the negative impact that cattle were having on the area. The respondent said the riparian areas were stinky and trashed with urine and cow pies.

Coyote Gulch was mentioned three times. One respondent was surprised by the number of people at the site, while another had expected it to be busier. The other respondent did not expect dogs to be left roaming off of their leashes.

The Harris Wash, Left Hand Collet, and Egypt area also received three comments. The Harris Wash and Egypt comments were positive responses to the beauty and scenery of the locales. A single neutral comment was made about Left Hand Collet being closed.

Smokey Mountain Road Area

Smoky Mountain Road is accessed from Highway 12 in the town of Escalante, and runs southward until it joins Highway 89 near the town of Big Water, Utah. The Smoky Mountain Road area includes the Smoky Mountain Road itself, and any responses referring to the Kaiparawits Plateau. Roughly one percent (n = 3) of the comments for this question dealt with this area.

There were two respondents who mentioned the Smoky Mountain Road itself. One respondent said the area was hot and had no trees, and the other said the area was beautiful, but not "monument class." The other respondent said they experienced solitude on the Kaiparawits Plateau.

Cottonwood Road Area

Cottonwood Road is accessed from Highway 12 in the town of Cannonville, and runs southward to Highway 89 near Big Water, Utah. The Cottonwood Road area includes Cottonwood Road itself, Cottonwood Canyon, Grosvenor Arch, Lower Hackberry, Hackberry, Skutumpah Road, Bull Valley Gorge, and Lick Wash. Around ten percent (n = 25) of responses to this question addressed this geographic area. Over half of the comments on the Cottonwood Road Area were positive (n = 13), with the remainder being composed of negative (n = 8) and neutral (n = 4) observations.

Responses for Cottonwood Road and Cottonwood Canyon have been combined for a total of eleven responses. Of these eleven responses well over two-thirds (n = 8) were positive, and three were negative. Among the positive responses five were general references to the beauty and scenery of the area. The other three positive responses were related to travel, including references to both the condition of the road and the number of people on the road.

Negative responses about Cottonwood Road and Canyon included two references to the unsightly nature of the power lines along the road (e.g., distracting, awful). Another respondent was disappointed at the lack of information signs along the road.

Grosvenor Arch is located at the end of an eastward turnoff from the Cottonwood Road. Seven respondents addressed Grosvenor Arch specifically. Of those seven respondents, three said that Grosvenor Arch was more spectacular than they had expected. One of those same respondents was also delighted to see toilets at the site. Negative responses consisted of criticism of the camping conditions (sites too close together), and disappointment with the condition of the road (it was better before it was a Monument). The other two respondents were both surprised at the number of people at such a remote location.

Skutumpah Road is accessed from Cottonwood Road and runs south to Highway 89 near Kanab. The road was mentioned by four respondents. All four of these responses regarded the road. Two respondents expressed disappointment with the plainness of the drive, another expressed surprise with the beauty of the drive, and a fourth stated the road was smoother than anticipated.

Three additional locations in the Cottonwood Road Area were addressed in comments. There was one response directed towards Bull Valley Gorge. The respondent was disappointed because they expected a sign and ended up missing the site. A second comment praised the beauty of the Hackberry Canyon. The final neutral response about the Lick Wash simply stated, "Trees."

Paria Area

The Paria area consists of the region where Cottonwood Road intersects with Highway 89 on the southern side of the Monument. The Paria area includes the Paria Movie Set; the Paria River, Buckskin Wave, White House Campground, Wire Pass and the Big Water Visitors Center. This area was commented on 19 times, of which ten were positive, six were negative, and three were neutral.

The Paria Movie Set was mentioned by eight respondents. Three respondents were pleasantly surprised, saying they were surprised and delighted by the lack of

development at the site. Three other respondents were disappointed by the site. One of these respondents commented on the lack of interpretative information. The other two expressed disappointment with the presence of structures at the Movie Site that were not original, and the negative impact of All Terrain Vehicles (ATVs) on the area.

The Buckskin Wave was referred to by five respondents. All of their responses were positive and expressed a general delight and satisfaction with the beauty and scenery of the site.

Wire Pass was mentioned by three respondents. One respondent said that the parking lot was ugly and another said the site was drier than expected.

Three other sites received one comment each. One respondent mentioned White House Campground, saying it was excellent. A second comment dealt with the lack of campsites in the Paria River. The final comment simply stated surprise at seeing a new visitor center in Big Water.

Towns of Escalante and Boulder

The town of Boulder was specifically addressed by three respondents. Two made positive reference to the town, saying it was "really nice," and that it "combined a Colorado experience with a Zion-type area." Another respondent said that they expected the town to be "more developed."

The town of Escalante was mentioned by five respondents. One of these respondents made general reference to the beauty of the town. Other respondents revealed differences in expectation regarding the lack of dining and forms of entertainment, and the short distance between the town of Escalante and many of the sites. It should also be noted one respondent made a general reference to towns in the Monument area stating they had "expected more of a town scene."

Infrequently Addressed Locations/Non-Specific Geographic Areas

A number of other sites that received comments were either unidentifiable, based on the information provided, or did not fit into a specific geographic area. Areas of this type were commented on 14 times (5.2% of total), eight of which were neutral, five positive, and one negative.

There were three comments that addressed slot canyons and "toadstools." Of these comments, two were positive and explained the respondents' joy and surprise with the area, while a third explained a respondent's ignorance of the existence of slot canyons prior to his arrival.

Another three specific canyons were mentioned by respondents. Fence Canyon was commented on twice; one of these responses explaining the area's general character the other mentioning its ruggedness. The 50 Mile Canyon area's landscape was commented on once, while a second respondent remarked that the same location was better than they expected. Horse Canyon's abundance of water was also mentioned in one comment.

A group of three additional areas received a single neutral comment each. The appropriateness of Death Ridge's name was mentioned by one respondent. A second

respondent felt that Croton Road was "hardly passable." A third respondent made a comment about the condition and upkeep of Nephi Pasture.

The arch at Phipps Wash received a positive comment from one respondent. No Mans Mesa also elicited a positive comment from a visitor who enjoyed the lack of cow manure in the area.

Kiva Coffee House received one negative comment from a respondent who was confused by its placement in the area.

Personal Benefits to Visitors

Tables 36 and 37 below present visitors' responses to questions dealing with personal benefits derived from Monument visitation. These benefits have been grouped into four categories: 1) Solitude and Nature; 2) Novelty of New Area/Experience; 3) Social Interactions/Status; and 4) Skills and Accomplishments. Each item was measured on a four-point Likert scale where 4 = most important, 3 = important, 2 = slightly important, and 1 = not important. Individual benefits identified under each category have been ordered from highest to lowest mean importance.

Table 36: Benefits Derived from Visiting the Monument:
Solitude/Nature and *Novelty of New Area/Experience*

	Mean[1]	Most Important	Important	Slightly Important	Not Important
SOLITUDE/NATURE					
Viewing Scenery	3.75	76.0%	23.0%	0.5%	0.1%
Being in a Natural Area	3.67	71.0%	25.1%	2.6%	0.8%
Enjoying Quite and Tranquility	3.48	58.9%	32.0%	7.4%	1.7%
Escaping from Every Day Pressures	3.18	39.4%	43.0%	13.7%	4.0%
Finding Solitude	3.02	38.7%	33.9%	18.1%	9.3%
Seeing No People Outside My Group	1.88	9.7%	16.0%	26.5%	47.8%
NOVELTY OF NEW AREA/EXPERIENCE					
Discovering New Places and Landscapes	3.59	63.0%	34.0%	2.1%	0.8%
Seeing Places Never Seen Before	3.41	54.0%	35.2%	8.1%	2.7%
Doing Something New and Different	3.27	40.2%	47.4%	11.2%	1.2%
Learning More About Nature	3.05	29.2%	49.1%	19.4%	2.4%

[1]Mean score calculated on a scale where 4 = most important, 3 = important, 2 = slightly important, and 1 = not important.

Solitude and Nature

The first category, Solitude and Nature, contains six benefit items related to the solitude or naturalness of the area, along with the mean importance of each item as perceived by the respondents and scale frequencies in percentages. "Viewing Scenery" (mean = 3.75), "Being in a Natural Area" (mean = 3.67), and "Enjoying Quite and

Tranquility" (mean = 3.48) ranked highest of the items in the category. Over 90.0% of respondents ranked these three items as "most important" or "important." Two additional items, "Escaping from Every Day Pressures" and "Finding Solitude," were also rated as important to visitors (mean = 3.18 and 3.02, respectively). "Seeing No People Outside of My Group" appears to have been the least important item to visitors, and the only item whose mean score was somewhat less than "slightly important" (mean = 1.88). There seems to have been a distinction made by respondents between "Finding Solitude/ Enjoying Quite/Escaping from Every Day Pressures" and "Seeing No People Outside of My Group." This may suggest while people want to find relaxing areas for their recreational activities, where they can feel as if they are on their own, they are not necessarily bothered by seeing other visitors while they are there.

Novelty of New Area/Experience

A second category of benefit items, Novelty of New Area/Experience, includes those perceived benefits associated with discovery, novelty, uniqueness, and learning opportunities of both being in the area and having new experiences. All four of the items in this category were rated by clear majorities of visitors as being "most important" or "important" (means range from 3.59 to 3.05), demonstrating the value Monument visitors place on perceived benefits associated with these opportunities.

Visitors rated "Discovering New Places and Landscapes" highest, with a clear majority (63%) saying this item was "most important" and about another one-third (34%) saying "important." The other three items in this category "See Places Never Seen Before," "Doing Something New and Different," "Learning More About Nature" were rated by over three-fourths of respondents as either "most important" or "important." A majority of respondents (54.0%) rated "See Places Never Seen Before" as "most important." The lowest ranking item in this category was "Learning More About Nature" (mean = 3.05), but a large majority of respondents (78.3%) still rated it as "important" (49.1%) or "most important" (29.2%).

Differences in the importance of these perceived benefits, although not great, may indicate Monument visitors place a somewhat greater value on being able to discover and explore a new area and engage in new activities, compared to general learning opportunities during their trip.

Table 37: Benefits Derived from Visiting the Monument:
Social Interaction/Status and *Skills & Accomplishment*

	Mean[1]	Most Important	Important	Slightly Important	Not Important
SKILLS AND ACCOMPLISHMENT					
Exercising	2.84	24.2%	43.5%	24.4%	7.9%
Being Creative (photography, painting/drawing, etc.)	2.48	17.9%	31.8%	30.8%	19.5%
Using Outdoor Skills	2.39	10.7%	35.0%	36.5%	17.8%
For a Challenge	2.36	14.9%	27.1%	36.6%	21.4%
For a Sense of Accomplishment	2.30	13.0%	26.7%	37.9%	22.3%
SOCIAL INTERACTION/STATUS					
Being with Friends and/or Family	2.63	25.1%	34.0%	20.1%	20.8%
Telling Others About It at Home	2.10	9.2%	22.2%	38.0%	30.6%
Meeting New People/Socialize	1.72	3.5%	13.7%	33.7%	49.1%

[1]Mean score calculated on a scale where 4 = most important, 3 = important, 2 = slightly important, and 1 = not important.

Skills and Accomplishment

The third category, Skills and Accomplishment, includes five items of perceived benefits associated with skill development and accomplishment during a visit. Except for "Exercising," the majority of respondents (between 50% and 60%) ranked the items in this category as being "slightly important" or "not important" (ranging from 2.48 to 2.30). A clear majority (67.7%) ranked the importance of "Exercising" (mean = 2.84) as "important" (43.5%) or "most important" (24.2%). "Being Creative" was ranked by a near majority (49.7%) as being "important" (31.8%) or "most important" (17.9%). Between 50% and 60% of the visitors rated the remaining three items as "slightly important" or "not important." These items, in order of mean importance, were "Using Outdoor Skills," "For a Challenge," and "For a Sense of Accomplishment." The lower importance assigned by visitors to these perceived benefits associated with skill development and accomplishment, compared to the previous two categories of Solitude/Nature and Novelty of New Area/Experience items, seems to indicate visitors placed a greater value on relaxation and sightseeing (being able to discover and explore a new area and engage in new activities there) than on skill development and accomplishment during a visit.

Social Interaction/Status

The last benefit category, Social Interaction/Status, includes two items dealing with the perceived benefits of social interactions while in the Monument area and one with the social status of visiting the area. These items had the lowest overall means of any category of items. With a mean of 2.63, "Being with Friends and/or Family" had more than half of respondents (59.1%) agree it was an "important" (34%) or "most

important" benefit of a visit to the Monument. "Telling Others About It at Home" (mean = 2.10) and "Meeting New People/Socialize" (mean = 1.72) each had roughly three-fourths of respondents agree these perceived benefits were only "slightly important" or "not important." Although a clear majority expressed the personal importance of being able to be with friends and/or family, these ratings seem to suggest only a low to moderate interest in a visit to the Monument area for socializing with others or as a vehicle for social status at home.

The perceived personal benefits for Monument visitors seem to differ based on where those visitors live. Table 38 lists ten benefits whose perceived levels of importance by visitors are statistically significantly different among the three categories of visitor residences: Utah, other U.S. States, and international. These items are from all four of the benefit categories in Tables 36 and 37.

Table 38: Statistically Significant Differences in Perceived Personal Benefits of a Monument Visit Between Utah, Other American, and International Visitors

	Utah (n = 107-108)	Other U.S. States (n = 537-548)	International (n = (98-102)
Viewing Scenery	3.20[1]	3.44[1]	3.43
Finding Solitude	3.12[2]	3.06[2]	2.71[2,2]
Discovering New Places/Landscapes	3.43[1]	3.63[1]	3.59
Seinge Place Never Seen Before	1.79	1.67[1]	1.89[1]
Being With Friends/Family	3.66[1]	3.77[1]	3.76
Meeting New People/Socialize	3.19[3,3]	2.58[3,1]	2.30[3,1]
Exercising	2.90[1]	2.89[3]	2.48[1,3]
Using Outdoor Skills	2.62[3]	2.40[3]	2.06[3,3]
For a Challenge	2.48[1]	2.39[1]	2.05[1,1]
For a Sense of Accomplishment	2.37	2.33[1]	2.08[1]

[1] $p < 0.05$; [2] $p < 0.01$; [3] $p < 0.001$

"Viewing Scenery" and "Finding Solitude," showed significant differences among the three residence groups. Utahns placed greater emphasis on solitude than other U.S. and international visitors, while other visitors placed greater emphasis on scenery than Utahns. Both of these differences could be a result of the proximity of Utahns to the Monument and similar types of scenery and remote areas experienced in the state, while residents from other areas are more interested in the seeing the unique scenery. This assertion would also appear to be supported by the differences in responses to the novelty questions. Utahns placed less importance on "Discovering New Places/Landscapes" than other visitors did, and significantly less importance than U.S. visitors from other states The final novelty related benefit, "See Place Never Seen Before," was of greater importance to international visitors than Utahns and of significantly greater importance than U.S visitors from outside of Utah.

Six of the items dealing with social interactions and skills/accomplishments were significantly different based on visitor residence. Utahans were less likely than other states' residents to feel that being with family and friends was an important benefit of their visit, but more likely than those from other states and countries to feel that meeting new people and socializing was an important benefit. Utah residents also rated all of the skill and accomplishment benefits as more important than non-Utah residents. Utahans rated "Exercise," "Outdoor Skills," "Challenge," and "Sense of Accomplishment" higher than other U.S. residents did, and other U.S. residents rated them higher than international visitors did. This could indicate long-distance visitors have more of a "big-picture," tourism type purpose, or they are less familiar or comfortable with the local physical environment and therefore are less likely to be involved in skill-based outdoor recreation activities. It seems likely as the distance traveled to reach the Monument area, and the differences between the Monument area and the residents' home region increase, the focus of the trip might be more oriented to touring and sightseeing, and less oriented toward specific site or environment oriented activities that require specialized skills and equipment.

Importance-Performance Analysis: Monument Management

The purpose of Importance-Performance (I-P) analysis is to have visitors rank various aspects of their trip for 1) the importance each aspect is for a satisfying recreational experience, and 2) their actual satisfaction with each aspect (perception of performance). Included were two broad sets of questions: 24 items related to Monument management, and 14 items related to other visitor facilities and services in local communities and on other public lands.

The following series of tables contain data concerning specific aspects of the overall quality of visitors' recreation experiences on the Monument itself. Questions dealing with the importance of items related to the overall quality of visitors' recreation experience asked respondents, "How important to you are each of the following items when visiting the Monument?" Responses to this question were on a scale where: 1 = "Not Important," 2 = "Somewhat Important," 3 = "Important," 4 = "Quite Important," and 5 = "Very Important." Questions dealing with the overall quality of visitors' recreation experience asked respondents, "Please rate how satisfied you were with the following items during your actual visit to the Monument." Responses to this question were on a scale where: 1 = "Not Satisfied," 2 = "Somewhat Satisfied," 3 = "Satisfied," 4 = "Quite Satisfied," and 5 = "Very Satisfied." This question also contained a "N/A"— Not Applicable check box for respondents who had not had experience with a particular item during their trip. The responses to the two overall quality questions have been divided into six sections: Signage, Naturalness, Services, Infrastructure, Education, and General Information. Each section contains three tables displaying importance scores, satisfaction scores, and importance vs. satisfaction scores for respondents who experienced an item they rated "Very" or "Quite Important." Note, the sample sizes in tables containing satisfaction data vary because data from respondents who checked "N/A," were not included.

Signage

The survey asked respondents to rate the importance of four different types of signs in the monument area, and the satisfaction they felt with the types of signs they experienced. Table 39 presents the percentage of respondents agreeing with each importance value for the four types of signs. Roughly three-fourths of respondents rated all four sign types, Directional Signs to Visitor Centers, Directional Signs to Other Destinations, Trailhead Markers, and Road Signs, as being at least "Important" to them. Table 40 lists the percentage of respondents feeling a certain degree of satisfaction with the same four sign types. Over three-fourths of those visitors who had experience with any given sign type stated that they were at least "Satisfied" with the Monument area sign types.

Table 41 presents the percentage of respondents who listed a sign type as "Very/Quite Important" and were either "Very/Quite Satisfied" or "Somewhat/Not Satisfied" with that sign type. All four sign types had similar percentages of respondents stating a high level of importance and satisfaction with each item. Roughly 30% of respondents who had experience with all four types of signs indicated they were highly important to them and they were highly satisfied with the available signage. On the opposite end of the spectrum, around 20% of respondents indicated that "Monument Trailhead Markers" and "Directional Signs on Roads to Other Monument Destinations" were of high importance to them and they were "Somewhat/Not Satisfied" with these signage types in the Monument area. This means nearly one-fifth of the respondents felt these types of signs were important but they were relatively dissatisfied with the signs on the Monument. However, "Monument Road Signs" had the lowest percentage of respondents (9.4%) indicating high importance and low satisfaction with available signs.

Table 39: Importance of Sign Types to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Directional Signs to Monument Visitor Centers (n=713)	3.9%	13.5%	26.4%	27.3%	28.9%	3.64
Monument Trailhead Markers (n=711)	4.5%	9.4%	20.3%	27.3%	38.5%	3.86
Directional Signs on Roads to Other Monument Destinations (n=712)	3.2%	9.3%	23.6%	30.1%	33.8%	3.82
Monument Road Signs (n=709)	5.4%	20.5%	26.7%	25.0%	22.6%	3.39

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 40: Satisfaction with <u>Sign</u> Types to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Directional Signs to Monument Visitor Centers (n=635)	8.2%	11.5%	27.9%	31.8%	20.6%	10.6%	3.45
Monument Trailhead Markers (n=552)	7.6%	14.7%	32.4%	26.1%	19.2%	21.6%	3.35
Directional Signs on Roads to Other Monument Destinations (n=635)	8.2%	15.6%	31.8%	27.4%	17.0%	9.8%	3.29
Monument Road Signs (n=675)	4.9%	9.9%	32.4%	31.1%	21.6%	4.8%	3.55

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 41: Importance and Satisfaction with <u>Sign</u> Items to Overall Quality of Recreation Experience

	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Directional Signs to Monument Visitor Centers	630	35.2%	13.0%
Monument Trailhead Markers	548	33.9%	18.2%
Directional Signs on Roads to Other Monument Destinations	629	31.4%	18.6%
Monument Road Signs	668	29.3%	9.4%

Naturalness

The I-P questions included two different types of questions on natural features. At least 85.0% of respondents rated both "Plants" and "Wildlife" as being at least "Important" to them (Table 42) and over 80.0% of those visitors who had experience with these features stated that they were at least "Satisfied" with them (Table 43).

About 36% of respondents who had experience with these item types indicated these were highly important to them and they were highly satisfied with what they had encountered during their trip (Table 44). Only around 10.0% of visitors indicated high importance and low satisfaction with the natural features they encountered in the Monument area.

Table 42: Importance of <u>Naturalness</u> Items to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Plants (n=714)	2.4%	12.6%	27.9%	32.5%	24.6%	3.64
Wildlife (n=714)	0.8%	8.8%	26.6%	34.5%	29.3%	3.82

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 43: Satisfaction with <u>Naturalness</u> Items to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Plants (n=594)	3.2%	11.8%	37.0%	29.5%	18.5%	15.9%	3.48
Wildlife (n=586)	3.4%	15.5%	36.2%	26.8%	18.1%	16.9%	3.41

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 44:
Importance and Satisfaction with <u>Naturalness</u> Items Overall Quality of Recreation Experience

	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Plants	591	36.9%	9.3%
Wildlife	582	36.8%	12.4%

Services

Respondents were asked to rate three different types of service items. and how satisfied they were with those service items they had used during their trip. Over three-fourths of all respondents rated the "Helpfulness of Monument Employees," "Safety Information," and the "Cleanliness of Restroom Facilities" as at least "Important" (Table 45). Over three-fourths indicated that they were "Quite" or "Very Satisfied" with the "Helpfulness of Monument Employees;" just over half indicated a similar degree of satisfaction with the other two service items, and 4.7% of respondents were "Somewhat" or "Not Satisfied" with the helpfulness of employees, while less than 10.0% indicated a similar low level of satisfaction with "Safety Information" and the "Cleanliness of Restrooms" (Table 46).

In general, there was a moderately high importance and satisfaction with all three service items; 6% or less of responses for all three service types indicated high importance but low satisfaction. The highest importance and satisfaction rating was with the "Helpfulness of Monument Employees." Over half of respondents indicated that this item was highly important to them and that they were also highly satisfied. Around

40.0% indicated "Safety Information" and the "Cleanliness of Restrooms" were of high importance to them and they were highly satisfied with these services (Table 47).

Table 45: Importance of <u>Service</u> Items to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Helpfulness of Monument Employees (n=715)	1.7%	5.2%	20.7%	32.9%	39.6%	4.03
Safety Information (n=714)	4.5%	11.8%	25.1%	26.2%	32.5%	3.70
Cleanliness of Restroom Facilities (n=716)	5.9%	8.9%	22.2%	29.5%	33.5%	3.76

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 46: Satisfaction with <u>Service</u> Items to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Helpfulness of Monument Employees (n=612)	1.8%	2.9%	13.6%	31.0%	50.7%	14.0%	4.26
Safety Information (n=547)	3.1%	5.3%	38.0%	30.0%	23.6%	22.6%	3.66
Cleanliness of Restroom Facilities (n=584)	2.4%	6.3%	34.2%	30.5%	26.5%	17.0%	3.72

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 47:
Importance and Satisfaction with <u>Service</u> Items to Overall Quality of Recreation Experience

Signage	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Helpfulness of Monument Employees	608	56.2%	3.1%
Safety Information	544	41.8%	5.3%
Cleanliness of Restroom Facilities	580	41.0%	6.0%

Infrastructure

Respondents were asked to rate the importance they attached to five different types of infrastructure items. The "Condition of Monument Trails" and the "Condition of Monument Roads" were ranked as "Quite" or "Very Important" by over three-fifths of respondents, indicating these are the most important infrastructure items to visitors (Table 48). The "Condition of Developed Campsites" and the "Condition of Undeveloped Roadside Campsites" were rated as "Somewhat" or "Not Important" by two-fifths of respondents. Satisfaction was relatively high with all these items. However, roughly half of those using the five infrastructure items indicated they were "Quite" or "Very Satisfied" with them, while less than one-quarter of respondents indicated they were only "Somewhat" or "Not Satisfied" with any of the infrastructure items (Table 49).

The lowest combined importance and satisfaction ratings were for the "Condition of Monument Roads" and "Availability of Restroom Facilities" (Table 50). For the rest of the items, less than 9% of the respondents for whom these were applicable had low satisfaction ratings.

Table 48: Importance of <u>Infrastructure</u> Items to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Condition of Monument Trails (n=707)	5.9%	11.0%	22.5%	29.4%	31.1%	3.69
Condition of Monument Roads (n=712)	2.7%	6.6%	23.7%	33.8%	33.1%	3.88
Condition of Developed Campsites (n=696)	27.2%	16.5%	24.6%	21.4%	10.3%	2.71
Availability of Restroom Facilities (n=714)	9.8%	14.4%	25.8%	26.2%	23.8%	3.40
Condition of Undeveloped Roadside Campsites (n=688)	30.1%	18.3%	26.6%	15.7%	9.3%	2.56

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 49: Satisfaction with Infrastructure Items to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Condition of Monument Trails (n=512)	2.1%	9.2%	32.6%	33.0%	23.0%	27.3%	3.66
Condition of Monument Roads (n=659)	6.8%	10.0%	29.1%	30.5%	23.5%	6.9%	3.54
Condition of Developed Campsites (n=223)	4.5%	6.3%	30.9%	28.3%	30.0%	67.8%	3.73
Availability of Restroom Facilities (n=598)	6.7%	11.0%	35.6%	25.6%	21.1%	15.3%	3.43
Condition of Undeveloped Roadside Campsites (n=215)	6.5%	9.8%	34.0%	27.0%	22.8%	69.0%	3.50

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 50:
Importance and Satisfaction with Infrastructure Items
to Overall Quality of Recreation Experience

Signage	n	*Very* or *Quite Important* and *Very* or *Quite Satisfied*	*Very* or *Quite Important* and *Somewhat* or *Not Satisfied*
Condition of Monument Trails	505	37.7%	8.9%
Condition of Monument Roads	651	37.4%	13.8%
Condition of Developed Campsites	221	36.7%	5.0%
Availability of Restroom Facilities	592	28.2%	11.3%
Condition of Undeveloped Roadside Campsites	211	26.1%	6.2%

Education

   Next, respondents were asked to rate seven different items related to visitor center displays and natural history topics. Table 51 lists the percentage of respondents agreeing with each importance value for the seven items. "Archaeology" and

"Geologic Information" were ranked as "Quite" or "Very Important" by approximately 60% of respondents, compared to 50-55% for "Visitor Center Displays," "Historic Sites," and "Monument History," and 42-44% for "Paleontology" and "Wayside Displays." Over three-fourths of those using the seven types of educational items indicated they were "Quite" or "Very Satisfied." "Paleontology" was the item most likely to leave a respondent "Somewhat" or "Not Satisfied" (25.0%), while "Visitor Center Displays" were the least (10.0%) (Table 52).

For the combined ratings, the highest importance and satisfaction ratings were for "Visitor Center Displays" and "Archaeology" (Table 53). Approximately 40% of respondents listed these items as having been highly important, and they were highly satisfied with what they found. Around 25% of respondents visiting "Educational Displays at Waysides" and "Paleontology" sites indicated they were highly important to them and they were highly satisfied with what was available in the Monument area. Respondents were least likely to rate "Visitor Center Displays" (3.9%) and "Educational Displays at Waysides" (6.1%) as highly important to them and less than satisfied with what was available. The other five types of education items all scored similarly, with approximately 10.0% of visitors indicating high importance and low satisfaction.

Table 51: Importance of Education Items to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Visitor Center Displays (n=709)	3.2%	17.5%	29.8%	28.2%	21.3%	3.47
Archaeology (Pre-Historic Native American Sites) (n=714)	2.1%	9.2%	27.3%	31.8%	29.6%	3.77
Historic Sites (n=716)	3.6%	12.2%	30.2%	29.5%	24.6%	3.59
Geologic Information (n=713)	2.1%	10.5%	29.6%	33.5%	24.3%	3.67
History of Monument Area (n=718)	2.9%	13.6%	29.5%	32.9%	21.0%	3.55
Educational Displays at Wayside (n=715)	3.9%	17.6%	36.6%	27.3%	14.5%	3.31
Paleontology (n=715)	8.8%	19.4%	29.4%	24.5%	17.9%	3.23

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 52: Satisfaction with <u>Education</u> Items to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Visitor Center Displays (n=572)	3.5%	6.3%	28.7%	33.4%	28.1%	19.0%	3.76
Archaeology (Pre-Historic Native American Sites) (n=518)	3.9%	14.3%	32.4%	30.5%	18.9%	26.8%	3.46
Historic Sites (n=555)	3.6%	11.7%	35.7%	29.5%	19.5%	21.7%	3.50
Geologic Information (n=575)	4.2%	12.2%	35.3%	30.6%	17.7%	18.6%	3.46
History of Monument Area (n=579)	4.5%	12.1%	35.8%	30.1%	17.6%	18.1%	3.44
Educational Displays at Wayside (n=591)	2.7%	9.8%	39.1%	30.1%	18.3%	16.6%	3.51
Paleontology (n=419)	7.2%	16.7%	39.6%	22.4%	14.1%	40.7%	3.20

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 53:
Importance and Satisfaction with <u>Education</u> Items to Overall Quality of Recreation Experience

Signage	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Visitor Center Displays	563	41.6%	3.9%
Archaeology (Pre-Historic Native American Sites)	514	38.5%	11.3%
Historic Sites	552	35.3%	9.2%
Geologic Information	569	34.7%	11.0%
History of Monument Area	577	34.4%	11.4%
Educational Displays at Wayside	586	27.6%	6.1%
Paleontology	417	24.2%	12.9%

General Information

Finally, respondents were asked to rate three different types of information items. Over three-fourths of all respondents rated "Brochures and Maps" as "Very" or "Quite Important," while less than half stated the other two types of information were of similar importance (Table 54). Nearly 69% percent indicated they were "Quite" or "Very Satisfied" with the "Brochures and Maps" and less than half indicated a similar degree of satisfaction with the other two information items (Table 55).

The highest combined importance and satisfaction rating was with "Brochures and Maps," with over half indicating this item was highly important to them and they were highly satisfied with it (Table 56). The combined ratings were relatively high for all three items, as less than 10.0% of respondents indicated any item was of high importance but their degree of satisfaction was low.

Table 54:
Importance of <u>General Information</u> Items to Overall Quality of Recreation Experience

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Brochures and Maps(n=715)	1.5%	5.0%	14.8%	27.1%	51.5%	4.22
Information Availability about Recreation Opportunities (n=705)	4.7%	16.6%	29.4%	27.7%	21.7%	3.45
Educational Displays (in general) (n=712)	3.5%	17.0%	38.3%	26.8%	14.3%	3.31

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 55:
Satisfaction with <u>General Information</u> Items to Overall Quality of Recreation Experience

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Brochures and Maps (n=652)	3.7%	7.4%	20.1%	29.6%	39.3%	7.8%	3.93
Information Availability about Recreation Opportunities (n=543)	4.1%	11.2%	36.1%	30.4%	18.2%	23.0%	3.48
Educational Displays (in general) (n=569)	2.5%	10.7%	38.7%	31.8%	16.3%	19.1%	3.49

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 56:
Importance and Satisfaction with <u>General Information</u> Items
to Overall Quality of Recreation Experience

Signage	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Brochures and Maps	649	59.4%	9.4%
Information Availability about Recreation Opportunities	534	32.7%	9.0%
Educational Displays (in general)	563	27.9%	6.0%

Importance-Performance Analysis: Supporting Services
The following series of tables contain data concerning 14 types of specific recreation and tourist services offered in local communities or on other agency lands. Questions dealing with the importance of services asked respondents, "How important to you are each of the following services when visiting the Monument area?" Responses to this question were on a scale where: 1 = not important, 2 = somewhat important, 3 = important, 4 = quite important, and 5 = very important. Questions dealing with visitor satisfaction with services asked respondents, "Please rate how satisfied you were with the following services during your actual visit to the Monument area." Responses to this question were on a scale where: 1 = not satisfied, 2 = somewhat satisfied, 3 = satisfied, 4 = quite satisfied, and 5 = very satisfied. This question also contained a "N/A"—Not Applicable check box for respondents who did not use a particular service during their trip.
The responses to these two questions have been broken up by service type into three separate sections: Overnight Accommodations, Retail Stores, and Other Visitor Services. Each section contains three tables displaying importance scores, satisfaction scores, and importance vs. satisfaction scores for respondents who used a service they rated "Very" or "Quite Important." Note, the sample sizes in tables containing satisfaction data vary because data from respondents who did not use a particular service, and therefore checked "N/A," was not included.

Overnight Accommodations
The mail survey asked respondents to rate four different types of overnight accommodations. "Lodging Services" (hotels, motels, B&Bs, cabins) was ranked as "Quite" or "Very Important" by 45.0% of respondents compared to only 10.4% for "Privately Owned Campgrounds" and about 34% for Monument and other government operated campgrounds (Table 57). Those who indicated they were "Somewhat" or "Not Satisfied" with overnight services ranged from 6.3% for "Lodging Services" to 18.4% for "Privately Owned Campgrounds" (Table 58).
The highest combined importance and satisfaction ratings were in "Lodging Services" and "State Park/USFS/NPS Campgrounds" (Table 59) with over 50% of respondents using these services indicated they were highly important to them and they

were highly satisfied with these accommodation types in the Monument area. In contrast, 26.2% indicated "Privately Owned Campgrounds" were of high importance to them and they were highly satisfied with the services in the Monument area. "Campgrounds in the Monument" had the highest percentage of respondents who indicated it was highly important to them and they were less than satisfied with the services, 9.1% compared to less than 4% for the other three types of accommodations.

Table 57: Importance of <u>Overnight Accommodations</u> in the Monument Area

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Lodging Services (n=736)	25.3%	11.8%	17.9%	21.6%	23.4%	3.06
State Park/USFS/NPS Campgrounds(n=729)	31.3%	13.2%	20.2%	16.7%	18.7%	2.78
Campgrounds in the Monument(n=727)	33.4%	13.8%	20.2%	14.4%	18.2%	2.70
Privately Owned Campgrounds(n=725)	56.3%	20.3%	13.1%	7.6%	2.8%	1.80

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 58: Satisfaction with <u>Overnight Accommodations</u> in the Monument Area

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Lodging Services (n=413)	1.9%	4.4%	26.6%	33.9%	33.2%	43.4%	3.92
State Park/USFS/NPS Campgrounds(n=238)	2.5%	5.9%	21.8%	29.4%	40.3%	67.4%	3.99
Campgrounds in the Monument(n=211)	4.7%	10.0%	29.4%	27.0%	28.9%	71.2%	3.65
Privately Owned Campgrounds(n=109)	10.1%	8.3%	33.9%	28.4%	19.3%	85.0%	3.39

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 59:
Importance and Satisfaction with <u>Overnight Accommodations</u> in the Monument Area

Recreation/Tourist Service	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Lodging Services	412	51.3%	3.6%
State Park/USFS/NPS Campgrounds	235	51.1%	3.4%
Campgrounds in the Monument	210	38.0%	9.1%
Privately Owned Campgrounds	107	26.2%	1.9%

Retail Stores

The mail survey next asked respondents to rate five different types of retail stores. "Service Stations" were ranked as "Quite" or "Very Important" by 53.3% of respondents, while over 70% rated "Sporting Goods Stores" and "Souvenir Shops" as only "Somewhat" or "Not Important" (Table 60). Nearly 50.0% of those using "Service Stations" and "Eating/Drinking Establishments" indicated they were "Quite" or "Very Satisfied" with the services they received at those establishments (Table 61). Between 15.0% and 20.0% of those using "Eating and Drinking Establishments," "Grocery and Convenience Store," "Sporting Goods and Outdoor Equipment Stores," and "Souvenir Store, Gift Shops, and Galleries" indicated they were "Somewhat" or "Not Satisfied" with those services.

The highest combined importance and satisfaction ratings were for "Service Stations" (Table 62). About one-third of the respondents using those services indicated they were highly important to them and they were highly satisfied. This compares to about one-quarter of the respondents for "Eating and Drinking Establishments" and "Grocery and Convenience Stores." Only 10.1% indicated "Souvenir Stores, Gift Shops, and Galleries" were of high importance to them and they were highly satisfied with these services. Few respondents were who rated retail services high in importance were dissatisfied with those establishments; those who were "Not Satisfied" or "Somewhat Satisfied" were under 8% for all five categories.

Table 60: Importance of <u>Retail Stores</u> in the Monument Area

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Service Stations(n=738)	3.9%	12.7%	30.1%	29.0%	24.3%	3.57
Eating and Drinking Establishments(n=736)	12.1%	20.9%	26.5%	23.9%	16.6%	3.12
Grocery and Convenience Store(n=739)	9.2%	19.5%	30.7%	25.4%	15.2%	3.18
Sporting Goods and Outdoor Equipment Stores(n=735)	41.9%	31.8%	18.8%	5.6%	1.9%	1.94
Souvenir Store, Gift Shops, and Galleries(n=738)	43.1%	30.5%	18.2%	5.1%	3.1%	1.95

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 61: Satisfaction with <u>Retail Stores</u> in the Monument Area

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Service Stations(n=634)	1.4%	6.0%	44.6%	31.5%	16.4%	14.0%	3.56
Eating and Drinking Establishments(n=567)	3.9%	11.1%	36.9%	30.3%	17.8%	22.6%	3.47
Grocery and Convenience Store(n=566)	4.2%	12.0%	42.8%	29.0%	12.0%	23.1%	3.33
Sporting Goods and Outdoor Equipment Stores(n=189)	5.3%	15.3%	42.9%	26.5%	10.1%	74.0%	3.21
Souvenir Store, Gift Shops, and Galleries(n=347)	3.5%	11.8%	49.3%	24.8%	10.7%	52.6%	3.27

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 62: Importance and Satisfaction with <u>Retail Stores</u> in the Monument Area

Recreation/Tourist Service	n	*Very* or *Quite Important* <u>and</u> *Very* or *Quite Satisfied*	*Very* or *Quite Important* <u>and</u> *Somewhat* or *Not Satisfied*
Service Stations	628	33.4%	3.8%
Eating and Drinking Establishments	561	27.4%	7.5%
Grocery and Convenience Store	563	24.1%	6.9%
Sporting Goods and Outdoor Equipment Stores	189	15.3%	2.6%
Souvenir Stores, Gift Shops, and Galleries	347	10.1%	1.4%

Other Visitor Services

Finally, respondents were asked to rate five other types of commercial services that might be important to Monument visitors. These were transportation, medical, search and rescue, guide and outfitting, and Monument visitor information. There was a wide range of importance ratings with "Monument Visitor Information Services" rated very high, "Local Transportation" and "Guide/Outfitting Services" very low, and "Emergency and Medical Services" and "Search and Rescue Services" in the middle (Table 63). This is partially because most visitors used or needed Monument information services, while 80-90% did not need the other four types of services (Table 64). For those who did use these services, over 70.0% of those using "Monument Visitor Information Services" and 57.7% of those using "Local Transportation" indicated they were "Quite" or "Very" Satisfied" with the services they received. Nearly 20.0% of those using "Search and Rescue Services," "Local Transportation," and "Emergency and Medical Services" indicated they were "Somewhat" or "Not Satisfied" with the services they received.

The highest combined importance and satisfaction rating was also for "Monument Visitor Information Services" (Table 65). About 62% of respondents using "Visitor Information Services" indicated it was highly important to them and they were highly satisfied with these services in the Monument area. On the low end of the scale, less than one-quarter indicated "Guide and Outfitting Services," "Search and Rescue Services," and "Emergency and Medical Services" were of high importance to them and that they were highly satisfied with these services in the Monument area. "Emergency/Medical Services" and "Monument Visitor Information Services" had the highest percentages of respondents who indicated these services were highly important to them and they were less than satisfied with that service in the Monument area, with between 6.0% and 8.0% of respondents. "Guide and Outfitting Services" had the lowest percentage of respondent indicating high importance and low satisfaction with available service, with less than 1.0% of respondents falling into this category. So all-in-all, there is not much dissatisfaction with the use of any of these services

Table 63: Importance of <u>Other Visitor Services</u> in the Monument Area

	Not Important	Somewhat Important	Important	Quite Important	Very Important	Mean[1]
Monument Visitor Information Services(n=738)	2.6%	5.6%	19.9%	34.0%	37.9%	3.99
Local Transportation (n=730)	49.2%	23.7%	12.6%	9.3%	5.2%	1.98
Emergency and Medical Services(n=730)	9.5%	15.1%	29.5%	23.3%	22.7%	3.35
Search and Rescue Services(n=725)	15.4%	16.7%	26.6%	20.3%	21.0%	3.15
Guide and Outfitting Services(n=731)	49.0%	25.6%	16.4%	6.4%	2.6%	1.88

[1]Mean score calculated on a scale where 1=not important, 2=somewhat important, 3=important, 4=quite important, and 5=very important.

Table 64: Satisfaction with <u>Other Visitor Services</u> in the Monument Area

	Not Satisfied	Somewhat Satisfied	Satisfied	Quite Satisfied	Very Satisfied	N/A[1]	Mean[2]
Monument Visitor Information Services(n=619)	3.1%	6.1%	18.4%	34.1%	38.3%	15.3%	3.98
Local Transportation(n=148)	10.8%	7.4%	24.3%	28.4%	29.1%	79.7%	3.57
Emergency and Medical Services(n=74)	8.1%	9.5%	50.0%	20.3%	12.2%	89.8%	3.19
Search and Rescue Services(n=63)	12.7%	6.3%	50.8%	17.5%	12.7%	91.3%	3.11
Guide and Outfitting Services(n=123)	6.5%	8.9%	41.5%	21.1%	22.0%	83.1%	3.43

[1]N/A is reported as a percentage of the total non-missing responses. Responses of N/A were not used in the reporting of n, the calculation of the satisfaction percentages, or calculation of the mean.
[2]Mean score calculated on a scale where 1=not satisfied, 2=somewhat satisfied, 3=satisfied, 4=quite satisfied, and 5=very satisfied

Table 65:

Importance and Satisfaction with Other Visitor Services in the Monument Area

Recreation/Tourist Service	n	*Very* or *Quite Important* and *Very* or *Quite Satisfied*	*Very* or *Quite Important* and *Somewhat* or *Not Satisfied*
Monument Visitor Information Services	614	61.9%	6.5%
Local Transportation	145	31.7%	3.5%
Emergency and Medical Services	74	24.3%	8.1%
Search and Rescue Services	63	22.2%	4.8%
Guide and Outfitting Services	123	21.1%	0.8%

Importance-Performance Analysis Summary

Following are summary Importance-Performance (I-P) diagrams of the importance and satisfaction ratings for all Monument management (Figure 17) and other local and community services (Figure 18) items. The dotted lines represent the grand means for the importance (horizontal) ratings for all respondents, and satisfaction (vertical) ratings for respondents that had experience with the items in that figure. Thus, the means are just a guideline to help visually illustrate the differences between all the items on both scales simultaneously.

In the simplest interpretation of the I-P diagrams, each quadrant represents a different management implication. Items in the lower right quadrant are generally the highest because they are relatively high on the importance scale and low on the satisfaction scale, that is, management should "concentrate efforts here" (Figure 16). Items in the upper right are those having relatively high importance *and* satisfaction scores ("keep up the good work"), those in the upper left are below the mean in importance but above the satisfaction mean ("possible overkill"), and those in the lower left are low on both scales ("low priority"). These interpretations are oversimplified however, as the following summary explains.

Figure 16: Importance/Satisfaction Model
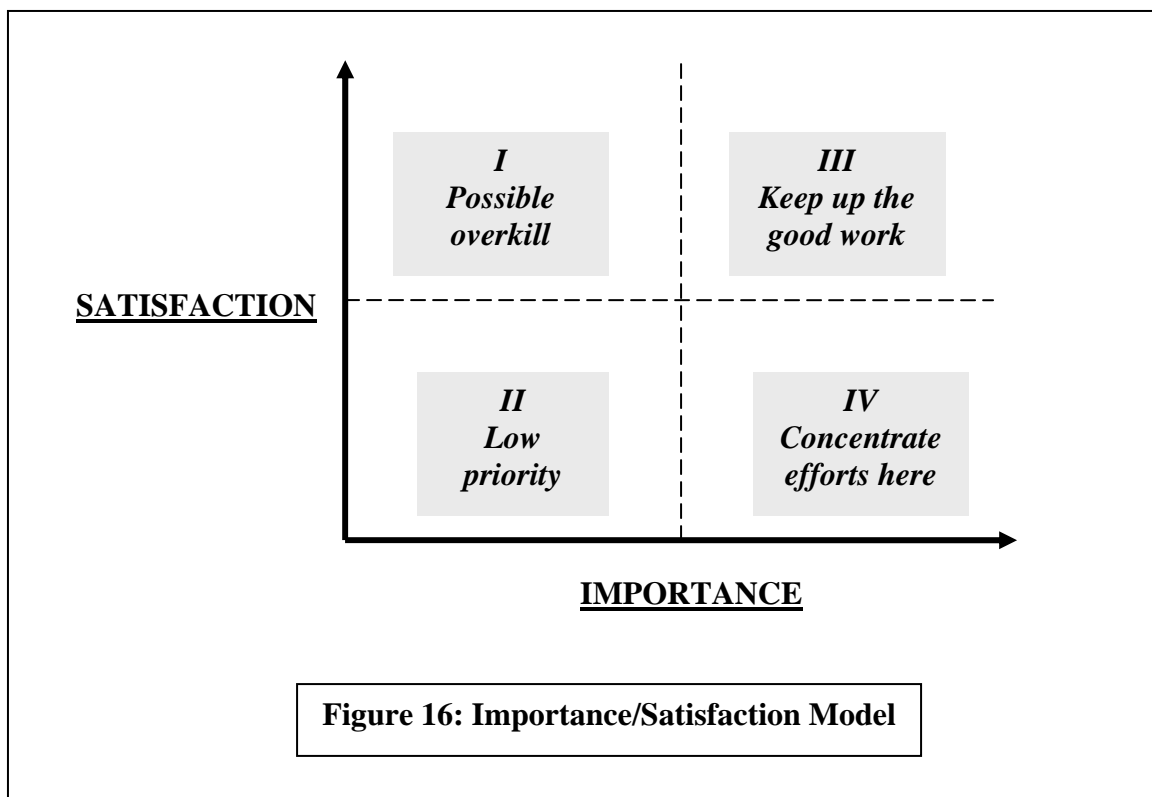
Monument Management

The I-P questions related to Monument management included 24 items in six categories: signage, naturalness, services, infrastructure, education, and information. Note especially five items in the upper right quadrant, "keep up the good work" (Figure 17): Brochures and Maps (A), Helpfulness of Monument Employees (W), Cleanliness of Restroom Facilities (V), Conditions of Monument Trails (Q), and Safety Information (X) that have high levels of importance and satisfaction. There are three items in the "concentrate efforts here" quadrant: Monument Trailhead Markers (P), Directional Signs to Monument Destinations (O), and Wildlife related information (K). In addition to these, a more detailed analysis suggests several other areas that need management attention. For example, item J was rated low on importance and satisfaction, which would suggest from a visitor viewpoint paleontology is not important nor done well. Given the importance of paleontology in the Monument Proclamation and science program, however, a lack of interest on the part of the public does not mean it should be downplayed by management, and if anything, it also suggests much more attention needs to be put on paleontology education in the future. It is also possible the word "paleontology" was unfamiliar to some visitors, reflected in relatively low importance rankings, than if the survey had stated "dinosaurs and other topics of pre-historic history."

There is also a relatively large cluster of items near the axis of the scale means. Many of these items are also related to natural history, signage, and information. For example G, H, I, and L are natural history topics (history, geology, archeology, and plants), N is about signs (Directional Signs to Visitor Centers), F is about History of the Monument area, and D is about Information about Recreation Opportunities. Thus the I-P results suggest improvements are needed most in the areas of signage, education/interpretation, and information. Changes related to the educational and interpretation needs, such as new visitor centers and environmental education programs, were being developed or were newly implemented at the time of the survey, but the I-P results also suggest better trailhead and destination information signs should also be a priority for the future. The results of this analysis should be used to evaluate the effectiveness of these management items related changes in the future. It should also be noted these I-P results represent a "macro" approach, representing visitors' perceptions of importance and satisfaction with general, overall management items, and not site-specific items.

Figure 17: I-P Monument Management Summary Diagram

A = Brochures and Maps
B = Educational Displays at Waysides
C = Visitor Center Displays
D = Information about Recreation Opportunities
E = Educational Displays (in general)
F = History of Monument Area
G = Historic Sites
H = Geological Information
I = Archeology (prehistoric Native American)
J = Paleontology
K = Wildlife
L = Plants
M = Monument Road Signs
N = Directional Signs to Visitor Centers
O = Directional Signs to Monument Destinations
P = Monument Trailhead Markers
Q = Condition of Monument Trails
R = Condition of Monument Roads
S = Condition of Developed Campsites
T = Condition of Undeveloped Roadside Campsites
U = Availability of Restroom Facilities
V = Cleanliness of Restroom Facilities
W = Helpfulness of Monument Employees
X = Safety Information

Importance Grand Mean = 3.7 and
Satisfaction Grand Mean = 3.4
indicated by dashed lines.
Importance Axis:
3 = Important, 4 = Quite Important,
and 5 = Very Important.
Satisfaction Axis:
3 = Satisfied, 4 = Quite Satisfied,
and 5 = Very Satisfied.

Other Community and Local Services

Unlike the results for the Monument management items, there is a fairly linear relationship between the importance and satisfaction scores for the 14 community service items (Figure 18). That is, as importance levels increase, satisfaction tends to increase as well. And while dissatisfaction seems to be quite low for visitors who actually used various types of services (none of the items had more than 10% of those who used the services, said they were important, and also said they were only "Somewhat Satisfied" or "Not Satisfied"), satisfaction was also not very high for many services other than State, USFS, and NPS Campgrounds (C), Lodging Services (A), and Monument Visitor Information Services (N) in the upper right quadrant. Conversely, Eating and Drinking Establishments (E), Grocery and Convenience Stores (F), and Emergency Medical Services (L) seem to need the most attention, based on their relatively high importance and low satisfaction scores.

Unlike the Monument management items, there are a relatively high number of items in the "low priority" category (lower left quadrant), including Privately Owned Campgrounds (D), Sporting Goods and Outdoor Equipment Stores (H), Souvenir Stores, Gift Shops, and Galleries (I), and Guide and Outfitting Services (J). While this partially reflects the fact relatively few people need or use these services, these findings, especially the relatively low satisfaction ratings, are important for local economic development in the communities. The results could reflect the relative newness of the Monument and the lack of experience of these businesses serving the number and diversity of visitors attracted by the new Monument. While national and state parks have traditionally attracted tourists to the area, the effect of the new Monument may be to hold and disperse visitors for longer periods in more communities having less experience with visitors than in the past. So for example, rather than most visitors to Bryce Canyon National Park staying in the national park campgrounds or at Ruby's Inn, now visitors are also stopping at Monument sites and staying in Boulder, Escalante, Cannonville, Tropic, and other towns that had little overflow business previously. This interpretation is also supported by the items located in the upper right quadrant, which identify successful service items—Agency Operated Campgrounds (B and C), Service Stations (G), and Lodging Services (A)—all services that would be expected to have had more experience with past tourism, the pass-through type tourist, and more traditional types of visitors, compared to sporting goods stores, outfitters, and souvenir shops in many of the small towns in the region.

Finally, the last item in the lower left quadrant, Search and Rescue Services (M), is difficult to interpret. Very few respondents, if any, would have had experience with search and rescue services, yet there were as many who said they used this service (n = 63) as said they used Emergency Medical Services (L; n = 74). It is possible many of these are the same respondents to both items, and some do not understand the difference between these two services—search and rescue operations are not offered in many parts of the U.S. and other countries. Regardless of the accuracy of response to this question, however, it is still a concern that visitors rated medical services relatively low, and Monument staff and local community officials should investigate these potential concerns.

Figure 18: I-P Community and Other Local Services Summary Diagram
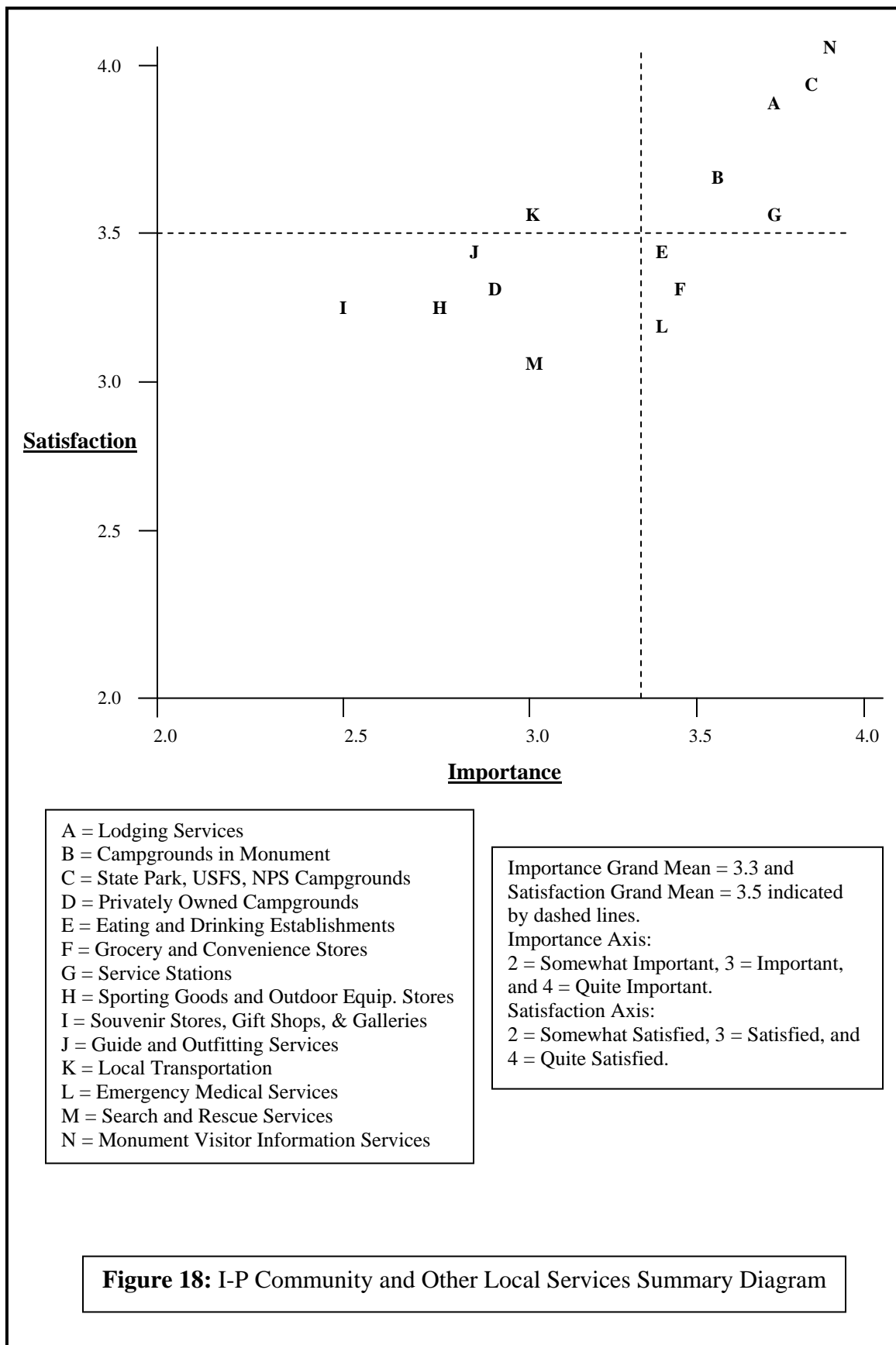
Again, it should be noted these I-P results represent a "macro" approach, representing visitors' perceptions of importance and satisfaction with general, overall Community and Local Services, and not community-specific items. In general, the I-P analysis results for community and other local services suggest as many potential questions related to the quality of local services, as they do answers. Additional analysis and future research is needed to help clarify and focus the interpretation of these results.

Satisfaction with Service Workers in Surrounding Communities

In Question 11, mail-back survey respondents were asked to rank their degree of satisfaction with the friendliness and helpfulness of service workers in the Monument's surrounding communities.

Table 66: Satisfaction with Friendliness and Helpfulness of Service Workers

	Very Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
Respondents (n=730)	48.8% (n=357)	41.9% (n=305)	6.4% (n=47)	1.6% (n=12)	0.5% (n=4)	0.7% (n=5)

Of the 730 respondents who answered question eleven, approximately 91% revealed they were either "Very Satisfied" (48.8%) or "Satisfied" (41.9%) with the friendliness and helpfulness of the service workers (Table 66). In the following sections, the distinction will be made between those who identified themselves in question 11 as satisfied ("Very Satisfied," "Satisfied," or "Somewhat Satisfied"), and those who identified themselves as dissatisfied" ("Very Dissatisfied," "Dissatisfied," or "Somewhat Dissatisfied").

Question 11 was followed by an open-ended question (11a) that asked respondents to specify in what ways they were satisfied or dissatisfied. Of the 730 respondents who answered Question 11, 76.0% (n=556) responded to Question 11a.

The open-ended responses address a wide range of services and both positive and negative opinions. The results are organized into several categories including general satisfaction with helpfulness and friendliness, specific services, and specific surrounding communities. It should be noted a large number of respondents who said they were satisfied, also identified areas where improvements could be made. For example one respondent who was "Very Satisfied," said that the service workers, "could have been more friendly." Appendix K presents all respondents' responses.

Friendliness and Helpfulness of Service Workers in General

Of the 556 respondents who answered Question 11a, 65% (n = 363) made general comments regarding friendliness and helpfulness. These responses contained no specific reference to a particular service or agency (e.g., "everyone was great," "they were friendly and helpful," and "everyone was pleasant and willing to give information").

About 20 respondents (3.6% of total) expressed negative impressions while the other 343 had positive comments. There were 61 responses addressing friendliness only (e.g., friendly, personable, cheerful) and 91 regarding helpfulness only (e.g., helpful, knowledgeable, informative). Both friendliness and helpfulness were addressed by 180 respondents. Twenty-two respondents (6.0%) made reference to neither friendliness nor helpfulness but expressed general satisfaction (e.g., no complaints, everyone was great, we will return). Appendix K presents responses along with respondent's level of satisfaction from the previous question.

Services Provided by the BLM

Responses to Question 11a included references to specific service workers in the area. This section focuses on the services provided by the BLM, namely campgrounds and visitors centers.

Only eight (1.4%) respondents mentioned campground services specifically. Five of those eight were satisfied overall and made very positive comments regarding campground service (e.g., "helpful in explaining different areas" and "good camp host"). Only one respondent identified campgrounds as the reason for their overall dissatisfaction with service workers. This respondent was disappointed with the campground hosts. The other two respondents expressed general satisfaction; however, they said they would like to see more campgrounds.

There were 79 (14.2 %) respondents who made reference to the services provided in Monument visitor centers and ranger stations. Approximately eight of ten of these respondents were satisfied overall with the friendliness and helpfulness of service workers, such as "enthusiastic personnel at visitor center who were very willing to spend time explaining about the GSENM."

Of the 79 responses mentioning visitor's centers, only five (6.0%) identified friendliness and helpfulness at visitor centers as the reason for overall dissatisfaction with service workers. These criticisms focused mainly on the helpfulness of visitor center employees (e.g., "friendly yes, knowledgeable no!"). And 11 respondents said that they were satisfied with visitor centers overall, but expressed criticism of the service at visitor centers. Several of these responses revealed satisfaction with one visitor center and yet dissatisfaction with another. Respondents criticized visitor center hours, amount of information, and friendliness of staff. The following comment is representative, "Nice visitor centers, but at the various visitors centers we got conflicting information regarding hikes and permits."

Services Provided by the Private Sector

A number of respondents (n = 26) addressed private services provided by local businesses. Most of those respondents (n = 21) offered comments that address several different services (e.g. restaurants, motels, laundromats), or private services in general. Approximately one third of those respondents (n = 8) who mentioned private services were satisfied overall, and made very positive comments regarding private services (e.g., "helpful," "friendly," "competent," "enthusiastic"). The other 13 responses were made by respondents who were satisfied overall, but felt there was room for improvement.

Suggestions for improvement focused largely on the attitude (friendliness) of local service workers (e.g., "feelings of animosity," "people seemed annoyed," and "more interested in talking with other locals"). Other suggestions included lower prices and greater availability of products like wine, water, and entertainment. There were five respondents who addressed guide and outfitting services specifically. All of these respondents were satisfied overall and made very positive comments regarding the services provided to them by guide/outfitting service workers (e.g., "outstanding," "fantastic," "informative," "friendly").

Responses Directed Towards Specific Communities

A total of 27 respondents specifically addressed the friendliness and helpfulness of service workers in the town of Escalante, Utah. Of the 27 respondents, a little over half (n = 14) were satisfied overall and made very positive comments regarding services in Escalante. Positive comments included references to food services, motel services, information services, and the local people in general. Only two respondent identified services in Escalante as the reason for their overall dissatisfaction with service workers. Both of these respondents were unimpressed with the friendliness of specific service workers in the town. The remaining eleven respondents were satisfied overall, but identified one or more areas where service in Escalante could be improved. Several respondents commented on the bad attitude of service workers (e.g., "disinterested," "lukewarm," "not friendly to outsiders"). Four respondents were frustrated they were charged a considerable amount of money for tap water at service stations. Other respondents expressed the desire for more services in Escalante. For example, "Escalante needs more visitor services-restaurants, early morning coffee/ breakfast, [a] good deli, more guide services…."

There were four respondents who specifically mentioned the town of Boulder, Utah. All four respondents were satisfied overall and had very positive comments about the friendliness and helpfulness of service workers in Boulder.

Kanab was mentioned specifically by nine respondents. Two thirds of those respondents (n=6) were satisfied overall and made positive comments regarding service in Kanab (e.g., "delightful," "friendly," "helpful"). Three respondents were satisfied overall but identified areas of service in Kanab that could use improvement. Two complained about the unfriendly nature of food service workers and the other was unimpressed with motel staff.

The towns of Page, Torrey, Panguitch and Tropic also received one or more comments. These comments are in Appendix K.

Satisfaction with Quality of Services in Surrounding Communities

In Question 13, mail-back survey respondents were asked to rank their degree of satisfaction with the quality of service provided in the Monument's surrounding communities. Table 67 presents the results of Question 13.

Table 67: Satisfaction with Quality of Service Provided in Surrounding Communities

	Very Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Very Dissatisfied
Respondents (n=725)	30.4% (n=221)	55.6% (n=404)	11.4% (n=83)	1.7% (n=12)	0.3% (n=2)	0.6% (n=4)

Of the 725 respondents who answered Question 13, 625 (86.0%) indicated they were either "Very Satisfied" (30.4%) or "Satisfied" (55.6%) with the quality of service provided in surrounding communities (Table 67). Only 18 respondents (2.6%) indicated some degree of dissatisfaction. Question 13 was followed by an open-ended follow-up question (13a), which asked respondents to specify in what ways they were satisfied or dissatisfied with the quality of service in the area. Of the 725 respondents who answered Question 13, 65.0% (n = 469) responded to the follow-up. See Appendix L for responses.

Responses addressed a wide range of services and related elements. They revealed both positive and negative opinions. In the following section, responses are organized into several categories: general satisfaction with quality of service in general, responses directed towards specific services, and responses directed towards specific surrounding communities. Of the 469 respondents who answered the follow-up question, ten (2.1 %) indicated they did not see or use services in the Monument's surrounding communities (e.g., did not stop, did not spend enough time).

General Services: Satisfied

Approximately one in six respondents (n = 76) referred only generally to services in the Monument. The respondents were all satisfied overall and all responses were positive in nature (e.g., "services provided were great," "no problem at all"). There were also 39 respondents (8.0%) who expressed satisfaction with multiple services. About half of those (19) specifically mentioned food and lodging services, and most responses were favorable in nature (e.g., "friendly people," "good food," "nice," "clean accommodations").

Specific Services: Satisfied

Of the 469 respondents who answered Question 13a, 14.0% (n = 65) expressed satisfaction with specific services. Three in five of the respondents (n = 38) were satisfied with gas and food services in the area; one in five of these respondents (n = 13) expressed satisfaction with information services, while approximately one in six (n = 12) expressed satisfaction with overnight services. Two respondents expressed satisfaction with auto-mechanic services.

There were 89 respondents (18.0%) who expressed overall satisfaction with the quality of services in the area, but also identified areas where they felt services could be improved. Just under half of these respondents (n = 41) said food and gas services in the area could be improved. These comments mainly regarded quality, price, and selection (e.g., "variety of food was lacking," "never did find a good bakery," "prices high"). About one in seven of these respondents (n = 13) specifically said quality of local services can be improved by offering better selection of services such as more lodging, dining, and service station options.

Approximately one in seven of these respondents (n = 12) felt lodging services in the area could be improved. These comments mainly regarded lodging selection, quality, and personnel (e.g., "not enough lodging available," "air conditioning did not function," "lost reservation"). Four respondents expressed the desire to see more overnight options for visitors with RVs. Another one in nine respondents (n = 10) identified the need for improvement of information services in the area. The majority of these comments were focused on the need for better signage. Other comments focused on service workers unwillingness or inability to share needed information. Three respondents felt local business hours could be better adapted for visitor needs and two felt service worker attitudes in the area could be improved.

Of the 469 respondents who answered Question 13, 16.0% (n = 75) identified friendliness or helpfulness of service workers (or both) as the reason for their overall satisfaction with the quality of service in the area. Twenty-seven mentioned friendliness alone, five mentioned helpfulness alone and 44 mentioned both. Two respondents who were satisfied overall expressed a desire for improved friendliness and helpfulness.

Services: Dissatisfied

Of the 469 respondents who answered Question 13, 4.0% (n = 20) made negative comments regarding specific services and expressed overall dissatisfaction. Just under half of these respondents (n = 8) identified the lack of availability and poor quality of food and one in five (n = 4) said the poor quality and high price of lodging was the reason for their overall dissatisfaction. Three respondents cited lack of available motels and another three identified service worker attitudes as their reason for being overall dissatisfied.

Local Communities

Several respondents identified specific communities in addressing the quality of service in the area. Escalante was mentioned by 28 respondents, Kanab was mentioned by 11 respondents, both Boulder and Torrey were mentioned six times and Tropic was mentioned four times. Other local communities were also mentioned (Appendix L).

Of the 28 respondents who mentioned Escalante specifically, one-half (n = 14) were satisfied overall and made positive comments about the quality of service. Approximately 40.0% (n = 6) of these respondents said they enjoyed the quality of the food. Three said they were satisfied with the helpfulness and friendliness of the service workers and two respondents commented on how the lodging services in Escalante were nice. Three other respondents made general positive references to the town of Escalante

(e.g., "Escalante is a neat little town"). The other half of the respondents (n = 14) who mentioned Escalante, were satisfied overall, but identified areas where they felt services could be improved. Of these 14 respondents, four expressed disappointment with the unfriendly attitude of service workers (e.g., "were not the friendliest," "I didn't feel very welcome"). Food quality, lodging, information, and selection were all mentioned twice by respondents as service areas that could see some improvement.

The community of Kanab was mentioned specifically by 11 respondents. Four of these respondents were satisfied and made positive comments. These respondents were impressed with Kanab's lodging and food services and also the friendly attitude of the service workers (e.g. "very friendly", "great meal", "we loved our accommodations"). The other seven respondents who mentioned Kanab, were satisfied overall, but identified areas where they felt services could be improved. Three respondents were disappointed with food and gas services (e.g., "low quality meals," "need more stations with diesel," "not many options for food"). Other comments included disappointment with lodging prices (n = 1), service worker attitudes (n = 2), and business hours (n = 1).

Boulder was specifically mentioned by six respondents. Two were satisfied overall and made positive comments about services; one respondent expressed general satisfaction and the other said the restaurants in Boulder are "excellent." The remaining four comments were made by respondents who were satisfied overall, but felt certain services could be improved. These respondents addressed the limited selection of food, shortage of facilities (e.g., phone), and frustration with "high prices."

Torrey, at the north end of Scenic Byway 12, was mentioned specifically by six respondents. Four were satisfied overall and made positive comments addressing helpfulness and friendliness in Torrey (n = 2), as well as the town's high quality of food (n = 1), and reasonable prices (n = 1). The remaining comments (n = 2) are from respondents who were satisfied overall but felt certain services could be improved; one was disappointed by information services and pricing, and the other respondent commented on the attitude of service workers (e.g., "manager treated us rudely").

Tropic was mentioned specifically by four respondents. Two were satisfied overall and made positive comments about lodging. The other two respondents were satisfied overall, but felt there should be more lodging options and restaurants in Tropic should be open on Sundays.

Visitor Expenditures and Economic Impact in the Monument Area

Respondents were asked to indicate their group's total monetary expenditure in the Monument area and surrounding communities for the trip when they completed the intercept survey. Eleven visitor service categories were listed (along with an "Other" expenditures category) and respondents were asked to list a dollar amount for each. Of the 766 who returned the mail survey, 735 (95.9%) answered this question. Following are two primary sets of analysis: 1) expenditures by respondents' location of residence, and 2) an IMPLAN analysis that demonstrates the broader contribution of these expenditures to the economy and employment of Garfield and Kane Counties.

Expenditures by Respondents' Location of Residence

As shown on Table 68, total average amount spent per group in the Monument area was just under $500. Average international group expenditures ($614.90) were almost $260 more than Monument visitors from Utah ($356.14) and about $115 more than visitors from other states ($500.43). When comparing average amount spent by Utahns with visitor groups from other states and countries, some interesting patterns begin to emerge. Groups from other states spent about twice as much on lodging compared to Utahns, and international visitors spent nearly three times more than Utahns. Domestic visitors (including Utahns) spent more on privately owned campgrounds than international visitors. Utahns spent less on average for restaurant meals ($75.25) than visitors from other countries ($135.29) and other states ($108.57). There is a similar pattern in purchases from grocery and convenience stores, with Utahns spending about $38 compared to internationals at $68 and those from other states at about $45. However, Utahns spent about $15 more for fuel than those in the other two groups. Visitors from other states spent more on souvenir and gift shop purchases ($42.05) than Utahns ($15.45) and international visitors ($29.00).

Table 68: Average Amount of Money Spent Per Group in Monument and Surrounding Area

Expenditure Categories	Overall (n=735)	Utah (n=108)	U.S.A (n=528)	International (n=99)
Lodging services	$164.29	$83.21	$167.33	$236.52
Campgrounds in monument	$3.85	$3.79	$3.77	$4.36
State park USFS/NPS campgrounds	$13.37	$14.56	$13.39	$12.01
Privately owned campgrounds	$8.65	$6.48	$10.21	$2.73
Eating and drinking est.	$107.28	$75.25	$108.57	$135.29
Grocery and convenience stores	$47.16	$38.18	$45.01	$68.40
Service stations (fuel)	$65.42	$78.64	$63.04	$63.64
Sporting goods/ outdoor equip	$10.13	$9.17	$9.37	$15.29
Souvenir, gift shops, galleries	$36.39	$15.45	$42.05	$29.00
Guide and outfitting services	$19.96	$11.57	$19.20	$33.13
Local transportation	$0.65	$1.39	$0.54	$0.45
Other	$17.64	$18.63	$18.11	$14.07
Total Average Expenditures	$494.65	$356.14	$500.43	$614.90

The summary statistics presented in Table 69 also show some interesting contrasts. Visitors to the Monument who reside in Utah tended to spend less on their trip (both median and mean values) than their counterparts from other states and countries. Of the 766 who returned the mail survey, 31 (4.0%) did not answer any expenditure questions, so they were eliminated from the data set, thus resulting in a sample size of 735. The total amount of money spent in the Monument area by our 735 respondents was $363,538. Utahns made up 14.6% of the respondents and contributed 10.6% to the total expenditures, whereas international visitors made up 13.4% of the respondents and contributed 16.7% to the total expenditures. However, a more marked discrepancy occurs

when examining the number of individuals who were in the respondents' groups. Respondents from Utah reported the expenditures were for larger size groups (mean = 4.8, median = 3.0) than those from outside Utah (mean = 2.5, median = 2.0 for both other states and international visitors). Thus, the 735 respondents gave expenditure information for 2,079 individuals (Table 69—bottom row). Expenditures for individuals traveling with the Utah respondents accounted for 24.7% of all individuals but contributed only 10.6% to the total amount spent compared to 16.7% contributed by international visitors and 72.2% by out-of-state American visitors.

Table 69 : Summary Statistics of Group Expenditures in Monument Area

	Overall	Utah	Other U.S.	International
Median	$324.00	$212.50	$347.50	$324.00
Mean	$494.65	$356.14	$500.43	$614.90
Standard Dev.	$597.20	$455.41	$571.57	$804.51
Sum (% of Overall)	$363,565.00 (100%)	$38,463.00 **(10.6%)**	$264,227.00 **(72.2%)**	$60,875.00 **(16.7%)**
Respondents (% of Overall)	735 (100%)	108 (14.6%)	528 (71.8%)	99 (13.4%)
Individuals (% of Overall)	2,079 (100%)	514 **(24.7%)**	1,318 **(63.4%)**	247 **(11.9%)**

It is important to point out most respondents made purchases in several service sectors and very few, if any, spent money in all sectors. As shown in the last row on Table 70, 4.2% (n = 31) indicated they did not spend any money in the Monument area during that trip. An interesting finding, but not necessarily surprising, is about two-thirds of visitors from other states and countries spent money on lodging services compared to 38.5% of Utahns. Visitors from other states were more likely to stay in privately owned campgrounds (11.4%) than Utahns and international visitors (about 5% each). The percent of visitors who spent money in restaurants and grocery stores was about the same for Utahns, international, and domestic visitors (about 75% or higher). However, while about half of the international and domestic visitors made purchases in souvenir or gift shops, less than one-third of Utahns made similar purchases (Table 70).

Table 70:
Percent of Respondents Who Did Not Spend Money in Monument Area
Compared With Those Who Spent Some Amount

Expenditure Categories	Overall (n=735)		Utah (n=109)		U.S.A. (n=527)		International (n=99)	
	$0	>$0	$0	>$0	$0	>$0	$0	>$0
Lodging services	40.7	59.3	61.5	38.5	38.3	61.7	30.3	69.7
Campgrounds in Monument	89.0	11.0	89.0	11.0	89.0	11.0	88.9	11.1
State Park/USFS/NPS camp.	72.2	27.8	73.4	26.6	71.9	28.1	72.7	27.3
Privately owned campgrounds	90.5	9.5	95.0	5.0	88.6	11.4	94.9	5.1
Eating and drinking est.	17.8	82.2	22.0	78.0	16.9	83.1	18.2	81.8
Grocery and convenience stores	24.2	75.8	21.0	79.1	24.7	75.3	25.3	74.7
Service stations (fuel)	12.1	87.9	9.2	90.8	12.2	87.8	15.2	84.8
Sporting goods/outdoor equip.	83.3	16.7	84.4	15.6	83.9	16.1	78.8	21.2
Souvenir, gift shops, galleries	52.0	48.0	67.9	32.1	49.0	51.0	50.5	49.5
Guide and outfitting services	92.9	7.1	95.4	4.6	92.6	7.4	91.9	8.1
Local transportation	98.5	1.5	99.1	0.9	98.3	1.7	99.0	1.0
Other	86.8	13.2	87.0	13.0	86.9	13.1	85.9	14.1
All categories	4.2	--	2.8	--	4.2	--	6.1	--

In order to get a more realistic estimate of group average expenditures for each category, mean and median values were calculated without including respondents who indicated they did not spend any amount in the different service sectors. As shown in Table 71, of the 436 (59.3%) respondents who spent money on lodging services, the average amount spent was $277. Average expenditures for privately owned campgrounds ($91) were about $40 to $55 more than the amount spent on public campgrounds. About three-quarters of the respondents spent an average of about $131 to eat out in restaurants for a total of almost $79,000. For those who contracted with local guide and outfitting companies (7.1%), the average was $282 with a median value of $100 and a total amount spent of $14,668. The largest amount of money spent in the Monument area by visitors was for lodging ($120,753), followed by meals in restaurants ($78,848), fuel at service stations ($48,016), items purchased in grocery and convenience stores ($34,660), purchases at souvenir and gift shops ($26,743), and guide services ($14,668).

Table 71: Mean, Medium, and Total Expenditures for Groups Who Spent Money

Expenditure Categories	Mean	Median	Range		Respondents		Sum
			Low	High	% of 735	n	
Lodging services	$277	$185	$10	$3,000	59.3%	436	$120,753
Campgrounds in monument	$35	$16	$4	$200	11.0%	81	$2,827
State park USFS/NPS campgrounds	$48	$21	$2	$800	27.8%	204	$9,819
Privately owned campgrounds	$91	$60	$4	$500	9.5%	70	$6,359
Eating and drinking est.	$131	$80	$3	$2,000	82.2%	604	$78,848
Grocery and convenience stores	$62	$40	$2	$1,500	75.8%	557	$34,660
Service stations (fuel)	$74	$50	$10	$750	87.9%	645	$48,016
Sporting goods/ outdoor equip	$61	$40	$1	$800	16.7%	123	$7,449
Souvenir, gift shops, galleries	$76	$50	$2	$1,200	48.0%	353	$26,743
Guide and outfitting services	$282	$100	$5	$3,000	7.1%	52	$14,668
Local transportation	$44	$30	$10	$150	1.5%	11	$479
Other	$133	$50	$3	$1,000	13.2%	97	$12,949
All expenditures	$516	$340	$4	$6,000	95.8%	704	$363,565

Input-Output Economic Analysis (IMPLAN)

This research was not designed to measure the economic impacts of visitors to the area on local or state economies. The expenditure items, described above, were intended to provide insight into what items are purchased in local businesses by Monument visitors. However, by putting the data into an economic analysis model, the resulting output can help further the understanding of economic relationships between tourism spending and local economic viability.

The impact a recreation activity has on an economy is different than total amount spent pursuing that activity. A dollar spent at point of purchase moves through the

economy and affects employment and income beyond the area of purchase. Estimating impacts tourist expenditures have on local counties helps inform those involved with formulating policy as to the potential consequences of their decisions.

An Input-Output (I-O) analysis model was used to assess the economic impact on Garfield and Kane Counties for visitors who indicated the Monument was their main destination. The computer model "Impact Analysis for Planning" (IMPLAN) was used as the analytical tool. This model is used for either analytical or predictive estimates for economic impacts and has been used previously to conduct economic impact analysis of recreation (McCoy et al., 2001).

When forecasting economic impacts using a predictive model, it is important to define whose expenditures are included, why those expenditures are more important than others, and purchase location. It is obvious there are a variety of motivations for Monument area visitation, from taking the wrong road to traveling specifically to experience the unique features of the Monument. If GSE-NM did not exist as a management unit, visitors would still be coming through and stopping to make purchases at local businesses. Therefore, rather than examining local expenditures of all visitors to the area, it may be of more interest to look at the local economic contribution for those who came specifically to see the Monument. In other words, treat the Monument as a tourist destination to help understand its designation effect on local county economies. This means the analysis below focuses on those who indicated the Monument was their main destination and they stopped in Garfield and Kane communities.

Of the 766 who returned the mail survey, 31 (4.0%) did not answer any expenditure questions, so they were eliminated from the data set, thus resulting in a sample size of 735. Of these, 29 did not indicate where they stopped and nine stopped only in Coconino County, Arizona, so these were eliminated from the data set as well. That left 697 respondents who made stops in Kane and/or Garfield counties, with an average party size of 2.82 for a total of 1,969 visitors.

The expenditure data were adjusted to the amount spent per person, by dividing the amounts spent by the number of people who had expenses. The amounts were also adjusted by whether they also stopped in Coconino County. If they stopped in Garfield and/or Kane counties, the expenditures were multiplied by one. If they stopped in Garfield or Kane and Coconino, the multiplier is 0.5. If they stopped in Garfield and Kane and Coconino, the multiplier is 0.67.

Of the 766 respondents, 697 (91.0%) said they had stopped in one or both of the Utah counties, and responded with how much they had spent (including $0). The 766 respondents identified their party size and/or the number of people who had expenditures. In other words, the 766 respondents were giving us information about 2,155 visitors. The 697 respondents with the Utah stops were speaking for 1,969 visitors. So, we have per person Kane and Garfield expenditure data for 1,969 of 2,155 sample visitors or 91.4%. BLM estimates the number of visitors to Grand Staircase-Escalante National Monument in a year is 600,000. If we could have contacted all 600,000 visitors (population from which the sample is drawn), we assume 91.4% or 548,400 would have stopped in Garfield and/or Kane counties, and would be able to tell us how much they spent.

Of those 697 respondents, 190 (27.6%) indicated the Monument was their main destination. This is slightly higher than the results from the intercept survey respondents, where 20.1% indicated the Monument was their main destination. This could perhaps be explained due to the fact only about 7% of respondents contacted at overlook sites said the Monument was their main destination and they were less likely to indicate they would be willing to complete a mail survey than those contacted at other sites. For purposes of IMPLAN modeling, this 190 sub-sample represents an estimated population 149,492 (27.3% of 548,400) who filled out the expenditure questions on the mail survey instrument, indicated the Monument was their main destination, and stopped in Garfield and/or Kane County communities. The sample of 190 has a confidence interval of ± 6.7% at the 95% Confidence Level, given the response rate of 67%.

The IMPLAN model produced county-level (Garfield and Kane) databases divided into three impact categories: Industry Output, Employment, and Value Added. *Industry Output* is the single number in dollars, or millions of dollars for each industry. The dollars represent the value of that industry's production. *Employment* is the single number of jobs for each industry given as full time equivalent jobs. *Value Added* is the aggregate of four components: employee compensation, proprietary income, other property type income, and indirect business taxes. Employee compensation is the total payroll costs including benefits. Proprietary income consists of income received by self-employed individuals. Other property type income examples include payments for rents, royalties, and dividends. Indirect business taxes include excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses (taxes that occur during normal course of business, but not profit or income tax).

The databases also account for the ripple or multiplier effect due to the initial increase in demand (the demand for a good will ripple through the economy until a new balance is achieved). The IMPLAN model uses three effects to measure economic impact; Direct, Indirect, and Induced effect. *Direct* effect is the production change associated with a change in demand for the good and is the initial effect on the economy. *Indirect* effect is a secondary impact caused by changing input needs of directly affected industries such as additional input needed to produce additional output. *Induced* effect is caused by changes in household spending due to additional employment generated by direct and indirect effects.

In running the IMPLAN model, a Social Accounting Matrices (SAM) type multiplier was used to simulate the ripple effect. A SAM Type multiplier is considered to be a realistic indicator since it takes into account all impacts of increased sales, jobs, or salaries as well as inter-institutional transfers resulting from the economic activity. The formula for calculating the SAM Type multiplier is to sum direct, indirect, and induced effects and divide that sum by the direct effects. Based on the overall results shown in Table 72, SAM type multipliers for Industry Output is 1.23, Employment is 1.2, and Value Added is 1.27. It should be noted that each industry sector has a unique multiplier and what is calculated above is an overall average.

The complete database tables are included in Appendix O. These show each of the impact categories by effects organized by 513 industry sectors. As shown in the summary table (Table 72), a population of 149,492 visitors to the Monument as their main

destination and based on the average expenditure of our sample of 190, more than $20.6 million would be directly spent in Kane and Garfield Counties in 21 different industrial sectors. This spending would directly support more than 430 full-time equivalent jobs with almost $10 million in employment value added on. When considering the ripple effect through the economy by adding indirect and induced effects, the total industry output impact would be about $25.4 million in 86 sectors, employment would support more than 500 jobs in 70 sectors, and value added would increase the effect of that money by about $12.5 million in 81 of 513 economic sectors (Table 72).

Interestingly, the Utah Division of Travel Development, Department of Community and Economic Development, estimated spending by travelers in Garfield County in 2003 to be $32.5 million with 904 jobs in travel and tourism related employment; estimated spending by travelers in Kane County in 2003 was $50.4 million with 1,012 jobs in travel and tourism related employment (Utah Division of Travel Development, 2005). Although at the time of the writing of this report similar data for 2004, the year of this study's data collection, was not available, the 2003 estimates by the Utah Division of Travel Development and expenditure data collected in this study suggest Monument visitor spending to be about 25% of overall visitor spending in Garfield and Kane Counties, which seems realistic considering the role of the Monument as just one of many attractions in these counties.

Table 72: Summary of IMPLAN Model Impacts[1]

		Direct	Indirect	Induced	Total
Output Industry Impact	Impact in dollars	20,653,631	2,070,708	2,641,281	25,365,320
	No. of Industrial Sectors	21 (4.1%)	74 (14.4%)	83 (16.2%)	86 (16.8%)
Employment Impact	Impact in Jobs	434.8	40.9	46.1	521.8
	No. of Industrial Sectors	10 (1.9%)	52 (10.1%)	59 (11.5%)	70 (13.6%)
Value Added Impact	Impact in dollars	9,883,993	1,105,146	1,555,766	12,544,844
	No. of Industrial Sectors	18 (3.5%)	72 (14.0%)	81 (15.8%)	81 (15.8%)

[1]See Appendix O for complete data tables.

Another interesting feature of IMPLAN is its ability to produce some data that help characterize current economic conditions in Garfield and Kane Counties. The summary output shown for the counties in Table 73, is taken from the Output, Value Added, and Employment table in Appendix O. Expenditures from the nearly 150,000 Monument destination visitors would contribute about 520 or over 7% of the 6,858 full-time equivalent jobs held by Garfield and Kane County residents and nearly 6% of the counties' residents salaries, property income, and business taxes and fees. Of the nearly $400,000,000 spent in all industries, about 6.5% is contributed by Monument destination visitors.

Table 73:
Contribution of Monument Destination Visitors
to Economic Conditions in Garfield and Kane Counties

	Garfield and Kane Counties Overall	Contribution by Monument Destination Visitors	Percent of Overall Contributed by Visitors
Industry Output	$390,342,000	$25,365,320	6.5%
Employment	6,858 jobs	521.8 jobs	7.8%
Value Added	$211,639,000	$12,544,844	5.9%

Again, it must be remembered this represents only those visitors who specified the GSE-NM as their primary destination. The Monument also contributes a greater amount to the local economies as a secondary destination for visitors whose primary destination is Bryce Canyon National Park, Zion National Park, or other state and national attractions in Garfield County, Kane County, and Coconino County in Arizona.

Mail Survey Open Ended Comments

The final question in the mail survey asked respondents to share any additional comments they had regarding their visit to the Monument. Of the 766 visitors who completed the mail survey, 485 decided to write additional comments. An unabridged version of all these comments can be found in Appendix M. Because of the open ended nature of the question, the responses covered a wide variety of issues in a number of different ways. For example, some respondents made focused site specific comments about some aspect of their visit, while others gave an overview of their entire trip. The amount of space provided for the final comments question also allowed a large number of respondents to record multiple comments on each survey, sometimes filling several pages of the survey.

Because of the variability of the mail responses, the kind of analysis done with the intercept comments in the previous section was not possible. Without researcher assistance, the types of comments in the mail survey often veered too far off topics related to the Monument to justify truly in-depth comment through content analysis. In place of this analysis, only recurring themes were recorded and analyzed. These major themes were divided by the type of location at which the original intercept survey was administered, and are discussed below in the same manner.

Monument Sites

The information offered by the 181 mail respondents surveyed at Monument Sites who wrote additional comments primarily focused on six thematic areas. Around 70 comments were made regarding the area's beauty, wilderness qualities, uniqueness or national value, or the surprise/discovery felt by visitors as they happened upon the Monument and its various features. The types of comments in this thematic area vary greatly. Some expressed general awe with the monument, such as, "*I think the Monument is an absolutely breathtaking place*" or, "*The Monument is truly a national treasure.*"

Other visitors expressed a sense of surprise or discovery at either what they found in the Monument or that GSENM was there at all. Typical responses of this type might include, "*I loved it there, it was totally unexpected*" or "*The kids had plenty to explore*". Only around ten comments indicated visitors were either unhappy with the remoteness/wildness of the area, the quality of specific sites, or the areas scenery.

The second most common thematic area dealt with issues of change in the Monument itself, the surrounding communities, and tourism growth. Roughly 70 comments were made either in support or opposition to change and development in the area. Comments made in opposition to the growth of the area and tourism outnumbered those in favor by a margin of roughly two to one. A respondent in opposition to GSENM development observed, "*[I] hope that development is limited to keep the natural beauty intact*." Another respondent speaking to the development/commercialization of the surrounding communities stated, "*[If necessary] pay the locals not to encourage tourism*". Those interested in seeing the Monument developed, often out of an apparent desire to have more "creature comforts" available on site, made recommendations such as, "*Paved roads would add greatly to the enjoyment... covered picnic areas would provide relief from the sun.*" Those interested in seeing development of the surrounding communities mostly cited a lack of desired commercial services in the area currently. One such respondent stated, "*Kanab, Utah could use a better choice of fast-food restaurants. I prefer Burger King or Taco Bell, not the choices that were available.*"

The next most common area of responses dealt with road and road sign issues. Of the roughly 60 comments that were made about road-related issues, roughly half stated they were anti-road improvement and paving, or pro-road closure. These responses often described the increased tourism and visitation of out of the way areas that would occur with better road and access infrastructure. For example, one respondent speaking of improvements that have been made to the Burr Trail said, "*It used to be fun taking people on the older road, now <u>anyone</u> (vans, etc) can use the road.*" Other responses indicated a desire to have either improved quality on the existing dirt roads or paved roads in the Monument. Of particular concern to several visitors was the Hole-in-the-Rock Road, which was commented on a number of times due to its roughness. Road signs also appeared to be a problem for users typified by this respondent speaking of the difficulty his group had navigating the Cottonwood Road, "*More and better signs on this road and others [are needed] through the Monument.*"

A number of wilderness/preservation management issues appeared to be of importance to respondents as well. Roughly 50 comments were made in support of restriction on certain uses (primarily motorized users, grazing, and mining) or supporting preservation of the wilderness characteristics of the area. One such respondent jokingly suggested, "*How about having an open season on all 4-wheelers?*" while another, more seriously, noted, "*We sincerely hope this place will be wild as it is now in a few years.*"

Around 45 comments were made by respondents describing past trips they made to the area or stating they would be making additional trips in the future. One respondent said, "*We recently moved to Page, Arizona, and [we] have visited 10-12 times already*". Those indicating an intention to return to the Monument area on future trips frequently

made comments such as, "*The monument is a world treasure that we will return to as often as we can*", or, "*I would definitely return if given the opportunity.*"

Approximately 35 comments dealt with issues related to monument information and services, such as signage to monument destinations, safety and directional signage issues involving trails, and use restrictions and permit systems. The majority of comments about monument and trail signage were negative. Typical comments of this type included, "*we'd like more and better signs... finding [Phipps Arch] was difficult,*" and, "*More signage on the trails!*" Respondents were evenly split positive and negative on the need for use restrictions and permit systems. Monument Site visitors made similar numbers of comments stating positions like, "[*If visitation increases] I think a permit system for everything may be necessary*" as they made comments stating the opposite position, "*I hope it will still be possible in the following years to hike in GSENM without making a permit reservation*".

Visitor Centers

Some visitors surveyed at the visitor centers wrote additional comments in the mail survey (n = 178). The main thematic areas identified for visitor center visitors were essentially the same as those for Monument sites. The largest thematic area in terms of the number of comments was issues with monument information and services, which had roughly 80 comments. Within this thematic area, two specific types of information and services stood out as potentially important. The first of these was visitor centers and visitor center information. This area contained comments concerning the quality of visitor centers, visitor center displays, visitor center employees, and visitor center information. Two-thirds of the remarks in this area were positive, and included comments such as, "*Your visitor center at Cannonville is very well designed and done. Staff also [were] very helpful.*" Negative responses seemed to deal mainly with the Escalante Visitor Center and the temporary trailer that was in use during the survey. The second type of information and services within this thematic area included a number of general information related issues. Responses of this nature generally indicated dissatisfaction, and dealt with issues of national and international information availability, signage to monument sites, accuracy/quality of maps and brochures, information on specific destinations and locales, and trail information. For example, roughly 11 comments discussed the lack of marketing and information about the Monument aimed at the general public. One respondent spoke to this issue by offering some advice, "*The [National Park Service] does a much better job at marketing and displaying the National Parks and [the Bureau of Land Management] may want to use them as model.*" Two information areas, weather/road condition information and published guides, received primarily positive comments.

The second most common thematic area, with around 70 comments, included remarks about the area's beauty, wilderness qualities, uniqueness or national value, or the surprise/discovery felt by visitors as they happened upon the Monument and its various features. These types of comments were generally similar to those reported by Monument site visitors, and included statements such as, "*This is a beautiful area*", "*[A] truly magnificent area that, hopefully, people will be able to enjoy for quite a long time,*" and, "*I was surprised at the amount of things to see [and] places to stay.*"

Roughly 60 comments dealt with respondents' descriptions of past trips they had made to the area or promises to return to the area in the future. One-fourth of these comments described a past experience in the monument, such as this respondent who stated, "*We have visited the Monument area many times during our travels.*" Those describing a planned future trip often cited more things to explore, like this respondent who said, "*We just scratched the surface and want to return for more intensive exploration of the Monument.*"

The next thematic area dealt with management actions related to preservation of the landscape's wild qualities. These roughly 50 comments dealt primarily with issues of solitude, the preservation of the area's wilderness qualities, limiting cattle grazing, limiting motorized recreation/bikes, and protecting riparian areas. For example, one respondent speaking of preservation and motorized recreation stated they "*very much appreciate and support wild places without those damn machines.*" Another respondent speaking to a number of these preservation themes simultaneously noted, "*The area is incredible, the solitude gratifying, but I am concerned about cows in riparian areas and mindless ORV use.*" Only two negative comments were made dealing with these preservation themes, one in support of motorized recreation and one in favor of grazing.

Monument and community change and development also appeared to be an important thematic area to visitor center visitors, with roughly 40 comments addressing these issues. Of these comments, two-thirds seemed to indicate a reluctance or resistance to the development of the Monument, tourism growth, community commercialization, or changing current management direction. Such anti-development comments include: "*It should be possible to keep the Grand Staircase from becoming overcrowded,*" or, "*I really hope all [GSENM] will remain as it is, I mean without being developed with new tourist facilities [like hotels, restaurants, etc].*"

A final common thematic area was roads. Just fewer than 40 comments were made concerning current road conditions, road improvement and paving, and road signs. Of these, slightly over half indicated they felt roads should be improved, signage should be updated, or that current road conditions were not good. These individuals often cited confusion due to poor signage, "*The road split several times and it was unclear which way to go,*" issues with road surface roughness, "*dirt roads are fine….but they should be graded for two wheel drive vehicles with moderate to high clearance,*" or general dissatisfaction with Monument area roads, "*I hope to see improvement in road conditions.*" On the other hand, some respondents expressed the opposite sentiment, often stating a need to keep the roads rough to control visitor behavior or access, "*Keep the roads dirt, so people slow down and have a look,*" or satisfaction with the current state of signage and upkeep, "*Moderately difficult [4WD] roads were a great feature that attracted us,*" "*My last trip was in 1976, and the roads and highways and approaches to sights were greatly improved.*"

Overlooks

The 124 Overlook respondents who wrote additional comments expressed similar ideas to those articulated by the other two groups. The most common comment theme for this group was monument information and services, which received nearly 55 individual

comments. Comments of this type were focused primarily on the national or international availability of information on GSENM, signage to sites and visitor centers, visitor center information, weather/road condition information, visitor center displays, and assorted other information services. Of the information/service comments, nearly 85 percent were negative or indicated a deficiency. One respondent noted, "*It's an incredible country, but without any way to understand it or any specific booklets or information centers [it's hard],*" while another complained, "*The BLM/NM people are tight with information [presumably to protect resources], which can be annoying.*"

The next most common thematic area included around 50 comments regarding the areas beauty, wilderness qualities, uniqueness or national value, or the surprise/discovery felt by visitors as they happened upon the Monument and its various features. The sentiments expressed by overlook visitors were very similar to those expressed by the respondents surveyed at the other two survey location types. Typical comments included descriptions of the area such as, "*It exceeded our expectations in beauty [and] interest,*" "*The scenery was absolutely breathtaking,*" and, "*We were just passing through the area and stopped at a pull off... what we saw we enjoyed.*"

Comments containing descriptions of past trips and discussions of future trips was the third most common thematic area, with roughly 40. Much like the previous thematic area, this comment section provided responses very similar to those made by respondents from the other two sample location types. Typical examples included, "*We hope to return and explore more of the area,*" and, "*If we come here again we shall target the Grand Staircase area in more detail.*" Unlike the other two comment sections however, only eight respondents indicated they had made prior trips, with the majority simply stating a desire to return in the future.

Road issues were the fourth most common theme for overlook visitors. Around 25 comments were made in this area, described visitor's impressions of the current road conditions, improvement of existing roads, adequacy of directional signs, and the paving of roads. Only six of these comments indicated satisfaction with the current road conditions or directional/road signs. The rest of the comments addressed perceived needs for improvement, primarily in the areas of signage, "*Hole in the Rock Road needs better/more signage,*" and road condition and paving, "*It would be highly appreciated if a proper road could be provided from north to south.*"

Management actions concerning wilderness protection or preservation were the topic of approximately 20 comments. The comments received were almost exclusively in favor of such actions, and dealt with preserving the area or its wilderness qualities, solitude, and limiting motorized recreation and grazing. A respondent stated what they would like to see happen to cattle and mining in the Monument, "*Just get rid of cows and prevent the miners from moving in.*" A second respondent spoke of a more general desire to protect the monuments attributes, "*[It is] extremely important to me that places of relative isolation [and] limited population are protected for me and future generations.*"

The final common thematic area, Monument and community development, received roughly 18 individual responses. Overlook respondents, like the other two groups, was predominantly against any kind of Monument or community development. A respondent commented on this subject by plainly stating, "*To the greatest degree*

possible, LEAVE IT ALONE," and a second echoed the sentiment, "*I really like seeing the area protected from developers*."

Summary of Locations

The distribution of the types of comments among the three survey location types can be used to illustrate the different priorities of these three different types of respondents. Although there was some minor differences in the mood (positive, neutral, or negative) of some of the comments, Visitor Center and Overlook respondents tended to have similar patterns when it came to the proportion of responses they made about each of the major themes. Table 74 presents the themes for each the site types ranked by frequency. Both Visitor Center and Overlook respondents had a larger proportion of negative comments about the quality and availability of information about the area. It seems reasonable informational availability would be of greater importance to these groups as the locations they have chosen to stop at seem to attract a larger number of casual and "park-loop" tourists, many of whom are first time visitors. In contrast, Monument Site respondents made far fewer information related comments, perhaps because they were more likely to have visited previously and were not in need of information, or possibly because they had simply put more effort into locating the information they required (i.e. that is why they were able to find the location where they were surveyed).

Table 74: Ranked Number of Comments for Each Location by Theme

	Monument Sites	**Visitor Centers**	**Overlooks**
1)	Beauty/Wonder	Information/Services	Information/Services
2)	GSENM/Community Change	Beauty/Wonder	Beauty/Wonder
3)	Roads/Signs	Previous/Future Trips	Previous/Future Trips
4)	Wilderness/Preservation	Wilderness/Preservation	Roads/Signs
5)	Previous/Future Trips	GSENM/Community Change	Wilderness/Preservation
6)	Information/Services	Roads/Signs	GSENM/Community Change

All three groups made a large number of general comments about the beauty of the area and the surprise they experienced while visiting. However, Visitor Center and Overlook visitors commented on their desire to return to the area more often than did Monument Site respondents. This difference could be the result of greater numbers of first time visitors in these two groups.

Wilderness/Preservation and GSENM/surrounding community change comments were much less likely to come from Visitor Center or Overlook respondents than Monument Site visitors. Again, this difference may be accounted for by the greater likelihood that Monument Site respondents are repeat visitors who have personally

witnessed the changes that have taken place since the Monument designation. Alternatively, these differences in responses could have occurred because those who are willing to travel off the paved roads to visit the Monument sites could simply be a group of people who are more engaged by these particular environmental, social, economic, and management issues.

Road-related issues were an interesting comparison across the three site types. Though roads were rated high by Monument Site respondents and low by Visitor Center respondents, both groups were split evenly on whether roads should be improved/graded/paved, or left alone. Overlook respondents were less divided when it came to road issues, as a large majority were dissatisfied with the current conditions or wished to see improvement. If it is true many of the Overlook visitors are "windshield" tourists, and therefore primarily experience the area in their cars, the larger number of comments favoring road improvement by this group seems to make sense.

PART IV: COMPARISON OF VISITOR USE LEVELS AND MANAGEMENT ZONES

The purpose of this section is to map the sites visited on the Monument and compare site use levels with the travel management zones identified in the GSENM management plan. This analysis is intended to help managers evaluate plan implementation and to provide baseline data for longitudinal analysis of visitor use patterns.

Monument Management Zone System

According to the management plan, "The designation of a management zone system will serve as the primary tool for managing visitation and other uses in a manner that will safeguard the Monument's resources" (U.S.D.I BLM, 1999: iv). To achieve this objective, the GSENM designated four travel management zones within the Monument that were based on existing development and use levels. For each zone, BLM planners identified the intended degree of development, road availability and use, and the recreation experiences to be offered. The four management zones are described below (U.S.D.I. BLM, 1999: v) and shown in Figure 19.

> The *Front Country Zone* (78,056 acres or 4% of the Monument) is the focal point for visitation. This zone will offer day-use opportunities near towns adjacent to the Monument and to Highways 12 and 89, both of which cross the Monument. The Front Country Zone will accommodate the primary interpretation sites, overlooks, trails, and related facilities needed to highlight the Monument's vast array of resources.

> The *Passage Zone* (39,037 or 2% of the Monument) contains secondary travel routes used as throughways and recreation destinations. The BLM will provide rudimentary facilities necessary for visitor safety and interpretation.

> The *Outback Zone* (537,748 acres or 29% of the Monument) is intended for an undeveloped, primitive, and self-directed visitor experience while accommodating motorized and mechanized access on designated routes. Facilities will be rare and provided only when essential for resource protection.

> The *Primitive Zone* (1,210,579 acres or 65% of the Monument) will offer an undeveloped, primitive, and self-directed visitor experience without motorized or mechanized access. The BLM will provide no facilities and will post only those signs necessary for public safety or resource protection.

The broad goal of the zoning plan is to concentrate visitor use and impacts in the Front Country and Passage zones, and allow the Outback and Primitive zones to remain in a more pristine state.
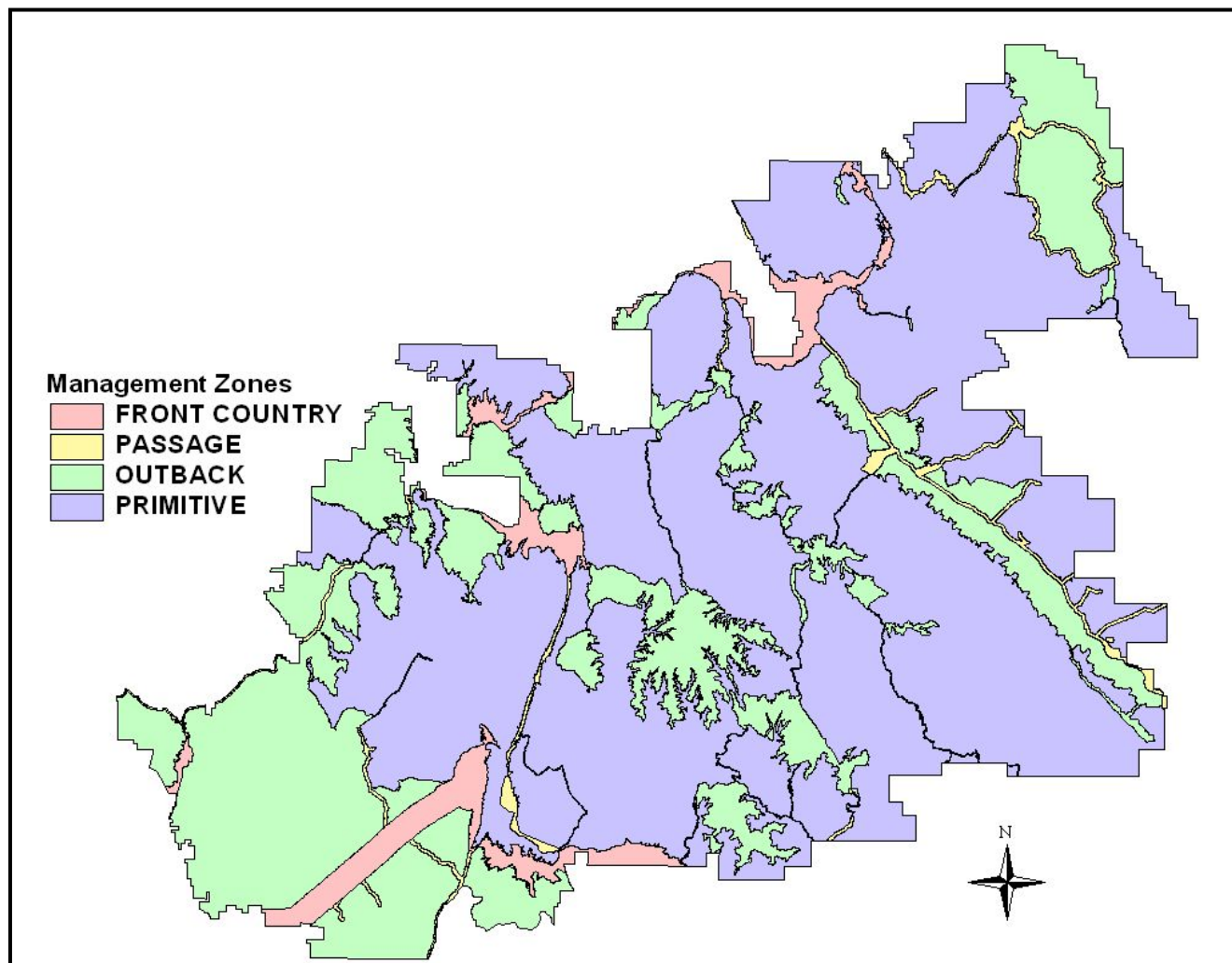
**Figure 19:** Map of the GSENM Management Zones

Data Collection and Analysis

The relationship between the 27 sampling sites and the travel management zones is shown in Figure 20. Both the intercept and mail survey respondents were asked to identify their trip route and stops on a map of the Monument and local area (Appendices A and B). Intercept surveys asked respondents for their actual stops up to the point of the survey and stops planned after the intercept survey was conducted. The mail survey asked for all stops in the Monument area for the entire trip. When comparing the planned stops from the intercept surveys with the actual stops identified on mail surveys, there were so many inconsistencies it was decided to use actual stops from the intercept survey and only the mail survey results for calculating site use levels. And while visitors were sampled only in Front Country and Passage zone sites, many also visited backcountry sites, so discussed are some of the backcountry implications of findings for key overlap or "transition" areas.

Data gathered through the mapping exercises, as well as the corresponding latitudinal and longitudinal coordinates for all sites visited, were entered into Dbase, a database program compatible with ArcView. From this database, shapefiles were created showing the survey sites, sites where visitors stopped, and the visitation use levels for all of the sites indicated. The frequency of visitation for each mail survey site was calculated and graphed as a scatterplot to visually determine if any logical breaks or patterns in the number of visits were evident. Based on the frequencies and a logical pattern of grouping evident in the scatterplot, six descriptive categories of use levels were created: very low (listed by one survey visitor), low (2-5 visitors), moderately low (6-14 visitors), moderately high (15-30 visitors), high (31-100 visitors), and very high (101-352 visitors), each of which contained about the same percent of sites.

The original intent of this analysis was to examine only Front Country and Passage zone visitors and sites, since all of the survey sites fell within these two zones. Upon further examination, however, it became evident the primary recreation opportunities at some of these sites actually occurred in adjacent Outback or Primitive zone areas. To reflect the potential importance of these areas, we used two additional classifications or transition area 'subzones' for data analysis: a Front Country Transition zone and a Passage Transition zone.
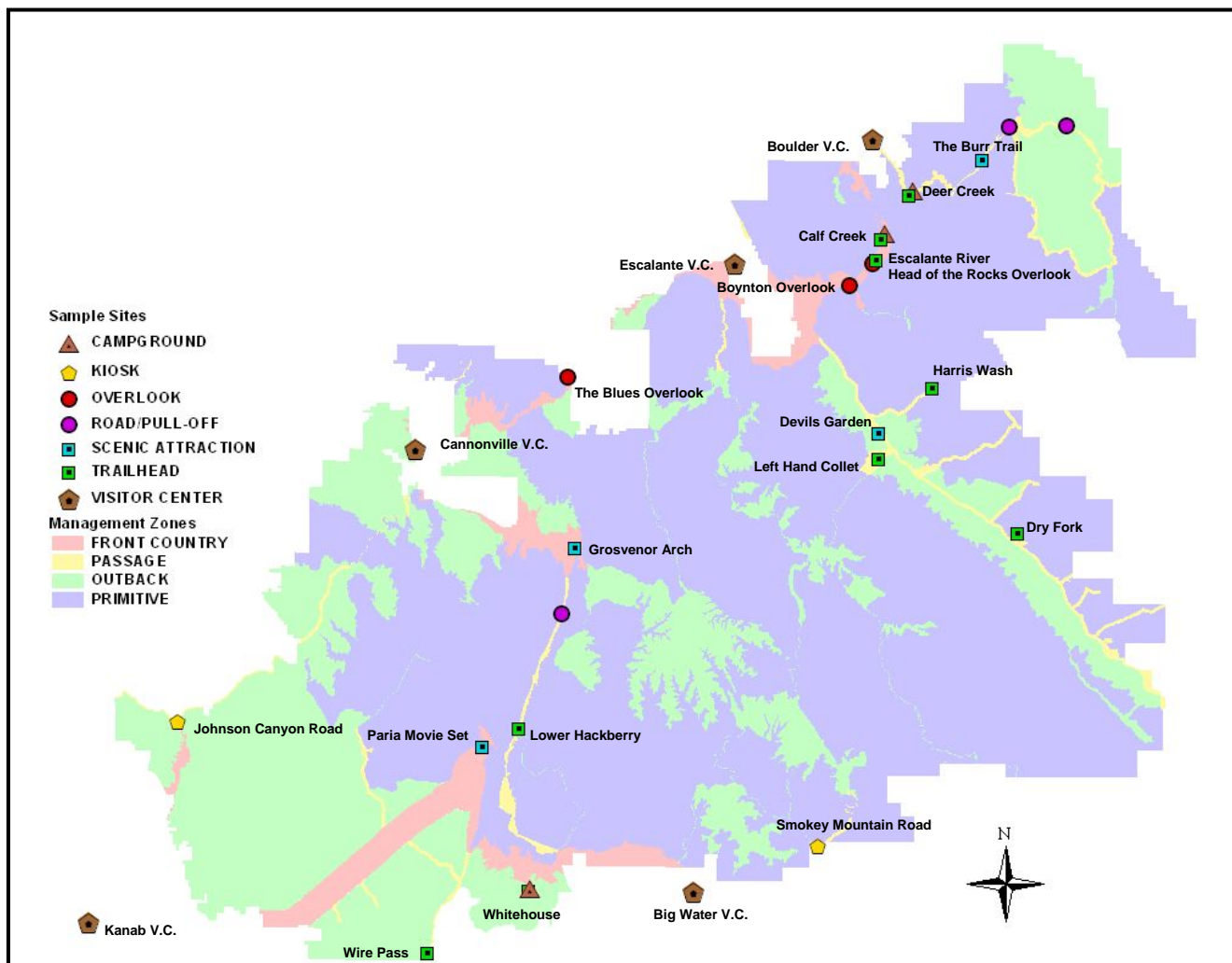
Figure 20: 2004 GSENM Front Country Visitor Use Survey Sites by Management Zone

Visitor Profiles by Management Zone

The percentage of male participants varied somewhat between the four zones, with the transition zones having slightly more male participants than the other two front country zones. Seventy-five percent of the Passage Transition zone visitors and 70% of the Front Country Transition zone visitors were male, compared to 69% of the Front Country and 67% of the Passage zone visitors. The average age of participants also varied slightly by zone. The average age of Front Country Zone visitors was 52 years, compared to 49 years in the Passage zone, and 44 years in both transition zones. These age and gender results in the transition areas (younger and more males) reflect the more remote, backcountry experiences offered there.

Regarding past visits, the Front Country and Front Country Transition zones get a larger percentage of first time visitors (64% and 56% respectively) compared to the Passage (44%) and Passage Transition zone (42%). The Front Country and Passage Transition zones had the higher percentage of international visitors (24% and 23% respectively) compared to Passage (16%) or the Front Country Transition zones (12%). Of those visitors who were from the U.S., 16% were from Utah, including 32% of Passage Transition zone participants, 28% of Front Country Transition zone participants, 27% of Passage zone participants, and 16% of Front Country zone participants. The transition zones have the highest per cent of Utah residents visiting the Monument, but most of the local residents (Garfield County) use the Passage and Passage Transition zones (Table 75).

Table 75: Major Survey Zone Destinations of Utah Visitors

	Percentage
Front Country Zone	
Salt Lake County	31%
Washington County	14%
Utah County	11%
Passage Zone	
Salt Lake County	20%
Garfield County	20%
Davis County	16%
Front Country Transition Zone	
Salt Lake County	41%
Utah County	21%
Wayne County	10%
Passage Transition Zone	
Salt Lake County	46%
Garfield County	8%
Summit County	8%
Utah County	8%

Sites Visited and Use Levels

Based on the results of both surveys, visitors stopped at 14 towns and 98 recreation sites including 78 different sites on the Monument itself, including the five visitor centers (Fig. 21) (A full list of sites and visitation is in Appendix N.). Use levels, which are based only on the mail survey, are shown in Figures 22 and 23. Reflecting the Monument zoning, most of the "high" use sites are visitor centers or sites located in the Front Country and Passage zones. Bull Valley Gorge, is the only "high" use site found entirely in the Primitive or Outback zones. However, both Figures 22 and 23 also show many of the sites visited provide access to the backcountry areas of the Outback or Primitive zones. Therefore, further analyses were conducted in those sites from which most backcountry zones are accessed. Eleven of the visited sites, which are labeled "transition zone" sites in Table 76, are primary access areas for visitors to the Outback and Primitive zones; three are in the Front Country zone (Calf Creek, Escalante River, and Whitehouse trailheads) and eight in the Passage zone (Wolverine Loop Road and seven trailheads: Deer Creek, Dry Fork, Egypt, Harris Wash, Lick Wash, Lower Hackberry, and Wire Pass).
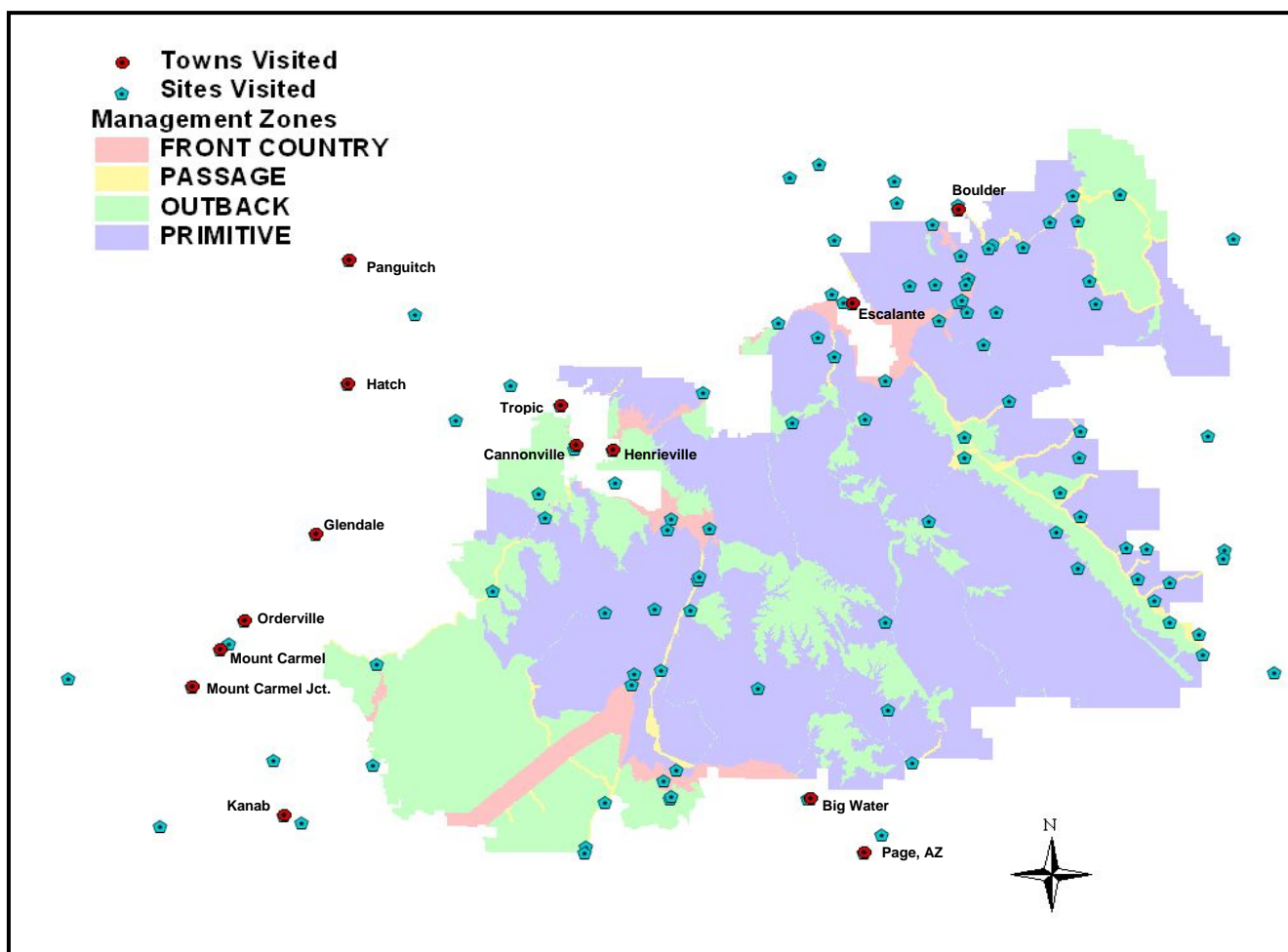
Figure 21: Sites in the GSENM and Surrounding Area Where Visitors Indicated Stopping
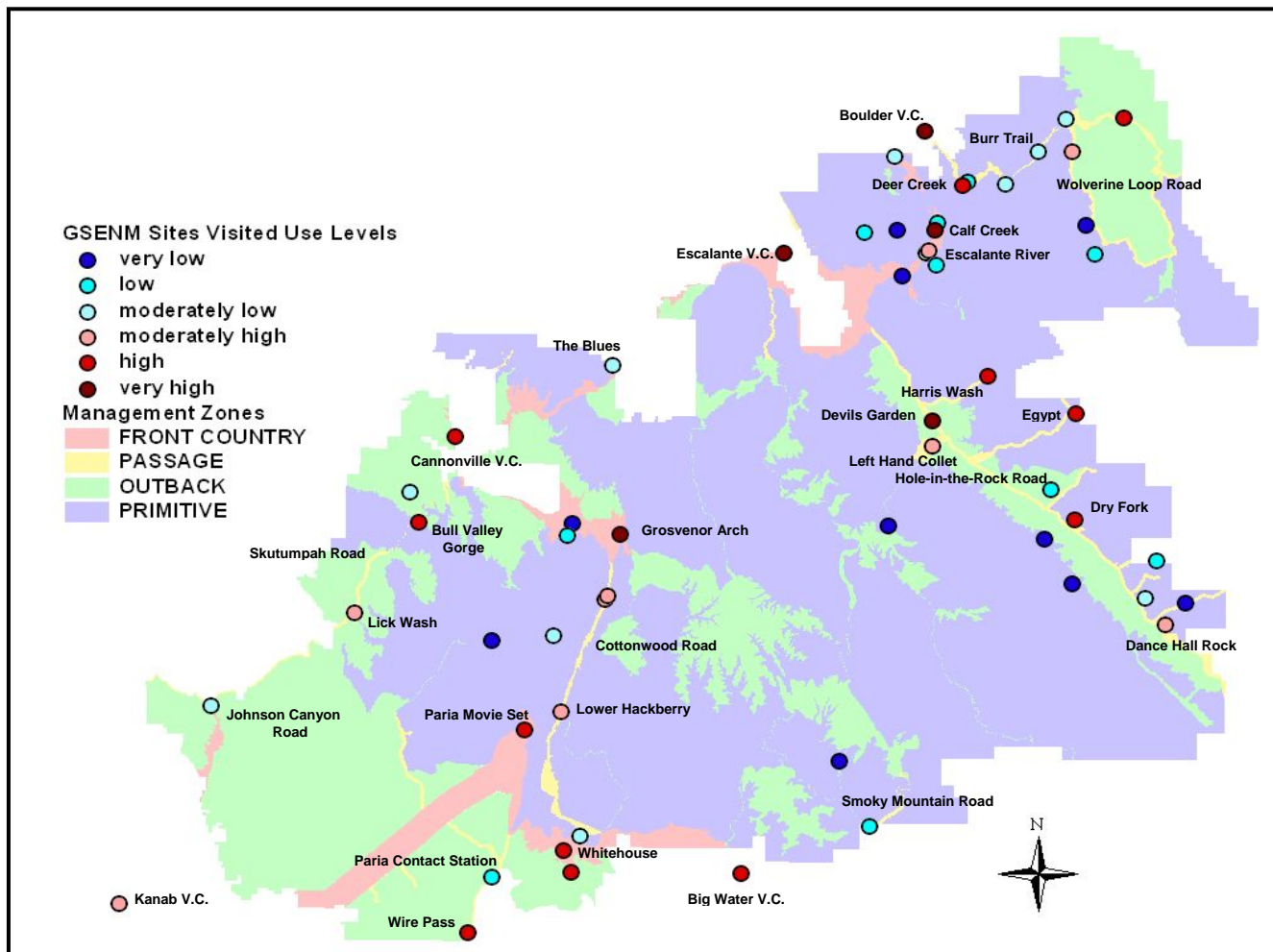
Figure 22: Use Levels for GSENM Sites
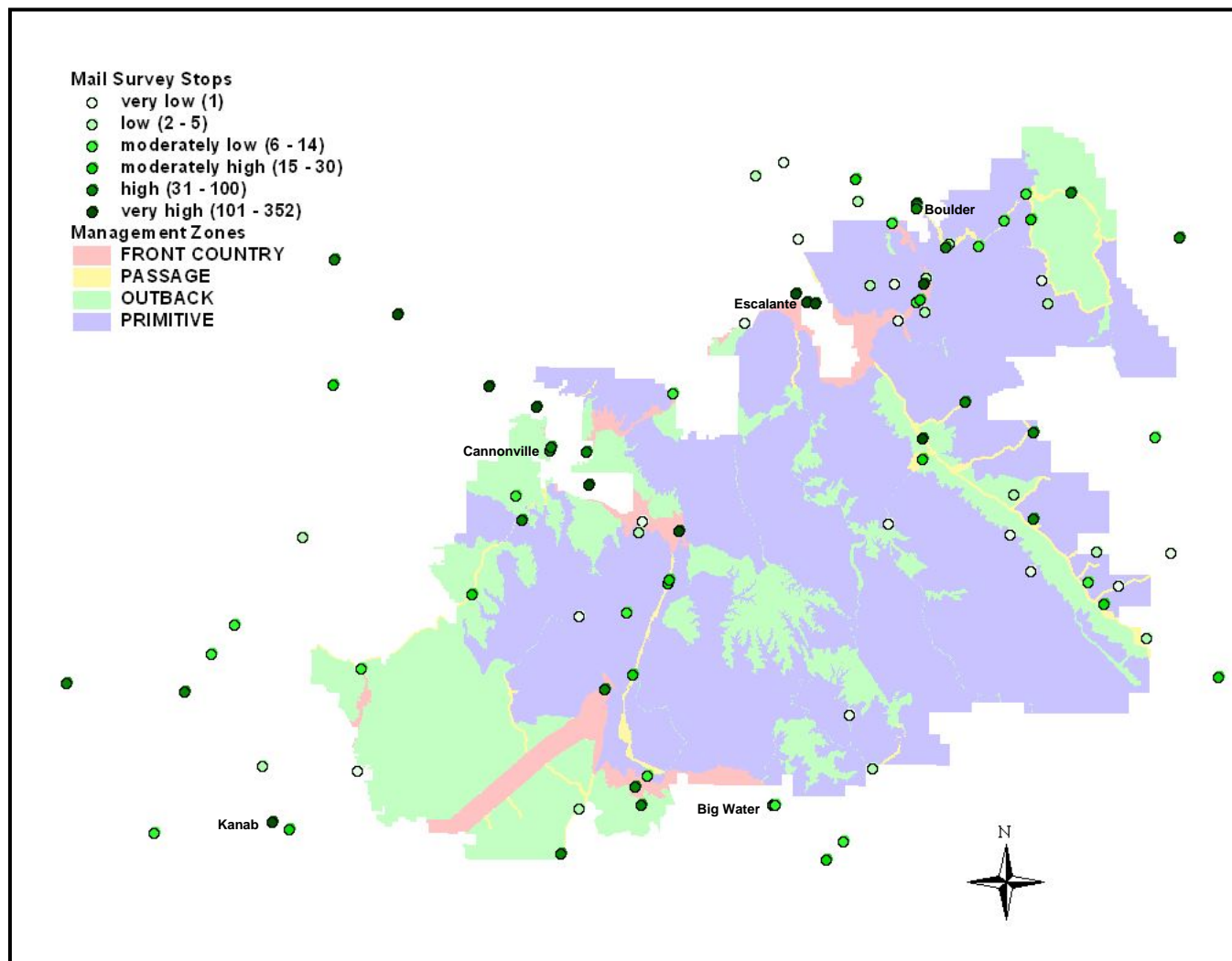
Figure 23: Use Levels for Sites Where Mail Survey Participants Indicated They Stopped

Figure 24 shows the location of the nine transition zone sites included in the survey in relation to the management zone boundaries, and Figure 25 shows the relative use levels of these sites. These transition zone sites are, from north to south: Deer Creek, Calf Creek, Escalante River, Harris Wash, Dry Fork, Lick Wash, Lower Hackbury, Whitehouse, and Wire Pass. Based on these results, these transition zones require more management attention than other Front Country and Passage zone sites. Visitors to these sites influence both front country and backcountry areas. Management of these sites will influence visitor numbers and behavior in the zones intended for low use, and these sites are likely to attract visitors with different trip expectations and management preferences.

The bottom of Table 76 (p. 140) also shows the differences between early trip stops (that tend to be reflected in the intercept results) and total trip stops (mail survey results) related to the transition zone areas. The Front Country Transition sites (43%) are especially heavily used compared to the Passage Transition sites (28%). And while about one third of the intercept respondents' stops included at least one of the transition areas by the time of the survey, this was true of over 70% of the mail respondents. It must be noted, however, due to sampling issues, the intercept survey was more representative of all visitors, and the mail survey was more representative of longer term and experienced visitors who are more likely to access backcountry areas. However, a relatively large portion of visitors use the transition areas that provide access to the backcountry.

In general, the results suggest Bull Valley Gorge and the eleven transition areas need additional management and research attention. Two of the Passage Zone Transition sites were not included as survey sampling points (Wolverine Loop and Egypt Trailhead). These sites should be included in future research. And, the BLM should consider conducting additional analysis of the visitor experiences, use patterns, and impacts in the transition zone areas, and possibly add an additional zone or "subzone" to reflect the unique character of the transition sites. These sites will require additional management actions (site hardening, zoning changes, additional informational and educational resources, etc.) to protect the quality of the experience, minimize backcountry impacts, and retain the viability of the current zoning pattern.

Table 76: High Use Sites by Zone and Use Levels Listed on Both Surveys

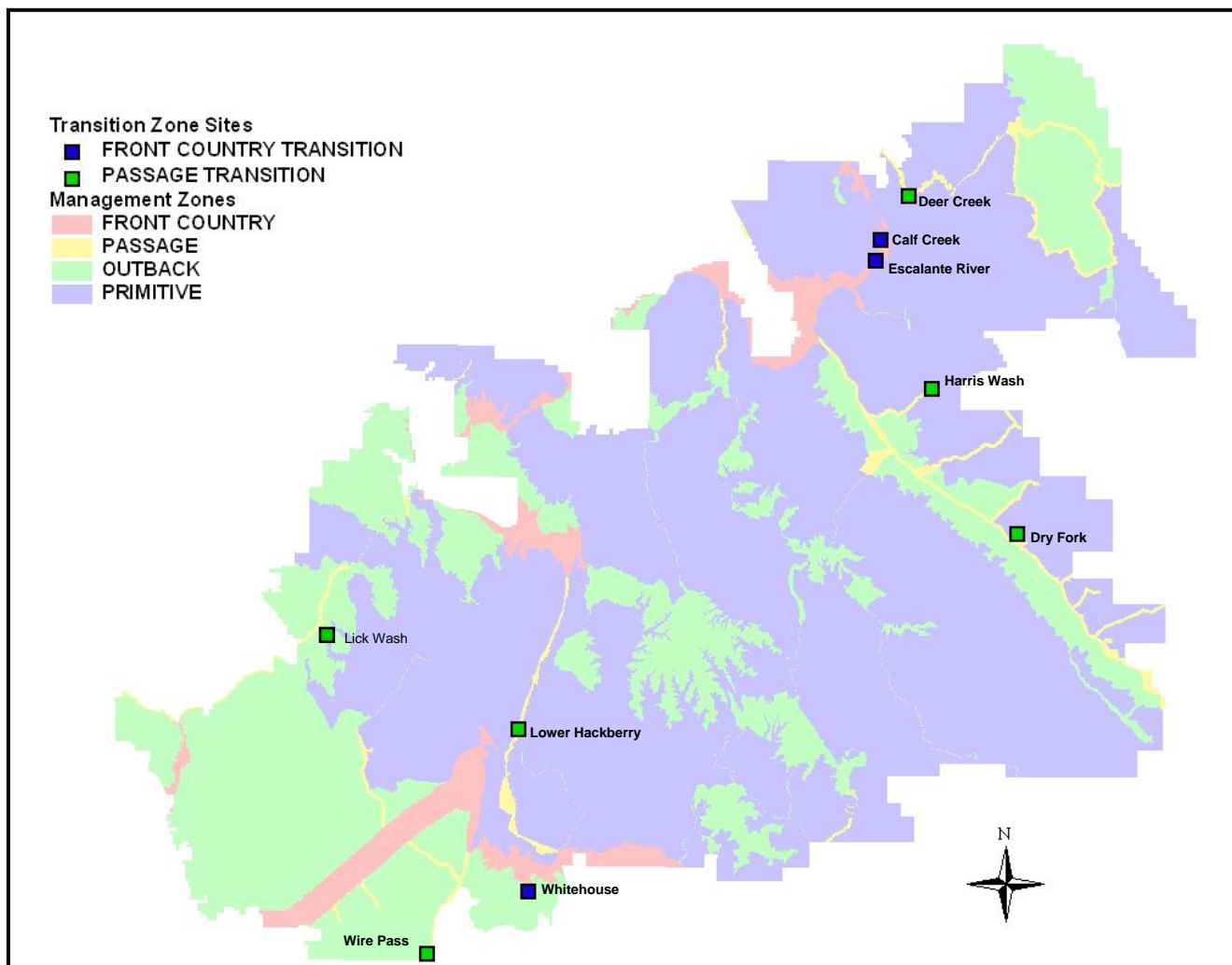|	Use Level					
	Intercept Survey Stops[1]	n	% of Total*	Mail Survey Stops[1]	n	% of Total**
Front Country Zone						
Big Water Visitor Center	VH	113	10%	H	44	6%
Blues Overlook	MH	22	2%	-	-	-
Boulder Visitor Center	VH	226	19%	VH	171	22%
Boynton Overlook	H	42	4%	-	-	-
Calf Creek Campground	H	33	3%	-	-	-
Cannonville Visitor Center	VH	152	13%	H	83	11%
Escalante Visitor Center	VH	338	29%	VH	204	26%
Grosvenor Arch	VH	125	11%	VH	153	20%
Head of the Rocks Overlook	H	42	4%	-	-	-
Kanab Visitor Center	VH	101	9%	MH	22	3%
Paria Contact Station	H	52	4%	H	62	8%
Paria Movie Set	H	92	8%	H	95	12%
Passage Zone						
Burr Trail Pull-off	MH	22	2%	-	-	-
Burr Trail Road	MH	24	2%	H	84	11%
Cottonwood Road Pull-off	MH	30	3%	MH	19	2%
Dance Hall Rock	-	-	-	MH	30	4%
Devils Garden	H	88	8%	VH	134	17%
Johnson Canyon Road Kiosk	MH	29	2%	-	-	-
Left Hand Collet Trailhead	-	-	-	MH	17	2%
Front Country Transition Zone						
Calf Creek Trailhead	VH	152	13%	VH	245	32%
Escalante River Trailhead	H	80	7%	MH	29	4%
Whitehouse Trailhead	MH	28	2%	H	49	6%
Passage Transition Zone						
Deer Creek Trailhead	MH	15	1%	H	31	4%
Dry Fork Trailhead	H	74	6%	H	80	10%
Egypt Trailhead	-	-	-	H	34	4%
Harris Wash Trailhead	-	-	-	H	31	4%
Lick Wash Trailhead	-	-	-	MH	17	3%
Lower Hackberry Trailhead	-	-	-	MH	15	2%
Wire Pass Trailhead	H	62	5%	H	50	6%
Wolverine Loop Road	-	-	-	MH	26	3%

[1]Use level codes: VH = Very High; H = high; MH = moderately high
*n = 1169; **n = 744

Table 76: High Use Sites by Zone and Use Levels Listed on Both Surveys (continued)

	Use Level					
	Intercept Survey Stops	n	% of Total*	Mail Survey Stops	n	% of Total**
Transition Zone Summary						
Total FCT Zone Use	-	260	22%	-	323	43%
Total PT Zone Use	-	161	14%	-	207	28%
Total Transition Zone Use	-	421	36%	-	530	71%

*n = 1169; **n = 744

Figure 24: Map Illustrating Transition Zone Sites in Relation to the GSENM Management Zones
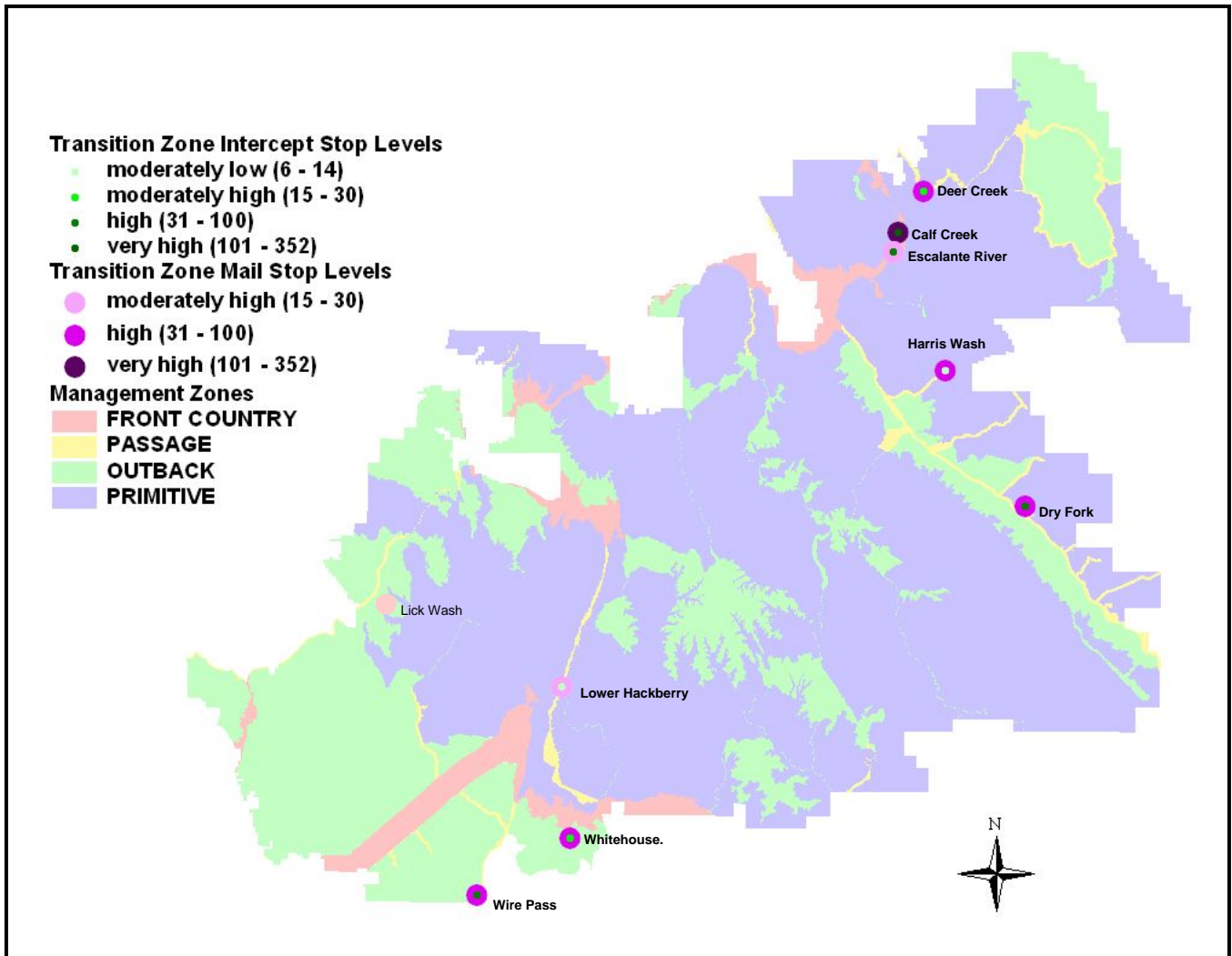
Figure 25: Map Illustrating the Use Levels Found for the Transition Zone Sites

PART V: DISCUSSION AND CONCLUSIONS

During the spring, summer, and fall of 2004, 2,062 visitors were interviewed at overlooks (n = 887), visitor centers (n = 602), and 20 different recreation sites (n = 573) in the Front Country and Passage Zones of the GSENM. Of these respondents, 1,170 agreed to participate in a follow-up mail survey, and 766 of them returned completed surveys. The intercept survey response rate was high (89%), but the mail survey response rate was moderate, as it represents 67% of those who agreed to do the survey, but just 44% of all those who were contacted and qualified to receive a mail survey (n = 1,751).

Future research should replicate the intercept methods and use these results as representative baseline data. The mail survey results add more detailed, but essentially suggestive, findings that tend to over-represent relatively highly committed, interested, and longer term visitors. International and overlook visitors are also somewhat underrepresented in the mail survey results.

General Visitor Characteristics

The GSENM is a national and international tourism attraction. In 2004, group sizes were relatively small (average group size is 2.8 and 90% of the groups had two or fewer people), visit lengths were long (70% expect to stay in the Monument area for two or more days), and 61% of the respondents were first time visitors. When asked what they expected to see, nearly all of the first time visitors used words like "natural features," "landscape," or "scenery." Only 14% of Monument visitors were Utahns, mostly from urban areas (Salt Lake, Utah, and Washington Counties). Nearly two-thirds of the visitors were from other states and 23% were international (Germany, Netherlands, and Canada especially). Two-thirds of the U.S. visitors from outside Utah, and 82% of the international visitors, took a commercial flight to start their trip. Of these visitors, four times as many started their trip in Las Vegas as Salt Lake City. About three-quarters of the overnight visitors stayed in commercial establishments in local communities. This is a transient, non-local, tourism-oriented clientele.

There was also a significant designation effect. About 85% of the visitors made their first visit to the Monument in the eight years since designation (1996 to 2004), including nearly half of the repeat visitors. The vast majority of the visitors' primary reason for visiting the Monument area was recreation, but relatively few said the GSENM was their primary destination; the major destination for most are other national or state parks in the area. And while many visitors knew about the Monument before their trip and claimed to know the managing agency, only about one-third actually named the BLM.

These results indicate the GSENM is an important stop for tourists to Garfield and Kane Counties, and visitation to the Monument increased substantially as a result of its designation. But for 70% of visitors, it is actually a secondary stop along the route visitors take to visit other more established designations like Zion and Bryce Canyon National Parks. This has both positive and negative implications for Monument management and local communities. While the Monument itself has probably not caused a large increase in the number of visitors to the area, Monument designation has clearly increased the average visitor's length of stay and expenditures in the area.

Visitors also have significant informational needs, as many are new to the Monument and are more likely to have investigated national and state parks rather than the Monument itself. Therefore, GSENM visitors may be more likely to have national park-type expectations for roads, information, and services. However, the very general nature of the visitors' expectations for the Monument experience may, to a great extent, be formed and influenced by the sites developed and information provided by the BLM.

The current management plan focuses on providing information and access to relatively few sites on the periphery of the Monument. The goal is to concentrate recreational use and impacts on a small number of acres. The relatively non-specific expectations and tourist-oriented character of the visitors seems to indicate this visitor management approach may be appropriate and effective. Service and overnight needs will also be important factors in visitor satisfaction, and the provision of these needs, and the relationship between Monument staff and local community service providers, will be an important future concern. And finally, it is likely there are distinct differences in the expectations and preferences of first-time and repeat visitors, and visitors from Utah compared to those from other states or countries.

Visitor Images, Expectations, and Satisfaction

In this section, we take a more specific look at the images and expectations of front country visitors and their general level and sources of satisfaction with both the Monument and local communities. There were several questions related to these topics on both the intercept and mail surveys.

Monument Management

On intercept surveys, visitor impressions were very positive and heavily influenced by the scenery; over 83% of the visitors' responses were simply superlative adjectives such as "awesome," "spectacular," and "beautiful." Most others pointed to the unique landscape and natural features of the Monument. About 15% of the responses dealt with management issues, and even here, less than 4% were critical comments.

On the scaled satisfaction question, 97% of the respondents said they were either satisfied or very satisfied, 3% said they were "somewhat satisfied," and less than 1% (nine total respondents) said they were dissatisfied. On the open-ended follow up question, satisfaction was usually related to the physical features, such as the scenery and geology of the areas. Only 3% to 7% mentioned management related factors like visitor services, recreation opportunities, number of people, quiet and solitude, roads, and signage. Forty-two people (2.5%) gave negative responses, mostly related to roads or signage, but 33 of those still said they were satisfied with their overall experience.

The mail survey contained more detailed responses about visitor impressions, and these also tended to be overwhelmingly positive, especially for visitors from outside Utah. On the scaled question, 5% of Utah visitors said they were dissatisfied compared to 3% of the U.S. visitors from other states and literally none of the international visitors. Like the intercept survey, most visitors pointed to the environmental features of the landscape as their sources of satisfaction, but several visitors also pointed to the cultural features. Wilderness, solitude, and lack of development were other key factors in satisfaction ratings, especially in contrast to the busier conditions found at the national parks they visited.

Roads and signs were once again the key management features that elicited both positive and negative comments. While many of the road complaints focused on rough and difficult roads, a few addressed safety issues and more developments like turnouts, restrooms, and campgrounds. Nearly one-fifth of the satisfaction responses addressed information availability and content; these were about evenly split between positive and negative comments. Most of the positive comments addressed Monument staff and visitor center exhibits, while negative comments focused on the need for additional information, clearer signs, and better interpretation.

The mail survey also had detailed questions about visitors' experiences compared to pre-visit expectations. Nearly one-third (31%) said the Monument in general, or a specific area on the Monument, was different than they expected. Surprisingly, the percentage of first time visitors (35%) was only a little higher compared to repeat visitors (27%). Nearly one-third of the 267 open-ended responses to this question addressed the Monument as a whole, with 38 positives comments, 24 neutral comments, and nine negative. Like visitors' general impressions, most of the positive comments addressed the beauty, landscape, size, geology, and flora of the Monument. Neutral comments expressed surprise at the size or climate, or simply that it was different. The few negative comments received cited problem with roads, information, people, wildlife, or the Monument's size.

This general pattern was repeated for specific geographic areas as well, but with a little more specificity in negative comments—like crowding at Calf Creek and Escalante River Trailheads, lack of information or signs at Dry Fork or along Cottonwood Road, and the non-natural character of the Paria Movie Set. However, negative comments were few and often balanced by positive comments, such as the people who liked the Paria Movie Set and those who enjoyed the people they saw in the Escalante Canyons area. In general, aside from a few site specific elements, these comments tend to mirror those discussed above: people have very few complaints, but roads, signage, and information availability drew the most negative comments.

This pattern was also found in the results of the Importance-Performance (I-P) analysis. Management areas needing the most attention are wildlife, directional signs to Monument destinations, and Monument trail markers. Secondary areas of concern are interpretation and natural history information, signs to visitor centers, and information about recreation opportunities. And even though roads were not included in I-P analysis, it seems this may be an informational issue as well. While the BLM has little control over some of these factors, like weather, road conditions, distances between sites, and others, these can become part of a general informational approach for the Monument. Research shows satisfaction is often increased as visitor experiences meet visitor expectations, and while new roads, paving, and pullouts on the Monument may not be economically feasible or meet the goals of the Monument plan or agency mandate, better information can be provided to tell visitors the challenging conditions and distances they can expect. This approach can increase visitor preparedness and satisfaction, and warning signs and information can also be used strategically to reduce visitation in primitive and outback zones. In this way, signs and information can increase visitor safety, improve experiences, reduce impacts, and generally help meet Monument zoning goals.

Local Communities

Visitor satisfaction with their local community experiences was also high, but not as high as for the Monument itself: 90% of the respondents were satisfied or very satisfied with visitor services in local communities, 7.6% were somewhat satisfied, and 2.5% were dissatisfied. Most of the 1,343 who gave reasons for their satisfaction ratings were pleased, especially with the friendly and helpful service of local people (n = 602). Negative comments identified by some of the respondents addressed limited service availability (n = 45), gas/food services (n = 27), limited business hours (n = 21), and lack of information (n = 19).

Community satisfaction questions on the mail survey were divided into satisfaction with "service workers" and "quality of services." Responses to the scaled items were similar to the intercept results, with about 90% satisfied or very satisfied and 2% to 3% dissatisfied. Satisfaction with service quality was lower, however, as only 30% were "very satisfied," 56% "satisfied," and 11% "somewhat satisfied," compared to 49%, 42%, and 6% respectively for satisfaction with service workers. On the open-ended follow up question for service workers, 96% of the comments were positive; of the 556 comments, only 20 were critical of service workers in general, 16 addressed BLM service workers, and 13 addressed specific private sector services. While the private sector comments covered a broad range of issues, most BLM related comments addressed visitor centers, hours of operation, amount of information, and staff friendliness. Of the 469 respondents to the quality of services follow up, 89 provided mixed positive and negative responses and 20 simply made negative responses. Most negative comments addressed gas and food issues, especially lack of options and quality of food, poor or limited selection, high prices, limited hours of service and Sunday closures.

In general, visitors felt service workers were friendly and helpful, but information availability and visitor center hospitality could be improved. The availability and type of services seems to be the greatest concern, especially related to the lack of diversity, cost, and hours of operation. These factors may be related to the relative newness of visitor service demands in many of the Monument host communities.

The Importance-Performance (I-P) results were similar. Eating and drinking establishments, grocery and convenience stores, and emergency medical services received high importance but low satisfaction ratings. The number, diversity, and hours of operation for these services need to be reviewed and perhaps expanded. Several other services that had low satisfaction scores, but also low importance scores, should also be reviewed: guides and outfitters, privately owned campgrounds, sporting goods and outdoor equipment stores, and souvenir and gift shops. Low importance ratings for these services are probably based on the relatively specific nature of the service, and do not reflect the changing patterns of visitation due to the Monument. Traditional services offered before the Monument was created, such as lodging services and government campgrounds, were highly rated. Demands for certain services like outfitters and guides and emergency medical services are probably increasing. In addition, the Monument's effect of holding visitors in the area longer has increased overnight stays by visitors in local communities with less experience with tourism and visitor services, like Cannonville, Boulder, and Escalante. In order to meet visitor satisfaction and community development goals, local officials and business owners should review and evaluate their

tourism and visitor services, and perhaps provide and market more of these low satisfaction services, even though some of the importance scores are also relatively low.

Monument Sites

One purpose of the study was to investigate visitor characteristics, attitudes, use levels, and crowding perceptions at various developed and dispersed sites in the Front Country and Passage Zones. On the intercept survey, the number of visitors interviewed at each site was tallied, and the visitors were asked use, visitor contact, and crowding questions about that site. On the mail survey, visitors were asked detailed satisfaction questions and the actual sites where they stopped during their trip, including sites that were not included in the intercept sampling process. The 20 Monument recreation sites where the visitors were interviewed were further categorized by "site type": trailheads, scenic attractions, roads, and campgrounds. To identify visitors' stops and compare these to the Monument travel management zones, a "mapping exercise" was included that mapped the number of stops in relation to the zones identified in the Monument plan. (Due to discrepancies in the intercept and mail survey mapping exercises, only the mail survey findings were used in the final use level and mapping results.)

Monument Use Levels

Based on mail survey results of all stops made, the sites receiving the most use were: Calf Creek Trailhead (33%), Escalante Visitor Center (26%), Boulder/Anasazi Visitor Center (22%), Grosvenor Arch (20%), Devils Garden (17%), Paria Movie Set (12%), Cannonville Visitor Center (11%), and Dry Fork Trailhead (10%). The next highest use areas were Paria Contact Station (8%), Big Water Visitor Center, Whitehouse Trailhead, and Wire Pass Trailhead which were all recorded stops by 6%, Escalante and Deer Creek Trailheads (4% each), and Kanab Visitor Center (3%). Eleven percent of the mail survey respondents made stops somewhere along the Burr Trail Road. For those who visited Monument sites, visitor centers, trailheads, and scenic attractions received the highest amount of use.

Due to the mail survey response rate, these numbers can not be considered exact; they are probably high estimates of visitor use, because mail survey respondents tended to be longer term visitors and more active than the typical visitor. And while it is difficult to directly compare the mail survey with intercept survey results for each site, the relative level of use between the two survey measures is similar. For visitor centers, Escalante was the highest intercept site, followed by Boulder (Anasazi State Park), Big Water, Cannonville, and finally Kanab. The top Monument sites for intercept surveys were Calf Creek, Grosvenor Arch, Paria Movie Set, Devils Garden, Escalante River Trailhead, Wire Pass Trailhead, Dry Fork Trailhead, and various stops along the Burr Trail Road. The major differences in the two use estimates is because more intercept respondents were included at Escalante River Trailhead, Johnson Canyon Road Kiosk, and the Cottonwood Road pull-off compared to use levels suggested by the mail survey. In each case, however, these three sites had higher visitation rates on the intercept mapping exercise, indicating there may have been a recall problem on the mail survey, especially for the kiosk and road pull-off stops, as these tend to be relatively quick stops and may not have been as memorable as many of the other Monument sites.

Also, fewer visitors were intercepted at the Deer Creek and Harris Wash Trailheads then the mail survey results suggested. The reasons for intercept sampling differentials for the trailheads are relatively minor and could have been random sampling error, such as a few days of bad weather, or mail survey response bias, but the actual use levels are probably slightly higher than sampling suggests at Deer Creek and Harris Wash Trailheads and lower at Escalante River Trailhead. Smoky Mountain Road, Lower Hackberry, and Left Hand Collet Trailheads receive very little use based on both use estimate approaches.

There were also three Passage Zone sites, Egypt Trailhead, Wolverine Loop Road, and Dance Hall Rock, that were identified by between 3% and 4% of the mail survey respondents on the mapping exercise but not included in the intercept sampling design. Future sampling should include these areas, and their management zone designation should be reviewed as well. For example, since Dance Hall Rock was visited by only 4% of the visitors, and is very remote and near the end of Hole-in-the-Rock Road, most of the visitors to the area are probably experienced traveling in the Monument. The BLM may want to indirectly dissuade travel beyond Dry Fork Trailhead, with warning signs and the like, to reduce use to this relatively remote area, and further advance the concentration zone approach used in the management plan

Use in Travel Management Zones

All of the "high" use sites are located within the Front Country and Passage Zones, except Bull Valley Gorge which is located entirely in the Outback and Primitive Zones. It was evident, however, the primary recreation opportunities at 11 of the front country sites actually occur in adjacent Outback or Primitive zone areas: three are in the Front Country zone (Calf Creek, Escalante River, and Whitehouse trailheads) and eight in the Passage zone (Wolverine Loop Road, Lick Wash, and six trailheads: Deer Creek, Dry Fork, Egypt, Harris Wash, Lower Hackberry, and Wire Pass). Due to the potential for backcountry impact and visitor conflicts, we suggest these sites receive additional management and research attention. Thus, two additional classifications or transition area "subzones" were identified for analysis: a Front Country Transition zone and a Passage Transition zone.

While more research is needed, some minor visitor use differences were found in the zone analysis. For example, Front Country and Front Country Transition zones get a larger percentage of first time visitors (64% and 56% respectively) compared to the Passage and Passage Transition zone (44% and 42% respectively). Additionally, Front Country and Passage Transition zones had the higher percentage of international visitors (24% and 23% respectively) compared to Passage or the Front Country Transition zones (16% and 12% respectively).

In general, however, results suggest Bull Valley Gorge and the ten "transition zone" sites need additional management and research attention. The BLM should consider conducting additional analysis of the visitor experiences, use patterns, and impacts in the transition zone areas, changing the zone classification for Bull Valley Gorge, and adding an additional zone or "subzone" to reflect the unique character of the transition sites. These sites will require additional management actions (site hardening, zoning changes, additional informational and educational resources, etc.) to protect the

quality of the experience, minimize backcountry impacts, and retain the viability of the current zoning pattern.

It was also interesting to note none of the mail survey respondents said they visited the overlooks, and since some of the intercept mapping respondents said they had visited the overlooks (between 2% and 4%), the mail survey results are probably due to the memory recall problems. Again, this suggests certain sites are not as memorable as others, and future survey design needs to be changed to encourage inclusion of all sites, including quicker or less distinctive sites like overlooks and roadside stops. At a minimum, however, overlook stops are rare among visitors who make stops on the Monument itself, and since the overlooks get a high amount of use in general, it probably suggests that typical overlook visitors have very different use patterns compared to Monument specific visitors.

Crowding

Since the emphasis of the Monument plan to provide most recreational opportunities on relatively few acres in the Front Country and Passage zones, it is also important to investigate and evaluate the role of crowding in the main visitor use/attraction areas. While concentrating use can have major benefits for reducing environmental impacts and management effort, the social and psychological quality of the visitor experience may be impacted if use levels lead to perceptions of crowding and reduced satisfaction levels.

Crowding is more than the number or density of other people visitors see—it is the individual's negative psychological interpretation of the number of people they encounter. In addition to visitor numbers, it can also be influenced by the locations of contacts, behaviors of others, perceptions of conflicts, and many other factors. Due to the potential management implications and the complexity of the concept, a series of questions were asked of visitors interviewed at all survey intercept sites: 1) number of other people seen, 2) how that number compared to their expectations, 3) feelings about the number of people seen, 4) effect the number of people seen had on overall visitor experience, and 5) if use restrictions were needed.

Overall, visitors saw an average of about nine people at the site where they were interviewed. This varied greatly, however, depending on the type of site and day of visit. The total number of other people respondents saw ranged from zero to 150, means varied from one to 40, and the medians ranged from .5 to 25, indicating a few high contact days influence the mean numbers of others that people were seeing. The site type medians were highest for campgrounds (20), followed by trailheads (10), scenic attractions (6), overlooks (6), visitor centers (4), and roadside stops (3). The top seven sites, which accounted for most of the higher number of other people visitors saw, were: Calf Creek Campground (median = 40), Calf Creek Trailhead (34), Whitehouse Campground (30), Devils Garden (16), and Cottonwood pull-off, Anasazi Visitor Center, and Whitehouse Trailhead (14). The medians for all other sites were under ten.

There was a great deal of diversity in responses to the expectation question, but little indication of crowding in general. A majority of visitors felt the number of other people they saw was about what they expected (52%), while 22% saw less than they expected, and 19% saw more than they expected. At trailheads and campgrounds there was a tendency for visitors to see more people than they expected compared to those who

said they saw less than they expected, and it was the opposite at scenic attractions, roadside stops, visitors centers, and overlooks. There were eleven specific sites where expectations were exceeded for more than 20% of the visitors, but, as we will see below, these expectations rarely seemed to result in perceptions of crowding.

Monument-wide, visitors overwhelmingly (81%) said they saw "about the right number of other visitors"; only 11% said they saw too many and 9% said they saw too few. Indications of potential crowding (less than 80% "about right" and more than 15% "too many") were found at five sites: Calf Creek Trailhead (27% saw too many people), Calf Creek Campground (26%), Devils Garden (25%), Dry Fork Trailhead (19%), and Whitehouse Trailhead (18%). The next highest was Escalante River Trailhead (15%) and Wire Pass (14%). Other than Calf Creek and Devils Garden, however, these numbers are not very high, and all these sites also had some of the highest ratings where visitors said seeing other people "added to" the quality of their experience. Overall, 80% of the visitors said the number of other visitors they saw had no effect on their experience, and only 5% said the number of people they saw detracted from the quality of their experience. Similarly, 89% of the visitors said there was no need to restrict visitor use levels and 2% said they did not know. Of the 51 who said they thought there ought to be restrictions, only 15 people (3%) said it was because there were too many people.

The conclusion from these results is that crowding is not a management concern and will not likely be a Front Country concern in the future. And while the Calf Creek and Devils Garden sites seem to indicate approaching levels where use limitations may be needed, even here crowding and other visitor problems are probably related to many factors other than just use numbers, *per se*, and should be addressed using alternative management tools, like site design, educational approaches, and others, if research indicates crowding perceptions or other problems are increasing. This conclusion is based on Monument-wide considerations, rather than simply site specific crowding perceptions. The primary consideration is retaining the Monument travel management goals and reducing potential for future displacement.

Currently, there seems to be little evidence for displacement of past Monument visitors. Almost two-thirds of repeat visitors who had first visited the Monument before 1996 said the number of their visits since the designation had stayed the same, over one-quarter said they increased, and less than ten percent said their visits had decreased. This is a crude measure and does not mean some displacement has not occurred, or that visitors have changed use patterns to avoid crowding. In fact, there is anecdotal evidence that local community residents have been displaced from the Calf Creek and Escalante River Trailhead areas. While it is likely this displacement has occurred, limiting use at Calf Creek will not change this—it would be impossible to replicate traditional visitor use patterns. It would be more problematic, however, to shift the existing high use levels at Calf Creek to other areas that now get used by the local or solitude searching visitors who were previously displaced. This would cause additional displacement and spread impacts, yet would not change the displacement at Calf Creek.

The whole point of the travel management plan is to avoid such a dispersal pattern of use and impacts. Thus, the general management strategies suggested are to use site design and indirect management tools (signs, education, etc.) to address existing social and biophysical impacts at the Calf Creek and Devils Garden areas, and even to encourage use to continue to grow in these areas, to limit future use dispersal. In fact, this

is recommended as a general visitor management approach: encourage visitation at the current high use sites, in an effort to limit future displacement of visitors from higher use to lower use areas that provide similar opportunities within the Monument. This model applies to trailheads, campgrounds, arches, slot canyons, dinosaur fossil areas, and other geologic and scenic attractions.

This conclusion is supported by several social and managerial aspects of the Monument: the tourist-oriented visitor characteristics, the generally low perceptions of crowding, the very high satisfaction levels in all areas of the Monument, and the travel management plan itself, which specifically designated the Front Country and Passage Zones as the focal areas for visitation. And problems with visitors due to use restrictions has already occurred in the Paria Canyon-Vermillion Cliffs Wilderness, which has experienced increased use levels as a result of caps placed on hikers to the "Wave" area of the wilderness. This displacement from the historically more heavily used northern region of the wilderness to southern area has displaced recreationists, and resulted in significantly more cumulative recreational impact than would have occurred in the Wave area that had already been impacted. In general, it is recommended that it would be better to better manage visitors and impacts in areas that already get heavy use, implement management to reduce impacts, but not number of visitors in those areas, and indirectly reduce the dispersal of visitors.

Visitor Centers

Approximately 29% (n = 602) of visitors were interviewed at one of the five Monument visitor centers. Visitors were asked about their source of information about the center, reason for stopping, exhibits they viewed, if they learned something and could identify the center's theme, information availability, and contacts with staff. It is difficult to evaluate effectiveness based on these results, because most of the visitor centers were new and in different stages of development during 2004, but some interesting findings and suggestions for future evaluation emerged from the results.

The visitor centers are heavily used; 81% of the mail survey respondents stopped in at least one visitor center, and 52% said they stopped at more than one visitor center. While these numbers include the Forest Service's Red Canyon Visitor Center and the Paria Contact Station, each visited by 18% of the respondents, each of the five Monument visitor centers were visited by at least 10% of the respondents. Escalante was the most heavily visited by a wide margin (61%), followed by Boulder (Anasazi State Park) (34%), Kanab (26%), Cannonville (23%), and Big Water (11%).

For all visitor centers except the Boulder Visitor Center-Anasazi State Park, most respondents found out about the center from road signs as they were driving by. For Boulder, however, this was true of only 27% of the visitors, while most found out from published sources (maps, guidebooks, or brochures) or from a travel agency or other information center. This probably reflects the more established nature of the Boulder Visitor Center-Anasazi State Park compared to the other newer and still developing Monument visitor centers at the time of data collection.

This theme was also evident in the reasons people stopped at the visitor centers. Most stopped to get general information about the area or the Monument, recreation opportunities, or road and weather conditions. But for Boulder Visitor Center-Anasazi State Park visitors, nearly three-quarters stopped specifically for the archeological

displays and ruins, thus focusing on the interpretive content of the center rather than general information needs. The Boulder Visitor Center-Anasazi State Park also had the highest per cent of visitors (85%) who viewed displays, compared to a range of 33% for the Escalante Visitor Center and 66% for the Big Water visitor Center. Again, these findings probably reflect the longer, more established character of the Boulder Visitor Center-Anasazi State Park, with Big Water being the second most established visitor center. In general, the results for the Boulder Visitor Center-Anasazi State Park, can provide goals for evaluating the other Monument visitor centers.

The pattern of results for what visitors' felt they learned was similar, but less distinctive. Based on visitor self evaluations, the most learning took place at the Big Water Visitor Center with 74% of visitors saying they learned something from the displays. Learning at the Boulder Visitor Center-Anasazi State Park was second (69%), followed by the Kanab (53%), Cannonville (51%), and Escalante (48%) Visitor Centers. The Big Water Visitor Center was the first of the Monument's four new visitor centers to be fully established and functioning at the time of data collection. In addition to time of establishment, the result of the most learning at Big Water probably also reflects visitors' high level of interest in dinosaurs.

Visitors' impressions of display quality, however, followed a totally different pattern. Cannonville was rated highest (72% "very good"), followed by Kanab (69%), Bigwater (67%), Boulder Visitor Center-Anasazi State Park (63%), and Escalante was very low (25%). The Escalante Visitor Center displays were temporary, primarily just colorful photos of Monument features, but it is unclear why the ratings for the well-established Boulder Visitor Center-Anasazi State Park were similar to the visitor centers with new and sometimes even temporary displays. It is possible the Boulder Visitor Center-Anasazi State Park attracted more return visitors who were already aware of the existing exhibits, in other words, a more experienced and "tougher" audience to impress. This is supported by the visitors' identification of the visitor center themes. Nearly all visitors (94%) correctly identified the primary theme of the Boulder Visitor Center-Anasazi State Park, and while the result for Big Water was nearly as high (87%), the other centers were much lower, ranging from 33% for Cannonville to 19% for Kanab. But again, the mixture of temporary and non-thematic displays probably explains the discrepancy, and results for the Boulder Visitor Center-Anasazi State Park and Big Water Visitor Center can provide benchmarks for evaluating the quality of information and interpretation at the newer visitor centers. For example, based on the Boulder-Anasazi State Park and Big Water results, about 90% of the visitors should be able to identify the primary theme at each visitor center.

Finally, 86% of the visitor center respondents said they had contact with at least one staff member, and 87% said this contact "increased" or "greatly increased" the quality of their overall experience with 12 % indicating the contact had "no effect" on their experience. Interestingly, the four new visitor centers had over 90% contact rates, while the Boulder Visitor Center-Anasazi State Park had only a 66% contact rate, and 31% of those who had contact said the contact had no effect on their experience. The Boulder Visitor Center-Anasazi State Park also had the lowest rate of visitors who found the information they got was "useful for the rest of their trip."

These findings are obviously oriented more toward trip information than the quality of interpretation, and is probably also related to building design and visitor motivation. Compared to the other visitor centers, Boulder Visitor Center-Anasazi State Park visitors were more likely to stop for interpretive information rather than general trip information. Additionally, the Boulder Visitor Center-Anasazi State Park is well established and fully developed; it has several sections (bookstore, separate museum area, outdoor ruins) and more displays to attract attention than the other centers. The Monument information desk is located somewhat out of sight in the back of the building. While these visitor motivations and design features are unavoidable, there is a lesson for future development of the other visitor centers. Since many GSENM visitors need and seek out general Monument and trip information, at least two of the centers (one on the north side of the Monument and one on the south side) should provide a visible and welcoming front desk design where visitors feel the role of the staff is to provide directions, maps, road conditions, service information, and the like. Given visitation levels, it is recommended, at a minimum, that the Escalante and Kanab Visitor Centers be designed with this need in mind.

Visitor Expenditures and Economic Impacts
To estimate the economic impact of Monument visitors' spending for local communities, mail survey respondents were asked to estimate their group expenditures for the trip. Two sets of analyses were conducted: descriptive statistics of group and individual expenditures, and an input-output analysis to estimate the total effects of these expenditures in different economic sectors in Kane and Garfield Counties.

The average amount spent per group was $495. Average expenditures for groups from Utah were considerably lower ($356) than for visitors from other states ($500) and other countries ($615). This is especially significant since Utah visitor group sizes were nearly twice as large (mean = 4.8) as groups from other states and countries (mean = 2.5). Utah visitors spent an average of $74 per person, compared to $200 for visitors from other states, and $246 for international visitors. Most of this difference was due to lower spending levels for lodging, restaurants, and souvenir shops by Uthans.

IMPLAN was used for the input-output analysis. Calculations were based on an average group size of three, expenditures made by visitors for whom the Monument was their primary destination, and the BLM's estimate of 600,000 annual visitors. Results indicate GSENM visitors spend $20.6 million in Kane and Garfield Counties. This spending directly supports more than 430 full-time equivalent jobs with almost $10 million in employment value added. When considering the ripple effect of this money in the Garfield and Kane County economies, the total impact would be $25 million and more than 500 jobs. Value added effects increases the impact of that money by about $13 million.

Due to visitors' multiple trip destinations and other measurement factors, these figures are just estimates and are probably conservative estimates of the total value of Monument visitation. For example, as noted above, also found was a significant designation effect (i.e., 85% of the visitors made their first visit to the area since 1996). So many of the Monument visitors who may have come primarily to visit national or state parks in the area, may not have made the visit, or would not have stayed in the area

as long, if the GSENM had not been designated. To provide more exact figures, a more detailed economic impact study is needed in the future.

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