DEVELOP IOSCO INC

Community. Synergy. Solutions.

Date: **October 21, 2022**
To: **Consumers Energy**
Public Sector Consulting, Inc.
From: **Develop Iosco, Inc.**
Re: **State of Hydroelectric Dams in Iosco County, Michigan**

Develop Iosco, Inc., the county's economic development nonprofit organization, has reached out to township officials and business owners in Au Sable, Oscoda, Baldwin and Plainfield Townships to determine the economic impact of the Consumers Energy-owned hydroelectric dams in Iosco County. These four dams (Cooke, Foote, Five Channels and Loud) draw tourists from across Iosco County, the state of Michigan and the country each year, as identified by data from the Visitor Use Report from the USDA Forest Service. **We believe that the economic and environmental impact for businesses, residents, and the tourism industry is significant.**

Attached please find an initial response of the impact that any change to Consumers Energy's operation and management of the dams would have to this Northeastern Michigan community. **This sample only represents approximately 1% of the actual impact** because, due to time constraints and lack of resources, a thorough study could not be completed. Most businesses in the County were not able to respond. Businesses in the Oscoda-AuSable area not directly on the AuSable River will also be greatly impacted and those are not quantified here due to time constraints. These include other restaurants, shops, grocery stores, a movie theatre, several other hotels/cottages, convenience stores and gas stations. Also included are letters from local government leaders about the impact to their communities.

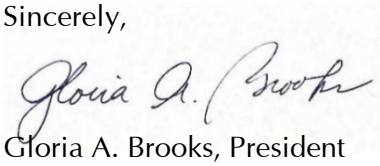
Develop Iosco, governmental leaders, and the community at large believes it is the responsibility of Consumers Energy, the Michigan Public Service Commission, the Michigan Economic Development Corporation, and the US Economic Development Administration to understand the potential for lost business revenue, jobs, and related lost tax revenue that would be in jeopardy if the dams are decommissioned. The only way to fully determine the economic impact on the region, as well as across the state for the 13 dams that are being considered for decommissioning, **is for an independent consultant be engaged through funding of the groups mentioned above to conduct a comprehensive, long-term economic impact study**. This study needs to quantify the impact so there is better understanding of what any proposed changes to operation of the dams would mean to our community.

We also believe that **an additional study that should be commissioned by Consumers Energy is the environmental impact to wildlife and the Au Sable River itself**. Prevention of invasive species and the protection of wildlife such as the bald eagle and trumpeter swan are all part of the impact to the region.

DI is interested in seeking a win-win solution that ensures that the dams continue to be in place and managed in the manner that the community and tourists have depended on for more than 100 years. We anticipate additional letters of response to be submitted by local units of government during the next four weeks during their regularly scheduled meetings and will submit to Consumers Energy when the documents are available.

We respectfully request a response to this letter by January 21, 2023.

Sincerely,



Gloria A. Brooks, President
Develop Iosco, Inc.
810-429-6727 – cell

DEVELOP IOSCO INC

Community. Synergy. Solutions.

Iosco County Initial Response to Decommissioning Hydroelectric Dams on the AuSable River

Hydroelectric Dams Response Team
Develop Iosco, Inc.
October 21, 2022

DEVELOP IOSCO INC
Community. Synergy. Solutions.

INITIAL RESPONSE TO
DECOMMISSIONING OF HYDROELECTRIC DAMS
ON AUSABLE RIVER – IOSCO COUNTY, MICHIGAN
OCTOBER 2022

Overview

Develop Iosco, Inc. is facilitating the countywide Hydroelectric Dams Response Team's response to Consumers Energy related to the potential economic and environmental impact of decommissioning four dams along the AuSable River in Iosco County, Michigan.

These dams are Cooke; Foote; Five Channels; and Loud. We acknowledge that similar concerns exist in the communities across the state of Michigan where 9 other hydroelectric dams are operating.

The data represented below is merely a snapshot and is estimated to be 1% of the actual data that needs to be collected to develop a comprehensive assessment of the economic development impact.

We call for funding be provided by Consumers Energy, the Michigan Public Service Commission, the Michigan Economic Development Corporation, and/or the US Economic Development Administration for an independent consulting firm to conduct comprehensive economic development and environmental impact studies not only for Iosco County, but for the state of Michigan as a whole.

Economic Data

Partial List of Recreation Attractions related to Dams	
Canoers Monument	
Champagne Hill	
Foote Pond Overlook	
Iargo Springs	
Lumberman's Monument	
Old Orchard Park	
Sample of Recreation Business	
Old Orchard Park	
Miles	4
Camp sites	525
Boat Slips	55
Motorless Watercraft Rentals (annual) *(Estimate does not including third-party motorized rentals)*	100
Visitors (annual)	100,000
Partial List of Other Businesses on the AuSable	
Alcona Canoe Rental	
Au Sable Cozy Cabins	
Au Sable River Queen	
AuSable River Resort	
Cozi Cabins General Store	
Desi's Restaurant	

Gordons Bait Shop	
Rollways Canoe Rental	
The Bear Store	
The Curtisville Mall	
The Dam Store	
Samples of Potential Lost Revenue and Jobs	
Restaurant A	
Annual Revenue	$ 1,000,414
Employees	19
Cottage Rental A	
Annual Revenue	$ 140,000
Employees	3
Visitors	200
Realtor A	
Sales (annual)	$ 1,200,000
Employees	10
Sample of Residential Impact	
Seven Mile Hill Property Owners Association	
Shoreline (feet)	1,500
Docks	32
Boat Slips	64
Families	78
Individuals (based on # of families)	624

Economic Impact of Visits to Huron Manistee National Forest

A copy of the July 2022 Visitor Use Report for Huron Manistee National Forest, which contains the AuSable River, is attached. The report is routinely commissioned by the USDA Forest Services. Their National Visitor Use Monitoring (NVUM) program provides reliable information about recreation visitors to national forest system managed lands at the national, regional, and forest level. Some highlights from this report include:

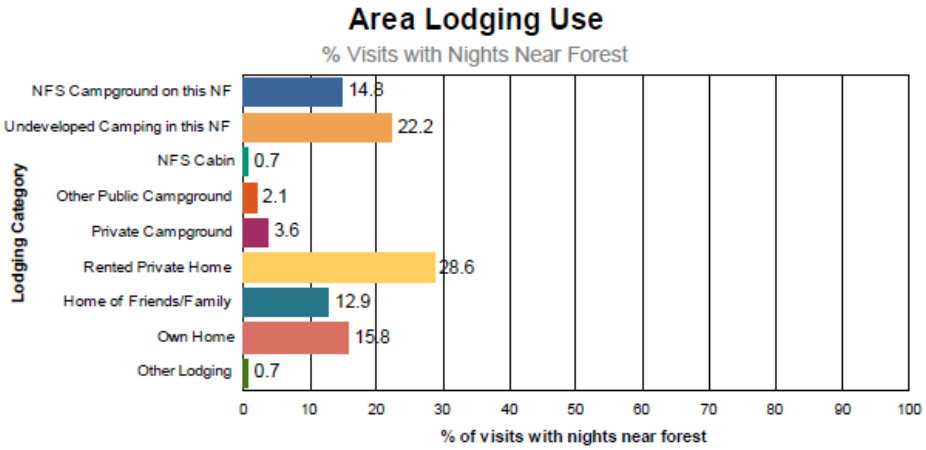
- Annual Estimated national forest site visits: 1,758
- Average Site Visit Time: 15.9 hours
- Median Site Visit Time: 6 hours
- Main Activity – Fishing: 28.1%
- Main Activity – Viewing Natural Features: 19.4%

Page 26 of the report provides the following economic impact data:

National Visitor Use Monitoring Results — Huron Manistee NF (FY 2017

Table 16. Trip Spending and Lodging Usage

Trip Spending	Value
Average Total Trip Spending per Party	$299
Median Total Trip Spending per Party	$120
% NF Visits made on trip with overnight stay away from home	43.0%
% NF Visits with overnight stay within 50 miles of NF	38.8%
Mean nights/visit within 50 miles of NF	3.2
Area Lodging Use	**% Visits with Nights Near Forest**
NFS Campground on this NF	14.8%
Undeveloped Camping in this NF	22.2%
NFS Cabin	0.7%
Other Public Campground	2.1%
Private Campground	3.6%
Rented Private Home	28.6%
Home of Friends/Family	12.9%
Own Home	15.8%
Other Lodging	0.7%



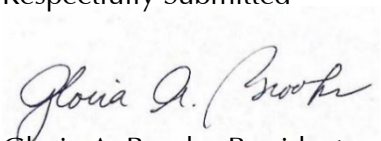
This data partially quantifies the economic impact of proposed changes to the hydroelectric dams' operations. If 1,758 visits to the forest are eliminated, the economic cost to the community would be more than $525,000. This is just a segment of how the community will be negatively impacted.

Conclusion

Comprehensive economic development and environmental impact studies are required to fully understand the impact of decommissioning the four dams along the AuSable River in Iosco County, Michigan and across the state of Michigan.

These studies must be completed before Consumers Energy and the Michigan Public Service Commission make any determinations about the future of hydroelectric dams in Michigan.

Respectfully Submitted



Gloria A. Brooks, President
Develop Iosco, Inc.

On behalf of Develop Iosco's Hydroelectric Dams Response Team Members

1. GayLynn Brenoel, Interim Director, Oscoda-AuSable Chamber of Commerce
2. Gloria Brooks, President, Develop Iosco, Inc.
3. Jamie Carruthers-Soboleski, Finance Director/Controller, Iosco County
4. Todd Dickerson, Economic Improvement Director, Oscoda Township
5. Micah Jordan, Supervisor, Tawas Point DNR
6. Tammy Kline, Superintendent, Oscoda Township
7. Josh Leisen, Huron Pines
8. Fred Lewis, Supervisor, Plainfield Township
9. Christopher Martin, Supervisor, Baldwin Township
10. Ann Richards, Supervisor, Oscoda Township
11. Eric Strayer, Superintendent, Au Sable Township
12. Joshua Sutton, Clerk, Oscoda Township
13. Ben Wiese, US Forest Service, Huron Manistee National Forest

Resource Liaison:
Richard Castle Jr, Northeast Michigan Community Affairs Manager, Consumers Energy

Iosco County
Board of Commissioners

COURT HOUSE
Tawas City, Michigan 48763

October 18, 2022

Consumers Energy

Subject: Letter of Support for State-wide Economic Impact Study

To Whom it May Concern:

The Iosco County Board of Commissioners and its administration are requesting that Consumers Energy fund a state-wide economic impact study prepared by a professional, independent consultant in order to truly see how devastating the removal of the dams would be to not only Iosco County's economy but the State of Michigan's as well. While we do not have the time or funds to conduct this study ourselves due to the Consumers Energy deadline, we feel Consumers Energy has a responsibility to accurately gather all economic data prior to making any decisions on decommissioning. Consumers Energy created this environment over a century ago and our communities have relied heavily on the tourism generated by the dams. While this certainly is a decision that has many factors that need to be considered, the economic impact of decommissioning these ponds is an important one. Because it is so important and due to the fact that Consumers Energy benefited from our natural resources for so many years, Consumers Energy has a duty to obtain an accurate picture of the economic impact on our community and state-wide.

Jamie Carruthers Soboleski

Jamie Carruthers Soboleski., CPA, MBA

Iosco County Controller/Finance Director

jcsoboleski@loscocounty.org

(989)362-4212

Charter Township of AuSable

4420 N. US 23 AuSable, Michigan 48750
Office: (989)739-9169 Fax: (989)739-0696
www.ausabletownship.net

To Whom It May Concern: 10/17/2022

As a Stakeholders of the Hydroelectric Dam in our area, we were invited to attend a meeting with Consumers Energy at the Warrior Pavilion on the 28th of September. At this meeting Stakeholders were given a presentation on the future of Consumers Energy's Hydroelectric involvement in this area, along with possible outcomes.

Our Board would like to take the time to express the importance the Hydroelectric Dams have on our community and on its residents. Not only do the back waters created by the dams offer a recreational opportunity for residents and visitors, but they also have an economic impact that ripples throughout not only our township, but the county as well. People that use the river and ponds to fish, kayak, boat, swim, stay and eat, spend money that is vital to our community businesses to keep going through the year.

We understand that there are decisions that must be made by Consumers Energy regarding the Hydroelectric facilities. Our Township Board on behalf of our citizens hopes that you take into consideration the impact that your decisions will have on the residents that have come to depend on the environment created by your company over the last century.

Eric Strayer

Superintendent

Charter Township of AuSable

Superintendent@ausabletownship.net

(989) 739-9169

October 6, 2022

Consumers Energy

SUBJECT: Letter of Support – Continue Dam Operations on Foote Site Pond

To Whom it May Concern:

As the Economic Improvement Director of the Charter Township of Oscoda, I couldn't be more opposed to decommissioning the Consumers Energy dam on Foote Site Pond. Our community and its small business community absolutely depends on summer tourism. Closure of the Foote Site Dam, and the additional dams located along the AuSable River will have a devastating impact on this community.

The closure will undoubtedly greatly temper enthusiasm for Old Orchard Park. The River Queen will cease to exist, and while not the biggest revenue generator in the Township, it is a destination amenity that many tourist seek out in the summer, but especially for fall color tours. Foote Site Pond is the greatest attraction we have for boaters, local and destination. No boating means the closure of the Damn Store, Desi's Restaurant, and the Cozi Cabins General Store. Home values where the water recedes leaving a baron wasteland will take a huge hit. Those are the direct impacts.

What's the multiplier effect? I would hope that before any real decision is made Consumers Energy commissions a professional consulting firm to perform an economic impact study. As mentioned, the boater community will be gone and campers to Old Orchard will significantly decrease and tourism to Iargo Springs, Monument and Canoers Memorial will all suffer as the scenic views these folks have come to know and love will be forever taken away. While I can't offer a sophisticated impact study and provide empirical data to you, what I am sure of is all these people who travel to Oscoda need the same things: gas, groceries, a place to dine out and sleep for the night(s). This impact may not close all our downtown businesses, but I anticipate additional businesses will close (in addition to those on River Rd) because of the downturn in summer tourism. Those who remain open will certainly suffer from a revenue standpoint.

As you make this important decision, be cautious. Since the closure of Wurtsmith Air Force Base, I can only think of one other event that could rival the closure of your dams for crippling Oscoda Township. What you are proposing is widespread loss of revenue and wealth, devalued property, loss of businesses and jobs ultimately decimating this community. As the Economic Improvement Director, I work tirelessly to bring investment to Oscoda and create a vibrant community atmosphere to raise the prosperity of the community. This job will be near impossible to accomplish if you move forward with the closure of the dams.

Sincerely,

Todd Dickerson

Todd Dickerson
Economic Improvement Director
Charter Township of Oscoda
419-309-7708

Charter Township of Oscoda
110 South State Street
Oscoda, Michigan 48750
Office of Supervisor: (989)739-3211
Office of Clerk: (989)739-4971
Office of Treasurer: (989)739-7471
Office of Superintendent: (989)739-8299
Fax: (989)739-3344

To whom it may concern:

Old Orchard Park campground and a day park named Footesite park in northeastern Michigan are located 8 miles west of the town of Oscoda. The 525 site Campground is situated on the banks of a nine mile long, 1,824 acre impoundment of the AuSable river named Foote Pond. Old Orchard Park is four miles long, owned by Consumers energy and maintained and operated through a lease agreement with the Charter Township of Oscoda.

Old Orchard Park Campground, located two miles to the west of Footesite Park, has been a popular campground destination for over half a century, being situated along the banks of the AuSable waterway, it provides wonderful, picturesque views, fantastic fishing opportunities, watercraft activities and national events such as the AuSable canoe race from Grayling Michigan and ending in the town of Oscoda.

The campground offers; waterfront camping, boat ramp, pavilion, swimming beaches, watercraft rentals, waterfront cabins and yurts and a fishing pier. The campground has 55 boat slips for its campers and guests, a newly re-furbished boat launch area and our popular motorless watercraft rentals, such as row boats and paddle boats available during the summer season months. The campground typically has close to 100 rentals on these crafts yearly. Water activities in the waters of Foote Pond are the number one activity in this campground.

The campground also offers pontoon and jet ski rentals through a third party rental service. This rental company has been renting watercraft throughout the area and is very popular on Foote Pond. You do not have to be a camper at the park to be able to enjoy this rental service.

The campground averages close to 100,000 visitors a season. A big appeal to our campground is not only being in beautiful Northeastern Michigan in close proximity to the Huron National Forest and lake Huron, but Foote Pond. Being able to camp close to this body of water and having close access to your watercraft to enjoy the water above and the river below Foote dam is what the campground staff hears often from its visitors.

Every year the park offers seasonal camping to 240 sites. The waterfront sites are by far the most popular but being close to and able to use and enjoy Foote Pond is one of the biggest reasons people return to this area year after year. Campers, visitors, and day guests travel up from all over Michigan to spend time along the banks and in the

waters of Foote Pond. The revenue generated from visitors to this area benefit local business in town and the surrounding areas who rely on the tourism months and the dollars generated to be able endure through the off season and winter months.

Footesite park is owned by Consumers Energy and maintained and operated by the Charter Township of Oscoda. During the boating season, Footsite park offers a Township maintained boat ramp accessing Foote Pond. This park located on this body of water is so popular that in season, parking is almost non-existent due to all the people putting in watercraft on Foote Pond.

Footesite Park also houses the AuSable river queen which is a paddle wheel powered boat. This boat travels up and down the AuSable river giving in season tours showing off the beauty of Northeastern Michigan and the Huron National Forest area. Footsite park offers shoreline parking, picnic areas, bathroom facilities, bird watching areas, shoreline benches, a pavilion, a small playground and a large sandy swimming beach. This beach is a popular place during the summer months for families to enjoy the water and have cookouts with the picnic facilities.

Footesite Park offers one of the few areas in Michigan where you can see trumpeter swans who nest and breed in this body of water in an area easily viewable from Footesite park. You may also see eagles hunting the waters, various waterfowl and local animals who depend on Foote Pond for survival.

Bird watchers, photographers, both amateur and professional, people who enjoy the colors of fall foliage, canoers and kayakers, fisherman, both regular and ice, all types of watercraft operators and people who come to this area to enjoy the water would be affected by losing Foote Pond. This particular body of water above this particular dam means a great deal to a lot of people in the area and the town of Oscoda.

Further west on River Road and through the Huron National Forest are roadside parks overlooking the AuSable river, sand dunes, trail heads, lumberman’s and canoers memorial monuments, Iargo springs, riverbank trails and smaller campgrounds all along the AuSable river/Foote Pond with views and attractions to be seen and experienced to be understood as to its popularity.

Decommissioning, or removing the dam at Foote Pond and thus the body of water itself would most definitely hurt the tourism and businesses in this area. Old Orchard Campground, Pontoon and boat rentals, canoe and kayak rentals, restaurants and party stores located around Foote Pond including the River Queen paddleboat would be some of the businesses that would suffer, by eliminating a body of water that means and does so much for so many.

Al Apsitis
Charter Township of Oscoda
Parks and Recreation Director

Plainfield Township

WELCOME TO HALE
LAND OF 60 LAKES
PLAINFIELD TOWNSHIP

October 20, 2022

Consumers Energy

Re: Letter of Support for a Statewide Economic Impact Study of the Proposed Hydro Dam Removal

To Whom It May Concern:

The Plainfield Township Board, on Wednesday October 19, 2022, unanimously passed a motion supporting the call by the Iosco County Board of Commissioners for Consumers Energy to undertake the leadership of funding and managing a statewide economic impact study on the potential scenario of the removal of the hydros as currently proposed.
A study of this magnitude and importance is beyond the ability of our communities to shoulder but we would provide any supporting role as may be necessary.

Just to be clear, we do not want to see the impoundments created by these hydros removed. They are an integral part of our environmental and economic community. Since these hydros have been operating here for over 100 years providing clean energy and recreational opportunities for our state, our communities have developed, depending on the natural splendor that the river environment has created. The loss of this environment would be devastating not just for our communities but for the state as a whole. The number of yearly visitors for the river culture alone numbers over 100,000. These are mainly from Michigan but draw worldwide.

We believe that any action, other then their continued operation, on behalf of Consumers Energy with relation to these hydros and their impoundments, taken without the full knowledge and understanding that would be provided by such a study, would be irresponsible.

Cordially,

Fred Lewis – Supervisor
Plainfield Township

CC: File

Seven Mile Hill Property Owners' Association

1975 Duffern Road
Oscoda, Michigan 48750

October 5, 2022

To Whom It May Concern,

We are writing in support of the Charter Township of Oscoda's efforts to support the AuSable River hydro dams and the continued ownership of these by Consumers Energy.

We recognize the enormous contributions Consumers Energy has made to this community and elsewhere in Michigan, starting in the early 1900s when it began building dams. This came as the logging industry was leaving the area and after fires had devastated many communities, including Oscoda Township. Dam construction is credited for saving Iosco County and Oscoda Township.

In the decades since, CE has provided Northeast Michigan with amazing and quality recreational opportunities, serving millions, both through its own facilities and by supporting facilities operated by state and federal agencies.

The Seven Mile Hill Property Owners' Association has held a lease or license from CE to use 1,500 feet of Foote Pond shoreline for boat docking and recreation since 1961. This license currently allows for 32 docks clustered in six groups, providing 64 boat slips and 64 families with water access. Additionally we have 14 households whose residents use the property for non-boat docking, such as a base for canoeing and kayaking, wildlife watching, picnicking, fishing, exercise and more. We conservatively estimate regular use by 624 people. There are other licenses such as ours along the AuSable, as well as campgrounds leased by CE to public entities, including Old Orchard Park and Blue Horizons. Most of the boat ramps on this river are owned by CE. Most of the drive-and-park shoreline fishing sites are owned by CE. All of these facilities would be at risk if CE were to remove the dams or sell to a private operator.

Of even greater importance is the role CE plays in protecting wildlife and the river itself. Foote Dam serves as barrier to invasive species such as the sea lamprey, as well as a barrier to prevent contaminated fish from accessing feeding ponds favored by bald eagles and other species. The bald eagle population has soared under CE's management of the AuSable River!

CE is also responsible for the restoration of a native species to Michigan, that being the trumpeter swan. It helped other groups with such projects as restoring wild rice, providing fish rearing facilities and much more.

We know the efforts CE makes to maintain its hydroelectric plants and are impressed with the company's diligence. Some years ago the undersigned was able to descend into the bowels of Foote Dam to view the turbines, which at the time were approaching their 90th birthday. The condition was amazing! Putting these facilities in the hands of a private entity would put our community at risk of the situation which occurred when the privately-owned dams in Gladwin and Midland counties failed.

Loss of the dams and CE would most certainly impact our property values in a very negative way. It would also destroy an environment which supports a healthy fish and wildlife population.

Obviously CE should not suffer financial losses by this ownership and operation, but we believe legislation could go a long way in requiring the Public Service Commission to approve capital expenditures and rate hikes necessary to keep the status quo. There could also be legislation supporting property tax breaks and much more.

Our association will do whatever it takes for CE to continue to own and operate the hydro dams and note that these also provide a source of environmentally friendly energy.

Thank you for the opportunity to express our opinion.

Sincerely,

Mark A. David
Secretary-Treasurer

The Seven Mile Hill boat docking facility is part of a Consumers Energy Company hydroelectric project licensed by the Federal Energy Regulatory Commission and is open to all members of the Seven Mile Hill Property Owners' Association without regard to race, color religious creed, sexual orientation or national origin.

United States Department of Agriculture

Forest Service

Natural Resource Manager

National Visitor Use Monitoring Program

Last updated:
30 July 2022

Visitor Use Report

Huron Manistee NF

USDA Forest Service
Region 9

National Visitor Use Monitoring
Data collected FY 2017

CONTENTS

1. INTRODUCTION

1.1. Scope and purpose of the National Visitor Use Monitoring program

The National Visitor Use Monitoring (NVUM) program provides reliable information about recreation visitors to national forest system managed lands at the national, regional, and forest level. Information about the quantity and quality of recreation visits is required for national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National Recreation Agenda. To improve public service, the agency's Strategic and Annual Performance Plans require measuring trends in user satisfaction and use levels. NVUM information assists Congress, Forest Service leaders, and program managers in making sound decisions that best serve the public and protect valuable natural resources by providing science based, reliable information about the type, quantity, quality and location of recreation use on public lands. The information collected is also important to external customers including state agencies and private industry. NVUM methodology and analysis is explained in detail in the research paper entitled: Forest Service National Visitor Use Monitoring Process: Research Method Documentation; English, Kocis, Zarnoch, and Arnold; Southern Research Station; May 2002 (http://www.fs.fed.us/recreation/programs/nvum).

In 1998 a team of research scientists and forest staff developed a recreation sampling system (NVUM) that provides statistical recreation use information at the forest, regional, and national level. Several Forest Service staff areas including Recreation, Wilderness, Ecosystem Management, Research and Strategic Planning and Resource Assessment were involved in developing the program. From January 2000 through September 2003 every national forest implemented this methodology and collected visitor use information. This application served to test the method over the full range of forest conditions, and to provide a rough national estimate of visitation. Implementation of the improved method began in October 2004. Once every five years, each National Forest and Grassland has a year of field data collection.

This NVUM data is useful for forest planning and decision making. The description of visitor characteristics (age, race, zip code, activity participation) can help forest staff identify their recreation niche. Satisfaction information can help management decide where best to place limited resources that would result in improved visitor satisfaction. Economic expenditure information can help forests show local communities the employment and income effects of tourism from forest visitors. In addition, the visitation estimates can be helpful in considering visitor capacity issues.

1.2. Methods

To define the sampling frame, staff on each forest classify all recreation sites and areas into five basic categories called "site types": Day Use Developed Sites (DUDS), Overnight Use Developed Sites (OUDS), Designated Wilderness Areas (Wilderness), General Forest Areas (GFA), and View Corridors (VC). Only the first four categories are counted as national forest recreation visits and are included in the visit estimates. The last category is used to track the volume of people who view national forests from nearby roads; since they do not get onto agency lands, they cannot be counted as visits. For the entire sampling year, each day on each site was given a rating of very high, high, medium, low, or no use according to the expected level of recreational visitors who would be

observed leaving that location for the last time (last exiting recreation use) on that day. The combination of a calendar day and a site or area is called a site day. Site days are the basic sampling unit for the NVUM protocol. Results of this forest categorization are shown in Table 1.

In essence, visitation is estimated through a combination of traffic counts and surveys of exiting visitors. Both are obtained on a random sample of locations and days distributed over an entire forest for a year. All of the surveyed recreation visitors are asked about their visit duration, activities, demographics, travel distance, and annual usage. About one-third were also asked a series of questions about satisfaction. Another one-third were asked to provide information about their income, spending while on their trip, and the next best substitute for the visit.

1.3. Definition of Terms

NVUM has standardized measures of visitor use to ensure that all national forest visitor measures are comparable. These definitions are basically the same as established by the Forest Service in the 1970's. Visitors must pursue a recreation activity physically located "on" Forest Service managed land in order to be counted. They cannot be passing through; viewing from non-Forest Service managed roads, or just using restroom facilities. The visitation metrics are ***national forest visits*** and ***site visits.*** NVUM provides estimates of both and confidence interval statistics measuring the precision of the estimates. The NVUM methodology categorizes recreation facilities and areas into specific site types and use levels in order to develop the sampling frame. Understanding the definitions of the variables used in the sample design and statistical analysis is important in order to interpret the results.

National forest visit is the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A national forest visit can be composed of multiple site visits. The visit ends when the person leaves the national forest to spend the night somewhere else.

Site visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time. The site visit ends when the person leaves the site or area for the last time on that day.

A ***confidence interval*** is a range of values that is likely to include an unknown population value, where the range is calculated from a given set of sample data. Confidence intervals are always accompanied by a ***confidence level***, which tells the degree of certainty that the value lies in the interval. Used together these two terms define the reliability of the estimate, by defining the range of values that are needed to reach the given confidence level. For example, the 2008 national visitation estimate is 175.6 million visits, with a 90% confidence interval of 3.2%. In other words, given the NVUM data, our best estimate is 175.6 million visits, and given the underlying data, we are 90% certain that the true number is between 170.0 million and 181.2 million.

Recreation trip is the duration of time beginning when the visitor left their home and ending when they return to their home.

Site day - a day that a recreation site or area is open to the public for recreation purposes.

Proxy - information collected at a recreation site or area that is directly related to the amount of

recreation visitation received. The proxy information must pertain to all users of the site and it must be one of the proxy types allowed in the NVUM pre-work directions (fee receipts, fee envelopes, mandatory permits, permanent traffic counters, group reservations, ticket sales, and daily use records).

Nonproxy - a recreation site or area that does not have proxy information. At these sites a 24-hour traffic count is taken to measure total use for one site day at the sample site.

Use level - for each day of the year for each recreation site or area, the site day was categorized as very high, high, medium or low last exiting recreation traffic, or no exiting use. No Use could means either that the location was administratively closed, or it was open but was expected to have zero last exiting visitors. For example a picnic area may listed as having no use during winter months (120 days), high last exiting recreation volume on all other weekends (70 days) and medium last exiting recreation use on the remaining midweek days (175 days). This accounts for all 365 days of the year. This process was repeated for every site and area on the forest.

1.4. Limitations of the Results

The information presented here is valid and applicable at the forest, regional, and national level. It is not designed to be accurate at the district or site level. The quality of the visitation estimate is dependent on the sample design development, sampling unit selection, sample size and variability, and survey implementation. First, preliminary work conducted by forests to identify and consistently classify sites and access points according to the type and amount of expected exiting visitation is the key determinant of the validity and magnitude of the visitation estimate. Second, the success of the forest staff in accomplishing its assigned set of sample days, correctly filling out the interview forms, and following the field protocols influence the reliability of the results, variability of the visitation estimate, and validity of the visitation descriptions. Third, the variability of traffic counts within a sampling stratum affects the reliability of the visitation estimates. Fourth, the range of visitors sampled must be representative of the population of all visitors. Finally, the number of visitors sampled must be large enough to adequately control variability. The results and confidence intervals will reflect all these factors.

Confidence intervals indicate the reliability of the visitation estimate, given the underlying data. Large confidence intervals indicate high variability in the national forest visit (NFV), site visit (SV) and Wilderness visit estimates. Variance is caused primarily by a small sample size in number of days or having a few sampled days where the observed exiting visitation volume was very different from the normal range. For example, on a particular National Forest in the General Forest Area low stratum, there were 14 sample days. Of these 14 sample days, 13 days had visitation estimates between zero and twenty. The remaining day had a visitation estimate of 440. So the stratum mean was about 37 per day, standard error was about 116, and the 90% confidence interval width is 400% of the mean. Causes for such outlier observations are not known, but could include a misclassification of the day (a high use day incorrectly categorized as a low use day), unusual weather, malfunctioning traffic counter, or reporting errors. Eliminating the unusual observation from data analysis would reduce the variability. However, unless the NVUM team had reason to suspect the observation was incorrect they did not eliminate these unusual cases.

The descriptive information about national forest visitors is based upon only those visitors that were interviewed. Every effort was made to incorporate distinct seasonal use patterns and activities that

vary greatly by season into the sampling frame. The sampling plan took into account both the spatial and seasonal spread of visitation patterns across the forest. Even so, because of the small sample size of site-days, or because some user groups decline to participate in the survey, it is possible to under-represent certain user groups, particularly for activities that are quite limited in where or when they occur.

Note that the results of the NVUM activity analysis DO NOT identify the types of activities visitors would like to have offered on the national forests. It also does not tell us about displaced forest visitors, those who no longer visit the forest because the activities they desire are not offered.

Some forest visitors were counted and included in the total forest use estimate but were not surveyed. This included visitors to recreation special events and organization camps. Their characteristics are not included in the visit descriptions.

Caution should be used in interpreting any comparisons of these results with those obtained during the 2000 - 2003 period. Differences cannot be interpreted as a trend. Several method changes account for the differences, for both visitation estimates and visit characteristics. One key factor is that the first application of the NVUM process was largely a national beta-test of the method, and significant improvements occurred following it. The NVUM process entailed a completely new method and approach to measuring visitation on National Forest lands. Simply going through the NVUM process for the first time enabled forest staff to do a much better job thereafter in identifying sites, accurately classifying days into use level strata, and ensuring consistency across all locations on the forest. These improvements enhanced the validity of all aspects of the NVUM results. Sampling plans and quality control procedures were also improved.

2. VISITATION ESTIMATES

2.1. Forest Definition of Site Days

The population of site days for sampling was constructed from information provided by forest staff. For each site, each day of the year was given a rating of very high, high, medium, low, or none according to the expected volume of recreation visitors who would be leaving the site or area for the last time (last exiting recreation use). The stratum, a combination of site type and use level, was then used to construct the sampling frame. The results of the recreation site/area stratification and days sampled are displayed in Table 1.

Table 1. Site Days and Percentage of Days Sampled by Stratum

Stratum*		Days Sampled	Site Days# in Use Level/Proxy Population	Sampling Rate (%)&
Site Type†	Use Level‡ or Proxy Code§			
DUDS	VERY HIGH	11	42	26.2
DUDS	HIGH	11	186	5.9
DUDS	MEDIUM	12	331	3.6
DUDS	LOW	12	1,593	0.8
DUDS	FE3	6	465	1.3
OUDS	VERY HIGH	1	1	100.0
OUDS	HIGH	6	14	42.9
OUDS	MEDIUM	10	251	4.0
OUDS	LOW	11	901	1.2
OUDS	DUR4	12	1,178	1.0
GFA	VERY HIGH	7	67	10.4
GFA	HIGH	15	511	2.9
GFA	MEDIUM	22	5,079	0.4
GFA	LOW	58	53,480	0.1
GFA	FE3	6	428	1.4
GFA	PTC3	6	520	1.2
WILDERNESS	VERY HIGH	1	1	100.0
WILDERNESS	HIGH	11	48	22.9
WILDERNESS	MEDIUM	11	87	12.6
WILDERNESS	LOW	11	382	2.9
Total		**240**	**65,565**	**0.4**

* Stratum is the combination of the site type and use level or proxy code. Sample days were independently drawn within each stratum.

† DUDS = Day Use Developed Site, OUDS = Overnight Use Developed Site, GFA = General Forest Area ("Undeveloped Areas"), WILDERNESS = Designated Wilderness

‡ Use level was defined independently by each forest by defining the expected number of recreation visitors that would be last-exiting a site or area on a given day. The forest developed the range for very high, high, medium, and low and then assigned each day of the year to one of the use levels.

§ Proxy Code - If the site or area already had counts of use (such as fee envelopes or ski lift tickets) the site was called a proxy site and sampled independent of nonproxy sites.

Site Days are days that a recreation site or area is open to the public for recreation purposes.

& 0.0 - This value is less than five one-hundredths.

2.2. Visitation Estimates

Visitation estimates are available at the national, regional, and forest level. This document provides only National Forest level data. Other documents may be obtained through the National Visitor Use Monitoring web page: www.fs.fed.us/recreation/programs/nvum.

When reviewing the results, users should discuss with forest staff if this forest experienced any unusual circumstances such as forest fires, floods, or atypical weather that may have created an unusual recreation use pattern for the year sampled. Table 2 displays the number of national forest visits and site visits by site type for this National Forest.

Table 2. Annual Visitation Estimate

Visit Type	Visits (1,000s)	90% Confidence Level (%)#
Total Estimated Site Visits*	1,758	±21.0
→ Day Use Developed Site Visits	228	±20.4
→ Overnight Use Developed Site Visits	71	±18.8
→ General Forest Area Visits	1,444	±25.3
→ Designated Wilderness Visits†	14	±31.5
Total Estimated National Forest Visits§	1,204	±22.8
→ Special Events and Organized Camp Use‡	2	±0.0

* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

† Designated Wilderness visits are included in the Site Visits estimate.

‡ Special events and organizational camp use are not included in the Site Visit estimate, only in the National Forest Visits estimate. Forests reported the total number of participants and observers so this number is not estimated; it is treated as 100% accurate.

§ A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

This value defines the upper and lower bounds of the visitation estimate at the 90% confidence level, for example if the visitation estimate is 100 +/-5%, one would say “at the 90% confidence level visitation is between 95 and 105 visits.”

The quality of the use estimate is based in part on how many individuals were contacted during the sample day and how many complete interviews were obtained from which to estimate NVUM numbers and visitor descriptions. Table 3 and Table 4 display the number of visitor contacts, number of completed interviews by site type and survey form type. This information may be useful to managers when assessing how representative of all visitors the information in this report may be.

Table 3. Number of Individuals Contacted by Site Type

Site Type	Total Individuals Contacted	Individuals Who Agreed to be Interviewed	Recreating Individuals Who Are Leaving for the Last Time That Day
Day Use Developed Sites	679	506	409
Overnight Use Developed Sites	180	164	89
Undeveloped Areas (GFAs)	709	571	327
Designated Wilderness	284	273	214
Total	**1,852**	**1,514**	**1,039**

Table 4. Number of Complete Interviews* by Site Type and Form Type

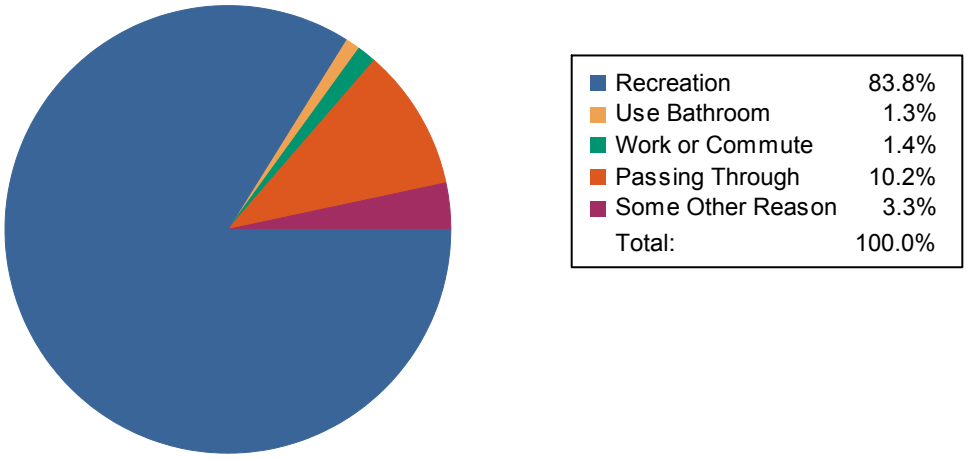
Form Type†	Developed Day Use Site	Developed Overnight	Undeveloped Areas (GFAs)	Wilderness	Total
Basic	150	30	116	71	367
Economic	129	31	104	69	333
Satisfaction	130	28	107	74	339
Total	**409**	**89**	**327**	**214**	**1,039**

* Complete interviews are those in which the individual contacted agreed to be interviewed, was recreating on the national forest and was exiting the site or area for the last time that day.

† Form Type is the type of interview form administered to the visitor. The Basic form did not ask either economic or satisfaction questions. The Satisfaction form did not ask economic questions and the Economic form did not ask satisfaction questions.

Visitors were interviewed regardless of whether they were recreating at the site or not, however the interview was discontinued after determining that the reason for visiting the site was not recreation. Figure 1 displays the various reasons visitors gave as their purpose for stopping at the sample site.

Figure 1. Purpose of Visit by Visitors Who Agreed to be Interviewed



3. DESCRIPTION OF THE RECREATION VISIT

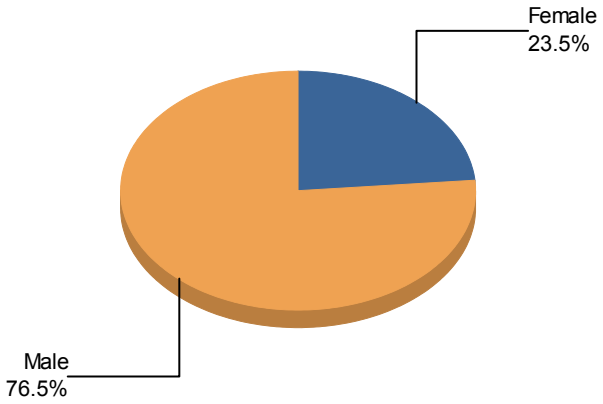
3.1. Demographics

Descriptions of forest recreational visits were developed based upon the characteristics of interviewed visitors (respondents) and expanded to the national forest visitor population. Basic demographic information helps forest managers identify the profile of the visitors they serve. Management concerns such as providing recreation opportunities for underserved populations may be monitored with this information. Table 5, Table 6 and Table 7 provide basic demographic information about visitors interviewed regarding Gender, Race/Ethnicity, and Age, respectively. Table 8 shows the 15 most common reported origins for recreation visitors. A complete list of reported zip codes for respondents is found in Appendix A. Table 9 provides information about self reported travel distance from home to the interview site.

Demographic results show that only about 24% of visits to the Huron - Manistee NF are made by females. Among the racial and ethnic minorities, the most frequently encountered are Hispanics/Latinos (4.1%). The age distribution shows that only about 15% of visits are children under age 16. People over the age of 60 account for 21% of visits. About 25% of visits are from those people living within 25 miles of the forest. About 30% live between 100 and 200 miles away.

Table 5. Percent of National Forest Visits* by Gender

Gender	Survey Respondents†	National Forest Visits (%)‡
Female	1,126	23.5
Male	1,438	76.5
Total	**2,564**	**100.0**



* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

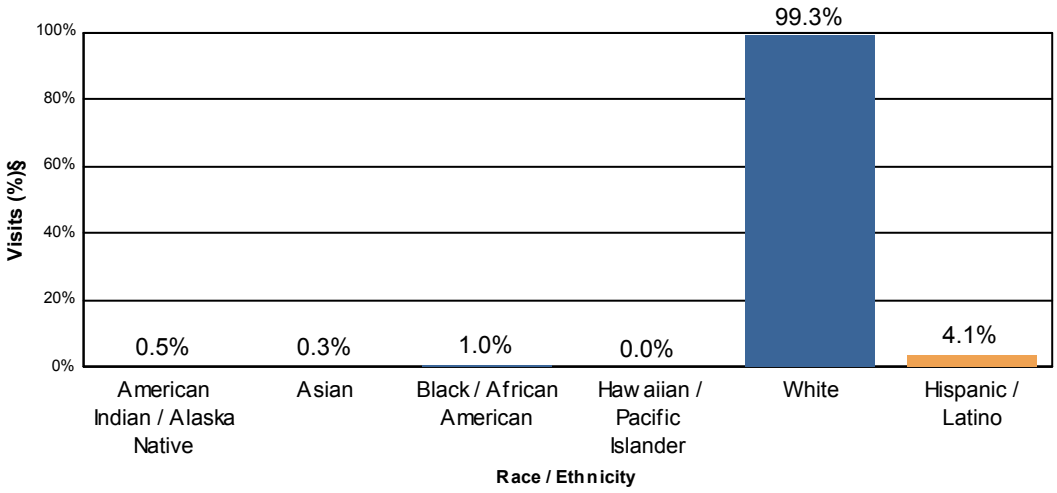
† Non-respondents to gender questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 6. Percent of National Forest Visits* by Race/Ethnicity

Race †	Survey Respondents‡	National Forest Visits (%)§#
American Indian / Alaska Native	11	0.5
Asian	14	0.3
Black / African American	9	1.0
Hawaiian / Pacific Islander	1	0.0
White	946	99.3
Total	981	101.1

Ethnicity†	Survey Respondents‡	National Forest Visits (%)§
Hispanic / Latino	32	4.1



* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

Respondents could choose more than one racial group, so the total may be more than 100%.

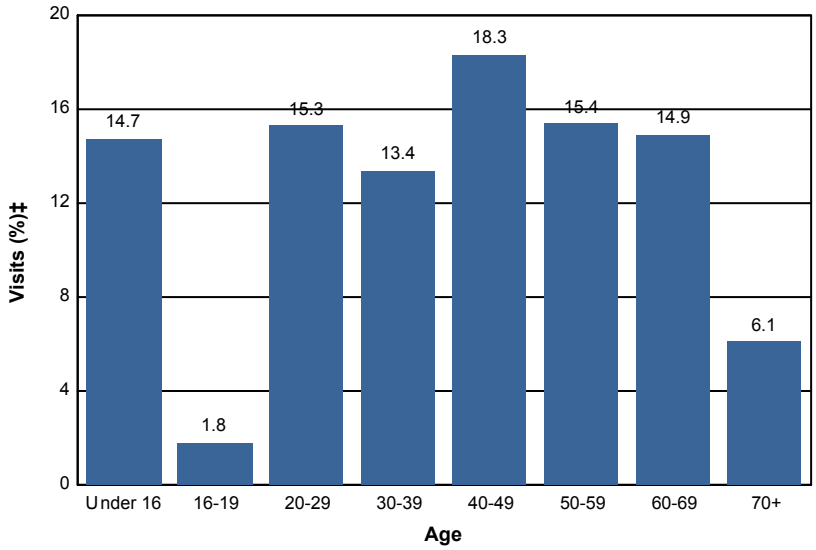
† Race and Ethnicity were asked as two separate questions.

‡ Non-respondents to race/ethnicity questions were excluded from analysis.

§ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 7. Percent of National Forest Visits* by Age

Age Class	National Forest Visits (%)‡
Under 16	14.7
16-19	1.8
20-29	15.3
30-39	13.4
40-49	18.3
50-59	15.4
60-69	14.9
70+	6.1
Total	**99.9**



* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Non-respondents to age questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 8. Top 15 Most Commonly Reported ZIP Codes, States and Counties of National Forest Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
Unknown Origin*			18.4	33
48750	Michigan	Iosco County	13.4	24
49503	Michigan	Kent County	7.8	14
49506	Michigan	Kent County	6.7	12
48739	Michigan	Iosco County	6.7	12
48103	Michigan	Washtenaw County	6.1	11
49504	Michigan	Kent County	6.1	11
48640	Michigan	Midland County	5.6	10
49431	Michigan	Mason County	4.5	8
49707	Michigan	Alpena County	4.5	8
49341	Michigan	Kent County	4.5	8
48603	Michigan	Saginaw County	3.9	7
48730	Michigan	Iosco County	3.9	7
49445	Michigan	Muskegon County	3.9	7
49426	Michigan	Ottawa County	3.9	7

* Includes respondents reporting no ZIP code or an invalid ZIP code.

Table 9. Percent of National Forest Visits* by Distance Traveled

Miles from Survey Respondent's Home to Interview Location†	National Forest Visits (%)
0 - 25 miles	24.9
26 - 50 miles	5.7
51 - 75 miles	8.5
76 - 100 miles	11.9
101 - 200 miles	29.9
201 - 500 miles	17.4
Over 500 miles	1.7
Total	100.0

Note: Blank cells indicate that insufficient data were collected to make inferences.

* National Forest Visits are defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Travel distance is self-reported.

3.2. Visit Descriptions

Characteristics of the recreation visit such as length of visit, types of sites visited, activity participation and visitor satisfaction with forest facilities and services help managers understand recreation use patterns and use of facilities. This allows them to plan workforce and facility needs. The average national forest visit length of stay and average site visit length of stay by site type on this forest is displayed in Table 10. Since the average values displayed in Table 10 may be influenced by a few people staying a very long time, the median value is also shown.

About half of visits to this forest last less than 6 hours, although the average duration is about 20 hours. The median length of visits to overnight sites is about 42 hours, indicating a one or two night stay is common. Over half of visits come from people who visit at most 5 times per year. Very frequent visitors are rare: roughly 9% of visits are made by people who visit more than 50 times per year.

Table 10. Visit Duration

Visit Type	Average Duration (hours)‡	Median Duration (hours)‡
Site Visit	15.3	6.0
Day Use Developed		
Overnight Use Developed		
Undeveloped Areas	15.3	6.0
Designated Wilderness		
National Forest Visit		

* A Site Visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time. Sites and areas were divided into four site types as listed here.

† A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

‡ If this variable is blank not enough surveys were collected to make inferences.

Many of the respondents on this National Forest went only to the site at which they were interviewed (Table 11). Some visitors went to more than one recreation site or area during their national forest visit and the average site visits per national forest visit is shown below. Also displayed are the average people per vehicle and average axles per vehicle. This information in conjunction with traffic counts was used to expand observations from individual interviews to the full forest population of recreation visitors. This information may be useful to forest engineers and others who use vehicle counters to conduct traffic studies.

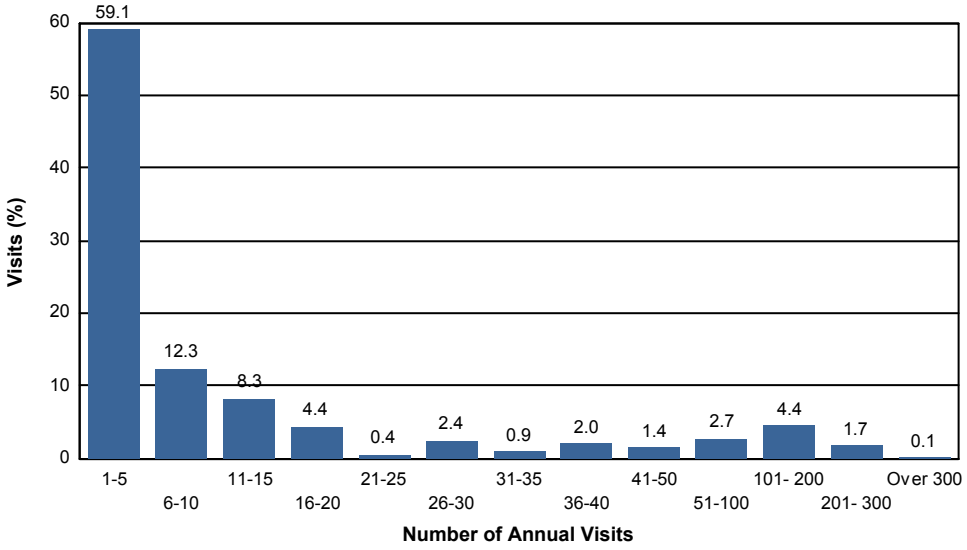
During the interview, visitors were asked how often they visit this national forest for all recreational activities, and how often for their primary activity. Table 12 summarizes the percent of visits that are made by those in each frequency category for this National Forest.

Table 11. Group Characteristics

Characteristic	Average
Percent of visits that were to just one national forest site during the National Forest Visit*	93.5
Number of national forest sites visited on National Forest Visit*	1.1
Group size	2.3
Axles per vehicle	2.3

Table 12. Percent of National Forest Visits* by Annual Visit Frequency

Number of Annual Visits	Visits (%)†	Cumulative Visits (%)
1 - 5	59.1	59.1
6 - 10	12.3	71.4
11 - 15	8.3	79.7
16 - 20	4.4	84.0
21 - 25	0.4	84.4
26 - 30	2.4	86.8
31 - 35	0.9	87.7
36 - 40	2.0	89.7
41 - 50	1.4	91.1
51 - 100	2.7	93.8
101 - 200	4.4	98.2
201 - 300	1.7	99.9
Over 300	0.1	100.0



* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† The first row indicates the percent of National Forest Visits made by persons who visit 1 to 5 times per year. The last row indicates the percent of National Forest Visits made by persons who visit more than 300 times per year.

3.3. Activities

After identifying their main recreational activity, visitors were asked how many hours they spent participating in that main activity during this national forest visit. Some caution is needed when using this information. Because most national forest visitors participate in several recreation activities during each visit, it is more than likely that other visitors also participated in this activity, but did not identify it as their main activity. For example, on one national forest 63 % of visitors identified viewing wildlife as a recreational activity that they participated in during this visit, however only 3% identified that activity as their main recreational activity. The information on average hours viewing wildlife is only for the 3% who reported it as a main activity.

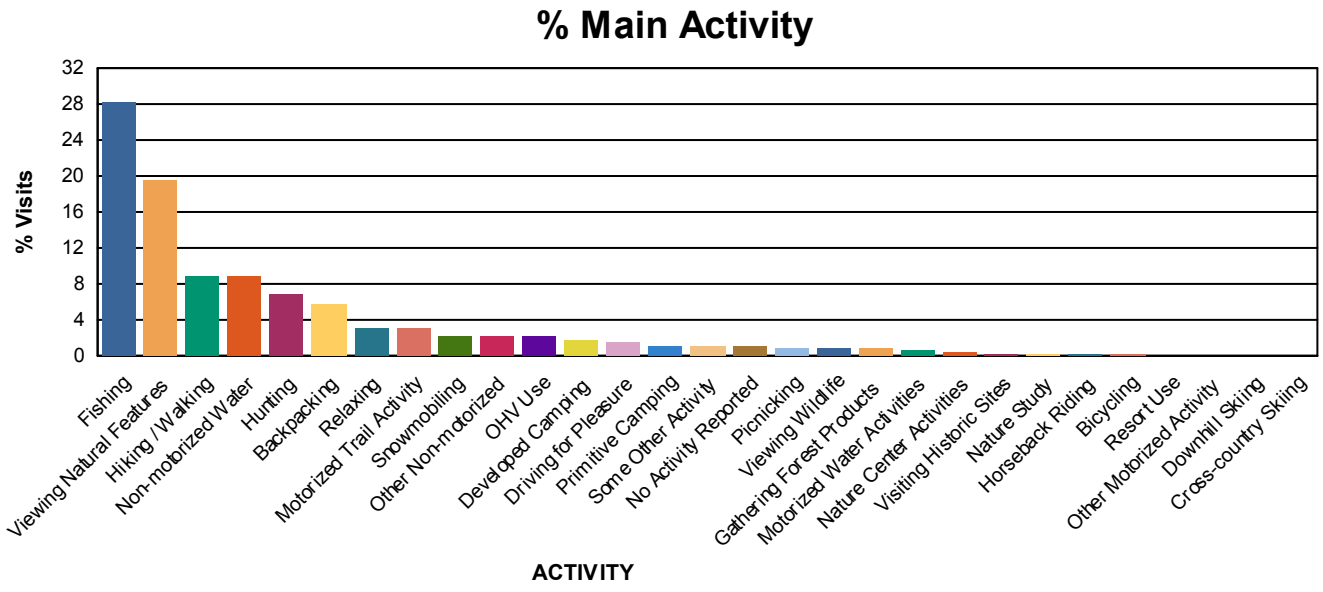
The most frequently reported primary activities are fishing (28%) and viewing natural features (19%).

Use of Constructed Facilities and Designated Areas

About one-third of recreation visitors interviewed were asked about whether they made use of a targeted set of facilities and special designated areas during their visit. These results are displayed in Table 14.

Table 13. Activity Participation

Activity	% Participation*	% Main Activity‡	Avg Hours Doing Main Activity
Viewing Natural Features	58.6	19.4	2.8
Relaxing	39.6	3.0	17.8
Viewing Wildlife	36.2	0.8	4.2
Fishing	32.6	28.1	9.6
Hiking / Walking	29.7	8.9	2.8
Driving for Pleasure	21.8	1.5	4.0
Non-motorized Water	18.4	8.8	4.2
Other Non-motorized	11.0	2.1	6.0
Hunting	7.7	6.9	15.5
Developed Camping	7.3	1.7	54.8
Picnicking	7.0	0.9	37.9
Gathering Forest Products	6.0	0.7	3.0
Backpacking	5.8	5.7	28.6
Nature Center Activities	5.2	0.4	5.2
Visiting Historic Sites	5.1	0.2	2.5
Motorized Trail Activity	4.5	3.0	10.5
Nature Study	3.3	0.1	1.0
OHV Use	2.8	2.1	11.0
Some Other Activity	2.7	1.1	2.5
Primitive Camping	2.3	1.1	27.3
Snowmobiling	2.3	2.2	2.8
Motorized Water Activities	2.1	0.7	5.0
Cross-country Skiing	1.1	0.0	0.0
Bicycling	0.8	0.1	4.4
No Activity Reported	0.3	1.0	
Resort Use	0.3	0.0	4.0
Downhill Skiing	0.1	0.0	0.0
Horseback Riding	0.1	0.1	13.0
Other Motorized Activity	0.0	0.0	0.0



* Survey respondents could select multiple activities so this column may total more than 100%.

‡ Survey respondents were asked to select just one of their activities as their main reason for the forest visit. Some respondents selected more than one, so this column may total more than 100%.

Special Facility Use

Table 14. Percent of National Forest Visits* Indicating Use of Special Facilities or Areas

Special Facility or Area	% of National Forest Visits†
Developed Swimming Site	4.6
Scenic Byway	16.7
Visitor Center or Museum	9.3
Designated ORV Area	0.9
Forest Roads	7.5
Interpretive Displays	6.9
Information Sites	3.4
Developed Fishing Site	15.9
Motorized Single Track Trails	0.4
Motorized Dual Track Trails	17.6
None of these Facilities	51.5

* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Survey respondents could select as many or as few special facilities or areas as appropriate.

4. ECONOMIC INFORMATION

Forest managers are usually very interested in the impact of National Forest recreation visits on the local economy. As commodity production of timber and other resources has declined, local communities look increasingly to tourism to support their communities. When considering recreation-related visitor spending managers are often interested both in identifying the average spending of individual visitors (or types of visitors) and the total spending associated with all recreation use. Spending averages for visitors or visitor parties can be estimated using data collected from a statistically valid visitor sampling program such as NVUM. To estimate the total spending associated with recreation use, three pieces of information are needed: an overall visitation estimate, the proportion of visits in the visitor types, and the average spending profiles for each of the visitor types. Multiplying the three gives a total amount of spending by a particular type of visitor. Summing over all visitor types gives total spending.

About one-third of the NVUM surveys included questions about trip-related spending within 50 miles of the site visited. Analysis of spending data included identification of the primary visitor segments that have distinct spending profiles as well as estimation of the average spending per party per visit. Results from the FY2005 through FY2009 period are available in a report: https://www.treesearch.fs.fed.us/pubs/43869. Results from the FY2010 through FY2014 period are in the publication process.

4.1. Spending Segments

The spending that occurs on a recreation trip is greatly influenced by the type of recreation trip taken. For example, visitors on overnight trips away from home typically have to pay for some form of lodging (e.g., hotel/motel rooms, fees in a developed campground, etc.) while those on day trips do not. In addition, visitors on overnight trips will generally have to purchase more food during their trip (in restaurants or grocery stores) than visitors on day trips. Visitors who have not traveled far from home to the recreation location usually spend less than visitors traveling longer distances, especially on items such as fuel and food. Analysis of spending patterns has shown that a good way to construct segments of the visitor market with consistent spending patterns is the following seven groupings:

1. local visitors on day trips,
2. local visitors on overnight trips staying in lodging on the national forest,
3. local visitors on overnight trips staying in lodging off the national forest, and
4. non-local visitors on day trips,
5. non-local visitors on overnight trips staying in lodging on the national forest,
6. non-local visitors on overnight trips staying in lodging off the forest,
7. non-primary visitors.

Local visitors are those who travel less than 50 road miles from home to the recreation site visited and non-local visitors are those who travel greater than 50 road miles to the recreation site visited. Non-primary visitors are those for whom the primary purpose of their trip is something other than recreating on that national forest. The distribution of visits by spending segment is not displayed in this report. See the appendix tables in the spending analysis report cited above for spending segment distributions.

Almost 48% of visits to this forest are made as a day trip from home rather than a trip that includes an overnight stay. Another 14% are side trips made while the person was on a trip to some other destination. The income distribution results show a slight concentration toward upper middle incomes. About 31% of visits are from households making between $75,000 and $100,000 per year.

Table 15 is no longer displayed here

4.2. Spending Profiles

Spending profiles for each segment are contained in the spending analysis report, as are tables that identify whether visitors to a particular forest are in a higher or lower than average range. It is essential to note that the spending profiles are in dollars per party per visit. Obtaining per visit spending is accomplished by dividing the spending for each segment bythe average people per party for the forest and spending segment. These data are in the appendix of the report.

4.3. Total Direct Spending

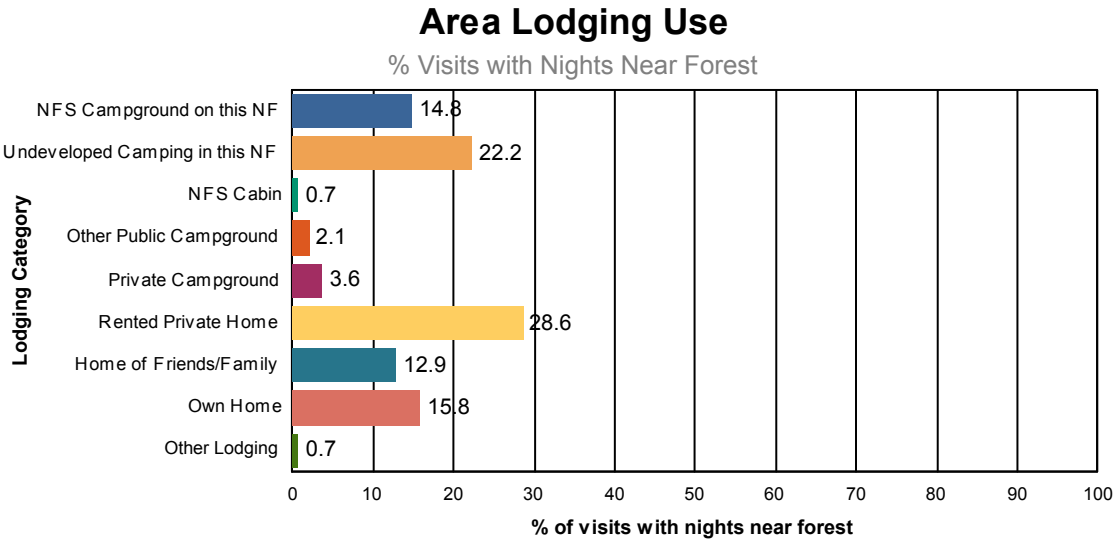
Total direct spending made within 50 miles of the forest and associated with national forest recreation is calculated by combining estimates of per party spending averages with the number of party trips in the segment. The number of party-trips in the segment equals the number of National Forest visits reported in table 2, times the percentage of visits in each spending segment, and divided by the average people per party.

4.4. Other Visit Information

There are several other important aspects of the trips on which the recreation visits to the forest are made. These are summarized in Table 16. The first aspect relates to total amount spent by the recreating party on the trip. This includes spending not just within 50 miles of the forest, but anywhere. The table shows both the average and the median. Another set describes the overall length of the trips on which the visits are made. The table shows the percent of the visits that were made on trips where the person stayed away from home overnight (even though the forest visit may be just a day visit), and the average total nights away from home and nights spent within 50 miles of the forest. For those spending one or more nights in or near the forest, the table shows the percentage that selected each of a series of lodging options. Together, these results help show the context of overall trip length and lodging patterns for visitors to the forest.

Table 16. Trip Spending and Lodging Usage

Trip Spending	Value
Average Total Trip Spending per Party	$299
Median Total Trip Spending per Party	$120
% NF Visits made on trip with overnight stay away from home	43.0%
% NF Visits with overnight stay within 50 miles of NF	38.8%
Mean nights/visit within 50 miles of NF	3.2
Area Lodging Use	**% Visits with Nights Near Forest**
NFS Campground on this NF	14.8%
Undeveloped Camping in this NF	22.2%
NFS Cabin	0.7%
Other Public Campground	2.1%
Private Campground	3.6%
Rented Private Home	28.6%
Home of Friends/Family	12.9%
Own Home	15.8%
Other Lodging	0.7%



4.5. Household Income

Visitors were asked to report a general category for their total household income. Only very general categories were used, to minimize the intrusive nature of the question. Results help indicate the overall socio-economic status of visitors to the forest, and are found in Table 17.

Table 17. Percent of National Forest Visits* by Annual Household Income

Annual Household Income Category	National Forest Visits (%)
Under $25,000	9.0
$25,000 to $49,999	21.0
$50,000 to $74,999	11.1
$75,000 to $99,999	30.9
$100,000 to $149,999	17.1
$150,000 and up	11.0
Total	100.1

* National Forest Visits are defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

4.6. Substitute Behavior

Visitors were asked to select one of several substitute choices, if for some reason they were unable to visit this national forest (Figure 3). Choices included going somewhere else for the same activity they did on the current trip, coming back to this forest for the same activity at some later time, going someplace else for a different activity, staying at home and not making a recreation trip, going to work instead of recreating, and a residual 'other' category. On most forests, the majority of visitors indicate that their substitute behavior choice is activity driven (going elsewhere for same activity) and a smaller percentage indicate they would come back later to this national forest for the same activity. For those visitors who said they would have gone somewhere else for recreation they were asked how far from their home this alternate destination was. These results are shown in Figure 4.

Figure 3. Substitute Behavior Choices

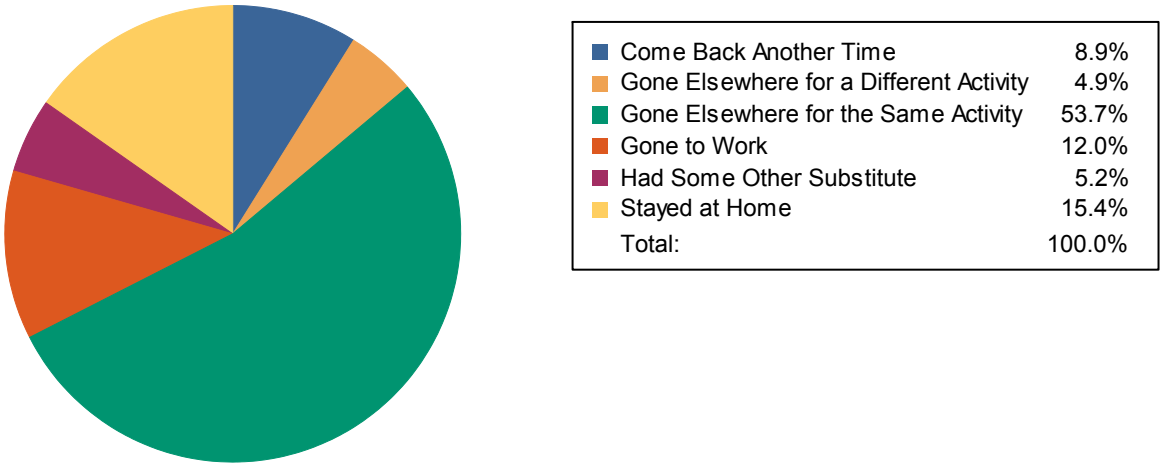
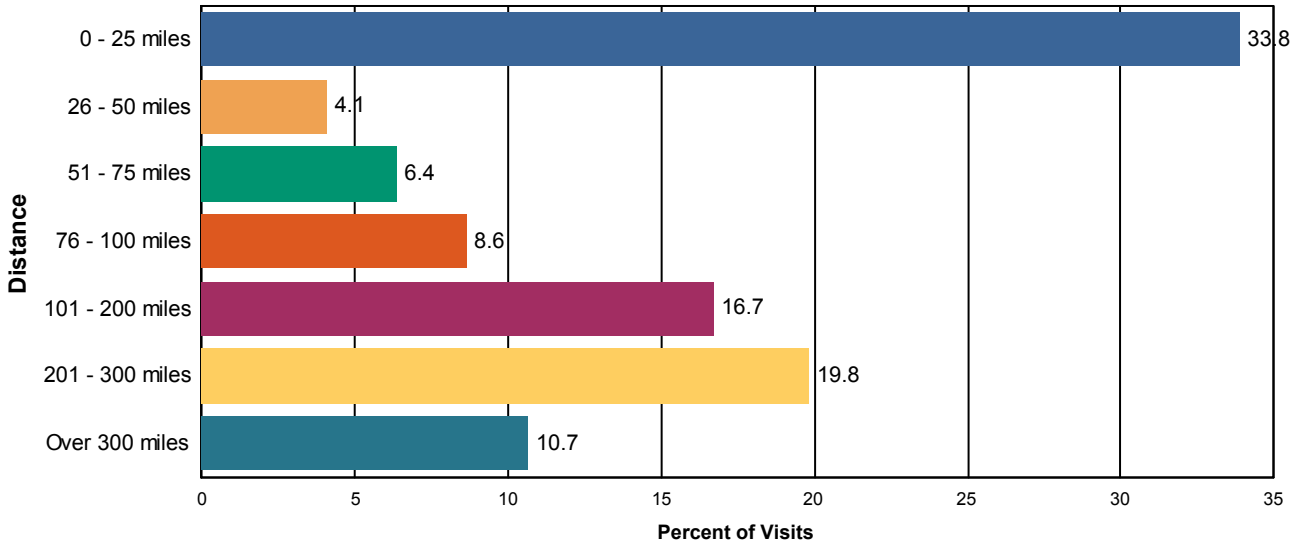


Figure 4. Reported Distance Visitors Would Travel to Alternate Location



5. SATISFACTION INFORMATION

An important element of outdoor recreation program delivery is evaluating customer satisfaction with the recreation setting, facilities, and services provided. Satisfaction information helps managers decide where to invest in resources and to allocate resources more efficiently toward improving customer satisfaction. Satisfaction is a core piece of data for national- and forest-level performance measures. To describe customer satisfaction, several different measures are used. Recreation visitors were asked to provide an overall rating of their visit to the national forest, on a 5-point Likert scale. About one-third of visitors interviewed on the forest rated their satisfaction with fourteen elements related to recreation facilities and services, and the importance of those elements to their recreation experience. Visitors were asked to rate the specific site or area at which they were interviewed. Visitors rated both the importance and performance (satisfaction with) of these elements using a 5-point scale. The Likert scale for importance ranged from not important to very important. The Likert scale for performance ranged from very dissatisfied to very satisfied. Although the satisfaction ratings specifically referenced the area where the visitor was interviewed, the survey design does not usually have enough responses for any individual site or area on the forest to present information at a site level. Rather, the information is generalized to overall satisfaction within the three site types: Day Use Developed (DUDS), Overnight Use Developed (OUDS), General Forest Areas, and on the forest as a whole.

The satisfaction responses are analyzed in several ways. First, a graph of overall satisfaction is presented in Figure 5. Next, two aggregate measures were calculated from the set of individual elements. The satisfaction elements most readily controlled by managers were aggregated into four categories: developed facilities, access, services, and visitor safety. The site types sampled were aggregated into three groups: developed sites (includes both day use and overnight developed sites), dispersed areas, and designated Wilderness. The first aggregate measure is called “Percent Satisfied Index (PSI)”, which is the proportion of all ratings for the elements in the category where the satisfaction ratings had a numerical rating of 4 or 5. Conceptually, the PSI indicator shows the percent of all recreation customers who are satisfied with agency performance. The agency’s national target for this measure is 85%. It is usually difficult to consistently have a higher satisfaction score than 85% since given tradeoffs among user groups and other factors. Table 18 displays the aggregate PSI scores for this forest.

Another aggregate measure of satisfaction is called “Percent Meet Expectations (PME)”. This is the proportion of satisfaction ratings in which the numerical satisfaction rating for a particular element is equal to or greater than the importance rating for that element. This indicator tracks the congruence between the agency’s performance and customer evaluations of importance. The idea behind this measure is that those elements with higher importance levels must have higher performance levels. Figure 6 displays the PME scores by type of site. Lower scores indicate a gap between desires and performance.

An Importance-Performance Analysis (IPA) (Hudson, et al, Feb 2004) was calculated for the importance and satisfaction scores. A target level of importance and performance divides the possible set of score pairs into four quadrants. For this work, the target level of both was a numerical score of 4.0. Each quadrant has a title that helps in interpreting responses that fall into it, and that provides some general guidance for management. These can be described as:

1. Importance at or above 4.0, Satisfaction at or above 4.0: **Keep up the good work**. These are items that are important to visitors and ones that the forest is performing quite well;
2. Importance at or above 4.0, Satisfaction under 4.0: **Concentrate here**. These are important items to the public, but performance is not where it needs to be. Increasing effort here is likely to have the greatest payoff in overall customer satisfaction;
3. Importance below 4.0, Satisfaction above 4.0: **Possible overkill**. These are items that are not highly important to visitors, but the forest's performance is quite good. It may be possible to reduce effort here without greatly harming overall satisfaction;
4. Importance below 4.0; Satisfaction below 4.0: **Low Priority**. These are items where performance is not very good, but neither are they important to visitors. Focusing effort here is unlikely to have a great impact.

We present tables that show the I-P rating title for each satisfaction element. Each sitetype is presented in a separate table. Results are presented in Tables 19 - 22.

The numerical scores for visitor satisfaction and importance for each element by site type, and the sample sizes for each are presented in Appendix B (Tables B1 - B4). Most managers find it difficult to discern meaning from these raw tables; however they may wish to examine specific elements once they have reviewed the other satisfaction information presented in this section. Note that if an element had fewer than 10 responses no analyses are performed, as there are too few responses to provide reliable information. Finally, visitors were asked about their overall satisfaction with and the importance of road condition and the adequacy of signage. Figure 7a and Figure 7b show the results.

The overall satisfaction results are very good. About 83% of people visiting indicated they were very satisfied with their overall recreation experience. Another 10% were somewhat satisfied. The results for the composite indices were also good. Satisfaction ratings for perception of safety were at least 95% for all types of sites. Ratings for the access composite was higher than 80% over all settings.

Figure 5. Percent of National Forest Visits by Overall Satisfaction Rating

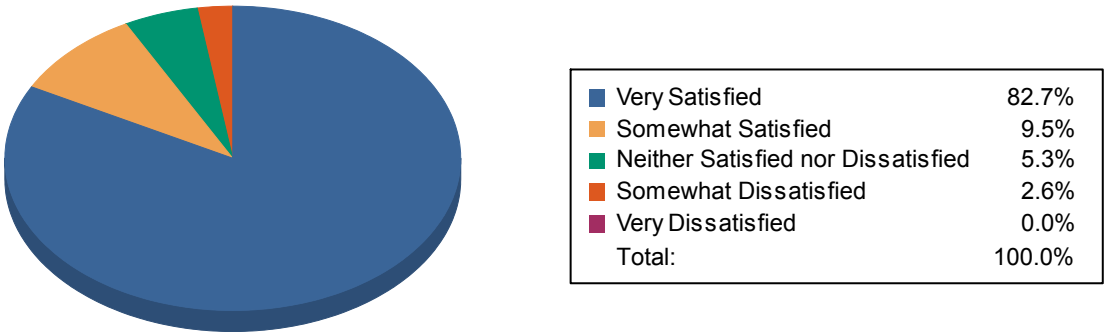


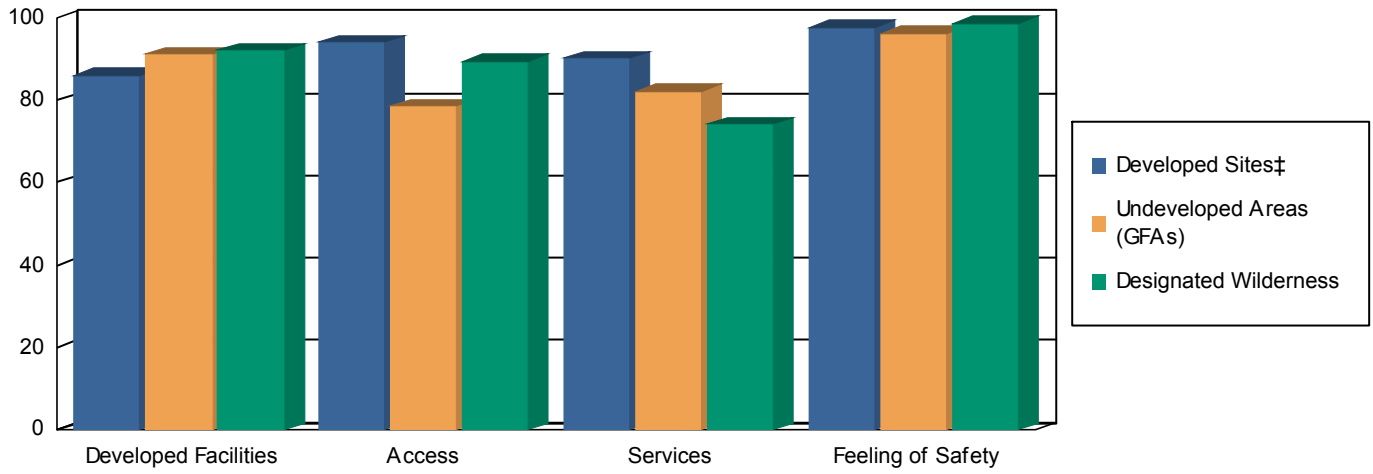
Table 18. Percent Satisfied Index† Scores for Aggregate Categories

Satisfaction Element	Satisfied Survey Respondents (%)		
	Developed Sites‡	Undeveloped Areas (GFAs)	Designated Wilderness
Developed Facilities	88.6	87.4	79.2
Access	96.0	81.9	85.1
Services	90.6	75.0	68.9
Feeling of Safety	99.9	94.8	99.4

† This is a composite rating. It is the proportion of satisfaction ratings scored by visitors as good (4) or very good (5). Computed as the percentage of all ratings for the elements within the sub grouping that are at or above the target level, and indicates the percent of all visitors that are reasonably well satisfied with agency performance.

‡ This category includes both Day Use and Overnight Use Developed Sites.

Figure 6. Percent Meets Expectations Scores*



* “Percent Meet Expectations (PME)” is the proportion of satisfaction ratings in which the numerical satisfaction rating for a particular element is equal to or greater than the importance rating for that element. This indicator tracks the congruence between the agency’s performance and customer evaluations of importance. The idea behind this measure is that those elements with higher importance levels must have higher performance levels. Lower scores indicate a gap between desires and performance.

‡ This category includes both Day Use and Overnight Use Developed Sites.

Table 19. Importance-Performance Ratings for Day Use Developed Sites

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Keep up the Good Work
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Keep up the Good Work
Interpretive Displays	Keep up the Good Work
Parking Availability	Keep up the Good Work
Parking Lot Condition	Possible Overkill
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Table 20. Importance-Performance Ratings for Overnight Developed Sites

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Keep up the Good Work
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Keep up the Good Work
Interpretive Displays	Possible Overkill
Parking Availability	Possible Overkill
Parking Lot Condition	Possible Overkill
Rec. Info. Availability	Possible Overkill
Road Condition	Possible Overkill
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Table 21. Importance-Performance Ratings for Undeveloped Areas (GFAs)

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Keep up the Good Work
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Keep up the Good Work
Interpretive Displays	Possible Overkill
Parking Availability	Keep up the Good Work
Parking Lot Condition	Possible Overkill
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Possible Overkill

Table 22. Importance-Performance Ratings for Designated Wilderness

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Low Priority
Developed Facilities	Possible Overkill
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Possible Overkill
Interpretive Displays	Possible Overkill
Parking Availability	Low Priority
Parking Lot Condition	Possible Overkill
Rec. Info. Availability	Possible Overkill
Road Condition	Possible Overkill
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Low Priority
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Road Conditions & Signage

Figure 7a. Satisfaction with Forest-wide Road Conditions & Signage Adequacy

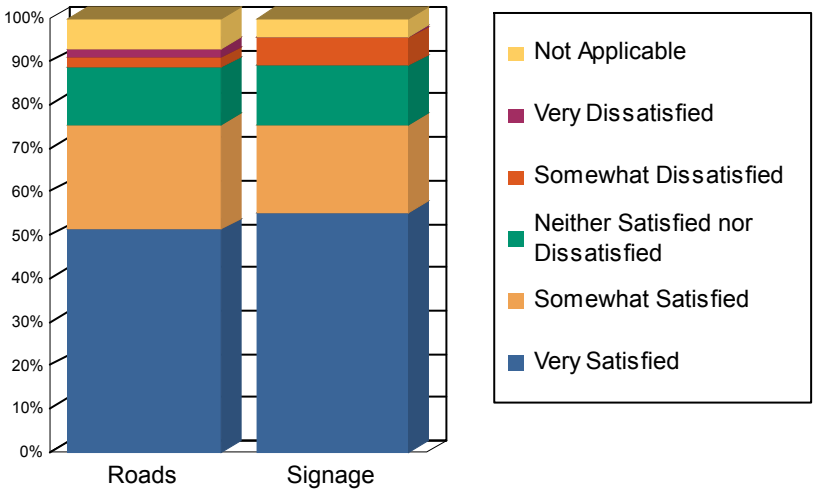
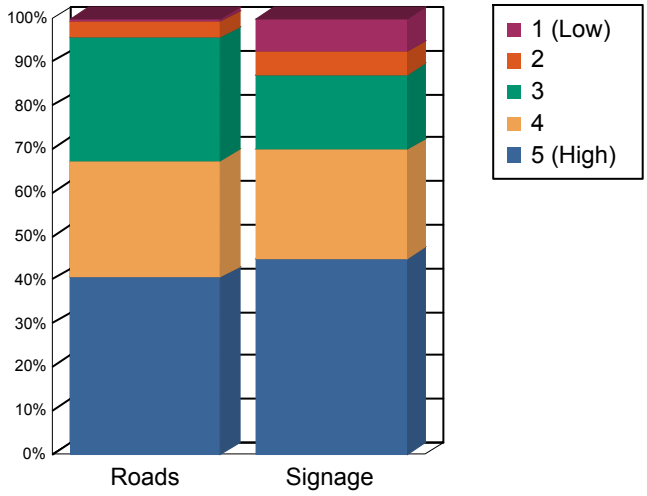


Figure 7b. Importance of Forest-wide Road Conditions & Signage Adequacy

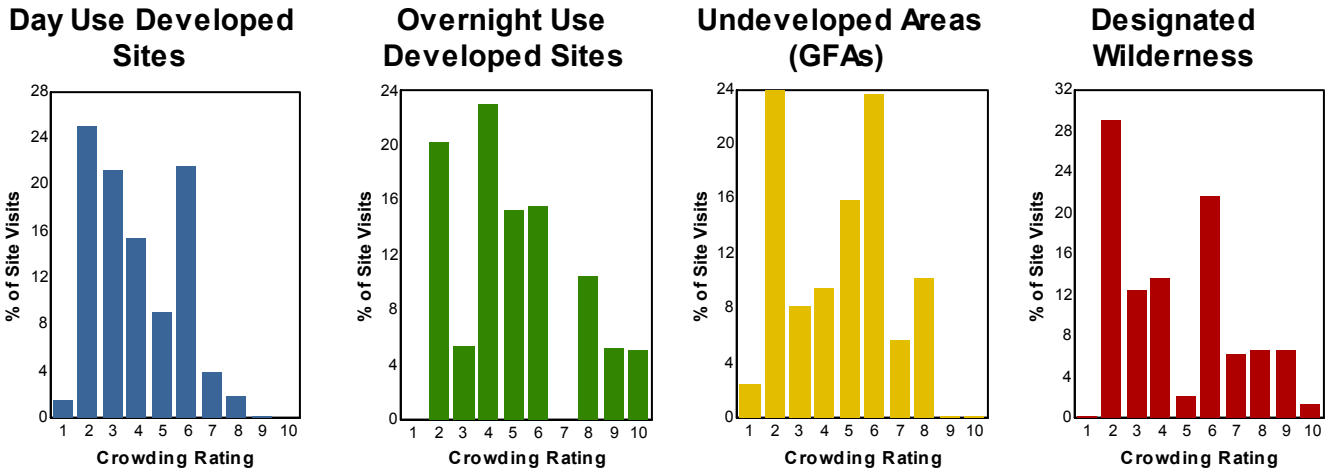


5.1. Crowding

Visitors rated their perception of how crowded the recreation site or area felt to them. This information is useful when looking at the type of site the visitor was using since someone visiting a designated Wilderness may think 5 people is too many while someone visiting a developed campground may think 200 people is about right. Table 23 shows the distribution of responses for each site type. Crowding was reported on a scale of 1 to 10 where 1 denotes hardly anyone was there, and a 10 indicates the area was perceived as overcrowded.

Table 23. Percent of Site Visits* by Crowding Rating and Site Type

Crowding Rating†	Site Types (% of Site Visits)			
	Day Use Developed Sites	Overnight Use Developed Sites	Undeveloped Areas (GFAs)	Designated Wilderness
10 - Overcrowded	0.0	5.1	0.1	1.3
9	0.2	5.1	0.2	6.7
8	2.0	10.5	10.3	6.7
7	3.9	0.0	5.8	6.2
6	21.6	15.6	23.6	21.7
5	9.1	15.2	15.9	2.0
4	15.4	22.9	9.5	13.7
3	21.3	5.3	8.2	12.6
2	25.0	20.2	23.9	29.1
1 - Hardly anyone there	1.5	0.0	2.5	0.1
Average Rating	**4.0**	**5.0**	**4.6**	**4.6**



* A Site Visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time.

† Survey respondents rated how crowded the site or area they were interviewed at was using a scale of 1 to 10 where 1 meant hardly anyone was there and 10 meant the site or area was overcrowded.

5.2. Disabilities

Providing barrier-free facilities for recreation visitors is an important part of facility and service planning and development. One question asked if anyone in their group had a disability. If so, the visitor was then asked if the facilities at the sites they visited were accessible for this person (Table 24).

Table 24. Accessibility of National Forest Facilities by Persons with Disabilities

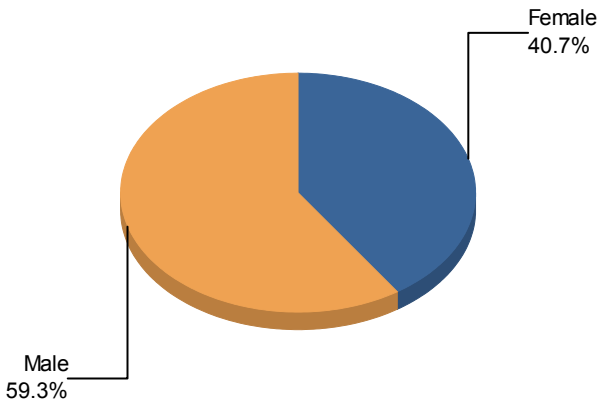
Item	Percent
% of visits that include a group member with a disability	8.4
Of this group, percent who said facilities at site visited were accessible	99.6

6. WILDERNESS VISIT DEMOGRAPHICS

Visits to Wilderness are sometimes made by a particular subset of the overall visitor population. In this chapter, tables are presented that describe the demographic characteristics of those who visit designated wilderness on this forest. Table 25 shows the gender breakdown, Table 26 the racial and ethnicity distribution, and the Table 27 age composition. In Table 28, a frequency analysis of Zip Codes obtained from respondents is presented, to give a rough idea of the common origins of Wilderness visitors.

Table 25. Percent of Wilderness Site Visits* by Gender

Gender	Survey Respondents†	Wilderness Site Visits (%)‡
Female	244	40.7
Male	328	59.3
Total	**572**	**100.0**



* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

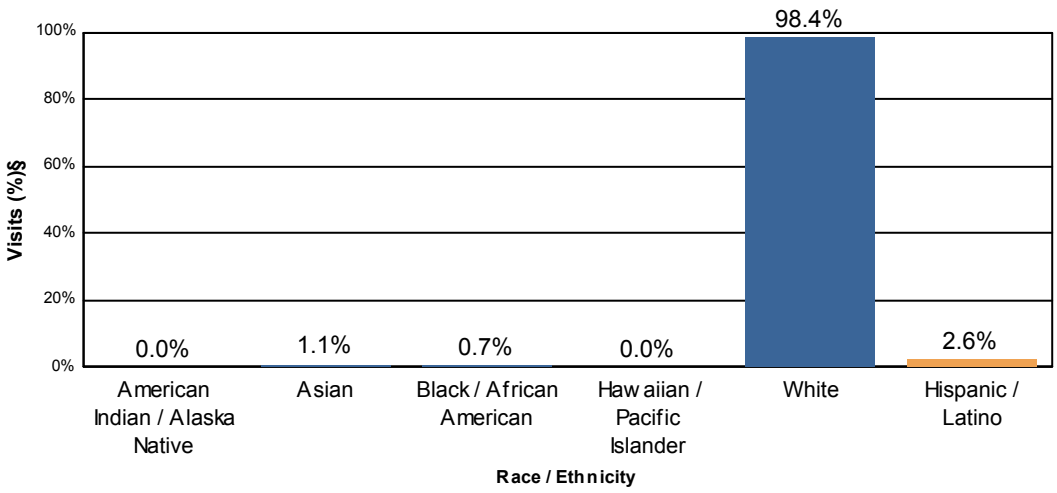
† Non-respondents to gender questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 26. Percent of Wilderness Site Visits* by Race/Ethnicity

Race †	Survey Respondents‡	Wilderness Site Visits (%)§#
American Indian / Alaska Native	0	0.0
Asian	5	1.1
Black / African American	3	0.7
Hawaiian / Pacific Islander	0	0.0
White	203	98.4
Total	211	100.2

Ethnicity†	Survey Respondents‡	Wilderness Site Visits (%)§
Hispanic / Latino	4	2.6



* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

Respondents could choose more than one racial group, so the total may be more than 100%.

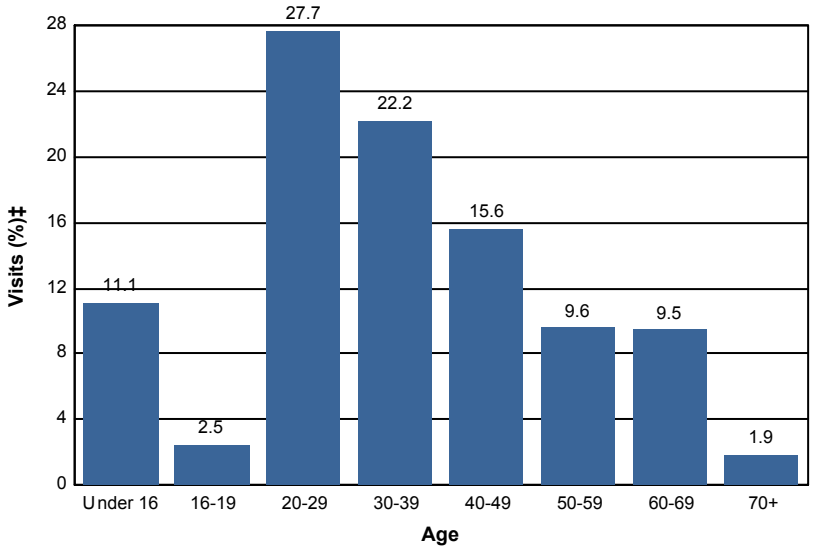
† Race and Ethnicity were asked as two separate questions.

‡ Non-respondents to race/ethnicity questions were excluded from analysis.

§ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 27. Percent of Wilderness Site Visits* by Age

Age Class	Wilderness Site Visits (%)‡
Under 16	11.1
16-19	2.5
20-29	27.7
30-39	22.2
40-49	15.6
50-59	9.6
60-69	9.5
70+	1.9
Total	**100.1**



* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

† Non-respondents to age questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 28. Top 15 Most Commonly Reported ZIP Codes, States and Counties of Wilderness Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
49506	Michigan	Kent County	15.1	11
49503	Michigan	Kent County	12.3	9
48103	Michigan	Washtenaw County	11.0	8
Unknown Origin*			6.8	5
49504	Michigan	Kent County	6.8	5
49341	Michigan	Kent County	6.8	5
49431	Michigan	Mason County	5.5	4
49660	Michigan	Manistee County	5.5	4
49316	Michigan	Kent County	5.5	4
49423	Michigan	Ottawa County	4.1	3
49544	Michigan	Kent County	4.1	3
49525	Michigan	Kent County	4.1	3
48104	Michigan	Washtenaw County	4.1	3
49418	Michigan	Kent County	4.1	3
49426	Michigan	Ottawa County	4.1	3

* Includes respondents reporting no ZIP code or an invalid ZIP code.

7. APPENDIX TABLES

APPENDIX A - Complete List of ZIP Codes

Table A-1. ZIP Codes, States and Counties of National Forest Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
Unknown Origin*			3.2	33
48750	Michigan	Iosco County	2.3	24
49503	Michigan	Kent County	1.3	14
49506	Michigan	Kent County	1.2	12
48739	Michigan	Iosco County	1.2	12
48103	Michigan	Washtenaw County	1.1	11
49504	Michigan	Kent County	1.1	11
48640	Michigan	Midland County	1.0	10
49431	Michigan	Mason County	0.8	8
49707	Michigan	Alpena County	0.8	8
49341	Michigan	Kent County	0.8	8
48603	Michigan	Saginaw County	0.7	7
48730	Michigan	Iosco County	0.7	7
49445	Michigan	Muskegon County	0.7	7
49426	Michigan	Ottawa County	0.7	7
48067	Michigan	Oakland County	0.7	7
Foreign Country			0.7	7
49660	Michigan	Manistee County	0.7	7
48823	Michigan	Ingham County	0.6	6
48430	Michigan	Genesee County	0.6	6
49689	Michigan	Manistee County	0.6	6
48647	Michigan	Oscoda County	0.6	6
49424	Michigan	Ottawa County	0.6	6
48706	Michigan	Bay County	0.6	6
49307	Michigan	Mecosta County	0.6	6
48104	Michigan	Washtenaw County	0.5	5
49509	Michigan	Kent County	0.5	5
48638	Michigan	Saginaw County	0.5	5
49423	Michigan	Ottawa County	0.5	5
48420	Michigan	Genesee County	0.5	5
48105	Michigan	Washtenaw County	0.5	5
48737	Michigan	Alcona County	0.5	5
49505	Michigan	Kent County	0.5	5
49601	Michigan	Wexford County	0.5	5
49009	Michigan	Kalamazoo County	0.5	5
48912	Michigan	Ingham County	0.5	5
48154	Michigan	Wayne County	0.5	5
48642	Michigan	Midland County	0.5	5
49411	Michigan	Mason County	0.5	5
49525	Michigan	Kent County	0.5	5

48848	Michigan	Shiawassee County	0.4	4
49738	Michigan	Crawford County	0.4	4
48653	Michigan	Roscommon County	0.4	4
49507	Michigan	Kent County	0.4	4
49301	Michigan	Kent County	0.4	4
49004	Michigan	Kalamazoo County	0.4	4
48178	Michigan	Oakland County	0.4	4
48187	Michigan	Wayne County	0.4	4
48195	Michigan	Wayne County	0.4	4
49442	Michigan	Muskegon County	0.4	4
48197	Michigan	Washtenaw County	0.4	4
48035	Michigan	Macomb County	0.4	4
49321	Michigan	Kent County	0.4	4
48433	Michigan	Genesee County	0.4	4
49316	Michigan	Kent County	0.4	4
49345	Michigan	Kent County	0.4	4
48439	Michigan	Genesee County	0.4	4
49202	Michigan	Jackson County	0.4	4
48910	Michigan	Ingham County	0.4	4
49304	Michigan	Lake County	0.4	4
49329	Michigan	Montcalm County	0.4	4
49055	Michigan	Van Buren County	0.4	4
48635	Michigan	Ogemaw County	0.4	4
48009	Michigan	Oakland County	0.4	4
48763	Michigan	Iosco County	0.4	4
49337	Michigan	Newaygo County	0.4	4
48328	Michigan	Oakland County	0.4	4
48451	Michigan	Genesee County	0.3	3
48723	Michigan	Tuscola County	0.3	3
49315	Michigan	Kent County	0.3	3
48417	Michigan	Saginaw County	0.3	3
48917	Michigan	Eaton County	0.3	3
48324	Michigan	Oakland County	0.3	3
48059	Michigan	St. Clair County	0.3	3
48761	Michigan	Ogemaw County	0.3	3
48748	Michigan	Iosco County	0.3	3
48127	Michigan	Wayne County	0.3	3
49544	Michigan	Kent County	0.3	3
48843	Michigan	Livingston County	0.3	3
48170	Michigan	Wayne County	0.3	3
48346	Michigan	Oakland County	0.3	3
48650	Michigan	Bay County	0.3	3
48309	Michigan	Oakland County	0.3	3
48446	Michigan	Lapeer County	0.3	3
48463	Michigan	Genesee County	0.3	3
49008	Michigan	Kalamazoo County	0.3	3
48661	Michigan	Ogemaw County	0.3	3
48820	Michigan	Clinton County	0.3	3
48167	Michigan	Wayne County	0.3	3
48872	Michigan	Shiawassee County	0.3	3
48060	Michigan	St. Clair County	0.3	3

48390	Michigan	Oakland County	0.3	3
49401	Michigan	Ottawa County	0.3	3
48083	Michigan	Oakland County	0.3	3
49534	Michigan	Kent County	0.3	3
49519	Michigan	Kent County	0.3	3
49006	Michigan	Kalamazoo County	0.3	3
49080	Michigan	Allegan County	0.3	3
48081	Michigan	Macomb County	0.3	3
48818	Michigan	Montcalm County	0.3	3
48708	Michigan	Bay County	0.3	3
49464	Michigan	Ottawa County	0.3	3
49686	Michigan	Grand Traverse County	0.3	3
49418	Michigan	Kent County	0.3	3
49546	Michigan	Kent County	0.2	2
49001	Michigan	Kalamazoo County	0.2	2
48383	Michigan	Oakland County	0.2	2
49221	Michigan	Lenawee County	0.2	2
49402	Michigan	Mason County	0.2	2
49022	Michigan	Berrien County	0.2	2
48888	Michigan	Montcalm County	0.2	2
48770	Michigan	Iosco County	0.2	2
48610	Michigan	Arenac County	0.2	2
49120	Michigan	Berrien County	0.2	2
48116	Michigan	Livingston County	0.2	2
48150	Michigan	Wayne County	0.2	2
60630	Illinois	Cook County	0.2	2
48003	Michigan	Lapeer County	0.2	2
48169	Michigan	Livingston County	0.2	2
49203	Michigan	Jackson County	0.2	2
48856	Michigan	Gratiot County	0.2	2
48174	Michigan	Wayne County	0.2	2
48838	Michigan	Montcalm County	0.2	2
60618	Illinois	Cook County	0.2	2
48306	Michigan	Oakland County	0.2	2
49309	Michigan	Newaygo County	0.2	2
49677	Michigan	Osceola County	0.2	2
48435	Michigan	Tuscola County	0.2	2
48317	Michigan	Macomb County	0.2	2
49038	Michigan	Berrien County	0.2	2
48503	Michigan	Genesee County	0.2	2
48703	Michigan	Arenac County	0.2	2
49643	Michigan	Grand Traverse County	0.2	2
48602	Michigan	Saginaw County	0.2	2
48188	Michigan	Wayne County	0.2	2
48858	Michigan	Isabella County	0.2	2
48307	Michigan	Oakland County	0.2	2
48634	Michigan	Bay County	0.2	2
49251	Michigan	Ingham County	0.2	2
48415	Michigan	Saginaw County	0.2	2
60647	Illinois	Cook County	0.2	2
48353	Michigan	Livingston County	0.2	2

48316	Michigan	Macomb County	0.2	2
49444	Michigan	Muskegon County	0.2	2
49319	Michigan	Kent County	0.2	2
48836	Michigan	Livingston County	0.2	2
48329	Michigan	Oakland County	0.2	2
48655	Michigan	Saginaw County	0.2	2
48043	Michigan	Macomb County	0.2	2
48822	Michigan	Clinton County	0.2	2
48348	Michigan	Oakland County	0.2	2
48030	Michigan	Oakland County	0.2	2
48048	Michigan	Macomb County	0.2	2
48911	Michigan	Ingham County	0.2	2
48386	Michigan	Oakland County	0.2	2
48073	Michigan	Oakland County	0.2	2
49331	Michigan	Kent County	0.2	2
49417	Michigan	Ottawa County	0.2	2
48122	Michigan	Wayne County	0.2	2
49461	Michigan	Muskegon County	0.2	2
60540	Illinois	DuPage County	0.2	2
48632	Michigan	Clare County	0.2	2
48131	Michigan	Monroe County	0.2	2
48629	Michigan	Roscommon County	0.2	2
76262	Texas	Denton County	0.2	2
48842	Michigan	Ingham County	0.2	2
48740	Michigan	Alcona County	0.2	2
48808	Michigan	Clinton County	0.2	2
49435	Michigan	Ottawa County	0.2	2
49766	Michigan	Alpena County	0.2	2
48237	Michigan	Oakland County	0.2	2
48038	Michigan	Macomb County	0.2	2
49441	Michigan	Muskegon County	0.2	2
48082	Michigan	Macomb County	0.2	2
49057	Michigan	Van Buren County	0.2	2
49619	Michigan	Manistee County	0.2	2
48182	Michigan	Monroe County	0.2	2
49410	Michigan	Mason County	0.2	2
48609	Michigan	Saginaw County	0.2	2
49446	Michigan	Oceana County	0.2	2
48198	Michigan	Washtenaw County	0.2	2
48126	Michigan	Wayne County	0.2	2
49451	Michigan	Muskegon County	0.2	2
48152	Michigan	Wayne County	0.2	2
49404	Michigan	Ottawa County	0.2	2
43623	Ohio	Lucas County	0.2	2
49454	Michigan	Mason County	0.2	2
41035	Kentucky	Grant County	0.2	2
49501	Michigan	Kent County	0.2	2
48742	Michigan	Alcona County	0.2	2
49091	Michigan	St. Joseph County	0.2	2
49615	Michigan	Antrim County	0.2	2
49326	Michigan	Kent County	0.2	2

48462	Michigan	Oakland County	0.2	2
48066	Michigan	Macomb County	0.2	2
48072	Michigan	Oakland County	0.2	2
48161	Michigan	Monroe County	0.2	2
48473	Michigan	Genesee County	0.2	2
48867	Michigan	Shiawassee County	0.2	2
48371	Michigan	Oakland County	0.2	2
38017	Tennessee	Shelby County	0.1	1
46580	Indiana	Kosciusko County	0.1	1
46074	Indiana	Hamilton County	0.1	1
48331	Michigan	Oakland County	0.1	1
49017	Michigan	Calhoun County	0.1	1
44212	Ohio	Medina County	0.1	1
48382	Michigan	Oakland County	0.1	1
48611	Michigan	Bay County	0.1	1
48619	Michigan	Oscoda County	0.1	1
47330	Indiana	Wayne County	0.1	1
48063	Michigan	St. Clair County	0.1	1
60622	Illinois	Cook County	0.1	1
46545	Indiana	St. Joseph County	0.1	1
28205	North Carolina	Mecklenburg County	0.1	1
49415	Michigan	Muskegon County	0.1	1
48864	Michigan	Ingham County	0.1	1
49668	Michigan	Wexford County	0.1	1
60175	Illinois	Kane County	0.1	1
48874	Michigan	Gratiot County	0.1	1
60457	Illinois	Cook County	0.1	1
49047	Michigan	Cass County	0.1	1
49113	Michigan	Berrien County	0.1	1
49931	Michigan	Houghton County	0.1	1
46324	Indiana	Lake County	0.1	1
48444	Michigan	Lapeer County	0.1	1
48855	Michigan	Livingston County	0.1	1
49659	Michigan	Antrim County	0.1	1
49616	Michigan	Benzie County	0.1	1
48033	Michigan	Oakland County	0.1	1
43212	Ohio	Franklin County	0.1	1
48138	Michigan	Wayne County	0.1	1
19425	Pennsylvania	Chester County	0.1	1
49302	Michigan	Kent County	0.1	1
49849	Michigan	Marquette County	0.1	1
49508	Michigan	Kent County	0.1	1
48220	Michigan	Oakland County	0.1	1
43082	Ohio	Delaware County	0.1	1
49036	Michigan	Branch County	0.1	1
60614	Illinois	Cook County	0.1	1
48230	Michigan	Wayne County	0.1	1
14831	New York	Steuben County	0.1	1
48766	Michigan	Arenac County	0.1	1
48457	Michigan	Genesee County	0.1	1
60612	Illinois	Cook County	0.1	1

64152	Missouri	Platte County	0.1	1
49007	Michigan	Kalamazoo County	0.1	1
48809	Michigan	Ionia County	0.1	1
60640	Illinois	Cook County	0.1	1
48221	Michigan	Wayne County	0.1	1
48094	Michigan	Macomb County	0.1	1
49230	Michigan	Jackson County	0.1	1
49656	Michigan	Lake County	0.1	1
55731	Minnesota	St. Louis County	0.1	1
48847	Michigan	Gratiot County	0.1	1
49002	Michigan	Kalamazoo County	0.1	1
60018	Illinois	Cook County	0.1	1
48168	Michigan	Wayne County	0.1	1
49512	Michigan	Kent County	0.1	1
44691	Ohio	Wayne County	0.1	1
15101	Pennsylvania	Allegheny County	0.1	1
49325	Michigan	Barry County	0.1	1
48064	Michigan	St. Clair County	0.1	1
19520	Pennsylvania	Chester County	0.1	1
14092	New York	Niagara County	0.1	1
32539	Florida	Okaloosa County	0.1	1
80301	Colorado	Boulder County	0.1	1
48107	Michigan	Washtenaw County	0.1	1
49348	Michigan	Allegan County	0.1	1
49455	Michigan	Oceana County	0.1	1
49085	Michigan	Berrien County	0.1	1
48604	Michigan	Saginaw County	0.1	1
60068	Illinois	Cook County	0.1	1
48091	Michigan	Macomb County	0.1	1
49460	Michigan	Ottawa County	0.1	1
32607	Florida	Alachua County	0.1	1
48162	Michigan	Monroe County	0.1	1
48124	Michigan	Wayne County	0.1	1
48176	Michigan	Washtenaw County	0.1	1
48835	Michigan	Clinton County	0.1	1
43558	Ohio	Fulton County	0.1	1
49420	Michigan	Oceana County	0.1	1
37209	Tennessee	Davidson County	0.1	1
60089	Illinois	Lake County	0.1	1
48837	Michigan	Eaton County	0.1	1
60423	Illinois	Will County	0.1	1
60439	Illinois	Cook County	0.1	1
43055	Ohio	Licking County	0.1	1
89002	Nevada	Clark County	0.1	1
60521	Illinois	DuPage County	0.1	1
49405	Michigan	Mason County	0.1	1
53703	Wisconsin	Dane County	0.1	1
78154	Texas	Guadalupe County	0.1	1
48189	Michigan	Washtenaw County	0.1	1
48044	Michigan	Macomb County	0.1	1
30677	Georgia	Oconee County	0.1	1

62095	Illinois	Madison County	0.1	1
49336	Michigan	Mecosta County	0.1	1
48173	Michigan	Wayne County	0.1	1
44859	Ohio	Ashland County	0.1	1
48732	Michigan	Bay County	0.1	1
46077	Indiana	Boone County	0.1	1
48532	Michigan	Genesee County	0.1	1
48051	Michigan	Macomb County	0.1	1
46538	Indiana	Kosciusko County	0.1	1
49858	Michigan	Menominee County	0.1	1
45242	Ohio	Hamilton County	0.1	1
48185	Michigan	Wayne County	0.1	1
49072	Michigan	St. Joseph County	0.1	1
49267	Michigan	Monroe County	0.1	1
04427	Maine	Penobscot County	0.1	1
48616	Michigan	Saginaw County	0.1	1
46516	Indiana	Elkhart County	0.1	1
60646	Illinois	Cook County	0.1	1
48429	Michigan	Shiawassee County	0.1	1
48801	Michigan	Gratiot County	0.1	1
43528	Ohio	Lucas County	0.1	1
46033	Indiana	Hamilton County	0.1	1
19934	Delaware	Kent County	0.1	1
48017	Michigan	Oakland County	0.1	1
57719	South Dakota	Pennington County	0.1	1
48180	Michigan	Wayne County	0.1	1
43449	Ohio	Ottawa County	0.1	1
49675	Michigan	Manistee County	0.1	1
48359	Michigan	Oakland County	0.1	1
48098	Michigan	Oakland County	0.1	1
49270	Michigan	Monroe County	0.1	1
48130	Michigan	Washtenaw County	0.1	1
49093	Michigan	St. Joseph County	0.1	1
48080	Michigan	Macomb County	0.1	1
48413	Michigan	Huron County	0.1	1
48239	Michigan	Wayne County	0.1	1
33616	Florida	Hillsborough County	0.1	1
48069	Michigan	Oakland County	0.1	1
43515	Ohio	Fulton County	0.1	1
48133	Michigan	Monroe County	0.1	1
48315	Michigan	Macomb County	0.1	1
49090	Michigan	Van Buren County	0.1	1
48464	Michigan	Lapeer County	0.1	1
43611	Ohio	Lucas County	0.1	1
48323	Michigan	Oakland County	0.1	1
48108	Michigan	Washtenaw County	0.1	1
16602	Pennsylvania	Blair County	0.1	1
48238	Michigan	Wayne County	0.1	1
48626	Michigan	Saginaw County	0.1	1
60406	Illinois	Cook County	0.1	1
45840	Ohio	Hancock County	0.1	1

48662	Michigan	Gratiot County	0.1	1
49083	Michigan	Kalamazoo County	0.1	1
48191	Michigan	Washtenaw County	0.1	1
49617	Michigan	Benzie County	0.1	1
48179	Michigan	Monroe County	0.1	1
48637	Michigan	Saginaw County	0.1	1
60448	Illinois	Will County	0.1	1
48212	Michigan	Wayne County	0.1	1
11418	New York	Queens County	0.1	1
08343	New Jersey	Gloucester County	0.1	1
49779	Michigan	Presque Isle County	0.1	1
48014	Michigan	St. Clair County	0.1	1
47303	Indiana	Delaware County	0.1	1
49459	Michigan	Oceana County	0.1	1
48469	Michigan	Sanilac County	0.1	1
48144	Michigan	Monroe County	0.1	1
63130	Missouri	St. Louis County	0.1	1
48377	Michigan	Oakland County	0.1	1
76131	Texas	Tarrant County	0.1	1
48101	Michigan	Wayne County	0.1	1
49096	Michigan	Eaton County	0.1	1
48631	Michigan	Bay County	0.1	1
48831	Michigan	Clinton County	0.1	1
48849	Michigan	Ionia County	0.1	1
60543	Illinois	Kendall County	0.1	1
46825	Indiana	Allen County	0.1	1
34251	Florida	Manatee County	0.1	1
48225	Michigan	Wayne County	0.1	1
48186	Michigan	Wayne County	0.1	1
48025	Michigan	Oakland County	0.1	1
34748	Florida	Lake County	0.1	1
06405	Connecticut	New Haven County	0.1	1
48023	Michigan	St. Clair County	0.1	1
49421	Michigan	Oceana County	0.1	1
60048	Illinois	Lake County	0.1	1
30102	Georgia	Cherokee County	0.1	1
48628	Michigan	Midland County	0.1	1
48613	Michigan	Bay County	0.1	1
61801	Illinois	Champaign County	0.1	1
93111	California	Santa Barbara County	0.1	1
48624	Michigan	Gladwin County	0.1	1
49107	Michigan	Berrien County	0.1	1
48370	Michigan	Oakland County	0.1	1
48336	Michigan	Oakland County	0.1	1
48393	Michigan	Oakland County	0.1	1
74052	Oklahoma	Creek County	0.1	1
48357	Michigan	Oakland County	0.1	1
46701	Indiana	Noble County	0.1	1
48436	Michigan	Genesee County	0.1	1
43545	Ohio	Henry County	0.1	1
44428	Ohio	Trumbull County	0.1	1

48460	Michigan	Shiawassee County	0.1	1
48813	Michigan	Eaton County	0.1	1
43201	Ohio	Franklin County	0.1	1
48654	Michigan	Ogemaw County	0.1	1
78073	Texas	Bexar County	0.1	1
48335	Michigan	Oakland County	0.1	1
35475	Alabama	Tuscaloosa County	0.1	1
48738	Michigan	Alcona County	0.1	1
48884	Michigan	Montcalm County	0.1	1
32250	Florida	Duval County	0.1	1
49339	Michigan	Montcalm County	0.1	1
49286	Michigan	Lenawee County	0.1	1
49233	Michigan	Lenawee County	0.1	1
49548	Michigan	Kent County	0.1	1
48367	Michigan	Oakland County	0.1	1
55364	Minnesota	Hennepin County	0.1	1
43612	Ohio	Lucas County	0.1	1
48735	Michigan	Tuscola County	0.1	1
49655	Michigan	Osceola County	0.1	1
46011	Indiana	Madison County	0.1	1
48202	Michigan	Wayne County	0.1	1
49087	Michigan	Kalamazoo County	0.1	1
46550	Indiana	Elkhart County	0.1	1
49269	Michigan	Jackson County	0.1	1
48507	Michigan	Genesee County	0.1	1
48045	Michigan	Macomb County	0.1	1
49679	Michigan	Osceola County	0.1	1
60610	Illinois	Cook County	0.1	1
47880	Indiana	Vigo County	0.1	1
55416	Minnesota	Hennepin County	0.1	1
48817	Michigan	Shiawassee County	0.1	1
48140	Michigan	Monroe County	0.1	1
46733	Indiana	Adams County	0.1	1
46526	Indiana	Elkhart County	0.1	1
60601	Illinois	Cook County	0.1	1
48749	Michigan	Arenac County	0.1	1
48223	Michigan	Wayne County	0.1	1
48341	Michigan	Oakland County	0.1	1
60148	Illinois	DuPage County	0.1	1
60411	Illinois	Cook County	0.1	1
48442	Michigan	Oakland County	0.1	1
48471	Michigan	Sanilac County	0.1	1
49706	Michigan	Emmet County	0.1	1
48649	Michigan	Saginaw County	0.1	1
48327	Michigan	Oakland County	0.1	1
48005	Michigan	Macomb County	0.1	1
48089	Michigan	Macomb County	0.1	1
49333	Michigan	Barry County	0.1	1
49071	Michigan	Van Buren County	0.1	1
55102	Minnesota	Ramsey County	0.1	1
61820	Illinois	Champaign County	0.1	1

48312	Michigan	Macomb County	0.1	1
49735	Michigan	Otsego County	0.1	1
48756	Michigan	Ogemaw County	0.1	1
33908	Florida	Lee County	0.1	1
74120	Oklahoma	Tulsa County	0.1	1
48762	Michigan	Alcona County	0.1	1
48892	Michigan	Ingham County	0.1	1
60526	Illinois	Cook County	0.1	1
43442	Ohio	Sandusky County	0.1	1
48219	Michigan	Wayne County	0.1	1
48745	Michigan	Alcona County	0.1	1
49306	Michigan	Kent County	0.1	1
48006	Michigan	St. Clair County	0.1	1
60137	Illinois	DuPage County	0.1	1
48438	Michigan	Genesee County	0.1	1
48506	Michigan	Genesee County	0.1	1
28111	North Carolina	Union County	0.1	1
48192	Michigan	Wayne County	0.1	1
49696	Michigan	Grand Traverse County	0.1	1
90019	California	Los Angeles County	0.1	1
49014	Michigan	Calhoun County	0.1	1
48755	Michigan	Huron County	0.1	1
48423	Michigan	Genesee County	0.1	1
43015	Ohio	Delaware County	0.1	1
49456	Michigan	Ottawa County	0.1	1
49349	Michigan	Newaygo County	0.1	1
48768	Michigan	Tuscola County	0.1	1
36330	Alabama	Coffee County	0.1	1
46590	Indiana	Kosciusko County	0.1	1
49646	Michigan	Kalkaska County	0.1	1
97707	Oregon	Deschutes County	0.1	1
49106	Michigan	Berrien County	0.1	1
48039	Michigan	St. Clair County	0.1	1
49340	Michigan	Mecosta County	0.1	1
92101	California	San Diego County	0.1	1
48875	Michigan	Ionia County	0.1	1
46256	Indiana	Marion County	0.1	1
60201	Illinois	Cook County	0.1	1
46561	Indiana	St. Joseph County	0.1	1
49288	Michigan	Hillsdale County	0.1	1
19311	Pennsylvania	Chester County	0.1	1
48065	Michigan	Macomb County	0.1	1
48134	Michigan	Wayne County	0.1	1
49015	Michigan	Calhoun County	0.1	1
48054	Michigan	St. Clair County	0.1	1
48893	Michigan	Isabella County	0.1	1
62526	Illinois	Macon County	0.1	1
43130	Ohio	Fairfield County	0.1	1
49613	Michigan	Manistee County	0.1	1
60115	Illinois	DeKalb County	0.1	1
46371	Indiana	La Porte County	0.1	1

49727	Michigan	Charlevoix County	0.1	1
46804	Indiana	Allen County	0.1	1
48093	Michigan	Macomb County	0.1	1
49033	Michigan	Calhoun County	0.1	1
49747	Michigan	Alpena County	0.1	1
48135	Michigan	Wayne County	0.1	1
48659	Michigan	Arenac County	0.1	1
58230	North Dakota	Steele County	0.1	1
48166	Michigan	Monroe County	0.1	1
49645	Michigan	Manistee County	0.1	1
49048	Michigan	Kalamazoo County	0.1	1
49428	Michigan	Ottawa County	0.1	1

* Includes respondents reporting no ZIP code or an invalid ZIP code.

APPENDIX B - Detailed Satisfaction Results

Table B-1. Satisfaction for Visits to Day Use Developed Sites

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	6.0	5.5	22.7	17.0	48.7	4.0	4.2	73
Developed Facilities	0.0	1.2	2.6	14.3	82.0	4.8	4.4	117
Condition of Environment	0.0	0.0	0.0	13.6	86.4	4.9	4.8	124
Employee Helpfulness	0.0	0.0	6.8	12.6	80.6	4.7	4.4	42
Interpretive Displays	0.0	1.2	2.6	15.9	80.3	4.8	4.0	113
Parking Availability	0.0	0.0	0.0	9.3	90.7	4.9	4.0	123
Parking Lot Condition	0.0	0.0	1.1	7.0	91.9	4.9	3.8	122
Rec. Info. Availability	1.0	1.6	10.5	21.1	65.8	4.5	4.2	77
Road Condition	0.0	0.0	11.0	7.2	81.9	4.7	4.1	66
Feeling of Satefy	0.0	0.0	0.0	5.4	94.6	4.9	4.6	122
Scenery	0.0	0.0	0.2	7.0	92.8	4.9	4.8	123
Signage Adequacy	1.0	0.5	8.8	10.2	79.5	4.7	4.3	115
Trail Condition	0.0	0.0	4.5	15.5	80.0	4.8	4.4	55
Value for Fee Paid	0.0	0.0	0.0	4.9	95.1	5.0	4.5	30

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-2. Satisfaction for Visits to Overnight Developed Sites

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	0.0	0.0	6.7	28.0	65.3	4.6	4.0	21
Developed Facilities	0.0	0.0	2.8	5.8	91.4	4.9	4.2	25
Condition of Environment	0.0	0.0	0.0	10.9	89.1	4.9	4.9	27
Employee Helpfulness	0.0	0.0	3.6	7.4	89.0	4.9	4.5	19
Interpretive Displays	0.0	7.2	10.6	28.6	53.6	4.3	3.1	19
Parking Availability	0.0	0.0	8.5	25.6	65.9	4.6	3.9	26
Parking Lot Condition	0.0	0.0	0.0	9.3	90.7	4.9	3.4	23
Rec. Info. Availability	0.0	0.0	19.8	8.0	72.2	4.5	3.9	20
Road Condition	3.1	0.0	6.4	6.9	83.5	4.7	3.8	24
Feeling of Satefy	0.0	0.2	0.0	0.2	99.5	5.0	4.8	27
Scenery	0.0	0.0	2.7	8.0	89.3	4.9	4.9	27
Signage Adequacy	0.0	0.0	8.0	8.3	83.7	4.8	4.1	27
Trail Condition	0.0	5.1	0.0	21.8	73.1	4.6	4.4	17
Value for Fee Paid	0.0	0.0	2.8	5.9	91.3	4.9	4.6	25

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-3. Satisfaction for Visits to Undeveloped Areas (GFAs)

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	0.0	0.0	21.5	30.1	48.4	4.3	4.0	48
Developed Facilities	0.0	0.0	7.9	12.1	80.0	4.7	4.2	74
Condition of Environment	0.0	0.0	2.7	23.4	73.9	4.7	4.9	95
Employee Helpfulness	0.0	0.0	24.4	0.9	74.7	4.5	4.2	41
Interpretive Displays	0.0	8.8	20.9	22.2	48.1	4.1	3.4	56
Parking Availability	0.0	0.3	6.4	18.6	74.7	4.7	4.2	85
Parking Lot Condition	0.0	0.1	13.1	10.6	76.2	4.6	3.8	80
Rec. Info. Availability	3.9	0.3	19.8	25.4	50.7	4.2	4.0	70
Road Condition	6.1	6.1	12.6	34.9	40.4	4.0	4.2	81
Feeling of Satefy	0.0	0.0	5.2	8.6	86.2	4.8	4.7	92
Scenery	0.0	0.0	2.6	10.2	87.2	4.8	4.8	95
Signage Adequacy	2.9	5.7	14.3	11.9	65.2	4.3	4.0	90
Trail Condition	0.0	0.2	32.0	19.4	48.4	4.2	4.3	47
Value for Fee Paid	0.0	0.2	16.1	10.6	73.0	4.6	3.8	40

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-4. Satisfaction for Visits to Designated Wilderness*

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	1.5	23.2	15.6	45.4	14.3	3.5	2.8	38
Developed Facilities	0.0	0.0	0.0	11.5	88.5	4.9	3.0	44
Condition of Environment	0.0	1.3	2.5	27.9	68.3	4.6	4.9	72
Employee Helpfulness	0.0	0.0	13.3	46.1	40.6	4.3	3.9	17
Interpretive Displays	0.0	0.9	21.2	27.3	50.6	4.3	3.4	56
Parking Availability	3.4	16.3	22.7	11.5	46.0	3.8	3.3	67
Parking Lot Condition	0.0	0.7	3.5	8.5	87.3	4.8	3.0	67
Rec. Info. Availability	0.0	1.8	31.4	17.8	49.0	4.1	3.9	52
Road Condition	0.0	6.2	3.9	31.7	58.2	4.4	3.5	60
Feeling of Satefy	0.0	0.0	0.6	0.6	98.7	5.0	5.0	70
Scenery	0.0	0.0	0.0	0.0	100.0	5.0	5.0	72
Signage Adequacy	4.4	14.1	23.6	18.4	39.6	3.7	3.8	57
Trail Condition	0.0	0.0	2.0	2.0	95.9	4.9	4.6	68
Value for Fee Paid	0.0	0.0	0.7	7.9	91.4	4.9	4.3	62

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

* Data supplied is for all Designated Wilderness on the forest combined. Data was not collected for satisfaction for each individual Wilderness on the forest.