Visitor Expectations and Perceptions of Program and Physical Accessibility in the National Park Service

Executive Summary

Rachel J. C. Chen, Ph.D.
Recreation and Tourism Management
Dept. of Consumer and Industry Services Management
247 Jessie Harris Building
University of Tennessee
Knoxville, TN 37996-1900
Email: rchen@utk.edu
Phone: (865) 974-0505; Fax: (865) 974-5236

November, 2001

Prepared for the National Center on Accessibility

Note from the National Center on Accessibility: *This executive summary provides examples of the major findings of this research. Contact the National Center on Accessibility to order a copy of the full Report.*

Several studies have been written about the trip characteristics of state/national park users. However, very little has been done about the behaviors, perceptions, motivations, and expectations of park visitors with disabilities. During spring (2001), the National Center on Accessibility/National Park Service sponsored a study of national park visitors with disabilities. The purpose of the study was to identify the perceptions of people with disabilities relative to program and physical accessibility in the National Park Service. This study interviewed a minimum total of 50 visitors with disabilities (a minimum of 10 at each park included in the study). The research met the following objectives:

- Collect data on park physical and programmatic accessibility; perceptions on accessibility and barriers to participation by visitors with disabilities,
- Generate suggestions and recommendations that visitors with disabilities may have that would make a visit to the national park enjoyable,
- Compile trip-related data (e.g., sources of information used, nights away from home, and the benefits associated with a visit, etc.) from opinions of visitors with disabilities, and
- Provide information for better understanding, planning, development, and maintenance in outdoor developed areas based on the needs of visitors with disabilities.

Method

Data were collected in the surrounding communities of the selected five national park units including the Great Smoky Mountains National Park, the Blue Ridge Parkway, the Shenandoah National Park, the Mammoth Cave National Park, and the Hot Spring National Park. All participants in this study were 1) adults (age 18 and older) who use mobility devices (manual chair, power chair, cane, walker, scooter, crutches), personal assistants, service animals, communication devices (TTY), or hearing aids, 2) parents/caregiver of individuals with developmental disabilities, and 3) parents/caregivers of kids with disabilities.

Data were gathered from national park unit visitors during the summer to the fall of 2001. Visitors with disabilities were stopped and asked to participate in the study by providing their names/addresses and the participants were then given a self-administered diary questionnaire and asked to fill out the survey on-site if they had have finished their park visit or mail it back in a postage-paid envelope at the end of their trips. A second copy of the questionnaire with postage-paid envelope was sent to those who had not responded within two weeks after the initial intercept.

In order to have diverse survey participants with many different disabilities represented (mobility, sight, hearing), our trained interviewers also worked with

some local disability resource centers to recruit subjects for the study. Working with local disability services related organizations was expected to be an efficient way to manage resources and our interviewers' time. However, some disability services related agencies were reluctant to participate in this study due to confidentiality and various constraints within agencies. Of all 94 participants, our interviewers recruited most (85) of them on-site and 9 were recruited by the disability services related organizations.

Usable surveys were coded and entered into a computer. Cross-tabulations and frequency distributions were calculated using a Statistical Analysis System (SAS) software package. Participants' comments from the open-ended responses were summarized. The results of this project provide useful information for park managers relative the access in their park.

Characteristics of Visitors with Disabilities

One objective of this study was to determine the characteristics, or demographic profiles, of the visitors with disabilities to the selected five national park units. This includes types of disabilities, age, gender, and the uses of various devices and assistances (e.g., wheelchair, walker, personal assistant, scooter, TTY, and service animals, etc.).

Types of Disabilities

Overall, four groups were sought for the national park units based on the categories of disabilities of individuals visiting each park: 1) people with physical disabilities, [e.g., individuals who use mobility devices (wheelchairs, scooters, walkers, canes, crutches)]; 2) people with hearing impairments (e.g., individuals who use the hearing aids); 3) people with visual impairments; and 4) people with developmental disabilities. Some result examples are listed as:

- People with disabilities visiting the Mammoth Cave National Park ranged between the ages of 8 and 83 with a mean age of 39 for all participants (53% were females, and 47% were males); with a mean age of 50 for the visitors (age 18 and above) with physical disabilities; with a mean age of 11 for the visitors (age under 18) with physical disabilities; with a mean age of 83 for the visitors with hearing impairments; and with a mean age of 10 for the people with developmental disabilities.

- People with disabilities visiting the Shenandoah National Park ranged between the ages of 29 and 90 with a mean age of 52 for all participants (47% were females, and 53% were males); with a mean age of 55 for the visitors with physical disabilities; with a mean age of 52 for the visitors with visual impairments; and with a mean age of 15 for the people with developmental disabilities.

Types of Assistances and Devices

- Overall, the three most common assistances/devices used by park visitors with disabilities were manual wheelchairs (26%), canes (25%), and power wheelchairs (25%). The park visitors with disabilities also used personal assistants (22%), walkers (22%), hearing aids (10%), crutches (8%), scooters (9%), communication devices (4%), and service animals (3%).

Visitor Expectations/Perceptions of Program and Physical Accessibility in the Park

Knowing the perceptions of visitors with disabilities regarding the program and physical accessibility in the park will assist in the process of providing a good foundation for future development and planning decisions.

Example: Visitors' Opinions of the Shenandoah National Park and its Physical Accessibility

- Participants were asked to rate their perceptions and experiences of the Shenandoah National Park's accessibility during their national park trips. The results given are based on a 7 point scale, where 1 = not a problem, 4 = neutral, and 7 = major problem.

General Accessibility Elements

- Lack of knowledgeable and/or helpful park staff regarding accessibility in the Shenandoah National Park (3.93), and lack of accurate information on accessibility in the park (4.8) were rated by all participants.

Physical Accessibility Elements

- The physical accessibility problems in the Shenandoah National Park to *visitors with physical disabilities* were lack of the width of doorway in restrooms (5.71), and followed by lack of grab bars in restrooms (5.23), lack of accessible trails (5.13), lack of appropriate urinal height in restrooms (5), lack of accessible restrooms (5.1), lack of accessible drinking water (4.73), narrow tread width of outdoor recreation access routes (4.54), lack of accessible overlooks and viewings areas (4.4), lack of accessible parking spaces (4.33), lack of accessible storage facilities (4.14), lack of curb cuts (4.13), lack of accessible camping facilities (4.06), lack of accessible utilities (3.93), lack of accessible route to the trash/recycling containers (3.6), and lack of accessible route to the visitor center (3.33).

More Specific Physical Accessibility Element Examples

- *Visitors with physical disabilities* were also asked to rate particular accessible facilities (including the picnic tables, grills, and fire rings) they were using during the Park visits. The accessibility guidelines for the above three facilities are: 1) the height of the elements; 2) seating space provided; 3) knee space; 4) clear space surrounding the element; 5) the ground surface; and 6) the ground slope.

- In the case of the Blue Ridge Parkway, some of *individuals with physical disabilities* rated there was a problem for the height of the picnic table

(2.56), lack of smooth surfaces around the picnic table (4.11), lack of firm and stable seating space (4.11), lack of appropriate ground slope around the picnic table (4), lack of appropriate ground surfaces around the table (3.89), lack of accessible route to the table (3.78), and lack of clear space for knees (3).

Overall Satisfaction Regarding Accessibility in Park

Examples:

- The mean overall satisfaction to the accessibility in the Great Smoky Mountains National Park was 4.5 (on a 1 to 7 scale, where 1 = very dissatisfied, 4 = neutral, and 7 = very satisfied) rated by all respondents, 4.67 rated by visitors with physical disabilities, 4.67 rated by visitors with hearing impairments, and 2.5 rated by parents/caregivers of persons with developmental disabilities.

- The mean overall satisfaction to the accessibility in the Hot Spring National Park was 4.83 (on a 1 to 7 scale) rated by all respondents, 4.83 rated by visitors with physical disabilities, 5.67 rated by visitors with hearing impairments, 4 rated by person with visual impairments, and 5 rated by parents/caregivers of persons with developmental disabilities.

Open-ended Questions Examples

- Several questions were open-ended and asked the participants to identify what they liked and disliked about the park regarding accessibility in the park. Some general opinions of what participants liked about the park units were a) nice park staff, b) useful information, and c) accessible overlooks. The general themes of what participants did not like about the park units were a) non-accessible restrooms, b) uneven grounds, and c) non-accessible trails.

- The participants were also asked to identify how the park could be improved on accessibility. Some general suggestions included a) more funding budgets needed, b) more accessible parking spaces, c) more accessible bathrooms, d) more accessible trails, and e) the needs of hiring individuals with disabilities as consultants of Park management teams.

Travel Behaviors of Visitors with Disabilities

Trip characteristics such as planning time, traveling distance, and lodging can provide a good foundation for future marketing and promotional decisions. The section provides demographic profiles of respondents (including visitors with

disabilities, caregivers/parents of visitors with developmental disabilities). For example,

Planning Time

- Fifty-three of the Mammoth Cave National Park respondents made their trip decision to visit the park on the day of the trip. Twenty six percent of respondents made their trip decision to visit the park less than 1 week in advance. This is followed by those indicating that the trip decision was made 1 month but within 3 months (7%) and 1 week but within 2 weeks (7%) in advance.

Activity Engagement

- The activities most frequently participated in by Hot Spring National Park visitors with disabilities were visiting a scenic area (50%), visiting a historical site (39%), camping (33%), fishing (28%), visiting a museum (28%), and hiking (22%).

Motivations/Benefits

- The benefits most important to the Great Smoky Mountains National Park visitors with disabilities were to observe the beauty of nature (6.8 on a 1 to 7 scale, where 1 = not important, 4 = neutral, and 7 = extremely important), to get some fresh air (6.8), relax (6.7), to increase fun/joy/enthusiasm (6.3). The least important benefits were to improve attitudes toward school (4.7) and to increase appropriate behaviors (5.2). Other mentioned important benefits were to spend time with friends and family.

The uniqueness of this project is that it 1) provides a comprehensive survey instrument which could be transferable to other related accessibility study in city/state/national parks and 2) represents the first time focusing on the perceptions and expectations of visitors with disabilities regarding the accessibility in individual national park units. Some concerns and suggestions are listed as:

- The findings discussed in result sections indicate the pilot-test results only. Data collection for the individual selected national park unit needs to be continuing, and additional benefits of this project will be realized following the analysis of these data.

- In this study, specific questions have been broken down into categories of disabilities of park users. For future related studies, researchers need to continue to make sure that only those who use the specific elements are answering each question. For instance,

someone with a physical disability would not have use for audio described or captioned video.

- This report summarizes the findings of the perceptions, expectations, participations, motivations, and behaviors of people with disabilities toward their visits at the five national park units. In order to further understand accessibility in the National Park Service, future research may consider collecting these patterns and attitudes from people with and without disabilities of various national park units (national parks, national historical sites, national parkways, and national monuments) at state, regional, and/or national wide levels.