

**National Visitor Use Monitoring Program  
for the  
Ashley, Uinta, and Wasatch-Cache National Forests  
2006-2007**

**Final Critique:  
Process, Methods, and Recommendations**

May 12, 2008

*prepared for:*

Ashley, Uinta, and Wasatch-Cache National Forests  
USDA Forest Service

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**TABLE OF CONTENTS**

Page

ACKNOWLEDGEMENTS .....5

INTRODUCTION .....6

    Explanation of NVUM.....6

METHODS .....8

    Administrative/Management.....8

    Field Work .....11

RESULTS .....13

    Sampling Stratus .....13

    Sites per Ranger Districts by Forest.....15

    Sample Site Types by Forest.....16

    Site Types per Ranger District by Forest.....17

    Proxy and Non proxy Sites per Forest .....18

    Number of Sites by Month per Forest.....19

    Number of Interviews by Forest .....20

    Number of Sites per Day of Week by Forest.....21

    Total Number of Interviews per Day of Week by Forest .....22

    Number of 24 Hour Counts per Forest .....23

    Hand tally per forest.....24

    Average Number of Interviews and Hand Tally per Site

        Type by Forest .....25

    Average Number of Interviews per Hour .....26

    Summary of Hours and Wages per Interview for All Forests .....27

COMMENTS/RECOMMENDATIONS .....28

    Pework .....28

    Supplies.....30

    Administrative/Management.....30

    Field Work .....31

    Summary .....34

REFERENCES .....35

APPENDICIES .....36

    APPENDIX 1: Sample Schedule from August 1.....36

    APPENDIX 2: Basic Interview Form.....37

## LIST OF TABLES

Table		Page
1	Sampling Day Stratus .....	13
2	Sites per Ranger Districts by Forest.....	15
3	Sample Site Types by Forest.....	16
4	Site Types per Ranger District by Forest.....	17
5	Proxy and Non proxy Sites per Forest .....	18
6	Number of Interviews by Forest .....	20
7	Number of 24 Hour Counts per Forest .....	23
8	Hand tally per forest.....	24
9	Average Number of Interviews and Hand Tally per Site Type by Forest .....	25
10	Average Number of Interviews per Hour .....	26
11	Summary of Hours and Wages per Interview for All Forests .....	27

## LIST OF FIGURES

Figure		Page
1	Number of Sites by Month per Forest.....	19
2	Number of Sites per Day of Week by Forest.....	21
3	Total Number of Interviews per Day of Week by Forest .....	22

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## **INTRODUCTION**

Utah State University's Institute for Outdoor Recreation and Tourism (IORT) received the agreement to conduct the National Visitor Use Monitoring (NVUM) program for the 2007 fiscal year on the Ashley, Uinta, and Wasatch-Cache National Forests. The National Agricultural Research, Extension, and Teaching Policy Act of 1977 authorizes the Forest Service to enter into cost reimbursement agreements with public universities without the need for competition. Utah State University is a land grant institution with accredited Recreation, Parks and Tourism, and Natural Resources programs. IORT has extensive background in natural resources-based research assisted through the support and utilization of resources, faculty, and students within these programs.

According to the agreement, IORT is not responsible for the analysis of the data collected through the NVUM program. Contractually, IORT was required to conduct the field work and deliver the raw data to the Forest Service. Therefore, the content of this report will critique the processes, methodologies, and provide recommendations for the administration of future NVUM projects.

### **Explanation of NVUM**

The US Forest Service implemented the National Visitor Use Monitoring program in 2000, in order to obtain a better understanding of recreational users on the National Forests. "This level of understanding is required by national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National

Recreation Agenda” (National Visitor Use Monitoring Results June 2004, WASATCH-CACHE NATIONAL FOREST p. 3). Results from NVUM are designed to show "how many people recreate on the forest, what kinds of activities they do, how long they stay, how much they spend, and how satisfied they are with the facilities and services provided" (NVUM Program National Project Results Jan 2000-Sept 2003 p. 1).

There are many different uses for the results from NVUM. By gathering data ranging from a forest level down to a site level, the Forest Service uses the information to make more informed strategic decisions and management plans. NVUM results are used for Congressional reporting and as a basis for the allotment of funding for the National Forests. Results from NVUM are also used by private interests, academia, and state and local governments.

The first full cycle of the NVUM program began in January 2000, and lasted until September of 2003. The Uinta and Ashley National Forests both conducted their first NVUM from October 2000 through September 2001. The Wasatch-Cache National Forest administered its first from October 2002 through September 2003. The three forests agreed to contract the field work for their second round of NVUM to IORT. The field work began in October 2006, and finished in September of 2007.

## **METHODS**

### **Administrative/Management:**

Prior to the beginning of the field work, the Project Manager, the Co-Principal Investigator, and two Forest Service contacts from the Wasatch-Cache attended a national NVUM training for Forest Service staff and contractors. The two day training was for managers assigned to administer the NVUM on the various forests. This training gave the IORT staff and the Forest Service contacts the opportunity to discuss strategies and goals of the project. At the conclusion of the training, IORT personnel received three forests calendars indicating sampling sites and dates.

Shortly after the training, IORT was given most of the necessary equipment including driving directions, maps, manuals, briefcases, signs, counters, and various other supplies. While the initial inventory was adequate to begin the study, IORT never received the full allotment of gear to conduct the NVUM according to the standards outlined in the training manual.<sup>1</sup>

Once the inventory was received, IORT began hiring and training a workforce. Due to its access to highly skilled students, IORT was fortunate enough to have the opportunity to be selective in the hiring process. As a result, most of the field technicians were in the recreation or natural resources fields. A majority of the technicians had previous experience working within a government agency and most had previous experience conducting interviews for similar projects. Only those individuals who were

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<sup>1</sup> For more information about the lack of supplies and the problems this created, see Supplies section under Comments/Recommendations.

assertive, tactful, and understood the value of the NVUM research were considered for field positions.

Employees were trained at a three day training retreat. The retreat consisted of one day of in-house training and two days of field exercises. Forest Service representatives were able to attend the first field training day in order to assure proper procedures were being taught. Following the initial three day retreat, all field technicians were then paired with a person with existing NVUM experience for a shadowing period. The length of the shadowing period was determined by them and their NVUM mentor at the time when both felt the technician was ready to work independently.

Shortly before the actual sampling began, the Forest Service staff issued press releases to the Ashley, Uinta, and Wasatch-Cache National Forest employees, law enforcement officials, and the general public alerting them of the project. The project's assistant manager sent Forest Supervisor's, District Rangers, District Recreation Managers and Law Enforcement Officers monthly emails notifying them where and when technicians would be at specific sites within their forests. The Forest Service coordinator sent weekly emails to the District offices where and when surveys were to occur and asked managers to conduct safety and procedural check-ups on the field technicians. These email notifications served several purposes. They served as a safety measure by alerting law enforcement and Forest Service staff of the time and location of the field technicians. In one instance, a district office in Vernal received the weekly email and noticed a scheduled site was in close proximity to where two escaped inmates had recently been seen. When the district office alerted IORT of the situation, the field technician was then warned of the possible dangers and the site day was cancelled.

Another benefit of the weekly emails was that it served as a quality control measure. Each email included a request for Forest Service staff to observe and critique the technician's performance. The email also included a performance evaluation form to be filled out by the observer. A third benefit of the emails was providing the district offices with the information to alert IORT of recent site closures. While the weekly emails did have several benefits, there were many instances when Forest Service personnel said they were not aware technicians were going to be on their District. This indicates District personnel were either not reading the emails or not passing the information on to office mates.<sup>2</sup> This proved problematic when site closures did occur and IORT was not alerted of the closures. The field technician would then go out into the field and find the site closed or inaccessible.

One of the most difficult aspects of the study was the logistics of the traffic and trail counter pickups with the interview schedule. The three forests comprised over 3.5 million acres. The geographic size of the interview area coupled with a limited inventory of counters (4 pneumatic and 3 infrared counters per Forest) that needed to be relocated on a daily basis required a very detailed counter pickup schedule (see Appendix 1 for sample of schedule). It appears that the problem could be simplified if a single forest conducted the study in-house. There are several steps that could simplify this problem on multiple forests. One would be to simply have a bigger inventory of counters. Another option could be as part of the final calendar approval, to analyze the number of non-proxy surveys on sequential days and schedule reasonable distances between survey sites.

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<sup>2</sup> There were instances when a lack of communication within the Forest Service or between the contractor and Forest Service personnel proved to be problematic. See the Supplies section under Comments/Recommendations for more information on lack of communication.

Once the interviewing began, returned forms would be reviewed in the IORT office for completeness and accuracy. If there were problems with the forms, feedback would be given to the technician in an attempt to correct the problem(s). Once the Daily Summary Forms were reviewed, they were photocopied for IORT's records. Completed interview forms and the original Daily Summary Forms were then mailed to a Forest Service office in Salt Lake City, Utah, every two weeks for processing.

### **Field Work**

A typical site visit for a field technician normally began several hours before their scheduled interview time. The technician would first check out all of their supplies from a regional staging area. These supplies would include signs, sign stands, cones, and restocking necessary forms from the staging area's inventory. The next step usually involved picking up a traffic or trail counter in the field at a different site location to be used at their scheduled site. In many instances, the technician was picking up a counter they did not put out. This required the interviewer to call the person who put the counter in the field for directions to its location. This step often proved to be extremely difficult particularly with trail counters meant to be hidden from the public's view. Once the technician picked up the counter, they would then retrieve the 24 hour count and relay that number to the person who originally placed the counter in the field. With all of the necessary supplies, including a counter, the field technician proceeded to their survey site. It was important for the interviewer to arrive on site early enough to evaluate the site and have the site completely set up prior to the scheduled interview time. There are a variety of specific site set ups for different site types. These are outlined in the NVUM

Handbook, which was used as our training and reference manual for technicians in the field. While there are specific set ups for the different types of sites, the sites themselves rarely lend themselves to be set up in the same manner as detailed in the manual. This was sometimes the result of safety concerns, geographic constraints, location of visitors, or not having the inventory to replicate the manual's instructions. For these reasons, the field technician had to have the initiative to implement the best site set-up scenario, which was safe, and most closely resembled the recommendations in the handbook. In general, normal site set-ups require a trail or traffic counter be set up, the placement of signs at specific distances, and the interviewer to be located in a certain location. While the technician interviews exiting visitors they also keep track of the number of visitors exiting the site with the use of a hand tally counter. At the end of the six hour interview period, the field technician records the number of interviews conducted, the six hour hand tally (one way) count, and the six hour (normally two way) count shown on the traffic or trail counter. The interviewer is also responsible for obtaining the 24 hour count from the counter prior to submitting their forms.

There are three different versions of the instrument used to interview visitors (see Appendix 2 for a sample of the instrument). The first three pages of all three forms are the same with the differences being on the last page. There is a basic form with no questions on the last page; an economic form with expenditure related questions; and a satisfaction form that measures the visitor's satisfaction with the quality of services and facilities provided at the site. Each instrument has specific instructions on what to say, who to interview, and how to conduct the interview. Our training followed the interviewing recommendations on both the instrument and in the handbook.

## RESULTS

Due to the interview forms being processed by the Forest Service, IORT does not have the ability to describe any of the results from information reported within the actual interview forms. Therefore, the Results section of this report will summarize various aspects of the study's sampling results. SPSS was used to help IORT researchers understand these aspects of the study's sampling through simple, descriptive statistics. Tables from the analysis were created and are used in this section to help describe results of the sampling procedure.

Table 1 shows a status of the sample days. There were a total of 686 scheduled site visits on the three forest calendars. Cancelled/closed days were those days when sites

**Table 1: Sampling day status.**

Status (days)	ASHLEY	UINTA	WASATCH-CACHE	Total
Scheduled <sup>1</sup>	223 (32.5%)	187 (27.3%)	276 (40.2%)	686
Cancelled/Closed	15 (6.5%)	10 (5.2%)	8 (2.8%)	33
Make-up	7 (3.0%)	4 (2.1%)	6 (2.1%)	17
Missed	6 (2.6%)	6 (3.1%)	6 (2.1%)	18
Regular	191 (82.3%)	162 (83.9%)	253 (89.1%)	606
Traffic Counter Only	11 (4.7%)	7 (3.6%)	9 (3.2%)	27
View Corridor	2 (0.9%)	4 (2.1%)	2 (0.7%)	8
<b>Total</b> <sup>2</sup>	211 (32.1%)	177 (26.9%)	270 (41.0%)	658

<sup>1</sup> Number of scheduled site visits.

<sup>2</sup> The total originally includes the Normal, Traffic Counter Only, View Corridor and Make-up days.

were either cancelled or not open. Examples of these types of days were the result of closures due to the presence of bears, fires, and seasonal closures. Missed days were those days when the interviewer simply was unable to complete a site visit. Examples of these were when the interviewer was too sick to work, or sites were inaccessible due to washed out roads or excessive snow.

Nearly every cancelled/closed day and missed day was submitted to the Forest Service for a request for makeup day. Many of the days such as those missed due to bad weather, fire closures, and seasonal closures were not granted a makeup day as per manual direction. In these cases the NVUM policy is to submit a Daily Summary Form indicating zero use for that day. Other missed days, such as when interviewers were sick, were issued a backup day and were permitted to be made up. There were a total of seventeen makeup days. The number of cancelled/closed days and missed days, and concurrently the number of zero use days, could have been significantly reduced with more extensive pre-work. In addition, better communication from Forest Service personnel to field workers, relaying site closure information could have been beneficial.<sup>3</sup>

Regular days were those days that were scheduled and a field technician completed the shift. After removing the cancelled days, there was a total of 658 site visits to all three forests. This number includes Regular, Traffic Counter Only, View Corridor, and Makeup days. It is interesting to note the difference in the percent of sampling that occurred on each forest with 41% occurring on the Wasatch-Cache, 32% on the Ashley, and just under 27% on the Uinta.

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<sup>3</sup> Many scheduled sites were not surveyed because they were closed for the season, roads and bridges to sites had been washed out in previous years, or recent private development made sites inaccessible. In these instances, more extensive pre-work could have identified these sites in advanced. See the Pre-work section under Comments/Recommendations for more information on this.

Not only is there an uneven distribution between the number of site visits within each forest, but there is any even bigger discrepancy between the distribution of site visits within each district. This discrepancy between the numbers of site visits to each district can easily be seen in Table 2. The Mountain View and Logan Ranger Districts received 3.7% and 4.4% of the sites sampled on their forests, while the Flaming Gorge and Salt Lake Districts received 57.8% and 63.7% respectively. The June of 2004 NVUM Results states results are "valid and applicable at the forest level. It is not designed to be accurate

**Table 2: Sites per ranger districts by forest.**

Forest Name	Ranger District	Number of Sites (% on Forest)	Total Sites per Forest
ASHLEY	Duchesne	21 (10.0%)	211 (32.1%)
	Evanston <sup>1</sup>	8 (3.8%)	
	Flaming Gorge	122 (57.8%)	
	Roosevelt	22 (10.4%)	
	Vernal	38 (18.0%)	
UINTA	Heber	48 (27.1%)	177 (26.9%)
	Pleasant Grove	80 (45.2%)	
	Spanish Fork	49 (27.7%)	
WASATCH- CACHE	Evanston	16 (5.9%)	270 (41.0%)
	Kamas	21 (7.8%)	
	Logan	12 (4.4%)	
	Mountain View	10 (3.7%)	
	Ogden	39 (14.4%)	
	Salt Lake	172 (63.7%)	
<b>Total</b>			658

<sup>1</sup> Original data set indicated that eight sites on the Evanston District were in the Ashley Forest. This is the result of the survey site being on the border between the two forests and interviewing visitors exiting the Ashley while on the Wasatch Cache.

at the district or site level." (p. 5) The low sample size found on the Mountain View and Logan Ranger Districts explain why the data can not be representative of an entire district, much less sites within a district.

Table 3 shows the five site type classifications and the number of times each was surveyed within the three forests. The five different site types are Day Use Developed Sites (DUDS), General Forest Area (GFA), Overnight Use Developed Sties (OUDS), View Corridor (VC), and Wilderness (WILD). There is a large difference between the number of times specific site types were surveyed within each of the forests. For instance, there are almost three times as many DUDS sites surveyed on the Wasatch-Cache (110) as those surveyed on the Uinta (41). This is partially the result of the disproportionate number of survey days on the Wasatch-Cache versus the other forests.

Of some concern was the relatively low number of View Corridor sites scheduled within the three forests. The Ashley and Wasatch-Cache each had two scheduled VC sites, representing less than 1% of their site visits, while the Uinta had four, comprising

**Table 3: Sample site types by forest.**

Forest Name	Site Types	Number of Sites (% per forest)	Total
ASHLEY	Day Use Developed Sites (DUDS)	66 (31.3%)	211 (32.1%)
	General Forest Area (GFA)	62 (29.4%)	
	Overnight Use Developed Sites (OUDS)	56 (26.5%)	
	View Corridor (VIEW)	2 (0.9%)	
	Wilderness (WILD)	25 (11.8%)	
UINTA	Day Use Developed Sites (DUDS)	41 (23.2%)	177 (26.9%)
	General Forest Area (GFA)	53 (29.9%)	
	Overnight Use Developed Sites (OUDS)	53 (29.9%)	
	View Corridor (VIEW)	4 (2.3%)	
	Wilderness (WILD)	26 (14.7%)	
WASATCH- CACHE	Day Use Developed Sites (DUDS)	110 (40.7%)	270 (41.0%)
	General Forest Area (GFA)	66 (24.4%)	
	Overnight Use Developed Sites (OUDS)	52 (19.3%)	
	View Corridor (VIEW)	2 (0.7%)	
	Wilderness (WILD)	40 (14.8%)	
<b>Total</b>			<b>658</b>

2.3% of their total sites. With driving for pleasure being one of the most popular of all recreational activities, these low VC numbers are of concern because it shows the three forests are missing a key demographic, the casual visitor.

Table 4 shows the number of site types sampled on each of the Ranger Districts within the Forests. It is interesting to note the range between the numbers of sites sampled from district to district. On the Ashley, the Flaming Gorge District was sampled over three times as much as the second most sampled district. While on the Wasatch-Cache, the Salt Lake District was sampled over four times as much as the second most sampled district. It appears as if the disproportionate sampling strata was by design, in order to concentrate on the higher use districts.

Each of the five different site types is either Proxy or Nonproxy. According to the NVUM handbook, "Proxy sites are those sites where a direct count of something (fee envelope, ski ticket sale, room rental receipt, etc.) is taken that represents recreation visitation to a Forest Service site" (p. 12). A Nonproxy site is a site where no

**Table 4: Site types per ranger district by forest.**

Forest Name	Ranger District	Site Types					Total <sup>1</sup>
		DUDS	GFA	OUDS	WILD	VIEW	
ASHLEY	Duchesne	4	2	8	7	0	21
	Evanston	0	0	0	6	2	8
	Flaming Gorge	61	29	32	0	0	122
	Roosevelt	1	4	12	5	0	22
	Vernal	0	27	4	7	0	38
UINTA	Heber	10	21	13	0	4	48
	Pleasant Grove	24	21	11	24	0	80
	Spanish Fork	7	11	29	2	0	49
WASATCH-CACHE	Evanston	8	2	2	3	1	16
	Kamas	6	9	6	0	0	21
	Logan	4	5	1	1	1	12
	Mountain View	0	1	6	3	0	10
	Ogden	16	16	7	0	0	39
	Salt Lake	76	33	30	33	0	172

<sup>1</sup> The total includes Proxy sites, Nonproxy sites, and zero use days.

recreational use count is being recorded. Therefore, only at Nonproxy sites do 24 hour counts and hand tally counts need to be taken.

A majority of the sites at all three forests were Nonproxy sites, although there was a significant range between the number of Nonproxy and Proxy sites on each forest, as seen in Table 5. There were only about 11% more Nonproxy sites than Proxy sites on the Wasatch Cache, while on the Uinta, there were about 67% more Nonproxy sites than Proxy.

Shifts at Nonproxy sites were either scheduled as AM shifts or PM shifts. The AM shift was from 8am until 2pm and the PM shift was from 2pm until 8pm, with adjustments made during daylight savings time. The footnotes in Table 5 shows the percentage of AM and PM shifts on all three forests. There were only about 10% more PM shifts than AM shifts on the Ashley and Uinta. However, on the Wasatch-Cache, over three times as many of the Nonproxy shifts were PM than AM.

Rather than Proxy shifts having an AM or PM starting time, field technicians were required to interview during the six hour period when the most number of visitors

**Table 5: Proxy and Non proxy sites per forest.**

Forest Name	Site Type	Number of Sites (% on Forest)	Total Sites per Forest
ASHLEY	Non-Proxy <sup>1</sup>	158 (74.9%)	211 (32.1%)
	Proxy	53 (25.1%)	
UINTA	Non-Proxy <sup>2</sup>	148 (83.6%)	177 (26.9%)
	Proxy	29 (16.4%)	
WASATCH-CACHE	Non-Proxy <sup>3</sup>	150 (55.6%)	270 (41.0%)
	Proxy	120 (44.4%)	
<b>Total</b>			658

<sup>1</sup> For Non-Proxy sites for the Ashley Forest, 29.9% were AM and 40.8% were PM.

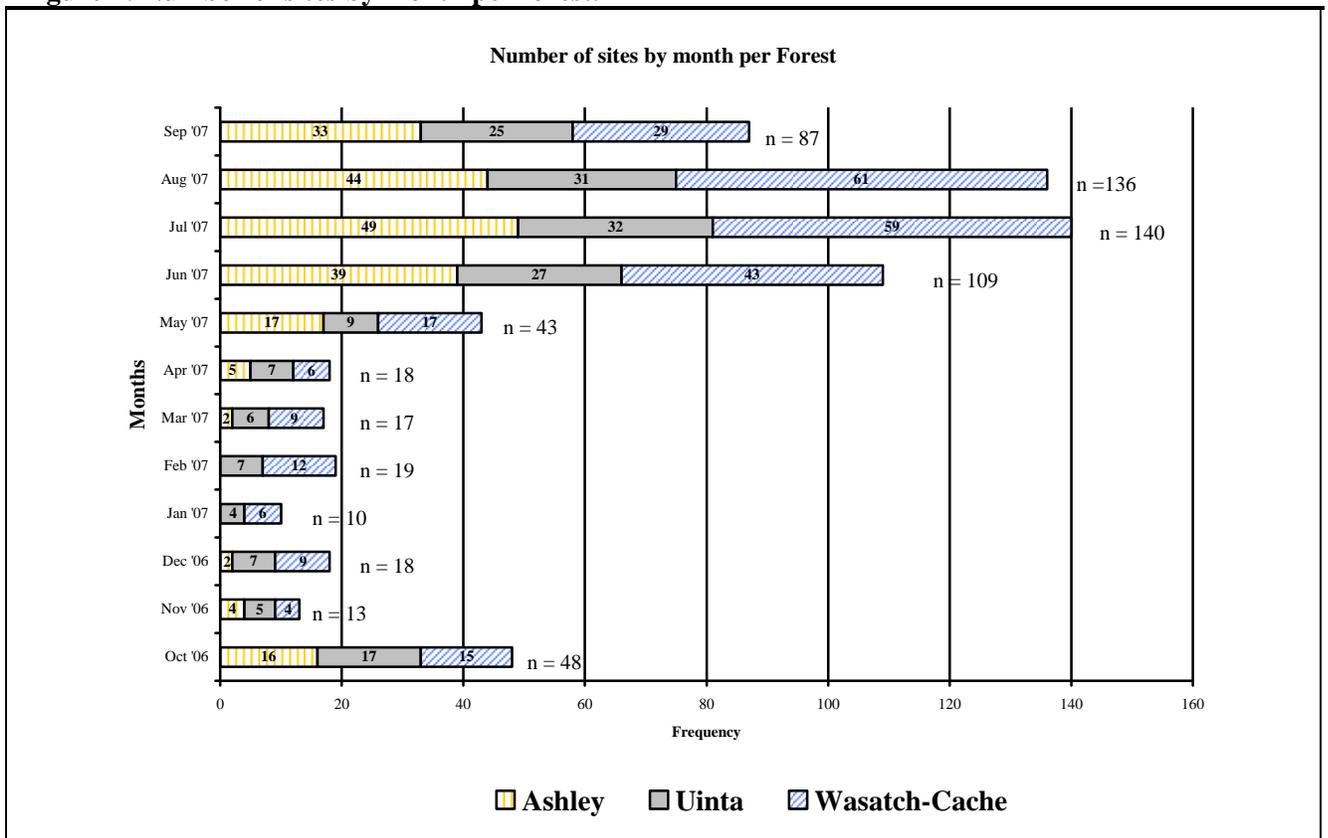
<sup>2</sup> For Non-Proxy sites for the Uinta Forest, 34.5% were AM and 45.2% were PM.

<sup>3</sup> For Non-Proxy sites for the Wasatch-Cache Forest, 19.6% were AM and 62.7% were PM.

were exiting the survey site. At sites such as ski resorts, the highest exiting time was apparent. However, at many of the Proxy sites, the time in which the most number of visitors were exiting was not as obvious.<sup>4</sup>

Figure 1 shows there were many more sample days during the summer months than there were throughout the winter months. Sampling for the project began in October of 2006, with a moderate 48 sample days. There was then a convenient slowdown in sampling over the winter months. This gave IORT a good introduction to what would be required from the project during low sample periods, and enabled us to reorganize for the

**Figure 1: Number of sites by month per forest.<sup>1</sup>**



<sup>1</sup> The Ashley Forest had two closed sites in January and February 2007 which were rescheduled.

<sup>4</sup> In the future, it may be beneficial for the Forest Service to designate survey times at Proxy sites since they are likely more familiar with visitation patterns than the contractor. For more information on this see the Field Work Section under Comments/Recommendations.

upcoming heavy sampling months.

There were more sample days scheduled on the Wasatch-Cache than there were on the Ashley or Uinta throughout the winter months. This helped to capture the ski crowd, as many of these scheduled sites were at ski resorts. It is the large ski population that has recently made the Wasatch-Cache the fifth most visited forest in the United States (Bauman, 2006).

The average number of interviews is fairly proportional to the average number of interview days on each forest. This can be seen in Table 6. The average number of interviews conducted per day on the three forests was 8.1. This number is as high as it is in part because of the rare, very high interview days. The 48 interview day on the Ashley was at Linwood Bay in June, the 75 interview day on the Uinta was at Aspen Grove Entrance Booth in August, and the 66 interview day on the Wasatch-Cache was at Snowbird in October. Due to the fact these very high interview days were a rare

**Table 6: Number of interviews by forest.**

Measure	ASHLEY	UINTA	WASATCH-CACHE	All forests
Number of interview days <sup>1</sup>	199 (31.6%)	170 (27.0%)	261 (41.4%)	630
Number of interviews	1,759 (34.5%)	1,182 (23.2%)	2,161 (42.3%)	5,102
Average number of interviews per day	8.8	6.9	8.3	8.1
Median number of interviews	7.0	3.0	5.0	5.0
Range of number of interviews <sup>2</sup>	0 - 48	0 - 75	0 - 66	0 - 75

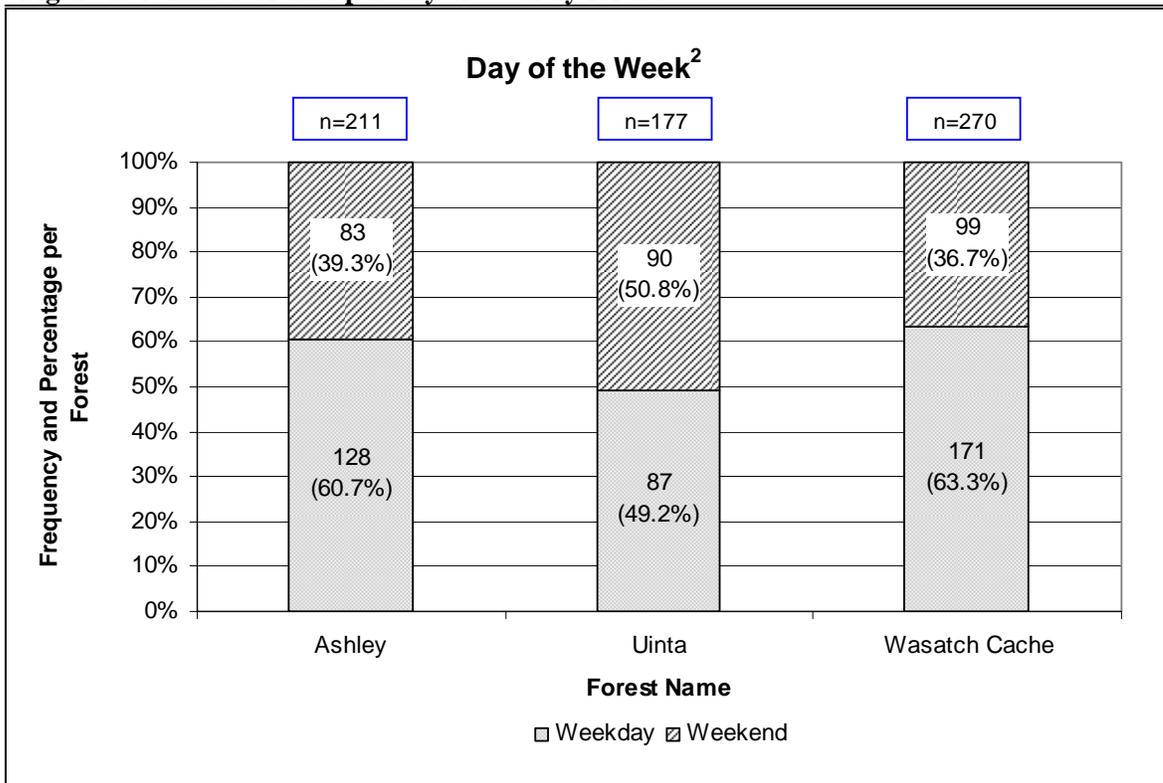
<sup>1</sup> The total number of interview days for each forest doesn't include the Traffic Counter Only, Closed/Cancelled, and Missed days.

<sup>2</sup> Of the 110 (16.7%) zero interview days for all forests, 27 (13.6% of total per forest) were on the Ashley Forest, 45 (26.5%) were on the Uinta Forest, and 38 (14.6%) were on the Wasatch-Cache Forest.

occurrence, resulting in a false high skewed average, the median number of five interviews per site visit may be a better representation of a normal interview day in the field. The reason why the Uinta's median number of interviews is so low may be because it had a much higher percentage of zero interview days. As seen in the second footnote, the Uinta has 26.5% of the zero interview days as opposed to 13.6% on the Ashley and 14.6% on the Wasatch-Cache. Five of the zero use days were at a General Forest Area (GFA) with no real attraction, nine were at three different campgrounds during weekdays in the off-season, and three were at a lodge during weekdays in the off-season.

Figure 2 shows the number of site visits per day of the week. In this figure, it is

**Figure 2: Number of sites per day of week by forest.<sup>1</sup>**



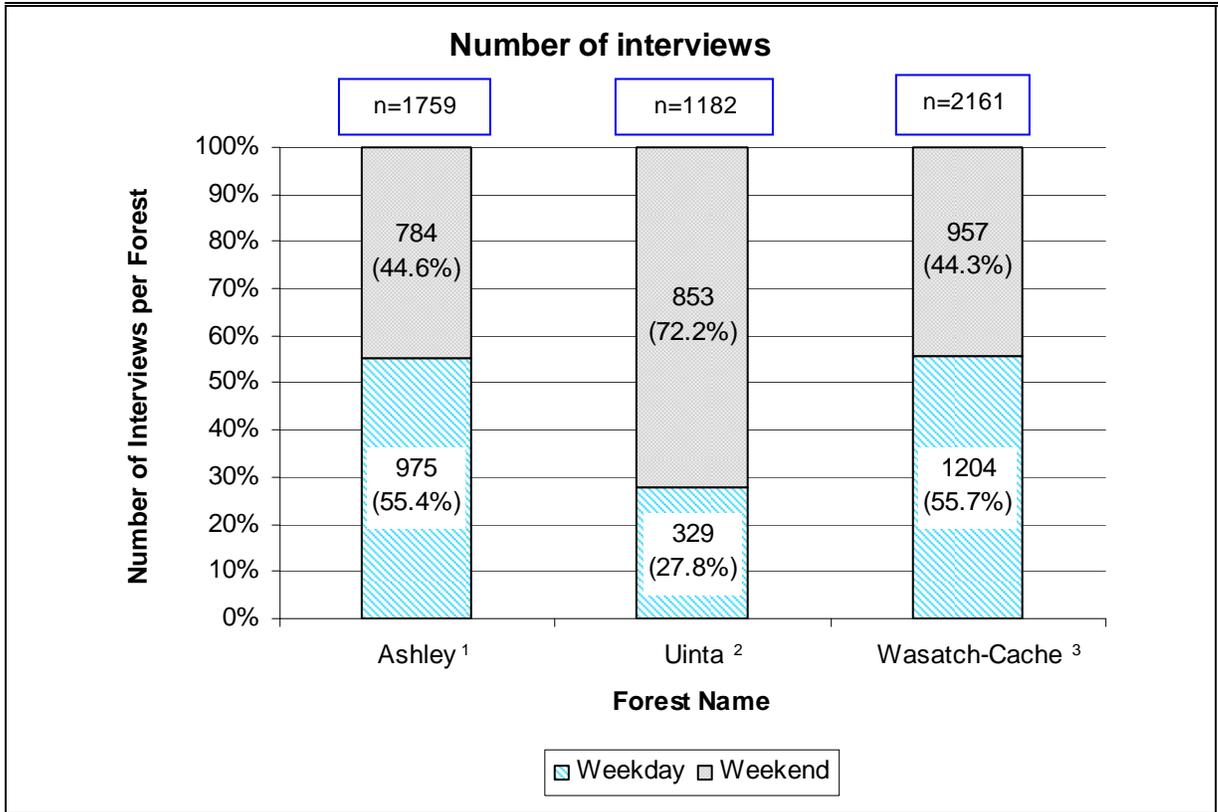
<sup>1</sup> On all the forests combined, 386 (58.7%) of the survey sites were on Weekdays and 272 (41.3%) of the survey sites were on Weekends.

<sup>2</sup> Weekdays are from Monday – Friday. Weekend days are Saturday and Sunday.

clear that proportionally there was more sampling on Saturdays and Sundays than there was on weekdays. If the distribution between the number of weekend days and weekdays sampled was proportional, only 27.5% of the sample days would occur on weekends. As it stands, the Uinta has nearly twice that with 50.8% occurring on the weekends, while the Ashley has almost 40% and the Wasatch-Cache has nearly 37%. This higher weekend sampling strata is likely designed to capture the higher visitation periods.

With the higher number of weekend site visits, it is only logical there would be a higher proportion of interviews conducted on weekends. Figure 3 shows the total number

**Figure 3: Total number of interviews per day of week by forest.**



<sup>1</sup> On the Ashley Forest the mean number of interviews for weekdays was 8.3 and for weekends was 9.5 The median number of interviews for weekdays was 6.0 and for weekends was 8.0.

<sup>2</sup> On the Uinta Forest the mean number of interviews for weekdays was 4.1 and for weekends was 9.4. The median number of interviews for weekdays was 2.0 and for weekends was 5.5.

<sup>3</sup> On the Wasatch-Cache Forest the mean number of interviews for weekdays was 7.3 and for weekends was 9.8. The median number of interviews for weekdays was 4.5 and for weekends was 7.0.

of interviews by day of the week. There were over twice as many interviews conducted on the weekends than on the weekdays on the Uinta. Part of the reason the number of weekday interviews is so low is because this is when a majority of the forty five zero interview days occurred. The Ashley and Wasatch-Cache each had only about 11% more interviews conducted on weekdays rather than weekend days.

With the introduction of the NVUM just over four years ago came a new, more accurate way of counting visitors to the National Forests.<sup>5</sup> "In 1996, 850 million visitors were reported, and the data show there were actually 205 million" (NVUM Handbook, p. 8). It is inaccurate counts like these that required changes. The new, more accurate system of counting relies on 24 hour pneumatic traffic and infra-red trail counters.

The 24 hour counts for each forest can be seen in Table 7. There was a fairly equal percentage of Nonproxy sites requiring 24 hour counts (between 31% to 35.4%) on

**Table 7: Number of 24 hour counts per forest.<sup>1</sup>**

Measure	ASHLEY	UINTA	WASATCH-CACHE	All forests
Number of 24 hr. counts <sup>2</sup>	154 (35.4%)	135 (31.0%)	146 (33.6%)	435
Sum of 24 hr. counts per forest	22,636 (19.5%)	41,162 (35.6%)	51,951 (44.9%)	115,749
Average 24 hr. count	146.9	304.9	355.8	266.1
Median 24 hr. count	61.5	105.0	121.0	90.0
Range of 24 hr. counts	0 – 4,000	0 – 12,481	0 – 4,000	0 – 12,481

<sup>1</sup> Represented are the 24 hr. counts of Infra-red Trail Counters and Pneumatic Counters.

<sup>2</sup> The total number of 24 hr. counts for each forest doesn't include Proxy Sites.

<sup>5</sup> IORT commonly found unaccounted for, noise within the 24 hour counts. For more information on these inaccurate counts, see Field Work Section under Comments/Recommendations.

each of the three forests. This however is not very representative because the Wasatch-Cache did have more sample sites and twice as many Proxy sites (not requiring 24 hour counts) as the Ashley and over four times as many as the Uinta (see Table 5).

There is a big difference between the three Forests' 24 hour average (266.1) and the 24 hour median (90). The 24 hour average is skewed in a positive direction because of the occasional high end of the range. The 4,000 count on the Ashley was at Yellow-pine Campground while the 4,000 count on the Wasatch-Cache was at Butler Fork. The 12,481 count on the Uinta occurred at the American Fork Canyon Entrance Booth. These exceptionally high counts at the high end of each Forest's range were outliers. It is these outliers that drive the average 24 hour count as high as they are. The median 24 hour count for all three forests of 90 is almost one-third that of the 266 average. This median count is likely a more realistic representation of a normal 24 hour field count.

Another component of a Nonproxy site visit, other than the 24 hour count, is a six hour hand tally count of all exiting traffic. Table 8 shows results of the six hour hand tally

**Table 8: Hand tally per forest.**

Measure	ASHLEY	UINTA	WASATCH-CACHE	All forests
Hand tally days per forest <sup>1</sup>	144 (34.4%)	135 (32.2%)	140 (33.4%)	419
Sum of hand tally per forest	3,004 (17.5%)	8,825 (51.4%)	5,352 (31.1%)	17,181
Average hand tally per site per forest	20.9	65.4	38.2	41.0
Median hand tally per forest	13.5	16.0	17.0	16.0
Range of hand tally per forest	0 – 139	0 - 1035	0 - 287	0 - 1035

<sup>1</sup> The total number of hand tally for each forest doesn't include Proxy, Traffic Counter Only, Closed/Cancelled, and Missed days.

count from each forest. Even though there is a fairly even distribution of hand tally days per forest (32.2% to 34.4%), there is a wide range in the number of actual hand tally counts per forest (3,004 to 8,825). There is also a big difference between the average and the median, with the median likely being the more accurate representation of a normal six hour hand tally count day. The 1,035 hand tally count was recorded at the American Fork Canyon Entrance Booth in June. It is this very high hand tally count that helps spike the Uinta's average hand tally to almost twice the Wasatch-Cache's average and over three times the Ashley's average.

Table 9 shows the number of interviews and the average hand tally count for each site type on all three forests. It is difficult to compare the average number of interviews and hand tally counts for the site type classifications on the different forests because of

**Table 9: Average number of interviews and hand tally per site type by forest.<sup>1</sup>**

Forest Name	Site Type	Average Number of Interviews	Average Hand Tally Count
ASHLEY	DUDS	10.2	28.0
	GFA	8.0	20.2
	OUDS	11.2	23.7
	VIEW	9.0	37.0
	WILD	1.6	6.2
UINTA	DUDS	8.1	48.9
	GFA	10.9	122.2
	OUDS	2.6	10.2
	VIEW	1.0	104.0
	WILD	7.9	43.9
WASATCH-CACHE	DUDS	10.3	63.6
	GFA	10.1	39.0
	OUDS	4.7	3.1
	VIEW	1.0	0 <sup>2</sup>
	WILD	4.9	15.2

<sup>1</sup> These values don't include Traffic Counter Only, Closed/Cancelled, and Missed days.

<sup>2</sup> The Hand tally count wasn't taken.

different characteristics specific site types may have, depending on the forest. For example, the OUDS site type on the Uinta averaged 2.6 counts per interview while the OUDS site type on the Ashley averaged 11.2 counts per interview. For a more accurate comparison between the average number of interviews and the average hand tally count on the three forests, it may be more helpful to compare use levels.

Table 10 presents the mean and median number of interviews per field hour on all three forests. The mean was found by simply dividing the number of interviews by the number of hours spent on site interviewing. Excluding the zero interview days, there was a mean of 1.7 and a median of 1.2 interviews per hour completed on all three forests. These figures drop to a mean of 1.4 and a median of .8 interviews per hour when the zero use days are included. The highest percentage of interviewing hours were spent on the Wasatch-Cache (41%), followed by the Ashley (32%), and finally the Uinta (27%). The percentage of interviewing hours closely corresponds to the number of site days on each

**Table 10: Average number of interviews per hour.**

Mean number of interviews per hour for all forests <sup>1</sup>	1.7		
Median number interviews per hour for all forests <sup>1</sup>	1.2		
Mean number of interviews per hour for all forests <sup>2</sup>	1.4		
Median number of interviews per hour for all forests <sup>2</sup>	0.8		
Measure	ASHLEY	UINTA	WASATCH-CACHE
Sum of the number of hours per forest	1,186 (32.0%)	996 (27.0%)	1,519 (41.0%)
Average number of interviews per hour <sup>2</sup>	1.5	1.6	1.4

<sup>1</sup>This doesn't include zero interview days (n = 520).

<sup>2</sup> This includes the zero interview days (n = 631).

forest with 41% occurring on the Wasatch-Cache, followed by 32.1% on the Ashley, and finally the Uinta with 26.9% of the site visits (shown in Table 1).

The NVUM for the three forests was a large scale recreational study requiring over 9,400 employee hours totaling \$102,361 in wages (Table 11). The final salary costs divided by the total number of interviews results in a cost of \$20.10 per interview. This figure does not include the significant transportation costs as well as other miscellaneous expenses.

**Table 11: Summary of hours and wages per interview for all forests.<sup>1</sup>**

Measure	Sum	Division by total number of interviews
Total number of interviews	5,102	-----
Total number of hours spent on site	3,701	0.72 hr/interview
Total field work hours <sup>2</sup>	7,335	1.4 hr/interview
Total field work wages <sup>3</sup>	\$74,731	\$14.60/interview
Total employee and project manager hours	9,425	1.8 hr/interview
Total employee and project manager wages	\$102,361	\$20.10/interview

<sup>1</sup> The values don't include transportation or equipment costs.

<sup>2</sup> The field work hours include driving hours as well as the 6 hour interview period. These hours spent in the field are for field technicians as well as office staff and project manager.

<sup>3</sup> The field work wages include wages for field technicians as well as office staff and project manager.

## **COMMENTS/RECOMMENDATIONS**

The Institute for Outdoor Recreation and Tourism believes it conducted the NVUM according to procedure and in accordance with the Forest Service's high standards of operation. This was accomplished through having an extensive background in natural resource-based research, a staff committed to excellence, continual monitoring coupled with corrective steps, and ongoing collaboration with Forest Service personnel. Therefore, the data provided are believed to be the most accurate results, achievable by the study's parameters.

The intent of the following section is not to point to potential flaws within the U.S. Forest Service or NVUM's methodologies, but to simply show those situations which proved to be problematic or challenging for IORT while conducting the study. This is done in the hopes that future administrators of the NVUM are able to improve upon the validity of its results.

### **Pework**

There was an apparent lack of prework conducted prior to the start of the project. There are certain requirements which need to be fulfilled in preparation of conducting an NVUM project. The Forest Service provides excellent resources detailing these prework requirements in their National Visitor Use Monitoring Pre-Work publication, on their website, and in the NVUM Handbook. This lack of prework was evident in many different areas.

First, it did not seem as if there was any review of the three forest's calendars once they were printed. Many sites had seasonal closures of which we were unaware. These closures included roads, campgrounds, resorts, visitor centers, and additional sites with specific opening and closing dates. Other sites were simply inaccessible due to instances such as roads and bridges having washed out years earlier. Another common situation was the presence of new private development prohibiting access to formerly accessible survey sites. In most cases, our technicians, unaware of these closures, would travel several hours to the site just to find it closed or inaccessible. This was not only terribly inefficient and inconvenient, but frustrating because a simple review of the calendar by a Forest or District staff, knowledgeable with the area, would have caught these instances. Many of these site visits were not granted makeup days, and therefore resulted in a zero use day. This ultimately reduced the accuracy of the NVUM's final results.

Another indication of the lack of prework conducted was the absence of necessary informational resources provided. IORT received driving directions to sites on only two out of the three forests. The driving directions on the two forests that were received were inaccurate; they were for the most part, unusable. Accurate driving directions would be useful as well as some detail about the specific site location and possibly even a recommendation for the site's set up. IORT also was given a map with the survey sites on it for only one out of the three forests. This map proved to be very useful and helped make the project more efficient on this one forest.

One explanation for the lack of prework, may be the result of the termination of the Forest Service staff member in charge of the prework duties. This staff member had been budgeted from the NVUM project to be employed for the duration of the project.

Shortly before the sampling had begun, this Forest Service staff member was laid off due to budgetary constraints.

## **Supplies**

With regards to supplies, there seemed to be some sort of a disconnect between IORT and the three forests. The inventory for the NVUM was often sent to the individual forest, which were at times not sure what the supplies were for. At the beginning of the project, several counters were sent to an individual forest and somehow ended up in a fire fighter's dorm. After about a month, the counters were then sent to our contact on the Wasatch-Cache and eventually delivered to IORT. Several of the traffic signs were never even received by IORT. These signs were found at the duration of the project in a Forest Service storage shed. It was this lack of sign supplies that often made the correct site set up (as outlined in the NVUM Handbook) not possible. As a result, incorrect set ups would often be reflected in secret shopper reviews. In one secret shopper review, it was noted traffic cones were needed in order to make a particular set up safe. At this point in time IORT had not been given any traffic cones. When IORT received the necessary traffic cones there were only 11 of them provided which equates to approximately one cone per technician. Having one set of cones per technician would be our recommendation.

## **Administrative/Management**

After our first contact was laid off, our second contact proved to be effective. He however did have many other duties within the Forest Service which required his

attention. It likely would have been more effective to have an individual devote a majority of their time to completing and updating the NVUM prework and having time for a more interactive correspondence with Forest Service staffs.

## **Field Work**

There are specific site set up requirements for the different types of sites. As expected, the sites themselves rarely lent themselves to be set up in the same exact manner as detailed in the manual. This was sometimes the result of safety concerns, geographic constraints, location of visitors, or not having the inventory to replicate the manual's instructions. Some sites were such that a counter could not accurately capture the traffic. Examples of these types of sites include: long pull offs alongside of roads and multiple entries (lack of counters prohibited us from counting more than one access point). IORT was instructed in these situations where counts could not be achieved by counters, for field technicians to stay on site for 12 hours conducting counts. This however regularly violated the Job Hazard Analysis (JHA) contract instructing field technicians not to work after dark.

A recommendation for not only difficult site set up scenarios, but all sites, is to have the Forest Service instruct the contractor how they would like the site visit conducted. These instructions could be included with the prework and provided to the contractor in a separate spreadsheet or possibly included with the driving directions. The instructions would include such things as a specific interviewing location, sign placement locations, and even potential hazards associated with specific sites. Other than the obvious benefits of taking the guess work out of setting up a site, this would add an

element of consistency to site visits and it would be in accordance with how the Forest Service envisions the visit to be conducted.

Group sites posed unique challenges throughout the NVUM. Initially when a group site would be scheduled, a field technician would travel to the site as if it were a normal site. In many instances the interviewer would arrive on site and stay for six hours, never to see a single person. In order to resolve this, the technicians were given the name and phone number of the concessionaire in charge of making reservations. The interviewer would then call ahead and check to see if there is a group with reservations for that day. This worked in some instances. The FS coordinator also monitored the National Recreation Reservation Site to determine when the group site was occupied and passed on the information to IORT. However, it was later realized there were groups reserving the site for the 24 hour period but only using the site in the evening. Technicians would arrive the morning of their scheduled shift after having confirmed reservations, to find there would be no one there. In other instances, when the field technician would confirm a reservation, they would arrive on site to discover the group was not departing that day. They would then ask the fourth question on the instrument which instructs the practitioner to discontinue the interview if the person is not leaving that day. These situations resulted in the interviewer having gone through the steps to confirm a reservation, travel to the site, and return with several interviews containing very little information.

Collaborating with Forest Service personnel it was determined that this was a local issue and that the departure time was a result of people preferring to sleep in their own beds at night. Therefore, the organization or individual who planned the activities at

the group site were planning around a 4 to 6 hour block of time. One possible resolution to the problem would be to contact the person who reserved the site prior to the reservation date and ask when they thought the most people would be leaving. Another option would be to call the person who reserved the site after they had returned home and see if they would be willing to be interviewed.

Proxy sites required IORT to choose the 6 hour period when the most number of visitors would be exiting the site. In cases such as ski resorts, the time was apparent. However, in less obvious locations, this proved to be problematic with the technician making wrong assumptions or interviewing during the most convenient time for themselves. Given the Forest Service's familiarity with specific survey sites, the survey time should be a decision best made by the Forest to be carried out by the contractor.

One of the technical problems IORT regularly incurred was the presence of a lot of noise in the 24 hr counts. Even when both trail and traffic counters were setup correctly the counts were often suspect. The technician would often retrieve the six hour two way count at the end of their interview period to find the count was not at all reflective of the actual amount of observed traffic. The 24 hour counts that were retrieved were often times much higher or much lower than would be expected at the site. In some cases there would be a logical explanation for the suspicious count, such as a group of kids on ATVs driving back and fourth over a traffic counter, or a windstorm blowing a branch back and fourth in front of a trail counter. In many other cases, there would be no logical explanation for the errant count.

## **Summary**

Running a NVUM project for the first time on three forests as geographically large and as popular as the Ashley, Uinta, and Wasatch-Cache proved to be challenging. As a result, IORT incurred many complications and unforeseen situations. With the help of the Forest Service, IORT does view the 2006-2007 Ashley, Uinta, and Wasatch-Cache NVUM project as a success. IORT appreciates the opportunity to work for the U.S. Forest Service and looks forward to future collaboration.

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## APPENDIX 1

### Sample Schedule from August 1

Forest	Date	Time	Site #	Site	Site Type	Collection	TC Pickup	Stratus	R. District	Employee
1	8/1/07 Wed.	•	5937	Little Hole Boating/Picnic	DUDS	PROXY		FR3	Flaming Gorge RD	Erin
1	8/1/07 Wed.	PM	35427	Dam Point Family Picnic	DUDS	NONPROXY	Put out TC # 8 Pick up TC # 8 on Aug. 2	MEDIUM	Flaming Gorge RD	Angie
19	8/1/07 Wed.	•	8534	Mirror Lake Picnic	DUDS	PROXY		FE3	Kamas RD	Pete
19	8/1/07 Wed.	PM	157	58) Farmington Cyn-D1	GFA	NONPROXY	Put out TC# 1 Pick up on Aug 3	MEDIUM	Salt Lake RD	Amrith
18	8/1/07 Wed.	PM	32	Payson Lakes-North Day Use Area	DUDS	NONPROXY	Put out TC# 4	MEDIUM	Spanish Fork RD	Hailey
18	8/1/07 Wed.	•	1102	Soldier Creek CG	OU DS	PROXY	Pick up TC # 3	DUR4	Heber RD	Annie

## APPENDIX 2

### Sample Individual Interview Form From the 2007 National Visitor Use Monitoring Handbook\*

#### Section 1: Screening Questions

After the visitor stops introduce yourself and read the first statement printed and highlighted on the form to the visitor. "The Forest Service is conducting interviews of visitors on the "Hiawatha" National Forest. The information collected will help us better serve our visitors by knowing what activities they do, how long they stay, and how satisfied they are with the facilities and services provided. Your participation is voluntary and all information is confidential." Then ask:

#### **Q1: Would you be willing to take a few minutes to participate in this interview?**

If the visitor says YES (they agree to be interviewed) → fill in the YES oval and GO TO Q2.

If the visitor says NO → (they do not agree to be interviewed) fill in the No oval but try to get zip code, then END INTERVIEW.

#### **Q2. I need to select just one of you to complete this interview. Which of you had the most recent birthday and is 16 years of age or older?**

You will direct ALL questions to ONLY this person.

**What is your home zip code?** Fill in the 5-digit zip code or if the visitor is from another country fill in the appropriate oval.

The interview form splits into two columns after Q2.

If it is a Day Use Site, Overnight Developed Site or Wilderness you will use the site name and ask questions 3, 4, and 5 on the left hand side of the form.

If it is a General Forest Area (GFA) survey day you will ask questions 3a, 3b, 4, 5, and 6 on the right hand side of the form.

#### **For Day Use Sites, Overnight Sites, and Wilderness:**

**Q3. What is the primary purpose of your visit to \_\_\_\_\_ (Site name)?** Read them the choices and fill in the circle of the answer they give.

- If visitor says one of the first 4 choices → fill in the appropriate oval, then say "Thank-you. That's all the information I need today" and END the interview.
- If visitor says Recreation → continue to Q4

#### **Q4. When do you plan to leave (say site name) for the last time on this visit?**

Read the visitor the answer choices.

- If the visitor says either "Not leaving this site today" or "Don't Know" → fill in the appropriate oval, the say "Thank-you. That's all the information I need today".
- If the visitor says "Leaving Now" → fill in that oval. You don't need to record the time because it will be the same as the interview time you recorded at the top of the interview form. GO TO Q5.
- If the visitor says "Leaving later today" → fill in that oval and also record the time they plan to leave. Then GO TO Q5.

#### **Q5. When did you first arrive at (say site name) on this visit?**

- Record month, day, year and time of their arrival on the interview form.

NOTE: There is no Q6 on this side of the form. Go to Page 2, Q7.

#### **For GFA (undeveloped areas of the forest) sites only:**

#### **Q3a: What is the primary purpose of your visit to this (say national forest name) National Forest?**

Read them the choices and fill in the circle of the answer they give.

- If visitor says one of the first four choices → fill in the appropriate oval then GO TO Q3b
- If visitor says Recreation → GO TO Q4.

#### **Q3b. What is the major reason you chose this route?**

Let the visitor tell you why they are driving this particular route.

- If they mention scenery → fill in the View Scenery oval
- If they did not mention scenery → fill in “Some other reason”
- For either response to Q3b, you then say “Thank you. That’s all the information I need today” and END the interview.

**Q4. We are interested in interviewing people who have recreated in the undeveloped areas of this national forest. This includes things like hiking trails (not in designated Wilderness), exploring forest roads, camping in undeveloped areas, and fishing in lakes or streams. Have you recreated in the undeveloped areas of this forest sometime during your visit?**

Let the visitor tell you all the places they have been since they arrived on the forest (make sure it’s a contiguous stay (they spent the night on the forest if it is more than one day).

- If the visitor mentions any areas or activities that are in the general forest area then → fill in Yes, recreated in the GFA and GO TO Q5.
- If the visitor does NOT mention any areas or activities that would occur in the undeveloped areas of your forest then → fill in NO, did not recreate in the GFA then thank visitor and END interview.

You should have a Forest map and allow them to look at the map and show you where they have been. From their answer you must determine if during any part of their visit they were recreating on a General Forest Area. Note that they did not have to recreate in the GFA on the interview day, only during their current visit to the Forest.

**Q5. Are you leaving the undeveloped portion of this national forest for the last time on this visit? Read the visitor the answer choices and have them pick only one choice.**

- If the visitor responds “Not leaving today” or “Don’t Know” → fill in appropriate oval, then say “Thank you. That’s all the information I need today, then END interview.
- If the visitor says “Leaving now” → fill in this oval and GO TO Q6.
- If the visitor says “Leaving later today” then → fill in this oval and GO TO Q6.

**Q6. In TOTAL, during this visit, how much time will you have spent in the undeveloped areas of this national forest?**

Have the visitor think about all the times during this visit they went into the undeveloped portions of the forest. Have them add up the total hours or days. If the total time in the undeveloped areas is over 24 hours record to the nearest day. For example, 25 hours would be 1 day while 40 hours would be 2 days. If the total time spent is less than 24 hours record the total time to the nearest hour. Do not use both days and hours.

Section 2: National Forest Visit

**Q7. Did you spend last night in the (say forest name) National Forest?**

If the visitor thinks they spent last night on the National Forest, clarify by asking where they stayed. Make sure it was ON your national forest.

- If visitor responds “No” → fill in that oval and GO TO Q7
- If the visitor responds “Yes” → fill in that oval after clarifying that the place they stayed was actually ON your national forest. Then ask them “How many nights do you plan to spend in the National Forest?” Write the total number of nights planned in the grey box next to this question.

Question 7 is intended to help the visitor use the same definition of a national forest visit as used in the NVUM program. Therefore, once you know the answer to Q7 you can double check the national forest visit length of stay by subtracting Q8 from Q9. The total time between first arrival and last departure for the NATIONAL FOREST VISIT should be the same number of days.

**Q8. When did you first arrive at this National Forest on this recreation visit?**

- Record the month, day, year, and time (military) or check “same as site arrival time” if they have already told you this is the only place they came to on the Forest for this visit.

Note: This question is different than Section I Q5. "When did you first arrive at THIS SITE?" Section I measures time at a specific site, Section II measures the total time spent on the Forest during this whole visit. It may or may not be the same.

**Q9. When do you plan to finish your visit to this National Forest?**

- Record month, day, year, and time if they aren't leaving right now.
- If the visitor is leaving both the site and the Forest after the interview then just fill in the choice "same as interview time".

Q10 and Q10a-d are asked to ensure we aren't double counting the same visitors on their national forest visit as they travel from site to site.

Say to the visitor: "Now I would like to ask you a few questions about where you will go during this visit to this national forest. When you answer please include your use of this and other areas of this national forest. Include areas you already used as well as places you plan to use before you leave this national forest for the last time on this visit."

**Q10. On this visit to this National Forest, did you go or do you plan to go to any places for recreation other than this one?**

- If No → fill in oval and GO TO Q11
- If YES → fill in oval and GO TO Q10a
- If Don't Know → fill in oval and GO TO Q10a

**Q10a. (Interviewer fill in Wilderness names on your forest) are congressionally designated Wilderness. Did you enter or do you plan to enter a Wilderness at any time during this national forest visit?**

- If No → fill in oval and GO TO Q10b
- If Yes → fill in oval and GO TO Q10b

**Q10b. Now think about forest roads, trails, rivers, lakes, and other undeveloped areas of this national forest. Did you enter or do you plan to enter these types of areas during this national forest visit?**

- If No → fill in oval and GO TO Q10c
- If Yes → fill in oval and GO TO Q10c

**Q10c. Lodging facilities include campgrounds, cabins, hotels, and lodges. How many different lodging facilities have you used or do you plan to use during this national forest visit?**

- Interviewer → fill in the appropriate oval with the correct number of different lodging facilities they plan to use. The choices are 0 – 9.

**Q10d. Developed day use sites include picnic areas, visitor centers, interpretive sites, developed swimming areas, and developed ski areas on this national forest. How many different developed day use sites have you used or do you plan to use during this national forest visit?**

- Interviewer → fill in the appropriate oval with the correct number of different day use facilities they plan to use. The choices are 0 – 9.

Questions 11-15 ask the visitor about the activities they participated in during their national forest visit. Since the activity choice list is very long, hand them the activity flash card for Q11-12 then ask:

**Q11. In which of the following activities have you participated or will you participate in during this national forest visit?**

- The visitor can choose more than one activity for Q11. Fill in the circles next to the activity numbers they read out to you (in the left column).

**Q12. Which ONE of those is your primary activity for this recreation visit on this NF?**

- The visitor can choose ONLY ONE of the activities they gave you in Q11. Fill in the ONE circle of the primary activities in the right hand column.

**Q13. Including this visit, about how many times have you come to this National Forest for recreation in the last 12 months?**

- Record the # of times they say they came to the forest in the last 12 months.

**Q14. How many of those visits were to participate in the main activity you identified a moment ago?**

- Record the number of times in the last 12 months they came for the main activity they identified in Q12.

**Q15. About how many hours did you spend doing your main activity during this visit?**

- Record the total number of hours the visitor estimates they did their main activity (identified in Q12) on this visit.

Q16 asks the visitor about their overall satisfaction with their current national forest visit. Hand them the flash card for Q16 with the satisfaction scale on it. Then ask Q16. Have visitor call out the NUMBER (x) to the left of the score they give their visit.

**Q16. Overall, how satisfied or dissatisfied are you with this visit to (interviewer fill in FOREST NAME), using a scale of 1 to 5 where 1 means very dissatisfied and 5 means very satisfied?**

- Fill in the oval next to the number the visitor gives for their satisfaction or dissatisfaction.

Section 3: This Trip Away From Home

This section of the interview asks visitors about their entire trip away from home, including how far they traveled, the purpose of their trip, any overnight stays and where they occurred, and what types of lodging they used within 50 miles of your forest, not just forest service lodging. If they visitor only came to your national forest from the local area this section may seem redundant. Ask the visitor to bear with you as these are required questions of everyone. The purpose of these questions is to estimate the economic value of tourism to the local communities near the forest.

**Q17. About how far from your home did you travel to get here?**

- Record the total number of road miles from the visitor's home to the site you are interviewing them at. In some cases visitors may have flown so get a best estimate of road miles. In other cases, the visitor may actually live full time in their RV, in this case have them use their "home base" as the start point.

**Q18. Which of the following choices best describe the purpose of your trip?**

- Read the visitor the answer choices and have them pick ONLY ONE. Then GO TO Q19.

**Q19. Are you staying overnight away from home on this trip?**

- If Yes → fill in oval and GO TO Q20
- If No → fill in oval and GO TO Q23

**Q20. How many total nights will you be away from home?**

- Record the total number of nights the visitor will be away from home for their entire TRIP then → GO TO Q21

**Q21. Of these, how many are within 50 miles of here?**

- Record the total number of nights away from home that are within 50 miles of the interview site then → GO TO Q22

Hand the visitor the flash card for Q22. Have them tell you all the types of lodging they will be using within 50 miles of the interview site.

**Q22. What types of lodging are you using within 50 miles of here?**

- Fill in the ovals for ALL the types of lodging the visitor says they will use on this TRIP within 50 miles of here → then GO TO Q23.

**Section 4: Demographics**

Questions 23-27 provide statistics about the basic demographics of forest visitors. This allows the forest to better understand who their clientele are. It also allows us to respond to Congress about underserved communities within the local forest area.

**Q23. How many people (including you) traveled here in the same vehicle as you?**

- Record the total number of people.

**Q24. How many of those people are less than 16 years old?**

- Record the number of people in the vehicle less than 16 years old.

Hand the person being interviewed the flash card for Q25. Have them call out the number next to their answer for age. You can fill in gender. Then have the person hand the flash card to the next person with the most recent birthday and have them give you their answer and record it under Person 2. Continue this process for up to 4 people, using the “most recent birthday” criteria to select which 4 people if there are more than 4 in the vehicle or group.

**Q25. Now I would like to collect age and gender information on everyone in your group. Looking at this flash card please call out the number next to the correct age category for you.**

- Record gender and age for person being interviewed
- Record gender and age for person 2
- Record gender and age for person 3
- Record gender and age for person 4

Interviewer: Direct remaining interview questions back to original person being interviewed. Hand them the flash card for Q26-27. Have them call out the number in () next to their answer choice.

**Q26. Are you of Spanish, Hispanic, or Latino ethnic origin?**

- Record only ONE of the 3 answer choices.

**Q27. Please select one or more of the following categories that best describe your race.**

- Record one or more of the answer choices.

IF THIS WAS A NONPROXY SITE YOU ARE DONE UNLESS THIS INTERVIEW ALSO HAS A SATISFACTION OR ECONOMICS QUESTIONNAIRE ATTACHED.

\*Note: This interview form is not the actual instrument but a practice sample which does contain the actual questions for the Basic Form.