NATIONAL FOREST TRAVEL SURVEY

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This paper describes the design and conduct of a travel survey undertaken during the summer of 1970 at Tahoe National Forest in California. The survey was part of a research effort aimed at the development of transportation analysis techniques for national forest planning. This paper is concerned mainly with the part of the survey dealing with recreational travel, because in Tahoe National Forest it was observed that the most predominant use, and consequently most travel, was recreation-oriented.

•IN THE development of transportation analysis techniques a data base is essential. This data base contains information that aids in the understanding of the forest transportation and land use system and that is used in the construction and testing of analytic models of the system. The data base also contains information that can be of use in performing various planning and management activities. The two main types of information included in the data base are inventory data and activity data. The first includes a complete description of the land uses and transportation facilities present in the study area. These data are obtained mainly from available sources. The second type of information includes a description of the land use and transportation activities that take place in the study area. The acquisition of this type of data was the major purpose of the travel survey described here.

SURVEY FRAMEWORK

The Study Area

Tahoe National Forest is one of 18 national forests in California. It is located in the eastern part of central California northwest of Lake Tahoe in the Sierra Nevada. Tahoe National Forest covers an area of approximately 1,600 square miles and ranges in elevation from about 1,000 ft to over 10,000 ft.

Tahoe National Forest is a popular recreation area serving California and Nevada. The Forest has many rivers and lakes and includes a large number of camping and other recreational facilities. In 1969 the Forest attracted about 2.8 million recreational trips, of which slightly over 90 percent originated in California.

Apart from its recreational land uses Tahoe National Forest has a number of other uses. Foremost among these are timber logging and grazing. Figure 1 shows the transportation system and recreational areas of Tahoe National Forest.

Information Required

As mentioned previously, there are basically two types of data required for the development of transportation analysis techniques: inventory data and activity data. The purpose of the travel survey was to collect activity data. These data include two kinds of information: travel pattern information and land use activity information. Since most nonrecreational land use and travel pattern information could be obtained from available sources, the travel survey was mainly oriented toward recreational travel.

The travel pattern activity information for recreationists in Tahoe National Forest required the following items:

1. City of residence. This information is necessary for performing trip-generation analysis in estimating travel demand to national forests in California.

2. Destination of main trip into the Forest. This information is necessary for the construction of allocation models that describe the distribution of travel demand among the various destinations within the Forest.

3. Modal and temporal characteristics. This information is needed to describe, for the purposes of possible model stratifications, the types of vehicles used by travelers to the Forest and the time patterns of their trip-making.

4. Travel activities within the Forest. This includes a complete log of all trips taken within the Forest on a day during the recreationist's stay. The log includes origin and destination, trip purpose, type of vehicle used, and possibly the route chosen for each trip.

The land use activity information that was obtained from the travel survey included the following items:

1. Main recreational activity. This information includes the main recreational purpose for visiting the Forest as well as other principal recreational activities undertaken by the recreationist during the stay in the Forest. It is a main stratifier of forest travelers (e.g., campers, fishermen, hunters) and is used for structuring models that describe the attraction of the various recreation sites within the Forest.

2. Frequency of Forest visits and durations of stays. This provides information about the use of the Forest by recreationists. It also provides information about the propensities for Forest visits generated by the various population centers in the region.

Apart from the travel activity and the land use activity information, it was necessary to obtain some descriptive information about the travelers themselves. This information, mainly socioeconomic, provides a basis for structuring models that describe the demand for recreation in the National Forests generated by various socioeconomic groups. The information includes the following items:

1. Traveling party characteristics (a traveling party was defined as any group of people traveling together in one or more vehicles): An indication as to whether the traveling party was a family, an organized group (e.g., scouts), or otherwise.

2. Traveling party composition: A description of the size of traveling party and of its age and sex distribution.

3. Traveling party income. For most traveling parties this was an indication of the annual income of the traveling household.

Survey Method

Three methods were considered for use in the national forest travel survey. These methods were compared, and an assessment was made concerning their suitability for use in the national forest setting. This section describes these three methods.

The first method considered was a card survey. Here the forest users would be handed pre-addressed questionnaire cards. The users would fill in the questionnaires and mail the cards back. This method is particularly suited for urban travel surveys because it is possible to sample addresses and send the cards to a sample of urban residents. In a national forest, however, it would be necessary to physically sample forest users on the roadside or at selected recreational sites in order to hand them the cards. Thus, in a national forest this method loses its main advantage of low manpower need. Another disadvantage of this method as applied in the forest is the effect of nonresponse. In an interview survey nonresponse can be identified and dealt with as the survey progresses, whereas in a card survey nonresponse can only be estimated and accounted for in advance of sending out the mail cards. In most locations within Tahoe National Forest it was found that the number of users (e.g., traffic on a particular road) was so low it was believed that errors in estimating nonresponse would be quite harmful to the validity of the remaining samples.

For these reasons it was felt that a card survey method was not suitable for a travel survey in Tahoe National Forest.

The second method considered for the travel survey was a roadside interview. This method involved interviewing travelers on their way out of the Forest at a selected number of roadside stations located at or near the Forest boundary. The travelers would

be interviewed by trained interviewers and asked about their transportation and land use activities while in the Forest.

This method appeared to have a number of advantages that made it quite suitable for application in the national forest travel survey. All of the required information can be obtained through one interview, and the survey forms can be completed by the interviewers themselves. This minimizes the possibilities of invalid responses or missing information. The roadside interview method also allows the use of a sampling technique that is flexible with respect to traffic conditions. Should a road be heavily traveled, then a smaller sampling rate can be used, thus causing less delay to traffic. Alternatively, if the traffic is very light, then a higher sampling rate can be used. Furthermore, this method permits identification of the incidence of nonresponse and the immediate adjustment of sampling to deal with it. The disadvantage that this survey method has is its high manpower requirement, because it is necessary to place interviewers at a number of different locations around the Forest boundary. Large traveling distances are involved for the interviewers, and equipment costs are high.

Another survey method that was considered was an interview survey conducted at a selected number of campgrounds and other recreation sites. This method has many of the advantages of the roadside interview method, but it also has a number of disadvantages. First, it involves interviewing recreationists while they are still in the midst of their stay in the Forest, thus requiring them to estimate their activities during the remaining part of their stay. This increases the amount of uncertainty of the information obtained. Second, it causes an interruption in the recreationist's participation in his activities, which for some type of activities (fishing, hunting, etc.) might not be desirable. Third, it requires dispersing interviewers over a wide area in the Forest in order to cover a representative sample of the recreation sites. This has a much larger manpower requirement compared with the roadside interview method, where all Forest users can be intercepted at a small number of stations.

Based on the evaluation described, it was decided that the method most suited to the national forest travel survey would be the roadside interview. However, in order to provide a certain degree of redundancy, it was decided to supplement the roadside interviews with a small sample of interviews carried out at a selected number of campgrounds. The information obtained from the campground interviews would be used to corroborate that obtained from the roadside interviews.

DESIGN OF ROADSIDE INTERVIEW SURVEY

The roadside interview involved selecting a sample of travelers leaving the Forest and interviewing them regarding the travel and land use activities that they undertook. The interviewing was supplemented by continuous traffic counts at the locations of the interview stations. The purpose of these counts was to provide information about the total population of travelers at these locations. This information was later used to expand the samples. The design of the roadside interview survey included three major activities: the choice of survey locations, the choice of survey dates and times, and the determination of sample sizes and sampling rates. In performing these three activities there were two guiding objectives. First, it was important to ensure unbiased samples. This meant that grographical bias had to be avoided in the choice of survey locations and that time biases and seasonal biases had to be avoided in the choice of survey dates and daily schedules. Second, it was important to ensure the statistical validity of the conclusions drawn on the basis of the samples. This meant that sample sizes and sampling rates had to be determined according to statistical methods.

Choice of Survey Locations

Seven locations were chosen for roadside interview stations. These locations are shown on the map of Figure 1. This choice of locations was governed by the need to have a sufficiently small number of stations to maintain reasonable survey costs while at the same time ensuring that the stations are an unbiased representative sample of the types of roads leading out of the major areas of the Forest. The stations were selected to be well-dispersed geographically over the Forest area and to cover a range

of road types. Two stations were located on a state highway that runs through the Forest (Highway 49). One of these stations (No. 1) was located in the western part of the Forest at a location with a relatively high traffic volume, and the other (No. 3) was located in the northern part of the Forest at a location with relatively low traffic volume. Two stations were located on major Forest roads leading to a major recreational area in the central part of the Forest. One (No. 2) was in the eastern part of the Forest, and another (No. 4) was in the southern central part of the Forest. Both roads have gravel surfaces. Two other stations were located on hard-surfaced roads; one (No. 5) was located in the central part of the Forest in an area close to a number of small towns, and the other (No. 6) was located in the southern part of the Forest where a recreational area is almost completely isolated from the rest of the Forest by a mountain barrier. Finally, a station (No. 7) was located on a minor Forest road with low traffic volume. This road is located in the central part of the Forest and is not surfaced.

Choice of Survey Days

In the choice of a period for the conduct of the survey, June 15 through September 15 was considered sufficient as a representation of the 1970 summer season. This choice was based on the fact that most Forest use occurs within this 3-month period. The period covered a total of 93 days, of which 66 were weekdays (Monday-Friday), 25 were weekend days (Saturday, Sunday), and 2 were major holidays (July 4, September 7).

Obviously it would have been excessively costly and unnecessary to conduct roadside interviews on all 93 days during the survey period. A sample was to be drawn. In doing this, 3 time variations in traffic and Forest use had to be accounted for to avoid any possible biases:

1. Weekly variations—variation in traffic characteristics among days of the week;
2. Monthly variations—variation in traffic characteristics among weeks of the month; and
3. Seasonal variations—variations in traffic characteristics among the 3 different months of the summer.

Of course a survey schedule that accounts completely for all 3 variations and all their interactions will be a complete schedule where all 93 days become survey days. This schedule is called a complete block design. If it is possible to assume away some of the interactions among these factors, then it becomes possible to reduce the number of survey days and schedule the survey as an incomplete block design. As an example of such interactions, we consider the interaction between weekly variations and monthly variations. By assuming this interaction to be negligible, it is implied that the difference between the traffic characteristics of a Monday and a Friday, say, is the same whether they are at the beginning or the end of the month.

By assuming that the interactions mentioned are negligible, it was possible to construct a block of 21 days in which each day of the week appears only once during each month of the survey period and in which the days of the week in each month are spread over the weeks of that month. Figure 2 shows this basic incomplete block design. The diagram is in the form of a calendar in which the numbers indicate the dates on which survey dates will fall.

The next step in the design of the survey schedule was to combine the basic incomplete block design for the 7 survey locations. Instead of conducting the roadside interview survey simultaneously at all 7 locations on each of the days shown in Figure 2, it was possible to replicate the same design on different days for different survey locations. This caused a great reduction in manpower requirements. The replication was done by shifting the design of Figure 2 by 1-day increments. To illustrate this combination we consider the schedule in Figure 2. Assuming that this schedule applies to the survey dates for interview station No. 1, it is possible to derive a data schedule for another station, No. 2, by scheduling this a day later. This pattern is shown in Figure 3. It can be seen there that on some days, particularly the weekends, duplication will occur in that both stations will be surveyed on the same day.

Figure 1. Tahoe National Forest.

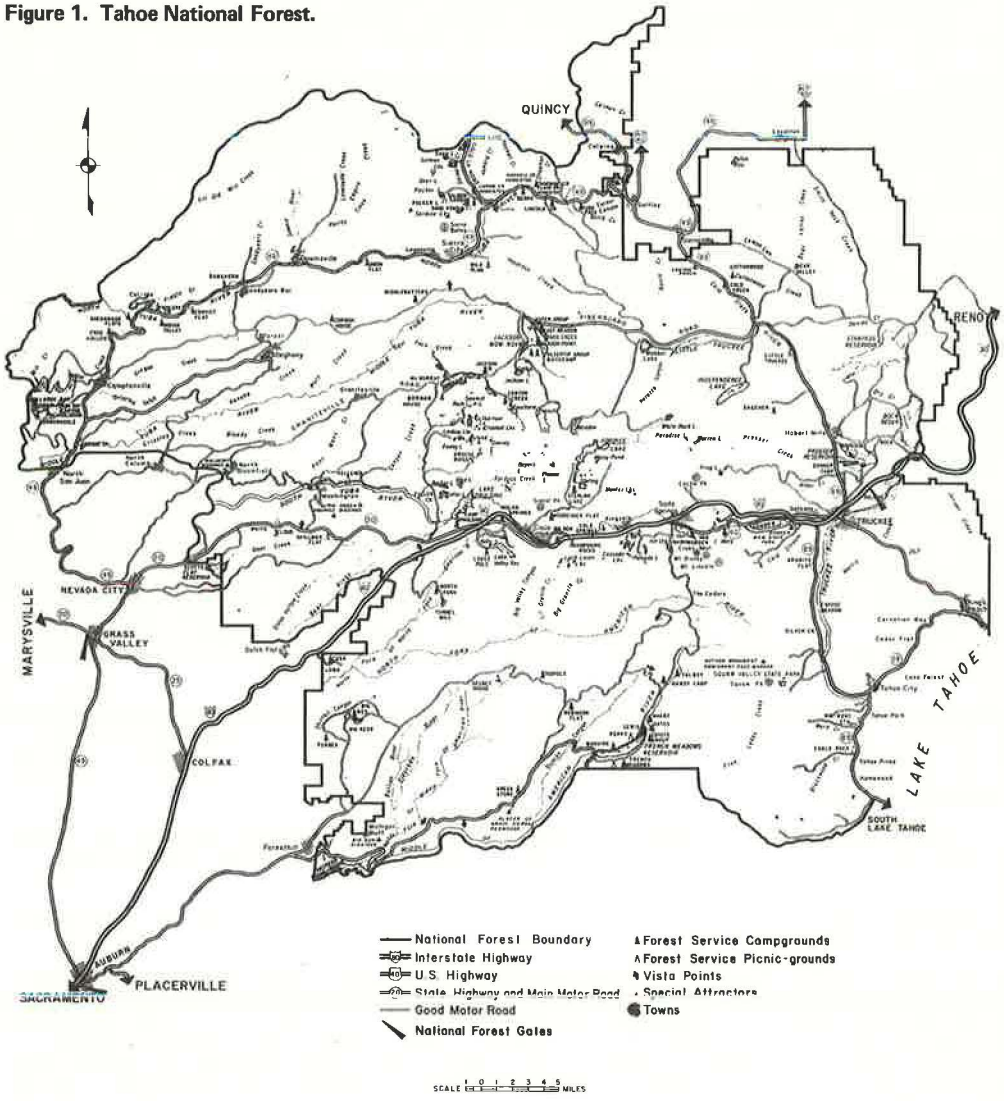

Figure 2. Basic block design for survey days.

	S	M	T	W	Th	F	S
JUNE				17			
					25		
JULY	S	M	T	W	Th	F	S
						3	4
	5	6					
			14				
				22			
					30		
AUGUST	S	M	T	W	Th	F	S
						7	8
	9	10					
			18				
				26			
SEPTEMBER	S	M	T	W	Th	F	S
					3	4	5
	6	7					
			15				

Figure 3. Block design for 2 survey stations.

1970	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
June	14			1	2		
	21				1	2	
	28					1	1 & 2
July	5	1 & 2	1 & 2	2			
	12		1	2			
	19			1	2		
	26				1	2	
August	2	2	2			1	1
	9	1	1	2			
	16		1	2			
	23			1	2		
	30				1	1 & 2	1 & 2
Sept	6	1 & 2	1 & 2	2			
	13		1				

Figure 4. Roadside interview survey schedule.

1970	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
June	14					4 & 5	5 & 6
	21 6 & 7	1 & 7			2 & 3	2 & 3	3 & 4
	28 4 & 5	5 & 6					All
July	5 All	All	1 & 7				
	12			5 & 6		1 & 7	1 & 2
	19 2 & 3	3 & 4				5 & 6	6 & 7
	26 1 & 7	1 & 2	3 & 4				
August	2						
	9				1 & 2	3 & 4	4 & 5
	16 5 & 6	6 & 7				1 & 2	3 & 2
	23 3 & 4	4 & 5					
	30			6 & 7			All
Sept	6 All	All	4 & 5			6 & 7	
	13 1 & 7	1 & 2	2 & 3				

Table 1. Sampling framework for roadside interviews.

Station	Approx. 1-Way ADT	Approx. Percent Recreation	Approx. Recreation ADT	Sample Size by Criterion 1	Sample Size by Criterion 2	Sampling Rate
1. Highway 49 north of San Juan	500	30	150	369	200	3/4
2. Fiberboard Road at Highway 89	100	80	80	92	56	1/1
3. Highway 49 east of Yuba Pass	100	60	60	94	63	1/1
4. Bowman Road north of Highway 20	75	90	67	67	45	1/1
5. Washington Road near Highway 20	100	80	80	92	56	1/1
6. FH 96 east of Forest Hill	75	60	40	72	52	1/1
7. 19 N 14 south of Columbia Hill	40	90	36	37	29	1/1

To accommodate all 7 survey locations with the basic design of Figure 2, it was necessary that the design be modified so that on each survey day 2 stations were surveyed simultaneously. The choice of stations that would thus be surveyed was made on the basis of their geographic location, the objective being to minimize the amount of travel to and from the Forest as well as within it. Further reduction in manpower requirements was attained by considering only 5 types of days of the week instead of 7. This was done by considering Tuesdays, Wednesdays, and Thursdays to be equivalent days of the week. This modification did not reduce the comprehensiveness of the survey because it was observed that no significant differences occurred between the traffic characteristics of these 3 days.

The basic block design was further modified in constructing the survey schedule. On holiday weekends (Labor Day and Independence Day), the design was preempted and all stations were scheduled for interviews. This was necessary because considerable Forest use occurs during these weekends. It was felt that travel and land use characteristics on these 2 weekends could not be adequately estimated by interviewing travelers on other weekends during the survey period.

The resulting survey schedule is shown in Figure 4. It shows that a considerable reduction in manpower was achieved by combining the basic block design for every pair of interview stations. Although 7 stations were interviewed an equal number of days spread throughout the summer period in a similar fashion, only 2 stations had to be manned simultaneously for most of the summer days. The schedule shows how the basic block design was maintained. Each interview station was surveyed at least twice each month, on different weeks; also, each station was interviewed on all 5 days of the week at least twice, once during the first half of the summer season and another during the second half. The total number of days on which interviewing was scheduled is 42, and each of the 7 stations was scheduled for interviews on 16 days during the summer period.

Determination of Sample Sizes

The next step in the design of the roadside interview survey was the determination of the sample sizes. This was done separately for each interview station because the volume of traffic expected, and thus the size of the total population from which a sample was to be drawn, was different for each station. Based primarily on the expected daily traffic at each of the stations, the sample sizes determined were the number of travelers that were to be interviewed during a survey day at each of the stations.

The determination of sample sizes includes two steps. First, a statement on the expected precision of the estimates should be made; second, a relationship between precision and sample size must be constructed. This relationship is based on some a priori, or assumed, knowledge about the characteristics of the variables that are to be estimated from the sample. In the determination of sample sizes for the roadside interviews, two criteria were used. These two criteria were based on precision statements specified for two different kinds of variables that were to be estimated from the survey.

Criterion 1—An estimate of the proportion of the total traffic that is recreational is made on the basis of the observed proportion. The estimate should be within 2 percent of the true value with 90 percent confidence. This precision statement, together with the assumption that the number of recreationists traveling past a roadside station is a binomial variable, allows the establishment of a relationship between precision and sample size as follows:

$$n = \Phi^2_{.10} \frac{P(1 - P)}{d^2}$$

where

n = the sample size,
$\Phi^2_{.10}$ = the 90 percent cutoff point of the cumulative normal distribution,

P = the proportion of the total traffic that is recreational, and
d = the expected precision of the estimate, 2 percent.

If for each roadside interview station an a priori assumption can be made about P, then this formula can be used to estimate the required sample size to achieve the specified precision. The value of the sample size n thus obtained should be adjusted if the total traffic volume is small. In such a case, the required sample size, n′, is obtained from n as follows:

$$n' = \frac{n}{(1) + (n/ADT)}$$

where ADT is the total daily traffic. Because the average daily traffic volume on most forest roads is relatively low (Table 1), this adjustment to the sample size was necessary.

Criterion 2—A number of variables that are estimated from the sampled interviews usually have distributions that are approximately exponential. Examples of such variables are trip length from origin to forest, duration of stay in forest, trip lengths within forest. It is required that the mean of an exponentially distributed variable be estimated with a relative precision of 10 percent. Because such variables apply only to the recreational traffic past a station, the relationship between this precision statement and the required sample size becomes

$$n = \frac{ADT_r}{1 + ADT_r \cdot d^2}$$

where

ADT_r = the recreational daily traffic, and
d = the expected precision, as before (here 10 percent).

This value of n must be adjusted to yield a sample size that can be drawn from the total traffic. This adjustment is made on the basis of an a priori estimate about the proportion of recreational traffic. Thus the adjusted sample size becomes

$$n' = \frac{n}{P}$$

Sample sizes using the two criteria described were determined for all 7 roadside interview stations. The results are given in Table 1. In determining the sampling rates (i.e., the proportion of the total traffic that is to be stopped for interviewing), the highest of the two sample sizes was used.

From Table 1 it can be seen that, because the expected traffic volumes on most interview stations were so low, most of the sampling rates were 100 percent. This means that the critical factors in the design of a roadside interview survey on the road system of a national forest are the choices of survey locations and survey dates rather than the calculation of sample sizes for each station. This result could be intuitively arrived at even without performing these calculations. The argument would be that, because one has to incur the survey costs required to travel to a roadside station in the forest and sample traffic throughout a survey day period, the marginal cost incurred in surveying all traffic is negligible, especially when the total volume expected during a day is as low as 100.

CAMPGROUND INTERVIEW SURVEY

As was mentioned earlier, the campground interview survey was conducted in conjunction with the main roadside interview survey at Tahoe National Forest. This survey was conducted at a small scale for the purpose of obtaining information similar to that obtained in the main survey. This information would then be used for corroboration.

For the campground interview survey it was realized that a representative sample of a number of different campground types had to be drawn. For this reason 7 campground types were defined, as follows:

1. Campgrounds along highways;
2. Campgrounds near extra-forest activities (e.g., Reno and other Nevada recreation areas);
3. Campgrounds along minor state highways;
4. Moderately accessible lakeside campgrounds;
5. Moderately accessible campgrounds not on a lakeside;
6. Poorly accessible lakeside campgrounds; and
7. Poorly accessible campgrounds not along a lakeside.

At least two campgrounds belonging to each of the 7 campground types were identified in Tahoe National Forest. Four interview days were chosen during the survey period—2 weekdays and 2 weekend days. It was believed sufficient for the campground interview survey to identify one 2 types of days of the week rather than 5 as was the case in the roadside interview survey.

As in the roadside interview survey, the determining factor in the design of the campground survey was the requirement for a representative sample rather than a requirement for statistical precision. In the campground survey the interviewers had to interview with a sampling rate of 100 percent. This was necessary because the number of recreationists that could be found in the campgrounds during any one day was relatively low. In fact, most campgrounds had a capacity below 30 campsites. The selection of a sample size on the basis of postulated variable characteristics and statistical precision statements would have been of little meaning when the population from which to choose did not exceed 30.

SURVEY CONDUCT AND RESULTS

Based on the survey designs described, the roadside interview survey and the campground interview survey were conducted according to schedule in the summer of 1970. Roadblocks were established according to traffic engineering principles, and teams of flagmen and interviewers manned these interview stations during the designated days. Interviewers were equipped with interview forms that they filled in as they received answers to their questions from the motorists. Samples of these interview forms are shown in the Appendix to this paper. Both roadside and campground forms are shown. Because the two surveys were complementary, it can be seen that the interview forms are quite similar.

Traffic volumes on forest roads were so low that no traffic delays were caused by the roadside survey. The interviews were conducted in such a manner that their duration was reduced to approximately 2 minutes per interview. The response of the recreationists, both on the road and at the campgrounds, was excellent. Nonresponse and inconsistent information did not exceed 5 percent of the total sample drawn in either survey. It seemed that motorists in recreation areas, such as a national forest, are much more cooperative with traffic surveys than is usually experienced on urban or on nonrecreational rural roads.

A total of 7,076 recreationist roadside interviews were conducted. Of these, 2,122, or 30 percent, were one-day visitors, and the other 4,954, or 70 percent, stayed overnight in the Forest. Of the latter, 79 percent were camped in the Forest and 21 percent had stayed in other types of facilities (motels, cabins, etc.). Of 2,225 overnight Forest campers that did not reside in the vicinity of the Forest, 86 percent came from central and southern California, 9 percent from northern California, Oregon, and Washington, and 5 percent from Nevada and other states. The Appendix contains some of the results of the survey as samples of the kind of information that can be obtained from a roadside survey in a national forest. A complete description of the results of the survey is given elsewhere (1).

CONCLUSIONS

A number of conclusions can be drawn based on the experience of the national forest travel survey of the summer of 1970. Some of these conclusions apply equally to other areas that have characteristics similar to national forests.

The roadside interview method is most suitable for surveying travel in a national forest. Travelers on their way out of a forest area will find it easy to report on the activities they undertook while on their visit. Traffic volumes are low. This allows roadside interviewing to proceed safely without causing traffic delays.

In designing the survey, the requirements of a representative unbiased sample were more critical in the determination of sampling rates and survey schedules than statistical precision statements. Volumes were so low that the marginal costs of increasing sampling rates to 100 percent were negligible at most survey locations.

Survey cost reductions could be achieved by scheduling survey days in conjunction with interview locations using an incomplete block design. This design allowed a reduction in total surveying effort while at the same time it yielded a representative sample unbiased by geographic, temporal, or other variations in travel and land use characteristics.

The campground interview survey method provides a fast and economic way of obtaining most of the information needed for planning purposes and for the development of transportation analysis techniques. It seems that in areas where little is known about travel and land use characteristics it may be necessary to conduct a roadside interview survey such as the one described in this paper; however, this may not be necessary in all situations. In areas where records exist of travel characteristics and land use participation, it may be sufficient to conduct surveys at campgrounds and other recreation areas for the purpose of updating such records or for the purpose of developing analysis techniques needed in planning. Of course, campground surveys alone may give a biased sample of the users of a forest or other recreation area. This may be remedied by conducting surveys for each particular area at the facilities most predominantly used in that area.

The information obtained from the travel survey was most helpful in giving insight about activities in the national forest. This insight was a major prerequisite for the development of techniques that could be used in analyzing the operation and impact of transportation system alternatives.

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APPENDIX

SAMPLES OF DATA COLLECTED

Figure A-1. Length of campers' stay.

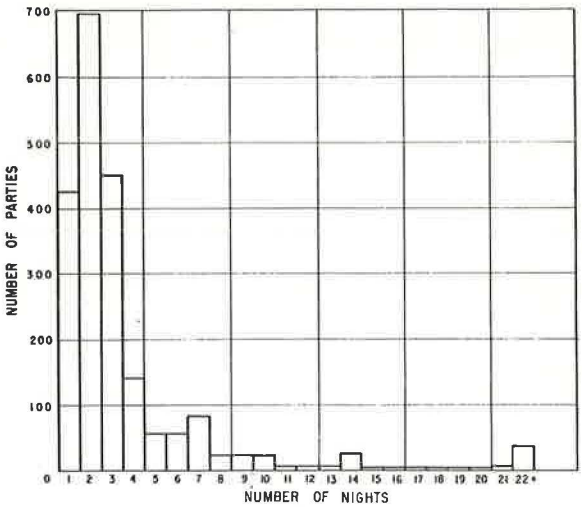

Figure A-2. Arrival day of week.

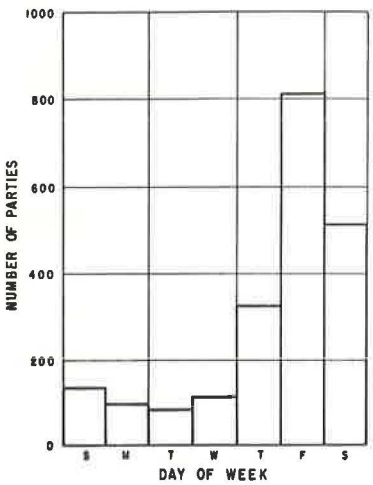

Figure A-3. Departure day of week.

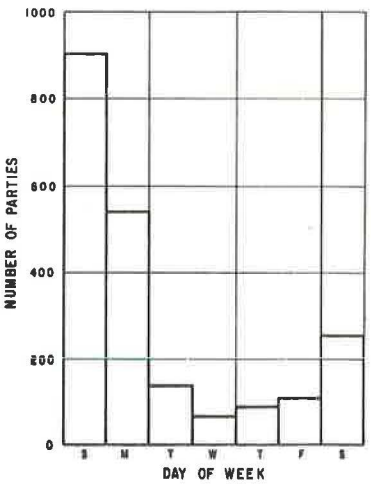

Figure A-4. Roadside interview form. Budget Bureau No. 40-R-70041 Approval Expires Dec. 1970

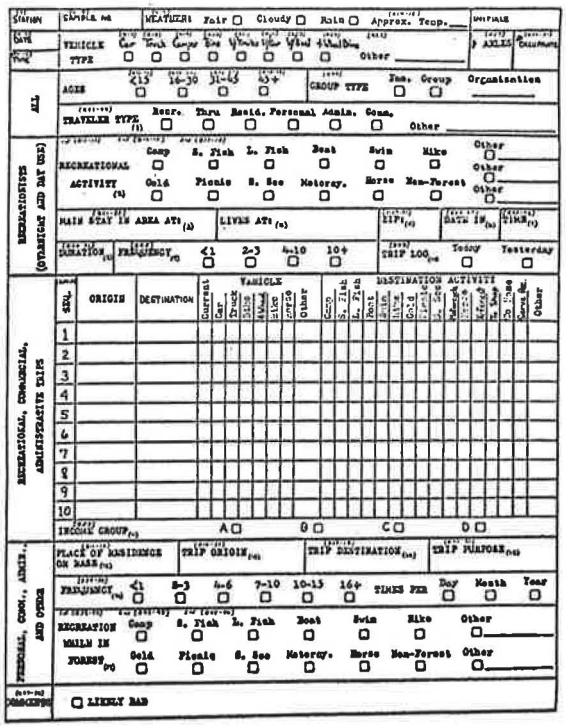

Figure A-5. Campground interview form. Budget Bureau No. 40-R-70041 Expiration Date—Dec. 1970

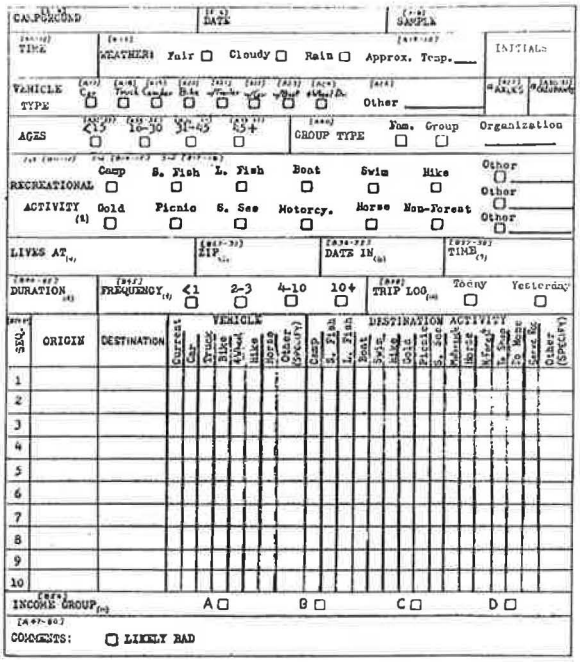

Table A-1. Distribution of length of stay for each party type.

Party-Type Categories	Number of Parties														
1. Families with Children (Members Under 16)	128	17%	245	33%	187	25%	60	51	37	30	5	10	2	1	6
2. Families with All Members Over 45	44	20%	68	30%	45	20%	19	18	6	5	5	2	3	0	9
3. All Other Families	94	21%	164	37%	86	20%	22	25	15	12	1	5	4	4	6
4. Groups with Children	12	15%	30	38%	18	25%	7	3	3	1	0	1	1	0	2
5. Groups with All Members Over 45	12		5		6		2	5	2	4	0	0	0	0	2
6. Groups with All Members 16-30	50		67		34		5	9	5	5	0	1	1	1	6
7. All Other Groups	26		35		10		5	0	2	1	1	2	1	1	5
8. All Organizations	1		3		8		2	1	0	0	0	0	0	0	0
Length of Stay (Nights)	1		2		3		4	5-6	7	8-10	11-13	14	15-20	21	OVER 21

Table A-2. Frequency distribution of arrival and departure day of week.

Number of Parties Departing	906	542	134	61	83	101	250
Number of Parties Arriving	133	99	88	109	326	809	513
Day of Week	SUN	MON	TUE	WED	THUR	FRI	SAT