PART II—National Recreation Survey

SAMPLE DESIGN AND METHOD [1]

The National Recreation Survey is a nationwide survey conducted on a quarterly basis for four quarters. The first survey was made in September 1960 and covered the period June-August 1960. The population is the civilian, noninstitutional population of the conterminous United States, 12 years and over.

Briefly, the objectives are to determine rates of participation in various types of outdoor recreation and relate the participation to selected socioeconomic characteristics; to develop information on the excursions, 1-day trips, and intermittent participation; to provide data on the days spent in these pursuits and the aggregate expenditures for selected services related to these activities; and, to obtain preferences in the use of leisure time and outdoor recreation activity.

Sample design

Each quarterly sample of the National Recreation Survey was a particular subsample of persons previously selected for the monthly labor force survey, the Current Population Survey. The sampling plan of the Current Population Survey (CPS) (and the first two stages of the National Recreation Survey) is described in "Current Population Reports." 2/

The Current Population Survey sample is used each month by the Bureau of the Census to collect official government statistics on employment and unemployment. An area probability sample, it is distributed over 333 primary sampling units (PSU), 3/ each being a county or group of counties, in total comprising 641 counties and independent cities in the 50 States and the District of Columbia. The 35,000 interviewed households in each month's sample are divided into 8 rotation groups of approximately 4,375 households each. Each rotation group comprises a representative sample of the U.S. population. A rotation group is interviewed for 4 consecutive months, then skipped for 8 consecutive months then interviewed for 4 additional months; it is then permanently dropped from the sample. The rotation group which was interviewed in the Current Population Survey for the last time in the month preceding the National Recreation Survey month was used to develop the sample for this survey.

Within each of the 333 sample PSU's, the CPS sample consists of small land areas called segments, each containing approximately six dwelling units. In determining sample size within each sample PSU, a within-PSU sampling ratio, rather than a fixed quota, is employed. The sample is thus made self-weighting, that is, each person has the same probability of being selected for the survey. In addition to the sampling stages of the CPS, an additional stage of sampling was used for National Recreation Survey.

Selection of individuals for interview

The interview sample of persons was selected by segment. Within each segment, the households were arranged according to a serial number order. Individuals residing in the household at the time of the last CPS interview (the previous month), 12 years of age and over, were transcribed to a sample person selection sheet containing predesignated lines for sample persons. Approximately two persons out of every five were selected for interviewing on this systematic basis.

At the census regional field office, the name and address of the respondent was inserted on the questionnaire. Each segment was assigned to an interviewer. Usually, an interviewer canvassed all segments in a PSU, except in larger areas where more than one interviewer worked. Interviewing was accomplished during the first 2 weeks of the survey month, although the time-period varied slightly. (See table I.)

The completed questionnaires were forwarded to Washington where responses were coded and transfered to IBM cards. The sample was adjusted to account for the nonresponse due to refusals, persons not at home and not available for other reasons. This was done by duplication of cards containing data secured by interview from a sample of persons of like age and sex characteristics as the nonrespondent within the same cluster of PSUs. There were 35 clusters of PSUs within the 5 age, and 2 sex groups. In addition, a second adjustment was made to bring the distribution of the sample according to 20 age, sex, and color groups, into correspondence with independent estimates of the age, sex, color distribution of the noninstitutional, civilian population of the conterminous United States, 12 years of age and above, at the time of the survey.

This procedure resulted in equal weighting of each adjusted sample case. The rates of nonresponse, the sample size and distribution of reasons for nonresponse are presented in the following tables.

Field procedure

Interviewers were instructed to interview the designated sample person, accepting no substitutes. For households having a telephone, the interviewer was instructed to attempt to make a specific appointment for an interview prior to visiting the household. Interviewers were allowed up to four personal visits to complete an interview with a sample person.

RELIABILITY OF ESTIMATES

Estimates based upon sample surveys are not exact because of errors arising from various sources.

1/This section was prepared by the Statistical Methods Division, U.S. Census Bureau.

2/"Current Population Reports," concepts and methods used in the current employment and unemployment statistics prepared by the Bureau of the Census, Washington: U.S. Department of Commerce, May 9, 1958 (Series P-23, No. 5).

3/Since only the conterminous United States was sampled in the National Recreation Survey, (Hawaii and Alaska were not included) 330 primary sampling units were involved, providing approximately 4,360 households from which a population sample was selected. Approximately 325 interviewers conducted the interviews, with the predesignated respondent.

Table I. Sample information, national recreation surveys

Survey	Field work performed during	Number of persons			Percent noninterviews
		Assigned for interview	Interviewed	Noninterviews	
I	Sept. 6-Sept. 16, 1960	4234	3817	417	9.8
II	Nov. 28-Dec. 9, 1960	4420	3926	494	11.2
III	Feb. 27-Mar. 10, 1961	4497	4046	451	10.0
IV	May 31-Jun. 16, 1961	4329	3820	509	11.8

Table II. Reasons for noninterview, national recreation surveys

Reason	Percent of noninterviews			
	I	II	III	IV
Refused	21	22	21	20
No one home, repeated calls	14	19	18	20
Temporarily absent	17	13	19	18
Moved after CPS month preceding NRS	18	14	11	12
Other[1]	28	31	31	29
No reason given	1	1	0	1

[1]Chiefly, sample person has left the household.

These sources include sampling variability, nonresponse of the designated respondent, respondent errors in memory and in providing the exact information requested and errors in the processing of the data (editing and coding). The sampling variability for some of the percentages in the tables are presented in the section below. To determine the extent of various other sources of error, such as respondent error and interviewer error, a second interview was conducted with a sample of respondents and compared with the first interview.

Since the estimates are based on a sample, they are subject to sampling variability. The standard error is a measure of sampling variability, that is, the variation that might occur by chance because only a sample of the population is surveyed. These tables do not reflect the effect of response variance, processing variance, or bias arising in the collection, processing, and estimation steps. The chances are about 68 out of 100 that the difference due to sampling variability between an estimate and the figure that would have been obtained from a complete enumeration is less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and 99 out of 100 that it is less than 2 1/2 times the standard error.

The estimates of standard errors shown in the following tables are approximations for the 330-area sample. In order to derive standard errors which would be applicable to a wide variety of population characteristics and which could be prepared at moderate cost, a number of approximations were required. As a result, the tables of standard errors should be interpreted as providing an indication of the order of magnitude of the standard errors rather than providing a precise standard error for any specific item.

Illustration

Using the tables on adjusted distribution of sample persons 12 years and over during June-August 1960: Population equals 29,600 times adjusted sample persons (table 1.02), we find 213 sample cases of females 25-44 years in the North Central region representing 6,300,000 females in this region. The table on "Swimming" (table 1.02.16) indicates 47 percent of the females aged 25-44 in the North Central region participated in swimming. Linear interpolation of table IV shows that the standard error of the 47 percent (for a base of 200 in table IV) is roughly 3.0 percentage points. Therefore, the chances are about 68 in 100 that a complete census would reveal that the percentage lies between 44.0 and 50.0 percent.

DEFINITIONS

Outdoor recreation activities

After the respondent had reported taking a vacation, trip, outing, or other outdoor recreation occasion, he

Table III. Standard errors of estimated percentage of the number of participants for the United States, for each quarterly survey, June 1960-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage[1]							
	100	200	300	400	500	1,000	2,000	3,000
2 or 98	1.2	0.9	0.8	0.7	0.6	0.4	0.3	0.2
5 or 95	2.1	1.5	1.2	1.0	.9	.7	.5	.4
10 or 90	2.9	2.1	1.6	1.4	1.3	1.1	.7	.6
25 or 75	4.3	3.0	2.5	2.3	2.1	1.7	1.0	.8
50	5.2	3.7	2.9	2.7	2.5	1.9	1.3	1.1

[1]Base shown when multiplied by 29,600 is the estimate derived for the sample survey of the number of participants.

Table IV. Standard error of estimated percentage of number of participants for the Northeast and North Central regions, for each quarterly survey, June 1960-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]						
	50	100	200	300	400	500	1,000
2 or 98	1.8	1.2	1.0	0.8	0.7	0.6	0.4
5 or 95	2.9	2.0	1.5	1.2	1.0	.9	.7
10 or 90	4.0	2.9	2.2	1.7	1.5	1.4	1.0
25 or 75	5.9	4.1	3.2	2.4	2.1	1.9	1.3
50	6.8	4.8	2.8	2.6	2.4	2.1	1.5

[1] Base shown when multiplied by 29,600 is the estimate derived for the sample survey of the number of participants.

Table V. Standard error of estimated percentage of number of participants for the South and West regions, for each quarterly survey, June 1960-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]						
	50	100	200	300	400	500	1,000
2 or 98	2.1	1.4	1.1	0.9	0.8	0.7	0.5
5 or 95	3.5	2.4	1.8	1.4	1.2	1.1	.7
10 or 90	4.4	3.3	2.5	2.0	1.8	1.6	1.0
25 or 75	6.9	4.8	3.7	2.8	2.4	2.2	1.5
50	7.9	5.7	4.5	3.3	2.8	2.5	1.7

[1] Base shown when multiplied by 29,600 is the estimate derived for the sample survey of the number of participants.

Table VI. Standard error of estimated percentage aggregate expenditures of participants for the United States, for each quarterly survey, June-August 1960, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]								
	500	1,000	2,500	5,000	10,000	25,000	50,000	75,000	100,000
2 or 98	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1
5 or 95	1.1	.9	.7	.5	.4	.3	.3	.2	.2
10 or 90	1.7	1.4	1.0	.8	.7	.5	.4	.3	.3
25 or 75	2.8	2.2	1.7	1.4	1.3	.8	.6	.5	.4
50	3.5	2.8	2.1	1.7	1.4	1.0	.7	.6	.5

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table VII. Standard error of estimated percentage aggregate expenditures of participants for the United States, September-November 1960, December 1960-February 1961 or March-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]							
	500	1,000	2,500	5,000	10,000	25,000	50,000	75,000
2 or 98	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.1
5 or 95	1.2	1.0	.8	.7	.6	.5	.4	.3
10 or 90	2.0	1.7	1.3	1.1	.9	.7	.6	.5
25 or 75	3.3	2.8	2.3	2.0	1.6	1.3	1.0	.8
50	4.3	3.6	3.4	2.4	2.2	1.6	1.2	1.0

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table VIII. Standard error of estimated percentage aggregate expenditures of participants, Northeast region, June-August 1960 or September-November 1960, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]									
	100	250	500	1,000	2,500	5,000	7,500	10,000	15,000	20,000
2 or 98	2.8	1.6	1.2	0.9	0.6	0.5	0.4	0.3	0.3	0.2
5 or 95	3.8	2.7	2.1	1.6	1.1	.8	.7	.6	.4	.5
10 or 90	5.5	4.0	3.1	2.3	1.5	1.1	.9	.8	.6	.6
25 or 75	8.9	6.4	4.7	3.4	2.2	1.6	1.3	1.1	.8	.6
50	11.2	7.6	5.6	4.0	2.6	1.8	1.4	1.2	.9	.7

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table IX. Standard error of estimated percentage aggregate expenditures of participants, Northeast region, December 1960-February 1961 or March-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]									
	100	250	500	1,000	2,500	5,000	7,500	10,000	15,000	20,000
2 or 98	2.1	1.8	1.3	1.0	0.7	0.5	0.4	0.3	0.3	0.2
5 or 95	4.5	2.9	2.2	1.6	1.0	.8	.6	.5	.4	.4
10 or 90	6.3	4.3	3.1	2.3	1.4	1.1	.9	.8	.6	.5
25 or 75	9.8	6.4	4.7	3.4	2.2	1.6	1.3	1.1	.9	.7
50	11.3	7.8	5.4	3.9	2.6	1.8	1.5	1.3	1.0	.8

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table X. Standard error of estimated percentage aggregate expenditures of participants for the North Central region, June-August 1960, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]								
	500	1,000	2,500	5,000	7,500	10,000	15,000	20,000	40,000
2 or 98	3.8	2.4	1.3	0.8	0.6	0.5	0.4	0.3	0.2
5 or 95	5.3	3.2	1.7	1.0	.8	.6	.5	.4	.3
10 or 90	6.3	3.9	2.0	1.2	.9	.8	.7	.5	.4
25 or 75	8.1	4.8	2.4	1.5	1.2	1.0	.8	.7	.5
50	8.4	4.9	2.5	1.7	1.4	1.2	.9	.8	.5

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table XI. Standard error of estimated percentage aggregate expenditures of participants for the North Central region, September-November 1960, December 1960-February 1961 or March-May 1961

[68 chances out of 100]

Estimated percentage	Base of percentage [1]								
	100	250	500	1,000	2,500	5,000	7,500	10,000	15,000
2 or 98	2.0	1.7	1.3	1.1	0.8	0.6	0.5	0.5	0.4
5 or 95	4.0	3.0	2.4	1.9	1.4	1.2	.9	.8	.7
10 or 90	6.2	4.5	3.7	2.9	2.6	1.5	1.3	1.1	.9
25 or 75	10.0	7.0	5.9	5.2	3.2	2.3	1.9	1.6	1.3
50	12.7	7.8	7.2	5.6	3.8	2.6	2.1	1.9	1.7

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditures of participants.

Table XII. Standard error of percentage aggregate expenditures of participants for the South region, June-August 1960 or March-May 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]									
	100	250	500	1,000	2,500	5,000	7,500	10,000	15,000	20,000
2 or 98	0.9	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3
5 or 95	1.7	1.4	1.2	1.1	.9	.8	.8	.7	.6	.6
10 or 90	2.7	2.4	2.1	1.8	1.5	1.3	1.1	1.1	1.0	.9
25 or 75	4.8	4.1	3.6	3.2	2.7	2.3	2.1	2.0	1.5	1.5
50	6.5	5.5	4.7	4.2	3.6	3.2	2.8	2.5	2.1	1.8

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditure.

Table XIII. Standard error of estimated percentage aggregate expenditures of participants for the South region, September-November 1960 or December 1960-February 1961, National Recreation Survey

[68 chances out of 100]

Estimated percentage	Base of percentage [1]									
	100	250	500	1,000	2,500	5,000	7,500	10,000	15,000	20,000
2 or 98	2.9	1.9	1.5	1.1	0.8	0.6	0.5	0.4	0.3	0.3
5 or 95	4.7	3.4	2.6	1.9	1.4	1.0	.9	.7	.6	.5
10 or 90	7.0	4.9	3.7	2.9	2.0	1.4	1.2	1.0	.8	.7
25 or 75	10.9	7.7	6.0	4.5	2.9	2.0	1.6	1.4	1.2	1.0
50	13.0	9.5	7.2	5.2	3.3	2.4	1.9	1.7	1.4	1.2

[1] Base shown when multiplied by 29,600 is the estimate derived for sample survey of the aggregate expenditure.

was asked, "Looking at the list, which of these activities did you take part in during your (vacation trip)?" The list contained 23 activities. No additional definition of each of the activities was specified for the respondent unless he seemed confused as to the meaning of the term, or unless he asked for clarification. In this case the definitions presented below were read or explained to him:

Camping. By camping we mean living out of doors using for shelter a bed roll, sleeping bag, trailer, tent, or a hut open on one or more sides, if the person takes his bedding, cooking equipment, food with him. Camping is often done in combination with other activities such as fishing, hunting, etc. (When such a combination is reported, all associated outdoor activities also are recorded.) Do not include formal camps for teenagers, such as Boy Scout camps, etc.

Fishing. For purposes of this survey, fishing is the taking of fish for noncommercial purposes. Spearfishing while skin diving should also be included. Fishing for commercial purposes or other "nonsport" fishing should not be included in this category.

Hunting. Hunting is the search for or stalking of animals in order to kill them for recreation purposes. No form of commercial hunting is considered.

Bicycling. Included in this category is any bicycle riding done only for pleasure. If a respondent rides a bicycle to work or to school it is excluded even though the person derives pleasure from riding.

Horseback riding. Includes only recreation riding. Riding to or from work or school or riding as part of a job such as a "cowboy" or mounted policeman is not included.

Driving for pleasure. The key word in this definition is pleasure. Included in this category is both riding and driving. If the driving was mixed, the determining factor is whether or not it was primarily for pleasure. Activities such as racing are included under sports and games.

Hiking (on trails with pack). The limitation, "on trail with pack", excludes casual walking and nature walks. A pack would normally include provisions and some sort of shelter. Heavy shoes are usually worn when hiking.

Nature walks (To observe birds, animals, plants, etc.). Nature walks includes walks for the purpose of observing either plants, birds, or animals, and the collection of specimens, photographing natural subjects, etc.

Picnics. A picnic is outdoor activity away from home the primary purpose being the preparation or eating of a meal, out-of-doors. Often other activities are associated with picnics.

Walking for pleasure. Any walking not included under Hiking or Nature Walks, from early morning "constitutionals" to long all day walks which do not require a pack.

Sightseeing. Sightseeing consists of looking at something of interest, the major limitation being that the sightseeing must be intentional. Excluded are such things as casually looking from the car window during a trip. If the person took a particular route or went out of his way to see a particular sight, it is classified as sightseeing. Excluded are activities such as window shopping wherein the emphasis is not on the out-of-doors.

Attending outdoor sports events. Attendance at any outdoor sports event as a spectator in which the respondent is not a participant, official, etc., is included here. The same events are included here as in playing outdoor games or sports.

Attending outdoor concerts, drama, etc. Included here are musical, dramatic, artistic or other nonsporting events which are conducted out of doors. Attending drive-in movies are excluded.

Snow skiing. Included are noncompetitive recreation use of skis on snow. Amateur competitive skiing is included in the category "playing outdoor games or sports." Professional skiing is out of scope and is not included in the survey.

Canoeing. The dictionary defines a canoe as a narrow light boat moved with paddles, not oars. Any recreation use of such a craft is "canoeing."

Sailing. The recreation use of any vessel with sail primarily intended to be propelled by wind is considered sailing. Sailboats with auxiliary engines, or sailing dinghys equipped with sail if primarily intended to be sailed rather than rowed, are included.

Other boating. The recreation use of any boat other than canoes or sailboats is included here, with the exception of houseboats, (which were entered separately by writing at the bottom of the list.) This category includes the use of rowboats, outboard motorboats, inboard motorboats, rafts, floats, etc.

Swimming. The ability to swim is not necessary for inclusion under this activity. "Bathing," playing in the surf, etc., is included as well as skin or scuba diving and surfboarding.

Water skiing. This includes any of the various sports where the person is towed behind a boat. This includes the use of aquaplanes, water skis or any other apparatus of this type.

Playing outdoor games or sports. Since most games and team sports require playing facilities of a kind different from the focus of the survey, they are lumped together in order to provide the proportion of the population participating in these activities. Included are all team sports, such as baseball, football, outdoor basketball, etc., as well as usually nonteam sports, such as tennis, golf, etc. Record events such as trying to set a speedboat record, are included. The name of the sport was required of the respondent. A requirement for including the activity is the aspect of competition, either against other people, the clock, a record, etc.

Mountain climbing with gear. Mountain climbing with gear eliminates any climbing of hills or rocks which do not require the use of climbing gear. Gear includes a rope and any other equipment such as axes, spiked shoes, crampons,stc.

Ice skating. Included is any noncompetitive recreation ice skating. Competitive skating including ice hockey, figure skating contests, etc., is classified as "playing outdoor games or sports." Interviewers were instructed to exclude any skating done on indoor ice rinks, as well as professional or other nonrecreational skating.

Sledding and tobogganing. This is the recreation use of a sled, toboggan, bobsled or similar vehicle designed for sliding over snow or ice. Excluded is the use of any large vehicle (sleigh) designed primarily to be drawn by a horse or propelled mechanically.

Other outdoor recreation activities. This category includes any other outdoor recreation activity not clearly classifiable into one of the categories listed above. Examples are: houseboating, skeet shooting, gliding, horse and buggy riding, trampoline jumping, etc.

Measures of participation

From the days reported engaging in each activity, three participation measures are computed, as indicated below.

Percent of persons participating. The percent of persons participating in an activity within a given period (for example, June-August 1960) was computed, using as the numerator the number of persons who reported participation for that activity in connection with any vacation, trip, outing or other recreation occasion, and, as the denominator, the number of cases in the final adjusted sample for the class being presented (for example, an age group).

Activity day. The information collected is the number of days of activity which the respondent reports. An activity day is any part of a day in which the person engaged in the activity one or more times. For example, one "swimming" day is counted if the person went swimming one time or two times during the day. If the person went swimming in the morning and horseback riding in the afternoon, an activity day is counted for the person for each activity.

Activity days per person. The number of activity days per person was arrived at by dividing the accumulated number of reported days of participation by the number of adjusted sample cases for the class being presented.

Activity days per participant. The number of activity days per participant was computed by dividing the accumulated number of reported days of participation by the number who reported any participation in the adjusted sample for the class being presented.

Definitions of classificatory variables

For reporting and analysis the recreation data are classified according to various categories presumed to have relevance for interpretation and prediction. The definition of the terms, for the most part, have followed standard concepts, particularly those employed by the U.S. Bureau of the Census. However, in some instances one or more classes of reporting categories usually used in reporting data have been combined. The major variables used are defined below.

Region. The sample is classified into four broad geographic areas of the conterminous United States. These are the standard four major groups of States regions used by the Bureau of the Census. They are as follows:

Northeast

Maine	Connecticut
New Hampshire	New York
Vermont	New Jersey
Massachusetts	Pennsylvania
Rhode Island	

North Central

Michigan	Iowa
Ohio	Missouri
Illinois	North Dakota
Indiana	South Dakota
Wisconsin	Nebraska
Minnesota	Kansas

South

Delaware	Florida
Maryland	Kentucky
District of Columbia	Tennessee
Virginia	Alabama
West Virginia	Mississippi
North Carolina	Arkansas
South Carolina	Louisiana
Georgia	Oklahoma
Texas	

West

Montana	Utah
Idaho	Nevada
Wyoming	Washington
Colorado	Oregon
New Mexico	California
Arizona	

Alaska and Hawaii were not included in the survey.

Residence. Residence is used to classify the responses according to the degree of urbanization of the territory wherein the respondent resides, standard Census Bureau classifications being employed. The definitions are those established with the 1950 census, the chief distinctions being, as follows:

Urban-Rural. For the 1950 decennial census, the urban population was defined as "all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, and villages, (b) incorporated towns of 2,500 inhabitants or more except in New England, New York, and Wisconsin, where 'towns" are simply minor civil divisions of counties, (c) the densely settled urban fringe, including both incorporated, and unincorporated areas, around cities of 50,000 or more, and (d) unincorporated places of 2,500 inhabitants or more outside any urban fringe. The remaining population is classified as rural."

Most of the tables distinguish three classes of urban population: within standard metropolitan areas (now called standard metropolitan statistical areas) of 1 million or more population, and of less than 1 million population; and, urban population outside standard metropolitan areas (this class generally being urban places of less than 50,000 population in 1950).

The standard metropolitan areas consist of the county or group of counties containing at least one city of 50,000 or more, except in New England. In addition, contiguous counties are included as SMA's "if according to certain criteria they are essentially metropolitan in character and socially and economically integrated with the central city." Towns and cities, rather than counties, are the units used in New England.

The rural-farm population includes all those living on farms, regardless of occupation. The rural-nonfarm population includes all others who do not live in urban territory. "The rural-nonfarm population comprises persons living in a variety of types of residences, such as isolated nonfarm homes in the open country, villages and hamlets of fewer than 2,500 inhabitants, and some of the fringe areas surrounding the smaller incorporated areas."

Elaborations of these definitions may be found in volumes of the 1950 Decennial Census of Population, particularly: U.S. Census of Population, 1950, vol. I., Washington, D.C.: Department of Commerce, Bureau of the Census.

The classification most often used for the National Recreation Survey data is, as follows:

Residence within standard metropolitan area—
- In urbanized area, 1 million or more.
- In urbanized area less than 1 million and all other urban population.
- Rural.

Residence outside standard metropolitan area—
- Urban (chiefly 2,500-50,000 population).
- Rural, nonfarm.
- Rural, farm.

In some tables the rural population within standard metropolitan areas has been combined with the rural categories outside SMA's.

Age. Age of the sample person and of the head of the household is recorded from the Current Population Survey record for the family, in single years and is the age at the last birthday of the individual. The National Recreation Survey included a sample of persons who were 12 years of age and over in the previous months' outgoing rotation group of households of the Current Population Survey.

Race. Only the white and nonwhite categories are presented in these tables. The information was transcribed from the Current Population Survey control card. The categories employed in that survey are white, negro, and other. Mexicans are recorded as white unless they are of Indian or nonwhite race. This characteristic is usually determined by observation, but inquiry is made if the interviewer is uncertain.

Education. Education is determined by direct question to the sample person and of the sample person for the head of the household, if the head is related to the sample person. (Otherwise, the education of the head is determined from another household respondent or the head itself.) The number of years of schooling completed is determined by the question: What is the highest grade (or year) of regular school you have ever attended? After checking the grade or year, the interviewer asks the respondent, "Did you finish this grade or year?" and records the "Yes" or "No" answer. Thus, the highest grade completed of the following categories by grade is recorded: Never attended school, kindergarten, elementary school (each of grades one through eight), high school (each grades one though four), college (each of years one through six or more). Regular school is defined as that which leads toward elementary or high school diploma or a college, university, or professional school degree. Attendance was accepted if full or part time, day or night school.

If a person was still in school, the current grade was entered.

Marital status. The marital status of both of the sample person and head of the household is transferred from Current Population Survey records. In the tables, some of these categories are combined. The categories employed and notes on their definitions are as follows:

Married. Includes common-law marriage. Married couples who are separated legally or because of marital discord, as defined below, are excluded here. If one spouse is temporarily absent, such as a husband in the armed forces or for similar reasons except marital discord, the person is classified as married.

Widowed Persons.

Divorced Persons.

Separated persons. The spouse is not present in the household but they have not obtained a divorce. The couple need not be legally separated to be classified as separated.

Never married.

Not ascertainable.

Income. The respondent was asked to classify the family according to the total family income "during the past 12 months." The respondent was given a flash card showing the response categories as presented below. In addition, family income was defined to include: "wages and salaries, business profits, net farm income, pensions, rents, and any other money income received by the members of this family."

Yearly	Weekly
Under $1,500	Under $30
$1,500 to $2,999	$30 to $59
$3,000 to $4,499	$60 to $84
$4,500 to $5,999	$85 to $119
$6,000 to $7,999	$120 to $154
$8,000 to $9,999	$155 to $189
$10,000 to $14,999	$190 to $289
$15,000 to $19,999	$290 to $379
$20,000 and over	$380 and over

Occupation. The employment status and occupation of the sample person and the head of the household was not independently asked for purpose of this survey. Instead, the information was transcribed from the records of the Current Population Survey. The Current Population Survey obtains this information through a series of questions which include, first, determining what the individual was doing most of last week, the classification being: working, looking for work, with a job but not at work, keeping house, going to school, unable to work, or other. If a person has a regular job or business he is asked, "What kind of work (were you) was ... doing?" In addition, the kind of business or industry in which the person was working is determined. Class of worker, also, is determined, the person being classified as follows: working for a private employer for wages, salary, compensation or tips: working for the government; working in own business or profession or farm for profit or fees; working without pay on family farm or business; never worked.

On the basis of the above information, the individual is classified according to employment status, occupation and industry. The employment status and occupational classifications are employed in the National Recreation Survey. When it was necessary to combine some occupational categories, standard census combinations were used. 4/ The basic categories are, as follows:

Employed:

- Professional, technical, and kindred workers.
- Managers, officials, and proprietors, except farm.
- Clerical and sales workers (other white collar).
- Craftsmen, foremen, and kindred workers.
- Operatives and kindred workers including laborers. (Except farm and mine.)
- Service workers (including private).
- Farm workers.
- Occupation not reported.

Not employed:

- Household.
- School.
- Unable to work, unemployed, and other.

REINTERVIEW SURVEY

As one means of measuring the quality of the sample results, the National Recreation Survey included an independent reinterview survey. Differences arising between the original interview and the reinterview provide an indication of the difference attributable to the measurement process. The reinterview survey was conducted in all four quarters of the survey year. The size of the reinterview for the September 1960 quarter was about 10 percent of the sample persons located in approximately 75 segments. The reinterview sample in December 1960 was half that size (5 percent) and 2 1/2 percent for the March and June 1961 surveys. The reinterviews were made by the supervisory staff independently of the results of the original interview. The interview procedures, except for the introduction of the interviewer, were the same as the original interview. An analysis of the results of the reinterview is presented as an appendix, part I, of this report.

QUESTIONNAIRE

The questionnaire for the September 1960 survey is presented as an appendix to this volume. Questions used in subsequent surveys were identical, except for a change in period of reference. For example, each reference to summer in the September 1960 survey was changed to fall for the December 1960 survey. Supplementary questions on hunting and fishing leases and questions on camping in undeveloped areas were added in the II, III, and IV surveys. Supplementary questions to provide data for methodological studies were also included in the II and IV surveys.

4/ "1960 Census of Population: Classified Index of Occupations and Industries." Washington, D.C.: U.S. Bureau of the Census, 1960. pp. XV-XX.