

PUBLIC OPINIONS AND ATTITUDES ON OUTDOOR RECREATION IN CALIFORNIA 1997

**An Element of the California
Outdoor Recreation
Planning Program**

MARCH 1998



CALIFORNIA STATE PARKS®

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CALIFORNIA STATE PARKS MISSION

The mission of the California Department of Parks and Recreation is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valuable natural and cultural resources, and creating opportunities for high-quality outdoor recreation.



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State of California - The Resources Agency
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P.O. Box 942896
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Public Opinions and Attitudes on Outdoor Recreation in California 1997 was developed from data resulting from a focused public opinion survey. It is an element of the California Outdoor Recreation Planning Program, formulated under the provisions of Chapter 5099 of the California Public Resources Code. The survey and subsequent report were developed under the leadership and coordination provided by the Planning and Local Services section of the California Department of Parks and Recreation.

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I. EXECUTIVE SUMMARY

Broad-level planning for outdoor recreation requires current information about the attitudes and opinions, the current activities and the desires of the general public. To obtain such information, current as of 1997, a focused public opinion survey was undertaken that asked respondents their views on many aspects of those recreation areas and facilities provided by all levels of government—federal, state, and local. This survey was undertaken by the California Department of Parks and Recreation, with the participation and strong support of the Federal Bureau of Land Management, National Park Service, and United States Forest Service. This survey is a partial replication of previous surveys taken by the Department in 1987 and 1992.

The 1997 survey of the California population was based on a sample of 2,010 California households selected at random. This sample size provides data that exceeds 95 percent confidence ± 5 percent when the state is considered as a whole. Each respondent was interviewed for an average of five minutes, and a portion of them also responded to a lengthy mail questionnaire. The mail questionnaire contained topics and questions that were too detailed or complex to be dealt with on the telephone.

Looking at the 1997 data, a few very broad generalizations can be made, which are similar to those from the 1992 study:

- Outdoor recreational areas and facilities are very important to the quality of life of most Californians;
- Californians are fairly well satisfied with the areas and facilities currently available;
- Californians spent approximately 2.2 billion days participating in outdoor recreation activities during 1997;
- Simple and inexpensive activities are engaged in far more than those which require considerable skill and expense;
- Californians do not show a strong willingness to pay for the recreational areas and facilities they use or desire; and
- Californians strongly believe that protection of the natural environment is an important aspect of outdoor recreation.

Below are a few of the more detailed highlights of the 1997 survey. The full range of detailed information will be found in the body of the report and in the Appendices, which follow.

FINDINGS FROM THE 1997 SURVEY

- Roughly 70 percent of Californians indicate that outdoor recreation areas and facilities are the same or better than five years ago.
- Over 80 percent of Californians indicated that federal and state government should continue to assist in financing outdoor recreation.
- Based on latent (unmet) demand and public support, Californians believe that nine outdoor recreational activities should have top priority for the expenditure of public funds: walking, trail hiking, camping in developed sites, camping in primitive sites, general nature study, use of open grass areas, picnicking in developed sites, visiting museums/historic sites, and visiting zoos and arboretums.
- Californians prefer methods of funding public recreation areas and facilities that do not directly impact the user or the general population, i.e., “sin” taxes.
- In terms of public spending priorities, Californians appear to focus more on existing facilities rather than expanded opportunities for outdoor recreation areas and facilities.

- Californians tend to want more local community parks; more horseback riding, hiking and/or mountain biking areas where no motorized vehicles are allowed; more campgrounds and **fewer** commercial businesses within public parks; and **fewer** areas for off-road vehicles.

COMPARISON WITH THE 1987 AND 1992 STUDIES

- Generally, there were few major changes in attitudes or behavior over the last decade. Some changes are noticeable for preferences for funding mechanisms, and changes are apparent in the average number of days among participants for walking, general nature study, basketball, surfing, sailboating and windsurfing, kayaking and other non-motorized watercraft use, and freshwater fishing.
- Direct comparability for some activities is not possible due to changes in activity definition since 1987. For example, in 1987 trail hiking was combined with mountain climbing. When examining the average days of participation data for all three surveys, several activities (walking, camping—both types, kayaking and related activities) exhibit an inverted “U” curve, implying that participation increased in 1992 then decreased to about 1987 levels.
- Between 1997 and 1992 “high” latent demand was basically unchanged for those activities identified in 1992, but willingness to pay changed for all of those activities.
- Finally, there is growing support for increased facility maintenance, increased construction of new facilities, and increased acquisition of lands for park and recreational purposes.

COMPARISON WITH HISPANIC AND NON-HISPANIC RESPONDENTS

- This year’s survey examined differences in responses between Hispanics and members of all other ethnic groups. For these groups, differences of 10 percentage points or more within an aggregated category (e.g., approve and strongly approve, or disapprove and strongly disapprove) were found for the types of outdoor recreational areas visited; the types of outdoor recreational areas preferred; selected attitudes concerning recreation lands and facilities, funding park and recreational areas, spending changes, changes to park and recreation facilities and services; and factors influencing enjoyment of the respondents’ most important recreational activity.
- Generally, data from the 1997 survey reveal that Hispanic respondents, as compared to all other respondents, have more positive attitudes towards their recreational experiences in California and are more likely to use and prefer highly developed areas, excluding historic and cultural sites.
- Hispanics also demonstrated more positive attitudes towards special programs and are more likely to be concerned with regulation of behavior at recreational sites, compared to non-Hispanics.
- Hispanics tended to participate less in many of the outdoor activities examined in this survey and have a different set of latent demand priorities than members of other ethnic groups.
- The results from this study are generally consistent with those of other California studies of non-Hispanic and Hispanic recreation patterns, which suggest that different service delivery approaches are needed to serve specific ethnic groups.

SECTION II INTRODUCTION



II. INTRODUCTION

BACKGROUND

The California Department of Parks and Recreation is responsible for the preparation and periodic revision of a comprehensive California Outdoor Recreation Plan. This plan provides policy guidance and basic information of value to all public agencies—state, federal, and local—engaged in providing outdoor recreational lands and facilities throughout the state.

The information that this public opinion survey provides is an essential ingredient to the 1998 revision of the California Outdoor Recreation Plan. (It serves to update the Open Project Selection Process, and may also be used to guide various grant programs.)

Similar surveys were undertaken in 1987 and 1992 to assist in the revision of the 1988 and 1993 plans. The present mail and telephone surveys added some statements to the original lists and the telephone survey added one additional question. All studies were accomplished under contract to the Department by CIC Research, Inc., of San Diego. Funding for the 1997 study has been provided by the California Department of Parks and Recreation, with support from the following federal agencies: The National Park Service, the Bureau of Land Management, and the United States Forest Service. This report presents the detailed findings of the 1997 public opinion survey, as well as comparisons of this data with relevant portions of the 1987 and 1992 surveys.

PURPOSE OF STUDY

This study focuses on two major areas of inquiry:

- Public attitudes, opinions, and values with respect to outdoor recreation in California.
- Demand for and current participation in 43 selected types of outdoor recreation activities.

Specifically, the study also aims to determine the:

- importance of public outdoor recreation areas and facilities to the respondent's life-style.
- satisfaction with the full range of public parks and outdoor recreation opportunities available in California.
- frequency of engaging in specific outdoor recreation activities.
- frequency of visiting various significantly different types of outdoor recreation areas and preferences for them.
- attitudes toward various proposed changes to existing public parks and recreation facilities, purposes and services.
- attitudes toward private firms being allowed to provide various services in public parks.
- willingness to pay for favorite outdoor activities at public parks under a variety of circumstances.
- attitudes toward various priorities and methods for funding public parks and recreation areas.
- reaction toward level of spending by government agencies on various park and recreation services.
- current differences, if any, between the Hispanic community's attitudes and opinions regarding outdoor recreation participation and those of the rest of the population.

ORGANIZATION OF REPORT

The major findings of the study are presented in the next section of this report. These narrative findings consider attitudes, activity/participation, latent demand, funding/priorities for spending, and miscellaneous issues on a statewide basis for outdoor recreation. The outdoor recreational activities considered focus on public facilities owned and managed by *all* levels of government, i.e., federal, state, and local. These findings are followed by a number of appendices, which provide more detail.

- Telephone survey instrument is provided with (unweighted) summary statistics on page A3.
- Mail questionnaire is presented in a similar fashion on page B3.
- Study methodology is described on page C3.
- Demographic characteristics of respondents are detailed starting on page D3.
- Selected crosstabulations¹ are presented to provide insight into the data set for decision-making purposes.
- A selective bibliography is provided on page E3.
- Organizations and individuals who contributed to this study are acknowledged.

¹A crosstabulation is a table showing the joint values of two or more characteristics.

SECTION III

FINDINGS



III. FINDINGS

In this section, major statewide findings are reported for the survey. Because the characteristics of survey data do not always match the characteristics of the populations, various characteristics were considered as possible weighting factors. Of the characteristics tested—age, income, education, and race—significant difference were discovered only in the education characteristic category. As a result, the survey data has been weighted to reflect the 1990 total California distribution of education. For example, if a specific education-level group is underrepresented in the sample, each observation from that education-level group is weighted upward so that the proper education-level proportions are achieved for the sample as a whole. Thus, the findings reflect the opinions and attitudes of Californians on a statewide basis.

The unweighted, or raw, survey data are presented in Appendices A and B to this report. The unweighted data reflect the characteristics of the sample respondents rather than the California population. The unweighted survey results are presented to permit evaluation of sample size, nonresponse, and distribution on a question-by-question basis.

ATTITUDES AND BELIEFS OF CALIFORNIANS TOWARD RECREATION

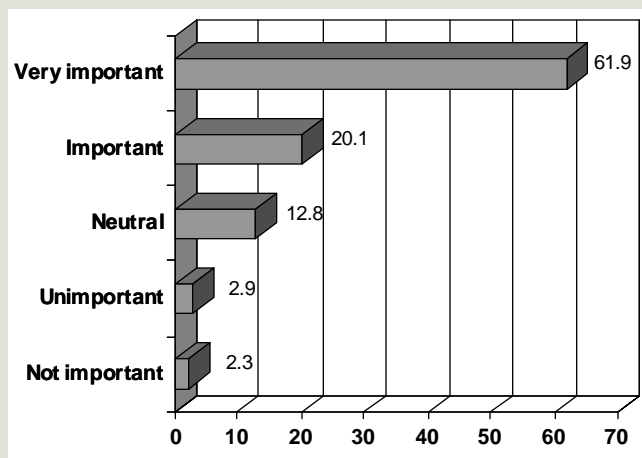
Generally, Californians may be characterized as individuals who think that outdoor recreation areas and facilities are very important to their quality of life and who are fairly satisfied with available public outdoor recreational areas and facilities. Most indicate that the conditions of public outdoor recreation areas and facilities in California are the same as or better than they were five years ago.

Importance

Californians were asked to consider any and all public outdoor areas, parklands, and facilities operated by **any** level of government. As Table 1 indicates, over eight in ten (82.0%)

Californians believe that outdoor recreation areas and facilities are “important” or “very important” to their quality of life. Roughly five percent indicated that outdoor recreational areas and facilities were “not at all important” or “unimportant” to their quality of life.

Table 1
OUTDOOR RECREATION IMPORTANCE TO QUALITY OF LIFE

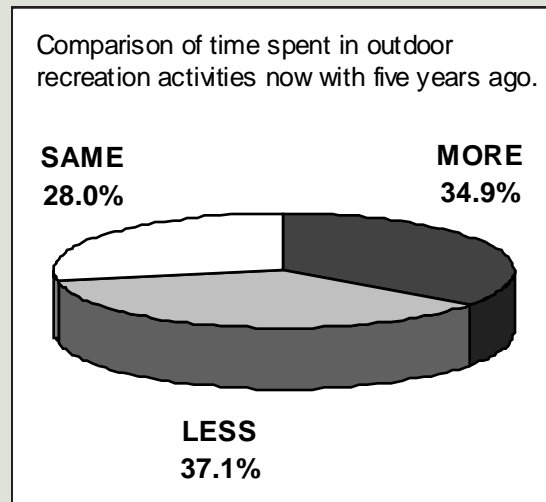


Source: CIC Research, Inc., 1997

Satisfaction

Californians were asked the degree of their satisfaction with California's public outdoor recreation areas and facilities currently available. As Table 2 indicates, 60.0 percent of the respondents indicated they were "satisfied" or "very satisfied" with their opportunities. Roughly 11 percent indicated they were "not at all satisfied" or "unsatisfied." In addition, respondents were asked to compare outdoor recreation areas and facilities today with those of five years ago. Almost 71 percent indicated that current conditions were "the same as" or "better than" five years ago. However, as Table 3 indicates, 37.1 percent spend less time in outdoor recreational activities than they did five years ago.

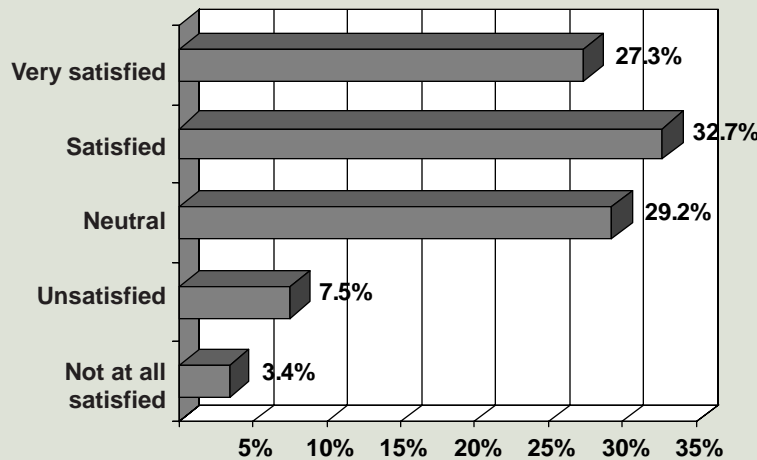
Table 3
TIME SPENT OUTDOORS



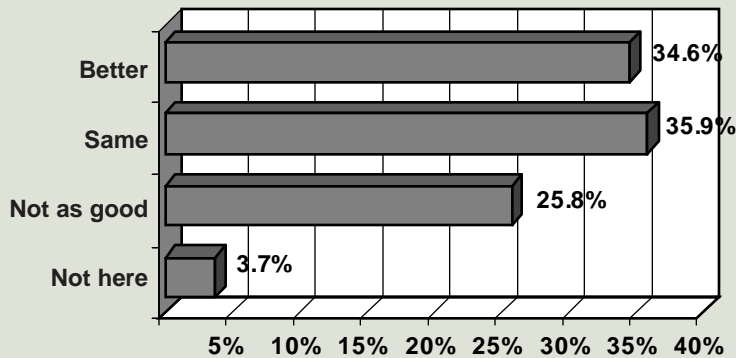
Source: CIC Research, Inc., 1997.

Table 2
SATISFACTION

Satisfaction with public outdoor recreation areas and facilities currently available.



Comparison of outdoor recreation areas and facilities today with five years ago.



Types of Areas Visited and Favorite Areas

Based on five broad types of outdoor recreation areas, Californians were asked to indicate how often they visited each. Table 4 indicates that "nature-oriented parks and recreation areas" are visited by the largest percentage of respondents, followed closely by "natural and undeveloped areas." "Highly developed parks and recreation areas," however, are visited with the greatest regularity. "Private outdoor recreation areas and facilities" are visited the least.

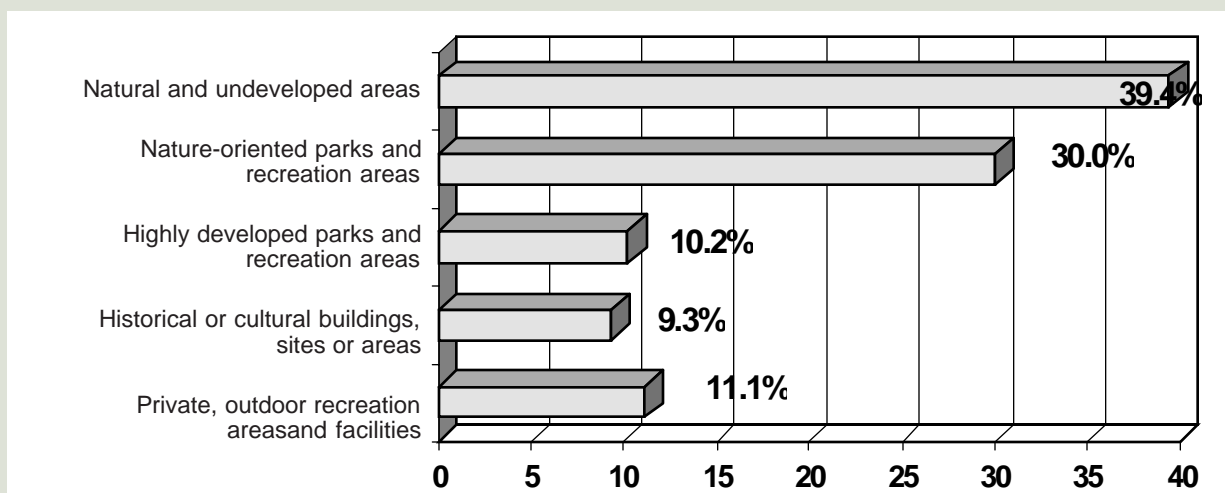
Table 5 lists Californians' preferences for the five broad types of outdoor recreation areas. "Natural and undeveloped areas" were preferred by the largest proportion of respondents (39.4%). Thus, Californians visit and prefer natural and undeveloped areas in the largest proportion but visit "highly developed parks and recreation

Table 4
VISITS TO OUTDOOR RECREATION AREAS

	Not At All	Once or Twice Per Year	Several Times Per Year	Once or Twice Per Month	Once Per Week	At Least 2-3 Times Per Week
Natural and undeveloped areas	9.7%	28.7%	36.8%	13.0%	5.9%	5.8%
Nature-oriented parks and recreation areas	8.8	22.1	43.3	16.0	5.6	4.1
Highly developed parks and recreation areas	11.0	20.9	28.5	19.0	12.0	8.5
Historical or cultural buildings, sites or areas	12.8	38.4	37.2	9.5	1.4	.8
Private, not public, outdoor recreation areas and facilities	25.8	28.0	22.7	10.6	7.4	5.5

Source: CIC Research, Inc., 1997.

Table 5
TYPES OF OUTDOOR RECREATION AREAS PREFERRED



areas” with the greatest regularity. “Historical/cultural areas,” “highly developed parks and recreational areas,” and “private recreation areas” do not appear to have the level of preference found for the other broad types of outdoor recreation areas.

General Attitudes

Californians were asked a sequence of questions to identify their general attitudes regarding outdoor recreation lands and facilities in California. First, respondents were asked for their level of agreement/disagreement to a series of 18

statements. Second, Californians were queried about changes to park and recreation facilities. Third, respondents were asked to determine activity levels and desired spending levels. Finally, a series of questions dealing with funding alternatives were asked. Highlights of the attitudes of Californians are presented below.

Preservation and Availability: Californians generally support statements regarding preservation and availability. As Table 6 indicates, Californians overwhelmingly agree (92.5% moderately or strongly agree) that protection of the natural environment is an important aspect of outdoor recreation areas. Further, Californians believe the

Table 6

Attitudes Concerning Outdoor Recreation Lands and Facilities

Statement	Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
a. There are enough outdoor recreation areas and facilities available that are convenient for me.	6.5%	18.6%	13.7%	42.0%	19.2%
b. More outdoor recreation areas and facilities are needed in or near large cities.	3.0	8.8	20.2	33.2	34.8
c. Protection of the natural environment is an important aspect of outdoor recreation areas.	1.2	1.9	4.5	20.5	72.0
d. Outdoor recreation areas and facilities in California are often too crowded when I want to use them.	2.6	11.1	26.7	30.3	29.2
e. Recreational facilities and programs for special populations such as the elderly, the very poor or disabled people should be increased.	4.5	9.2	26.5	27.6	32.3
f. Outdoor recreation areas and programs help to reduce crime and juvenile delinquency in my community.	3.2	8.8	26.3	29.4	32.2
g. Outdoor recreation areas and facilities improve a community's "quality of life."	1.0	1.9	6.9	31.7	58.4
h. Outdoor recreation areas and facilities attract undesirable people and activities.	19.0	31.2	27.9	16.7	5.2
i. Outdoor recreation areas and facilities can create jobs and spending in the community, helping its economy.	1.0	3.8	17.9	45.4	31.9
j. Outdoor recreation areas and facilities should be used to promote tourism.	4.1	9.6	20.4	37.8	28.1
k. Outdoor recreation areas and facilities increase the value of nearby residential and commercial property.	1.4	5.2	28.9	36.0	28.4
l. There should be better regulation of behavior, rules and laws in parks and outdoor recreation areas, which would make my experience more comfortable and safe.	4.4	8.9	22.8	30.0	33.9
m. The <u>federal</u> government should continue to give financial assistance to local and state governments for parks and outdoor recreation areas.	3.1	4.1	10.8	25.0	57.0
n. The <u>state</u> government should continue to give financial aid to local governments for outdoor recreation.	2.1	2.3	6.9	30.2	58.5
o. The quality of the natural setting is an important factor in my enjoyment of outdoor recreation areas.	0.7	1.0	4.2	27.7	66.5
p. Wetlands, such as estuaries and marshes, are of substantial ecological and recreational importance and should be protected by the government.	2.9	4.2	16.6	27.6	48.7
q. Additional campgrounds should be constructed that are more developed and have hot showers, including campsites for which there would be an extra fee with hook-ups for electricity and water.	8.1	10.6	20.5	27.3	33.4
r. Increased tourism at parks, wildlife and recreation areas should be encouraged if it is a means to generate additional funds for the operation and maintenance of those areas.	4.3	9.0	21.9	34.2	30.6

quality of the natural setting (line o, 94.2% moderately or strongly agree) is important to their outdoor experience and that wetlands, because of their ecological importance (line p, 76.3% moderately or strongly agree) should be protected by the government.

While the majority (61.2%) moderately or strongly believe that there are enough facilities available for their own use (line a), 68.0 percent indicated that more outdoor recreation areas and facilities are needed in or near large cities (line b). Further, almost 60 percent strongly or moderately agree that recreational facilities and programs for the elderly, poor or disabled should be increased (line e).

Problems: Californians appear to be concerned about crowded conditions and safety. Almost 60 percent indicated that outdoor recreation areas and facilities in California are often too crowded when they wish to use them (line d). Roughly 64 percent agreed that better regulation of behavior, rules and laws in parks and outdoor recreation areas would make their experience more comfortable and safe (line e). However, only 21.9 percent moderately or strongly agreed that outdoor recreation areas and facilities attract undesirable people and activities (line h).

Spillover values: In the eyes of Californians, outdoor recreation areas and facilities have value beyond simple use. Californians moderately or strongly agreed that outdoor recreation areas, programs, and facilities tended to reduce crime and juvenile delinquency (line f, 61.6%), created jobs and spending (line i, 77.3%), and increased the value of nearby commercial and residential property (line k, 64.4%). Roughly two-thirds of the respondents indicated that outdoor recreation areas and facilities should be used to promote tourism (line j).

Financing Attitude: A strong majority of Californians indicate that federal and state government should continue to assist in financing outdoor recreation. An identified 82 percent moderately or strongly agreed that the **federal government** should continue to give financial assistance to local and state governments for

parks and outdoor recreation areas (line m). Slightly more Californians (88.7%) agreed that **state government** should continue to give financial aid to local governments for outdoor recreation. Almost 65.0 percent moderately or strongly agreed that increased tourism at recreation areas should be encouraged if it generates additional funds for operation and maintenance of those areas (line r).

ACTIVITY/PARTICIPATION

Californians are very active in outdoor recreation and participate in a number of activities. In this survey, 43 outdoor activities were considered. Respondents were asked to note their participation in each of the 43 activities and note the number of days per year of participation.

Participation

The percentage of respondents that indicated one or more days of participation in each of the 43 activities is provided in Table 7. As the table indicates, walking was undertaken by the largest percentage of respondents (84.8%) while snowmobiling was undertaken by the lowest percentage of respondents (2.5%). Fifty percent or more of the respondents participated in 13 of the 43 activities noted. Alternatively, only seven activities reflected participation rates less than 10 percent. In general, participation rates appear to be higher for activities that are less expensive, require less equipment, and need fewer technical skills.

Activity Participation Days

Table 8 indicates the average number of activity days per year for **all** respondents in the survey (i.e., nonparticipants in the activity are included in calculating the mean). As the table indicates, average activity days vary significantly from activity to activity. Walking recorded by far the largest average number of days (74.3 days). Other activities with high activity rates included driving for pleasure (32.8 days), use of open grass areas (21.1 days), bicycling (19.7 days), and nature study/wildlife viewing (19.3 days). In essence, Table 8 represents the average number of days in 1997 for each activity per adult California resident.

Table 7

PARTICIPATION

Activity Number		Percentage of Participation	Rank	Activity Number		Percentage of Participation	Rank
01	Walking (Recreational)	84.8%	1	23	Beach activities, including sunning and games	67.8%	5
02	Trail hiking	58.0	8	24	Swimming (in outdoor pools)	48.0	14
03	Bicycling (on paved surfaces)	42.8	15	25	Swimming in lakes, rivers, and the ocean (not in pools)	57.2	9
04	Mountain biking (not on paved surfaces)	17.7	27	26	Surfing	5.3	42
05	Jogging and running	28.6	18	27	Sailboating and windsurfing	6.7	41
06	Driving for pleasure	68.3	4	28	Kayaking, rowboating, canoeing, and rafting	18.3	24
07	Horseback riding	14.2	32	29	Power boating	21.1	23
08	Hunting	8.7	38	30	Water skiing	12.8	34
09	Camping in developed sites with tent or vehicle	51.8	13	31	Fishing – saltwater	22.7	22
10	Camping in primitive areas and backpacking	25.8	20	32	Fishing – freshwater	37.3	17
11	Mountain climbing	10.1	36	33	Downhill (Alpine) skiing	15.6	30
12	General nature study, wildlife viewing	54.0	11	34	Cross-country skiing	7.2	40
13	Use of open grass or turf areas for casual and unstructured activities, like games, sitting, sunning	68.4	3	35	Other non-mechanized winter sports activities - sledding, snow play, ice skating	23.0	21
14	Use of play equipment, tot-lots	40.0	16	36	Snowmobiling	2.5	43
15	Picnicking in developed sites	65.0	7	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	9.9	37
16	Softball and baseball	26.4	19	38	4-Wheel drive vehicles used off paved roads	14.6	31
17	Basketball	18.1	25	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor settings	56.0	10
18	Football	8.5	39	40	Visiting museums, historic sites	74.6	2
19	Soccer	13.8	33	41	Visiting zoos and arboretums	66.3	6
20	Golf	17.9	26	42	Skateboarding and rollerblading	16.0	29
21	Tennis	12.6	35	43	Attending outdoor sports or athletic events, professional or amateur	51.9	12
22	Target shooting (including pistol and skeet)	17.0	28				

Source: CIC Research, Inc., 1997

Figure 1
Participation

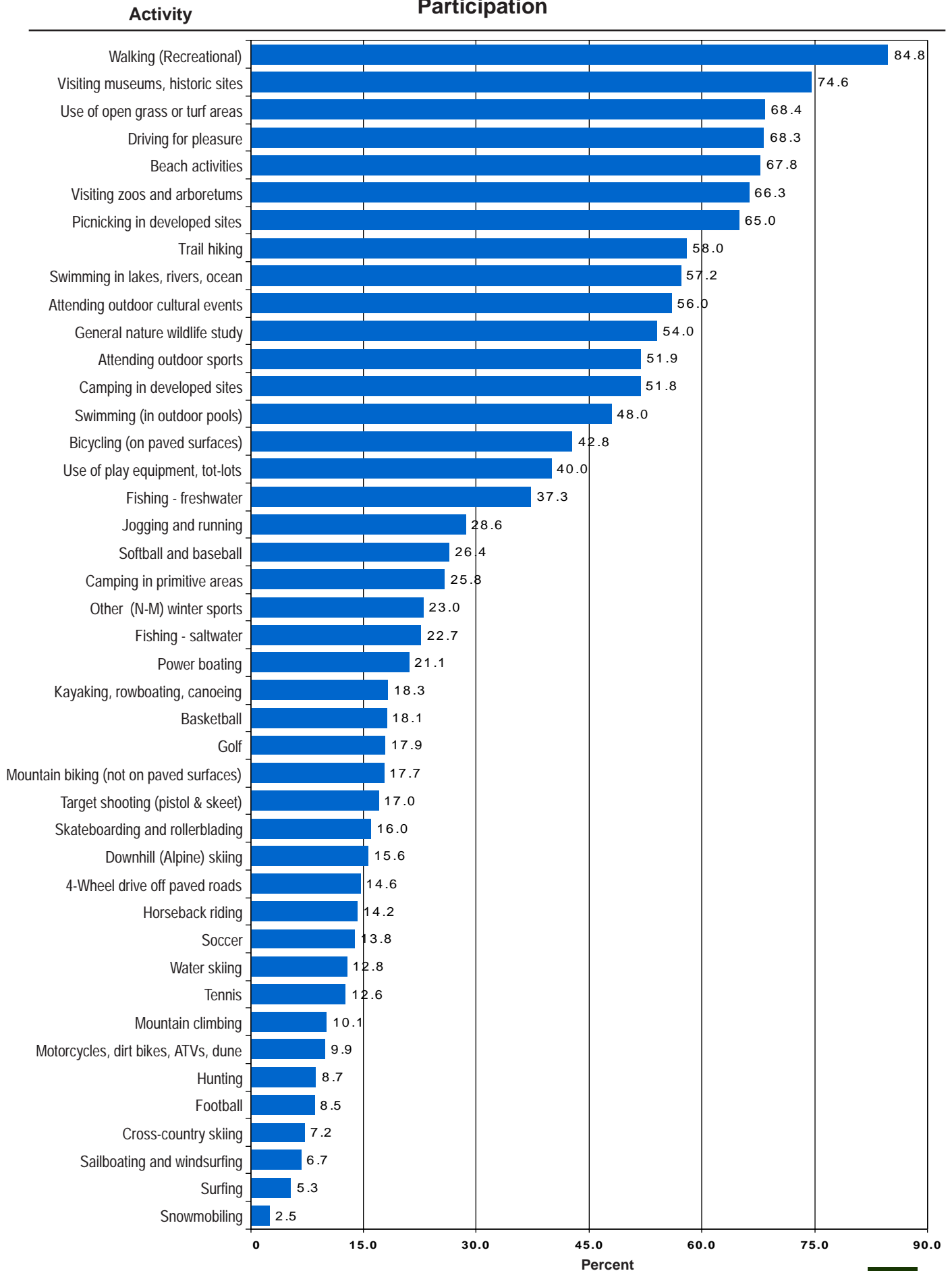


Table 8

AVERAGE ACTIVITY DAYS STATEWIDE
(All Survey Respondents)

Activity Number		Number of Days	Rank	Activity Number		Number of Days	Rank
01	Walking (Recreational)	<u>74.3</u>	1	24	Swimming (in outdoor pools)	<u>15.1</u>	7
02	Trail hiking	<u>11.9</u>	9	25	Swimming in lakes, rivers, and the ocean (not in pools)	<u>9.2</u>	11
03	Bicycling (on paved surfaces)	<u>19.7</u>	4	26	Surfing	<u>1.6</u>	35
04	Mountain biking (not on paved surfaces)	<u>3.8</u>	25	27	Sailboating and windsurfing	<u>0.6</u>	41
05	Jogging and running	<u>16.8</u>	6		Kayaking, rowboating, canoeing, and rafting	<u>1.2</u>	38
06	Driving for pleasure	<u>32.8</u>	2	29	Power boating	<u>3.3</u>	27
07	Horseback riding	<u>3.9</u>	24	30	Water skiing	<u>1.5</u>	36
08	Hunting	<u>1.8</u>	34	31	Fishing – saltwater	<u>2.6</u>	32
09	Camping in developed sites with tent or vehicle	<u>6.4</u>	15	32	Fishing – freshwater	<u>6.1</u>	17
10	Camping in primitive areas and backpacking	<u>2.8</u>	29	33	Downhill (Alpine) skiing	<u>1.4</u>	37
11	Mountain climbing	<u>1.1</u>	39	34	Cross-country skiing	<u>0.6</u>	35
12	General nature study, wildlife viewing	<u>19.3</u>	5	35	Other non-mechanized winter sports activities – sledding, snow play, ice skating	<u>1.9</u>	
13	Use of open grass or turf areas casual and unstructured activities, like games, sitting, sunning	<u>21.1</u>	3	36	Snowmobiling	<u>0.2</u>	43
14	Use of play equipment, tot-lots	<u>11.2</u>	10	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	<u>2.8</u>	30
15	Picnicking in developed sites	<u>7.8</u>	12	38	4-Wheel drive vehicles used off paved roads	<u>3.5</u>	26
16	Softball and baseball	<u>6.4</u>	16	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor settings	<u>4.7</u>	21
17	Basketball	<u>5.3</u>	19	40	Visiting museums, historic sites	<u>7.2</u>	13
18	Football	<u>0.8</u>	40	41	Visiting zoos and arboretums	<u>4.2</u>	23
19	Soccer	<u>4.2</u>	22	42	Skateboarding and rollerblading	<u>5.8</u>	18
20	Golf	<u>5.2</u>	20	43	Attending outdoor sports or athletic events, professional or amateur	<u>7.2</u>	14
21	Tennis	<u>3.1</u>	28				
22	Target shooting (including pistol and skeet)	<u>2.7</u>	31				
23	Beach activities, including sunning and games	<u>14.2</u>	8				

Source: CIC Research, Inc., 1997

Figure 2
AVERAGE ACTIVITY DAYS
 (Statewide)

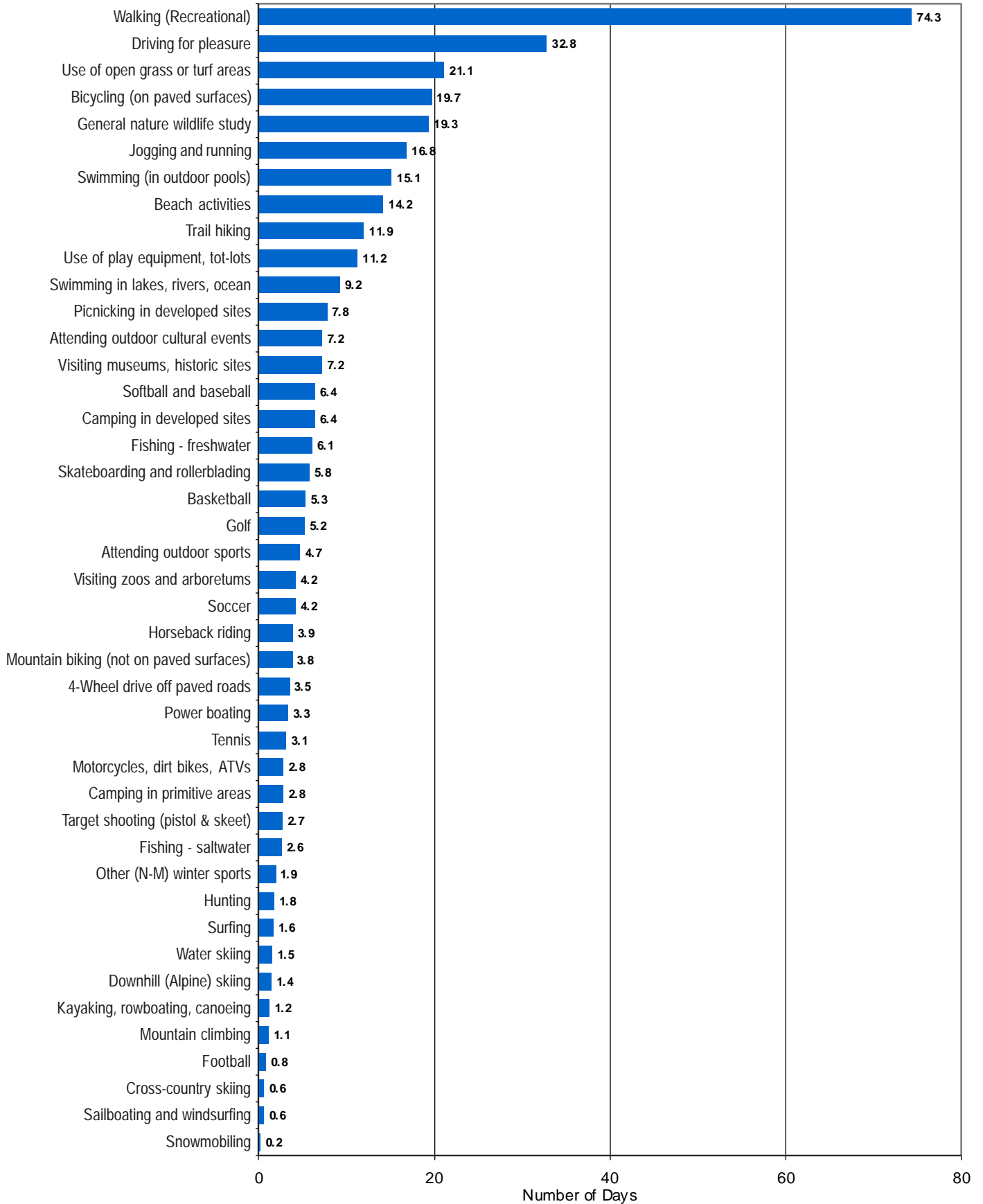


Table 9

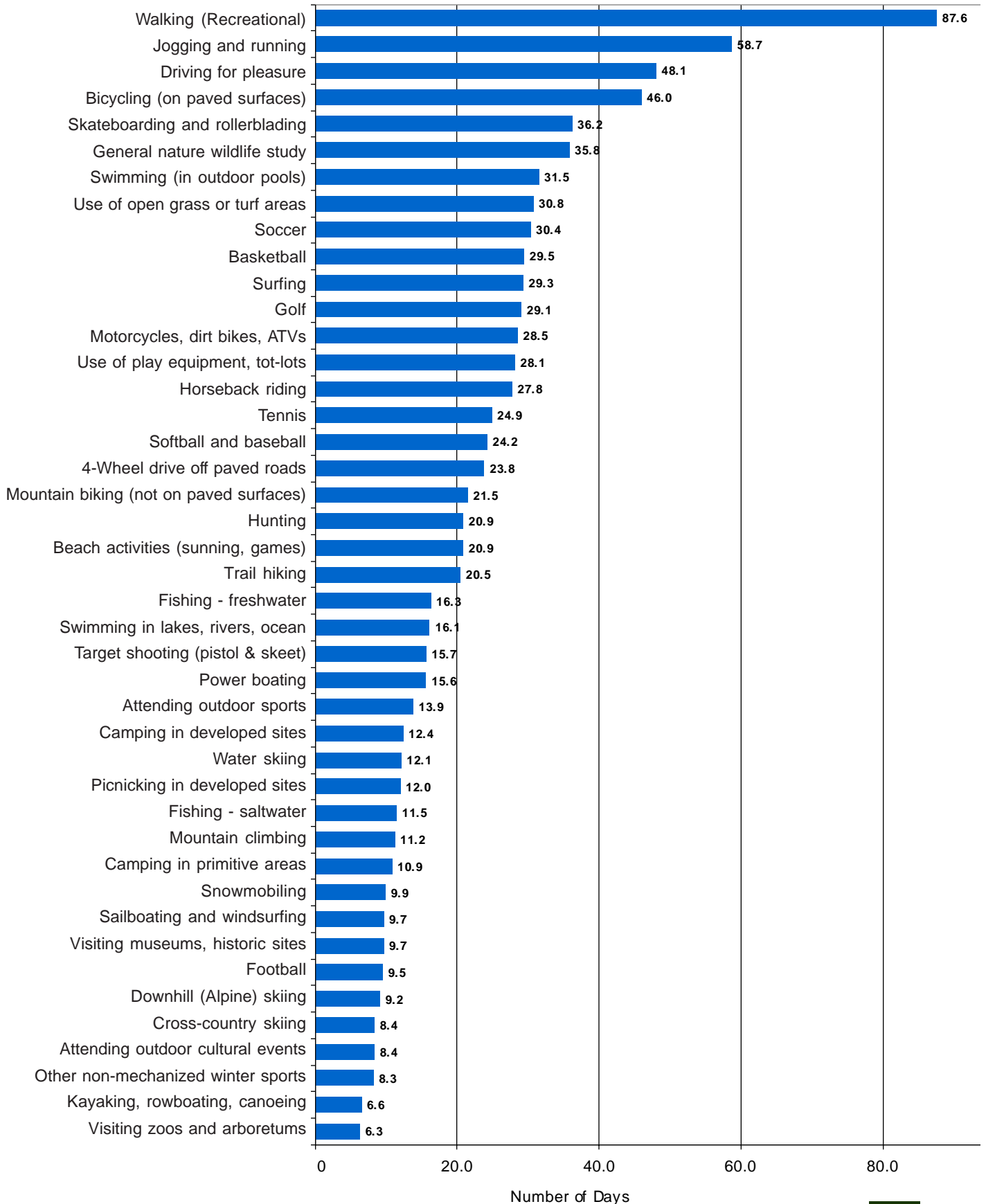
AVERAGE ACTIVITY DAYS
ACTIVITY PARTICIPANTS ONLY

(Respondents who participated in a particular activity)

Activity Number		Number of Days	Rank	Activity Number		Number of Days	Rank
01	Walking (Recreational)	87.6	1	23	Beach activities, including sunning and games	20.9	21
02	Trail hiking	20.5	22	24	Swimming (in outdoor pools)	31.5	7
03	Bicycling (on paved surfaces)	46.0	4	25	Swimming in lakes, rivers, and the ocean (not in pools)	16.1	24
04	Mountain biking (not on paved surfaces)	21.5	19	26	Surfing	29.3	10
05	Jogging and running	58.7	2	27	Sailboating and windsurfing	9.7	35
06	Driving for pleasure	48.1	3	28	Kayaking, rowboating, canoeing, and rafting	6.6	42
07	Horseback riding	27.8	15	29	Power boating	15.6	26
08	Hunting	20.9	20	30	Water skiing	12.1	29
09	Camping in developed sites with tent or vehicle	12.4	28	31	Fishing – saltwater	11.5	31
10	Camping in primitive areas and backpacking	10.9	33	32	Fishing – freshwater	16.3	23
11	Mountain climbing	11.2	32	33	Downhill (Alpine) skiing	9.2	38
12	General nature study, wildlife viewing	35.8	6	34	Cross-country skiing	8.4	40
13	Use of open grass or turf areas for casual and unstructured activities, like games, sitting, sunning	30.8	8	35	Other non-mechanized winter sports activities – sledding, snow play, ice skating	8.3	41
14	Use of play equipment, tot-lots	28.1	14	36	Snowmobiling	9.9	34
15	Picnicking in developed sites	12.0	30	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	28.5	13
16	Softball and baseball	24.2	17	38	4-Wheel drive vehicles used off paved roads	23.8	18
17	Basketball	29.5	11	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor settings	8.4	39
18	Football	9.5	37	40	Visiting museums, historic sites	9.7	36
19	Soccer	30.4	8	41	Visiting zoos and arboretums	6.3	43
20	Golf	29.1	12	42	Skateboarding and rollerblading	36.2	5
21	Tennis	24.9	16	43	Attending outdoor sports or athletic events, professional or amateur	13.9	27
22	Target shooting (including pistol and skeet)	15.7	25				

Source: CIC Research, Inc., 1997

Figure 3
AVERAGE ACTIVITY DAYS
 (Activity Participants Only)



Participants' Activity Days

Average activity days for only those Californians who participated in that activity is shown in Table 9. For example, while only 1.8 hunting days were recorded overall (Table 8), those Californians who do hunt spent an average of 20.9 days hunting.

Walking (87.6 days) and jogging/running (58.7 days) had the highest number of activity days among users. Many of the activities with low participation rates appear to have fairly avid participants. As an illustration, only 5.3 percent surf (Table 7), but those who do, surf an average of 29.3 days per year.

Statewide Participation Days

Table 10 estimates the magnitude of Californians' participation in the 43 outdoor activities listed. Not too surprisingly, walking leads the list with 724.9 million household participation days in 1997, while snowmobiling was the lowest. In a sense, Table 10 represents a conservative estimate since more than one adult household member may have participated in a given activity. However, the general magnitude of outdoor activity in California is clear. Based on Table 10, 2.2 billion household participation days occurred in 1997. Total outdoor activity days (Table 9) appear to have remained the same between 1992 and 1997.



LATENT OR UNMET DEMAND AND PUBLIC SUPPORT: A NEEDS ASSESSMENT

Californians were asked a series of questions to determine their unmet outdoor recreational demands and their support for public funding to provide additional public facilities for such activities. As a result, a needs assessment on a statewide basis was accomplished. This section of the study summarizes those findings.

First, unmet demand was determined by asking respondents to identify and rank those activities for which they would most probably increase their own participation if good opportunities were available. Respondents were asked to list their top 10 activities from a total of 43 possible activities. From these 10, respondents were asked to rank five activities beginning with their most important. These rankings were weighted such that a first place ranking received a weight of 10; second, a weight of 6.67; third, a weight of 4.45; fourth, a weight of 2.96; and fifth, a weight of 1.98. The weighting is such that a higher rank is weighted 1.5 times the previous rank. Unranked activities received a zero weight. The process follows the method used in the *Tennessee Statewide Recreational Study* (1983) and *Public Opinions and Attitudes on Outdoor Recreation in California* (1987 and 1992).

The weighted rankings were then categorized into high, moderate, and low latent demand. For an activity to be ranked in the high unmet demand category, it must have a score equivalent to a fifth place ranking by one-half the respondents (e.g., $1.98 \times .50 \times 10 = 9.9$, the formula for deriving an Index Number). A moderate unmet demand rating is a score equivalent to being ranked fifth by one-quarter of the respondents (i.e., between 4.95 and 9.9). Below 4.95, the unmet demand is considered low. Admittedly, these break points are arbitrary, but the classifications are consistent over activities. In addition, comparisons are possible.

Table 10

ESTIMATED TOTAL HOUSEHOLD PARTICIPATION DAYS
(in Millions)

Activity Number		Number of Household Days	Rank	Activity Number		Number of Household Days	Rank
01	Walking (Recreational)	724.9	1	3	Beach activities, including sunning and games	110.8	5
02	Trail hiking	79.4	8	24	Swimming (in outdoor pools)	83.4	7
03	Bicycling (on paved surfaces)	97.0	6	25	Swimming in lakes, rivers, and the ocean (not in pools)	60.5	10
04	Mountain biking (not on paved surfaces)	7.7	25	26	Surfing	1.0	39
05	Jogging and running	55.3	12	27	Sailboating and windsurfing	0.5	41
06	Driving for pleasure	257.8	2	28	Kayaking, rowboating, canoeing, and rafting	2.5	35
07	Horseback riding	6.4	28	29	Power boating	8.0	24
08	Hunting	1.8	37	30	Water skiing	2.2	36
09	Camping in developed sites with tent or vehicle	38.1	15	31	Fishing – saltwater	6.8	26
10	Camping in primitive areas and backpacking	8.3	23	32	Fishing – freshwater	26.2	18
11	Mountain climbing	1.3	38	33	Downhill (Alpine) skiing	2.5	34
12	General nature study, wildlife viewing	119.9	4	34	Cross-country skiing	0.5	42
13	Use of open grass or turf areas for casual and unstructured activities, like games, sitting, sunning	166.1	3	35	Other non-mechanized winter sports activities -sledding, snow play, ice skating	5.0	31
14	Use of play equipment, tot-lots	51.5	13	36	Snowmobiling	0.1	43
15	Picnicking in developed sites	58.3	11	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	3.2	33
16	Softball and baseball	19.4	19	38	4-Wheel drive vehicles used off paved roads	5.9	29
17	Basketball	11.0	20	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor setting	30.3	17
18	Football	0.8	40	40	Visiting museums, historic sites	61.8	9
19	Soccer	6.7	27	41	Visiting zoos and arboretums	32.0	16
20	Golf	10.7	21	42	Skateboarding and rollerblading	10.7	22
21	Tennis	4.5	32	43	Attending outdoor sports or athletic events, professional or amateur	43.0	14
22	Target shooting (including pistol and skeet)	5.3	30				

Figure 4

ESTIMATED TOTAL HOUSEHOLD PARTICIPATION DAYS

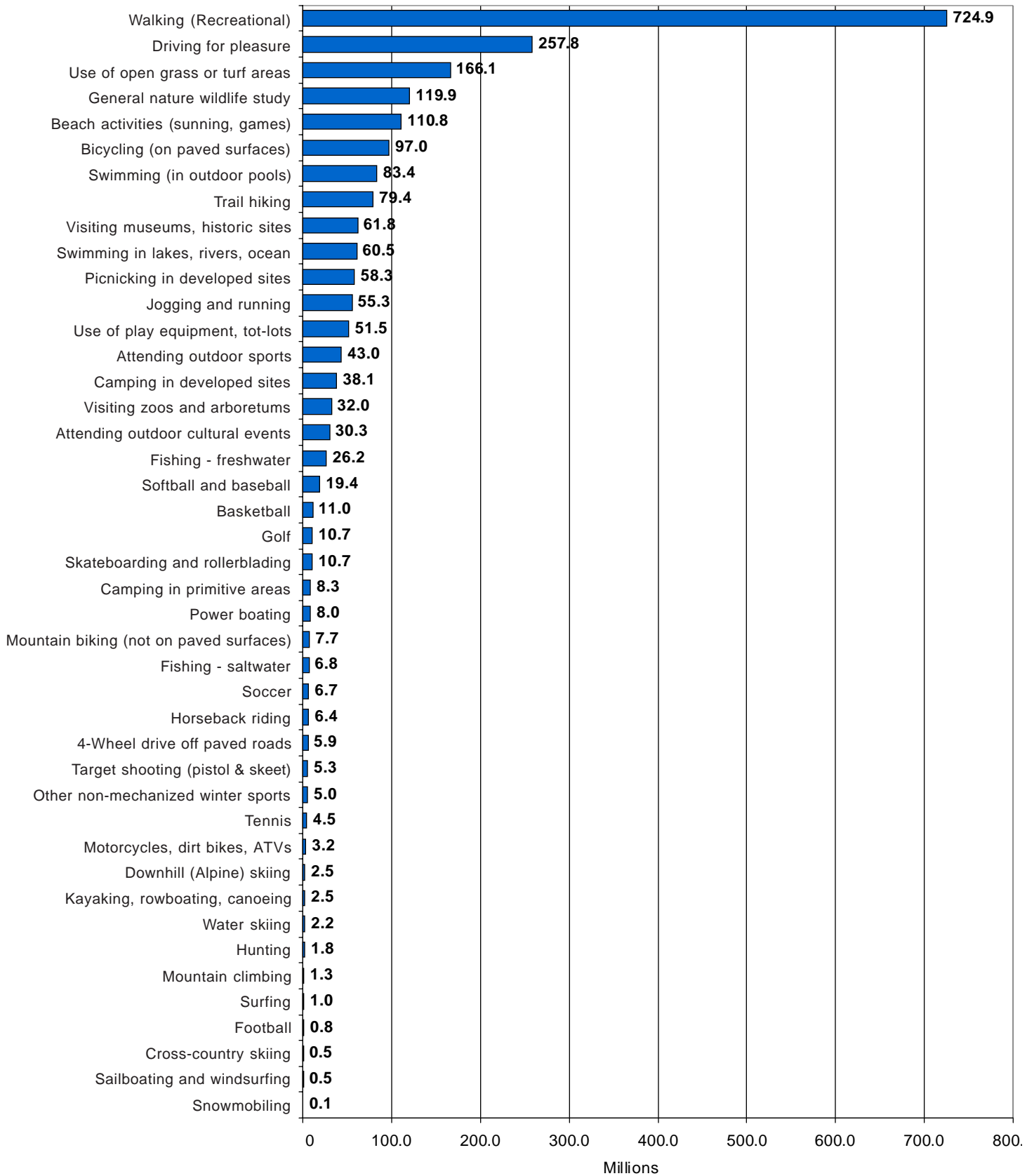


Table 11 provides the study's estimate of latent demand in California. Thirteen activities have high latent demand, 5 have moderate latent demand, and 25 have low latent demand. Over half the activities have low unmet demand, which indicates that Californians appear satisfied with opportunities for these activities.

The activities with high latent demand are camping in developed sites; walking, trail hiking; general nature study; use of open grass areas; freshwater fishing; beach activities; visiting museums/historic sites; attending outdoor cultural events; visiting zoos and arboretums; camping in primitive areas; swimming in lakes, rivers, and the ocean; and picnicking in developed sites.

Next, public support for funding outdoor recreational needs was determined by asking respondents to identify and rank those activities that government should give the highest priority when spending public money. Again, respondents were asked to list their top 10 activities from a total of 43 possible activities. From these 10, respondents were asked to rank their top five activities for public support. These rankings were weighted exactly as the unmet demand rankings were weighted. The high, moderate, and low categories were also determined exactly as noted previously for unmet demand.

Table 12 provides estimates of public support for public funding of the 43 activities in question. As the table indicates, 10 activities have high support, six have moderate support, and the remaining 27 have low support. Camping in developed sites had the highest support followed by trail hiking. Activities such as snowmobiling, water skiing, surfing, and football had almost no public support for funding (less than 0.5).

As in the Tennessee study, the needs assessment was performed by classifying activities into categories useful for decision making. Each activity addressed by the study

was scored both in terms of unmet demand and the extent to which the public supports funding to improve opportunities for that activity. The classification scheme is given below:

Priority Classification Scheme

Unmet Demand	Public Support		
	High	Moderate	Low
High	1	3	6
Moderate	2	4	8
Low	5	7	9

In this scheme, "unmet demand" and "public support" are simultaneously considered. However, public support is given priority over unmet demand. For example, moderate unmet demand and high public support is given a priority level 2 while high unmet demand and moderate public support is given a priority level 3. Based on this scheme, the highest priority level is given to activities with 1s and the lowest priority level to activities with 9s. While the scheme is simple, it does provide a rational method to evaluate projects that provide activities with high unmet demand and high public support.

Table 13 summarizes the results of the needs assessment for the 43 activities considered in the study. Nine activities were in the top priority level (1): walking, trail hiking, camping in developed sites, camping in primitive sites, general nature study, use of open grass areas, picnicking in developed sites, visiting museums/historic sites, and visiting zoos and arboretums. One activity was in the second priority level, four activities were in the third priority level, and two activities were in the fourth priority level. The remaining activities exhibited very low priority levels. Thus, Table 13 summarizes California's needs based on unmet demand and support for public funding of appropriate outdoor recreation activities.

Table 11

LATENT DEMAND

Activity Number	Activity	High			Activity Number	Activity	High		
		Index Number	Moderate Low	Rank			Index Number	Moderate Low	Rank
01	Walking (Recreational)	20.38	High	1	23	Beach activities, including sunning and games	10.16	High	10
02	Trail hiking	15.74	High	3	24	Swimming (in outdoor pools)	6.68	Moderate	17
03	Bicycling (on paved surfaces)	7.65	Moderate	16	25	Swimming in lakes, rivers, and the ocean (not in pools)	10.86	High	6
04	Mountain biking (not on paved surfaces)	4.49	Low	22	26	Surfing	.73	Low	41
05	Jogging and running	3.83	Low	25	27	Sailboating and windsurfing	1.78	Low	37
06	Driving for pleasure	5.87	Low	18	28	Kayaking, rowboating, canoeing, and rafting	4.74	Low	21
07	Horseback riding	7.77	Moderate	15	29	Powerboating	2.49	Low	30
08	Hunting	4.21	Low	23	30	Water skiing	1.86	Low	35
09	Camping in developed sites with tent or vehicle	19.82	High	2	31	Fishing - saltwater	4.00	Low	24
10	Camping in primitive areas and backpacking	10.27	High	9	32	Fishing - freshwater	10.10	High	12
11	Mountain climbing	1.43	Low	39	33	Downhill (Alpine) skiing	3.29	Low	27
12	General nature study, wildlife viewing	10.77	High	7	34	Cross-country skiing	1.52	Low	38
13	Use of open grass or turf areas for casual and unstructured activities, like games, sitting, sunning	10.11	High	11	35	Other non-mechanized winter sports activities -sledding, snow play, ice skating	2.48	Low	31
14	Use of play equipment, tot-lots	7.90	Moderate	14	36	Snowmobiling	1.03	Low	40
15	Picnicking in developed sites	10.04	High	13	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	2.80	Low	28
16	Softball and baseball	1.87	Low	34	38	4-Wheel drive vehicles used off paved roads	2.64	Low	29
17	Basketball	.62	Low	42	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor setting	14.19	High	4
18	Football	.46	Low	43	40	Visiting museums, historic sites	13.88	High	5
19	Soccer	1.94	Low	33	41	Visiting zoos and arboreturns	10.57	High	8
20	Golf	4.75	Low	20	42	Skateboarding and rollerblading	2.17	Low	32
21	Tennis	1.84	Low	36	43	Attending outdoor sports or athletic events, professional or amateur.	4.82	Low	19
22	Target shooting (including pistol and skeet)	3.80	Low	26					

Figure 5
Latent Demand

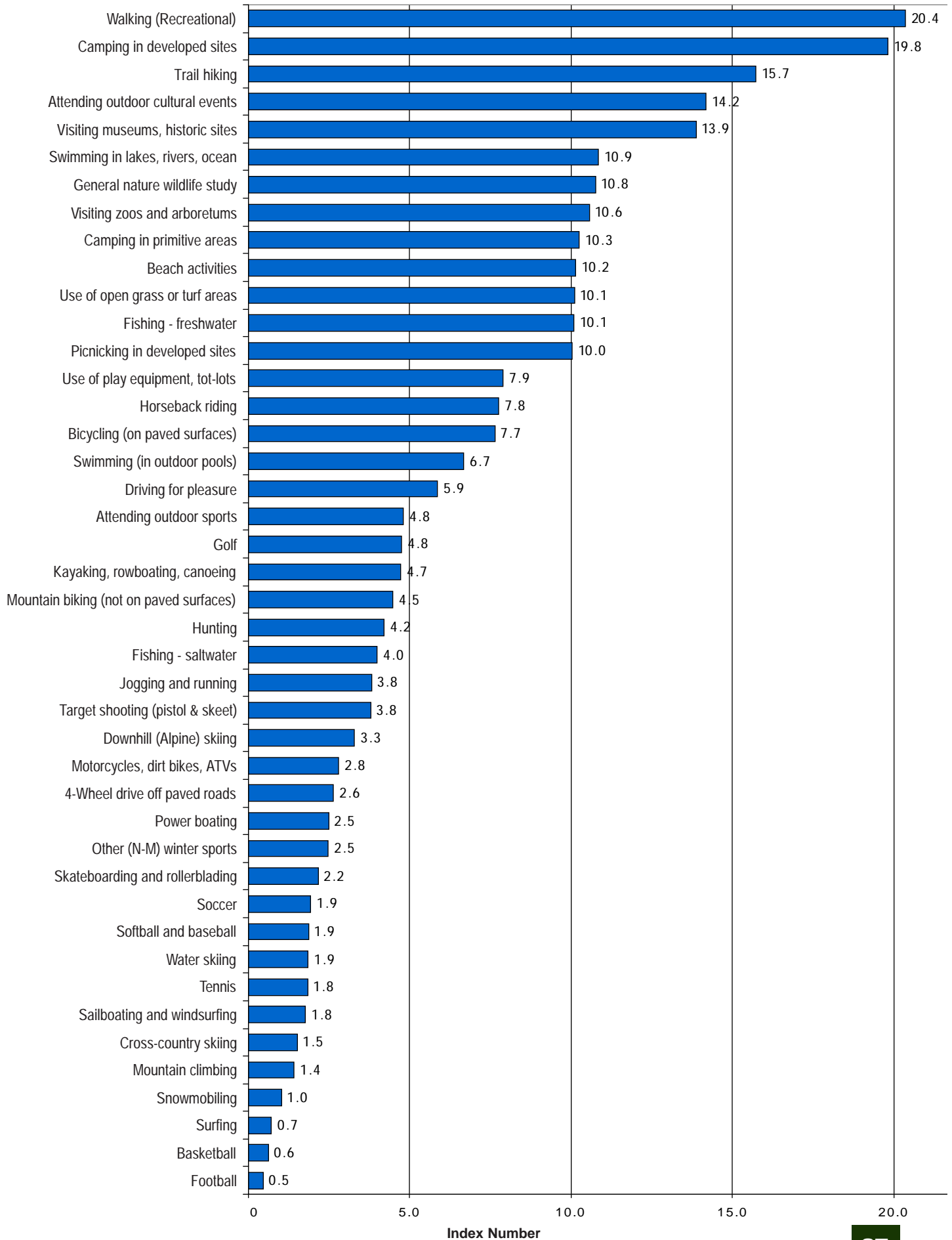


Table 12

PUBLIC SUPPORT

Activity Number	Activity	Index Number	High Moderate		Activity Number	Activity	Index Number	High Moderate	
			Low	Rank				Low	Rank
01	Walking (Recreational)	14.70	High	6	23	Beach activities (sunning and games)	8.75	Moderate	13
02	Trail hiking	19.02	High	2	24	Swimming (in outdoor pools)	5.81	Moderate	16
03	Bicycling (on paved surfaces)	9.16	Moderate	12	25	Swimming in lakes, rivers, and the ocean	8.50	Moderate	14
04	Mountain biking (not on paved surfaces)	3.41	Low	18	26	Surfing	.10	Low	43
05	Jogging and running	3.01	Low	21	27	Sailboating and windsurfing	.78	Low	35
06	Driving for pleasure	3.23	Low	19	28	Kayaking, rowboating, canoeing, and rafting	1.46	Low	31
07	Horseback riding	3.04	Low	20	29	Power boating	1.22	Low	33
08	Hunting	2.68	Low	25	30	Water skiing	.47	Low	40
09	Camping in developed sites with tent or vehicle	33.18	High	1	31	Fishing - saltwater	2.88	Low	22
10	Camping in primitive areas/backpacking	13.35	High	8	32	Fishing - freshwater	7.17	Moderate	15
11	Mountain climbing	.58	Low	38	33	Downhill (Alpine) skiing	.81	Low	34
12	General nature study/wildlife viewing	17.67	High	3	34	Cross-country skiing	.58	Low	37
13	Use of open grass or turf areas for casual and unstructured activities (games)	13.04	High	9	35	Other non-mechanized winter sports activities - sledding, snow play, ice skating	1.55	Low	30
14	Use of play equipment, tot-lots	15.87	High	5	36	Snowmobiling	.43	Low	41
15	Picnicking in developed sites	14.53	High	7	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	3.65	Low	17
16	Softball and baseball	2.74	Low	24	38	4-Wheel drive vehicles used off paved roads	1.95	Low	29
17	Basketball	.73	Low	36	39	Attending outdoor cultural events (concerts, theater, etc.) in outdoor setting	9.56	Moderate	11
18	Football	.35	Low	42	40	Visiting museums, historic sites	16.50	High	4
19	Soccer	1.31	Low	32	41	Visiting zoos and arboreturns	11.39	High	10
20	Golf	2.35	Low	27	42	Skateboarding and rollerblading	2.80	Low	23
21	Tennis	.52	Low	39	43	Attending outdoor sports or athletic events, professional or amateur.	2.46	Low	26

Figure 6
Public Support

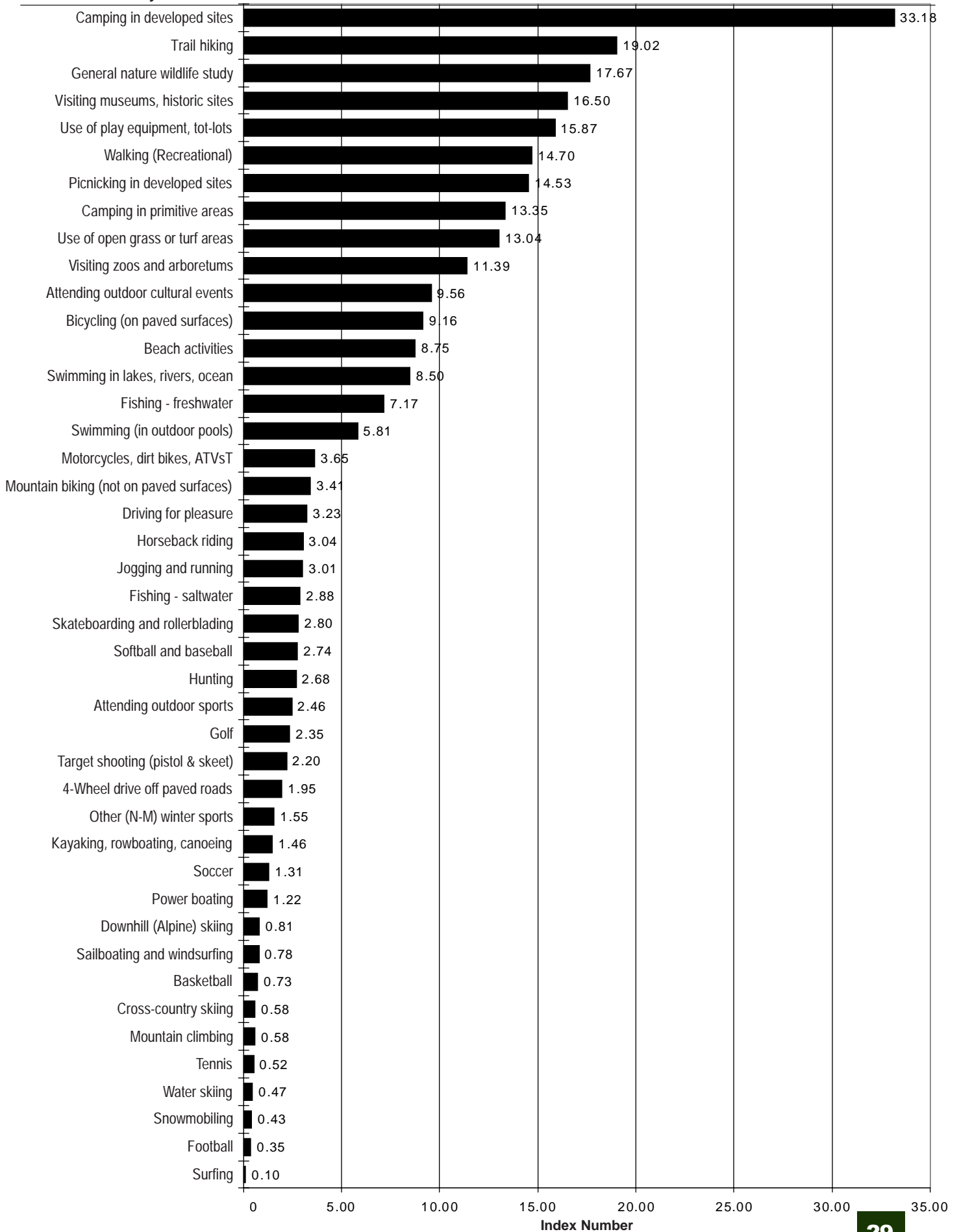


Table 13
NEEDS ASSESSMENT

Activity Number	Rank	Activity Number	Rank
01	1	24	4
02	1	25	3
03	4	26	9
04	9	27	9
05	9	29	9
06	8	30	9
07	8	31	9
08	9	32	3
09	1	33	9
10	1	34	9
11	9	35	9
12	1	36	9
13	1	37	9
14	2	38	9
15	1	39	3
16	9	40	1
17	9	41	1
18	9	42	9
19	9	43	9
20	9		
21	9		
22	9		
23	3		

Source: CIC Research, Inc., 1997

MOST IMPORTANT ACTIVITY/WILLINGNESS TO PAY

Californians were also asked which activities that take place in government-operated park and outdoor recreation areas and facilities were most important to them, rather than which activities had unmet demand. Table 14 summarizes their responses when scored in a fashion similar to the previous section. High importance generally followed latent demand. However, use of play equipment represented high importance but only moderate latent demand. Alternatively, picnicking in developed sites represented moderate importance but high latent demand. Rankings differ at lower levels as well. For example, jogging/running exhibited low latent demand but moderate importance to the respondent.

Respondents were also asked to indicate their willingness to pay for activities they would most like to participate in more often. Table 15 summarizes the results. In general, Californians tended to be most willing to pay for activities for which latent demand existed. However, their willingness to pay does not always match the activities for which Califor-

nians believe public support should be rendered. For example, Californians think that public support for use of grass areas and play equipment should be high but are only moderately willing to pay for these activities. Alternatively, public support of horseback riding is low but respondents are moderately willing to pay for this activity. In short, there is only a moderate correlation between what Californians think should be supported by government and what they are willing to support.

Respondents were not only asked to list the five most important activities in order of their preference but were also asked how much they were willing to pay for a high quality, uncrowded day. Table 16 summarizes the results. As the table indicates, activities for which charges are normal tend to have average willingness to pay that mirrors those charges. For example, what respondents are willing to pay for downhill skiing appears to reflect lift ticket costs. However, there are a number of activities noted in Table 16 that do not normally require charges but for which Californians appear willing to pay, such as walking (recreational), bicycling (on paved surfaces), mountain biking (not on paved surfaces), jogging, and running.



Table 14
MOST IMPORTANT ACTIVITIES
 (All Survey Respondents)

Activity Number	Activity	High			Activity Number	High		
		Index Number	Moderate	Low		Index Number	Moderate	Low
01	Walking (Recreational)	26.75	High	High	23	Beach activities (sunning and games)	10.63	High
02	Trail hiking	17.13	High	High	24	Swimming (in outdoor pools)	5.52	Moderate
03	Bicycling (on paved surfaces)	8.80	Moderate	Moderate	25	Swimming in lakes, rivers, and the ocean	8.21	Moderate
04	Mountain biking (not on paved surfaces)	3.33	Low	Low	26	Surfing	.67	Low
05	Jogging and running	5.24	Moderate	Moderate	27	Sailboating and windsurfing	1.19	Low
06	Driving for pleasure	7.50	Moderate	Moderate	28	Kayaking, rowboating, canoeing, and rafting	1.99	Low
07	Horseback riding	4.95	Moderate	Moderate	29	Power boating	2.14	Low
08	Hunting	3.65	Low	Low	30	Water skiing	1.27	Low
09	Camping in developed sites with tent or vehicle	22.97	High	High	31	Fishing - saltwater	4.63	Low
10	Camping in primitive areas/backpacking	10.92	High	High	32	Fishing - freshwater	9.91	Moderate
11	Mountain climbing	.45	Low	Low	33	Downhill (Alpine) skiing	2.55	Low
12	General nature study/wildlife viewing	13.54	High	High	34	Cross-country skiing	1.03	Low
13	Use of open grass or turf areas for casual and unstructured activities (games)	11.58	High	High	35	Other non-mechanized winter sports activities - sledding, snow play, ice skating	1.03	Low
14	Use of play equipment, tot-lots	10.87	High	High	36	Snowmobiling	.37	Low
15	Picnicking in developed sites	9.02	Moderate	Moderate	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	3.06	Low
16	Softball and baseball	2.46	Low	Low	38	4-Wheel drive vehicles used off paved roads	2.27	Low
17	Basketball	.68	Low	Low	39	Attending outdoor cultural events (concerts, theater, etc.) in outdoor setting	8.24	Moderate
18	Football	.00	Low	Low	40	Visiting museums, historic sites	15.17	High
19	Soccer	1.74	Low	Low	41	Visiting zoos and arboreturns	9.86	Moderate
20	Golf	4.53	Low	Low	42	Skateboarding and rollerblading	1.70	Low
21	Tennis	1.44	Low	Low	43	Attending outdoor sports or athletic events, professional or amateur.	3.54	Low
22	Target shooting (including pistol/skeet)	2.74	Low	Low				

Source: CIC Research, Inc., 1997

Table 15

GENERAL WILLINGNESS TO PAY

(For Activities Most Important to Respondents)

Activity Number	Activity	Index Number		High Moderate Low			
		High	Moderate	Low	High	Moderate	Low
01	Walking (Recreational)	18.23		High			
02	Trail hiking	16.53		High			
03	Bicycling (on paved surfaces)	7.81		Moderate			
04	Mountain biking (not on paved surfaces)	4.52		Low			
05	Jogging and running	3.77		Low			
06	Driving for pleasure	5.47		Moderate			
07	Horseback riding	8.06		Moderate			
08	Hunting	3.63		Low			
09	Camping in developed sites with tent or vehicle	22.27		High			
10	Camping in primitive areas/backpacking	10.56		High			
11	Mountain climbing	1.34		Low			
12	General nature study/wildlife viewing	10.55		High			
13	Use of open grass or turf areas for casual and unstructured activities (games)	9.10		Moderate			
14	Use of play equipment, tot-lots	7.09		Moderate			
15	Picnicking in developed sites	10.25		High			
16	Softball and baseball	1.34		Low			
17	Basketball	.52		Low			
18	Football	.47		Low			
19	Soccer	2.04		Low			
20	Golf	5.53		Moderate			
21	Tennis	1.93		Low			
22	Target shooting (including pistol/skeet)	4.23		Low			
23	Beach activities (sunning and games)	10.25		High			
24	Swimming (in outdoor pools)	7.02		Moderate			
25	Swimming in lakes, rivers, and the ocean	10.83		Moderate			
26	Surfing	.52		Low			
27	Sailboating and windsurfing	1.68		Low			
28	Kayaking, rowboating, canoeing, and rafting	4.94		Low			
29	Power boating	2.49		Low			
30	Water skiing	1.96		Low			
31	Fishing - saltwater	4.10		Low			
32	Fishing - freshwater	10.29		Moderate			
33	Downhill (Alpine) skiing	3.50		Low			
34	Cross-country skiing	1.65		Low			
35	Other non-mechanized winter sports activities - sledding, snow play, ice skating	2.18		Low			
36	Snowmobiling	1.03		Low			
37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	2.49		Low			
38	4-Wheel drive vehicles used off paved roads	2.41		Low			
39	Attending outdoor cultural events (concerts, theater, etc.) in outdoor setting	14.16		Moderate			
40	Visiting museums, historic sites	13.74		High			
41	Visiting zoos and arboretums	10.86		Moderate			
42	Skateboarding and rollerblading	2.48		Low			
43	Attending outdoor sports or athletic events, professional or amateur.	5.63		Low			

Source: CIC Research, Inc., 1997

Table 16

**AVERAGE DOLLARS WILLING TO PAY FOR A DAY'S WORTH
OF FIVE MOST IMPORTANT ACTIVITIES**

Activity Number	Average Dollars/Day	Activity Number	Average Dollars/Day		
01	Walking (Recreational)	4.51	24	Swimming (in outdoor pools)	4.70
02	Trail hiking	5.02	25	Swimming in lakes, rivers, and the ocean (not in pools)	6.20
03	Bicycling (on paved surfaces)	4.56	26	Surfing	16.25
04	Mountain biking (not on paved surfaces)	5.60	27	Sailboating and windsurfing Kayaking, rowboating, canoeing, and rafting	18.27
05	Jogging and running	4.19	29	Power boating	12.16
06	Driving for pleasure	9.69	30	Water skiing	12.90
07	Horseback riding	17.53	31	Fishing – saltwater	19.39
08	Hunting	12.55	32	Fishing – freshwater	8.50
09	Camping in developed sites with tent or vehicle	13.41	33	Downhill (Alpine) skiing	34.09
10	Camping in primitive areas and backpacking	9.82	34	Cross-country skiing	12.39
11	Mountain climbing	13.39	35	Other non-mechanized winter sports activities – sledding, snow play, ice skating	9.58
12	General nature study, wildlife viewing	8.19	36	Snowmobiling	21.00
13	Use of open grass or turf areas casual and unstructured activities, like games, sitting, sunning	6.31	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	9.46
14	Use of play equipment, tot-lots	5.50	38	4-Wheel drive vehicles used off paved roads	8.46
15	Picnicking in developed sites	5.93	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor settings	12.96
16	Softball and baseball	6.81	40	Visiting museums, historic sites	8.81
17	Basketball	5.83	41	Visiting zoos and arboretums	10.38
18	Football	3.00	42	Skateboarding and rollerblading	5.78
19	Soccer	3.07	43	Attending outdoor sports or athletic events, professional or amateur	17.63
20	Golf	24.10			
21	Tennis	7.459			
22	Target shooting (including pistol and skeet)	8.90			
23	Beach activities, including sunning and games	7.29			

Source: CIC Research, Inc., 1997

Table 17

FUNDING PARK AND RECREATION AREAS

Funding Methods	Strongly Oppose				Strongly Support
	1	2	3	4	5
a. Having a state and/or federal income tax check-off for parks, and recreation purposes	15.6%	5.6%	16.9%	16.7%	45.2%
b. Using money from the State lottery	17.7	5.2	12.6	13.9	50.7
c. Having a state and/or federal tax on the extraction of natural resources such as oil, gravel, and timber	24.5	9.3	18.9	15.6	31.8
d. Increasing the tax on tobacco products	21.1	4.4	8.5	7.1	58.9
e. Increasing the tax on alcoholic beverages	19.0	4.5	12.4	9.2	54.8
f. Having a modest (no more than 20%) increase in user fees at park and outdoor recreation areas	28.5	11.0	26.1	14.4	20.0
g. Dedicating a portion of the existing sales tax	19.5	9.3	23.0	19.8	28.4
h. Passing a voter approved park bond act	18.2	8.3	22.8	17.9	32.7
i. Adding a vehicle registration tax	56.3	12.5	13.8	6.2	11.2

Source: CIC Research, Inc., 1997.

FUNDING OUTDOOR RECREATION AREAS AND FACILITIES

Californians were asked to express their support or opposition to a number of methods for funding public outdoor recreation areas and facilities. Table 17 summarizes their responses. Over half of the respondents support or strongly support increased taxes on tobacco (58.9%) and alcoholic beverages (54.8%) and using money from the State lottery (50.7%).

Having a state or federal income tax check-off also received support or strong support (45.2%). Passing a voter-approved park bond act received modest support (32.7%). Having a tax on the extraction of natural resources received support from 31.8 percent. The strongest opposition was for adding a vehicle registration tax. Apparently, Californians prefer methods for funding public recreation areas and facilities that do not directly impact the user or the general population.

Table 18
SPENDING CHANGES

Category	Increased Spending	Remain the Same	Decreased Spending	# of Respondents
a. Acquire additional land for recreation purposes	57.1%	33.5%	9.4%	1,951
b. Basic maintenance of existing facilities (painting, small repairs, etc.)	64.8	32.8	2.4	1,974
c. Providing educational and activity programs for visitors	53.2	40.2	6.6	1,936
d. Building new facilities	57.5	34.7	7.8	1,944
e. Rehabilitating and modernizing existing facilities	68.4	28.4	3.2	1,964
f. Protection and management of the area's natural and cultural resources	67.6	28.1	4.2	1,955

Source: CIC Research, Inc., 1997.

PRIORITIES FOR SPENDING

A set of questions was asked to determine priorities for public spending changes for outdoor recreation in light of acknowledged tight, public agency budgets. Table 18 summarizes the findings. As the table indicates, Californians want increased spending for rehabilitation and modernizing existing facilities (68.3%), for protection and management of the area's natural and cultural resources (67.6%) and for basic maintenance of existing facilities (64.8%). Building new facilities (57.5%), acquiring additional land for recreation purposes (57.1%), and providing educational and activity programs for visitors (53.2%) received support for increased spending from over 50 percent of Californians. Californians' priorities appear to focus more on existing facilities than

expanded opportunities for outdoor recreation areas and facilities.

In addition, Californians were asked a series of questions to determine their attitudes concerning changes to park and recreation facilities and services. Table 19 provides the results for the thirteen statements that are expressed as increases or expansions of current opportunities. The strongest approval was found for developing more local community parks (78.1% approved or strongly approved). Californians also approve of developing more horseback riding, hiking and/or mountain biking areas where no motorized vehicles are allowed (76.0%) and constructing more simple campgrounds (76.9%). However, providing more commercial businesses within public parks was disapproved by 48.5 percent.

Table 19

**ATTITUDES TOWARD CHANGES
TO PARK AND RECREATION FACILITIES AND SERVICES**

Statement	Stongly Disapprove	Disapprove	Neutral	Approve	Strongly Approve	Respondents
a. Providing more educational programs and services in park and outdoor recreation areas.	1.2%	3.9%	26.3%	34.0%	34.6%	799
b. Construction of more simple campgrounds with picnic tables, cold water, and restrooms.	1.7	4.7	16.6	41.8	35.1	800
c. Construction of more campgrounds that are intensely developed and have hot showers, including some campsites (for which there is an extra fee) with hook-ups for electricity and water.	7.9	10.6	21.7	26.9	32.9	798
d. Developing more local community parks.	1.4	4.0	16.5	37.9	40.2	791
e. Providing more commercial hotels, motels, restaurants, shops, gas stations within public park and outdoor recreation areas.	25.1	23.4	26.5	13.5	11.4	800
f. Providing stronger enforcement of laws and regulations which deal with public use and behavior in parks and recreation areas.	3.1	4.9	23.2	28.3	40.5	799
g. Providing more areas for the legal use of off-road vehicles such as motorcycles, dune buggies, 4-wheel drive vehicles, and all-terrain vehicles.	25.2	15.9	22.1	19.0	17.8	796
h. Developing more horseback riding, hiking, and/or mountain biking areas where no motorized vehicles are allowed.	2.8	4.1	17.2	31.8	44.2	797
i. An increase in the number of wilderness type areas where no vehicles or developments are allowed.	4.8	5.3	20.2	27.1	42.6	799
j. Providing more open space in urban areas.	2.0	4.6	27.2	32.5	33.7	795
k. Construction of more RV sewage dump stations.	10.8	12.4	39.3	17.1	20.5	797
l. Providing more picnic sites that can handle large groups.	4.9	8.8	39.0	27.2	20.2	798
m. Providing more parking areas at day-use picnic sites.	5.1	7.5	35.6	28.6	23.3	799

Source: CIC Research, Inc., 1997.

MISCELLANEOUS

In addition to the major subjects discussed above, Californians were asked to provide their opinions on subjects that are important to public park and recreation administrators and decision makers. The subjects that respondents were asked to consider focused on the privatizing of public park and recreation areas, factors influencing enjoyment of the outdoors, and open-ended comments.

Private Business Involvement

Table 20 summarizes the public's opinion about the role of the private sector in providing services in public park and recreation areas. As the table indicates, a majority of Californians approve of privatization in terms of sale of ready-to-eat food and beverages (69.2%); maintenance of facilities and grounds (62.0%); and the sponsorship of contests, races, and special events (59.1%). Respondents were less definitive about private firms providing patrol/law enforcement activities (44.8%, yes; and 43.1%, no). However, the majority of Californians do not believe that a private firm should undertake the total operation and management of public park or recreation areas (59.4%).

Factors Influencing Enjoyment

Californians were asked to consider what activity was the most important to them from the list of 43 activities. Then they were asked to determine the degree of importance, while considering 15 factors, for the last time they participated in that activity. Table 21 summarizes the results. The factor considered very important by the largest number of respondents (86.9% of the respondents) was being in the

outdoors. Relaxing, releasing and reducing tension, beauty and quality of the natural setting were also very important for enjoyment. Meeting new people appears to be the least important factor for Californians for enjoyment of their most important activity.

Open Ended Comments

In the mail survey, respondents were asked for any additional comments about the public parks and outdoor recreation areas and facilities which exist today in California. Of the 2,010 households responding to the survey, 404 comments were clear enough to be categorized. The comments may not reflect the attitude and opinions of Californians as a whole.

However, the purpose of asking for comments was to determine or identify issues that might not have been directly addressed formally in the telephone and/or mail survey. Based on a codebook developed by the California Department of Parks and Recreation for the past survey, comments were categorized into six major categories: (1) environment and recreational values; (2) acquisition and development of park and recreation areas; (3) maintenance of park and recreation areas and facilities; (4) operation and maintenance of park and recreation areas; (5) funding and financing; and (6) off-highway motor vehicle recreation. The codebook also categorized comments as positive or negative ones.

Table 22 identifies the results of the comment summary effort. More comments were positive than negative. As one can see from the table, most issues had essentially been covered in the telephone or mail questionnaire. Table 22 should be viewed cautiously since it may not reflect the opinions and attitudes of all Californians.

Table 20

**PRIVATIZING PUBLIC PARKS
AND RECREATION AREAS**

Category	Yes	No	No Opinion	# of Respondents
a. Sale of ready-to-eat food and beverages	69.2%	17.1%	13.7%	784
b. Sponsorship of contests, races and special events	59.1	18.1	22.8	782
c. Maintenance of facilities and grounds	62.0	27.2	10.8	779
d. Patrol and law enforcement duties	44.8	43.1	12.1	784
e. Providing guided nature walks, educational activities	55.4	30.8	13.8	784
f. Undertaking the total operation and management of the park or recreation area	23.6	59.4	17.0	782

Source: CIC Research, Inc., 1997.

Table 21

**FACTORS INFLUENCING ENJOYMENT
OF MOST IMPORTANT ACTIVITY**

Factor	Not Important	Somewhat Important	Very Important
Being in the outdoors	1.8%	11.3%	86.9%
Relaxing	3.6	18.3	78.1
Beauty of the area	2.2	19.9	77.8
Quality of the natural setting	2.8	19.7	77.5
Releasing or reducing tension	3.7	20.8	75.5
Having a change from daily routine	4.9	20.6	74.4
Being with family and friends	9.0	20.5	70.6
Getting away from crowded situations	5.8	24.8	69.3
Feeling in harmony with nature	9.0	24.9	66.1
Doing something your youth enjoyed	21.6	15.4	63.0
Availability of facilities	7.7	29.5	62.7
Keeping fit and healthy	10.4	28.2	61.4
Achieving spiritual fulfillment	22.0	35.1	42.9
Experiencing challenge and excitement	20.5	36.7	42.8
Meeting new people	45.5	34.2	20.4

Source: CIC Research, Inc., 1997.

Table 22
COMMENTS FROM MAIL SURVEY

(A Total of 404 Comments were Utilized from Item 13 – Mail Survey)

Individual Comment Categories	(Percent of all Comments)	
	% Positive	% Negative
A. Environmental and Recreational Values		
1. Preservation and protection of natural areas, open space, scenery, and wild plants and animals	16.3	0.2
2. Park and recreation areas and programs and opportunities	21.6	0.2
3. Wilderness	0.4	—
B. Acquisition and Development of Park and Recreation Areas		
1. Acquire more, new parks near urban areas, close to home	1.7	—
2. Acquire more parks near coast	1.2	—
3. Acquire more parks in all other areas	2.6	0.7
4. Acquire, preserve more wild land	2.9	—
5. Develop more facilities near urban areas, close to home	2.8	—
6. Develop more facilities near the coast	0.2	—
7. Develop more facilities for handicapped people	0.4	—
8. Develop more facilities for camping	1.1	—
9. Develop more facilities for recreational vehicle (RV) camping	—	0.5
10. Develop more facilities with low density development	0.2	0.2
11. Develop more facilities in general or not specified above	10.4	1.0
12. Develop more facilities at historic sites	0.7	—
C. Maintenance of Park and Recreation Areas and Facilities		
1. Maintenance/condition of restrooms	0.7	4.9
2. Maintenance/condition of other developed facilities	0.5	0.6
3. Maintenance/condition of grounds, lawn and plantings	0.4	0.9
4. Maintenance/condition in general	6.0	6.9
5. Litter	—	0.2
6. Vandalism	—	0.5
D. Maintenance of Park and Recreation Areas		
1. Personal safety-fear of crime	1.4	8.7
2. Personal safety - other safety problems	0.5	2.2
3. Crowding of park/facilities	0.2	4.5
4. Noise, commotion	0.2	2.2
5. Reservation system	—	1.0
6. Enforcement of rules and regulations	7.5	1.1
7. Interpretation/education	3.2	0.2
8. Information on areas and opportunities	1.8	1.6
9. Recreation programs	1.3	0.2
10. Quality of staff people	2.4	0.5
11. Size of park staff	0.2	0.7
12. Encourage minorities' usage	0.2	—
13. Accommodate handicapped	0.4	—
14. Encourage use by poor	1.4	—
15. Presence of dogs and pets	0.6	0.1
16. Conflicts between different recreation activities	—	0.9
17. Other	—	4.7
E. Funding and Financing		
1. Use of volunteers	1.9	—
2. Reduced fees for seniors	0.2	—
3. Reduced fees for the poor	0.3	—
4. Payment of existing or increased user fees for park use	3.0	11.0
5. Payment of existing or higher taxes for the support of parks	1.5	1.0
6. Private business involvement in public park and recreation areas	1.1	2.5
F. Off-Highway Motor Vehicle Recreation (OHV)		
1. OHV areas and facilities	0.8	1.6
2. General or non-specific	—	1.6

Source: CIC Research, Inc., 1997.

HISPANIC RECREATION PATTERNS

In California, changing ethnicity patterns are changing the character of outdoor recreation. Much of this change is attributed to rapid growth in the Hispanic population (see chart below). In California in 1990, there were about 6 million Hispanics, and by 1995 this figure had increased to about 8 million, while the state's general population had increased from approximately 29.8 million to about 32 million people. The trend toward changing ethnicity patterns will continue in the next century. According to the Census Bureau 1995 Population Profile report (Campbell, 1997), California will add 10 million international immigrants during the next 25 years. This represents about 60 percent of the estimated population increase in this state. Another relevant projection is that the state's Hispanic population will double, from 8 to 17 million people. If these projections are correct, then in 20-25 years, about 30-35 percent of California's population will be Hispanic.

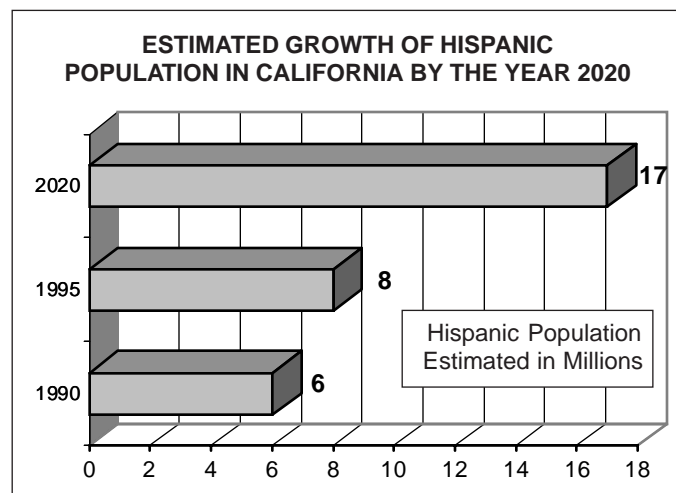
Growth in the Hispanic population is important because this ethnic group will heavily influence recreation participation in the next century. Dwyer (1994) summarized the results of several population projection/recreation demand projection studies with respect to changing ethnicity. One of his conclusions was that minority participants are projected to comprise 75 percent of the growth in participation in backpacking, birdwatching, hunting, day hiking, tent camping, walking for pleasure, and picnicking. Given what is currently known about Hispanic recreation patterns, some departures from traditional service delivery strategies will be needed. Research conducted at the Forest Service Pacific Southwest Research Station found that many public recreation sites in southern California are disproportionately used by Hispanics (Simcox and Pfister, 1990; Baas et al., 1993; Chavez and Winter, 1993) with up to 80 percent of the visitors identifying themselves as of Hispanic origin. The above researchers and others have found

that Hispanics differ in recreation preferences, types of areas visited, and types of activities engaged in when compared to predominantly Anglo populations. A thorough, national level review of research on ethnic influences on recreation is found in Gramann (1996).

To address the effect of growth in the Hispanic population on outdoor recreation in California, the 1997 survey compared and examined results of Hispanic and non-Hispanic respondents. For this study, Hispanics were considered those respondents who identified themselves as Mexican-American or Other Hispanic (e.g., Central American). Respondents who selected one of the remaining seven ethnic categories were aggregated to form the non-Hispanic group. (Additional details on

creating the Hispanic and non-Hispanic categories, and how data were analyzed to compare these two groups, is found in Appendix C.)

This pilot study to compare Hispanic and non-Hispanic responses at the state level is unique in California. The major-



ity of studies in California on Hispanic recreation patterns over the last decade has been site specific. The only exception is a household survey conducted by Shaull and Gramann (in press, 1997) which surveyed Hispanic and non-Hispanic households in southern California and the Central Valley.

For the 1997 data, only differences of 10 percentage points or more within an aggregated category (i.e., approve and strongly approve, or disapprove and strongly disapprove) between Hispanics and non-Hispanics are discussed. Differences of this magnitude were found for the types of outdoor recreation areas visited; the types of outdoor recreation areas preferred; selected attitudes concerning recreation lands and facilities; funding park and recreation areas; spending changes; changes to park and recreation facilities and services; and factors influencing enjoyment of the respondents' most important recreational activity.

Generally, data from the 1997 survey reveal that Hispanic respondents as compared to all other respondents have more positive attitudes towards their recreational experiences in California, and they are more likely to use and prefer highly developed areas, excluding historic and cultural sites. Hispanics also demonstrate more positive attitudes toward special programs and are more likely to be concerned with regulation of behavior at recreation sites when compared to non-Hispanics. A fuller discussion and interpretation of these results in the context of previous studies of Hispanic recreation patterns is detailed on the following pages.

Visits to and Types of Areas Preferred

Substantially fewer Hispanics stated they visited natural, undeveloped areas than did members of other ethnic groups (Table 23). Slightly more than one-fifth (20.6%) of Hispanic respondents stated they had not visited natural, undeveloped areas, as compared to 7.7 per-

cent of respondents of all other ethnic groups. Hispanic respondents were less likely to regularly visit historic or cultural buildings than other respondents. About one quarter of Hispanics (24.7%) said they visited this type of recreation area "not at all," as compared to 10.7 percent of members of all other ethnic groups.

Another substantial difference in types of areas visited pertained to private recreation areas. About half of the Hispanic respondents (46.4%) stated they did not visit these areas, whereas only about one-fifth of respondents from other ethnic groups (22%) gave this answer. Finally, when asked, "which area do you most enjoy visiting?", about one-fourth of Hispanic respondents (23.4%) responded "highly developed," as compared to 7.7 percent of those individuals of all other ethnic groups (Table 24).

Attitudes toward Recreation Lands and Facilities

Table 25 displays Hispanic and non-Hispanic attitudes towards recreation lands and facilities. Numerous differences were found. Almost 90 percent of Hispanics moderately agreed or strongly agreed that more outdoor recreation areas are needed near large cities, whereas only 64.5 percent of respondents of other ethnic groups moderately or strongly agreed with this statement. An unexpected difference was found regarding crowding of recreation areas. Almost 70 percent of Hispanics agreed or strongly agreed that "recreation areas and facilities in California are too crowded when I want to use them," whereas about 57 percent of those in other ethnic groups responded positively to this statement.

Substantial differences were found in attitudes toward increasing recreation programs for special populations, with the majority of Hispanic respondents (85.9%) supporting this idea as compared to slightly more than half (54.9%) of respondents for all other ethnic

Table 23

HISPANIC AND NON-HISPANIC GROUP VISITS TO OUTDOOR RECREATION AREAS

	Not At All		Once or Twice Per Year		Several Times Per Year		Once or Twice Per Month		Once Per Week		At Least 2-3 Times Per Week	
	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %
Natural and undeveloped areas	20.6	7.7	42.0	26.4	26.7	38.8	4.2	14.5	2.6	6.5	3.9	6.1
Nature-oriented parks and recreation areas	16.8	7.3	27.2	21.7	33.3	44.4	9.2	17.3	6.6	5.6	6.8	3.6
Highly developed parks and recreation areas	5.2	12.0	19.0	20.6	36.0	27.8	12.2	20.6	18.0	10.8	10.7	8.2
Historical or cultural buildings, sites or areas	24.7	10.7	49.4	36.6	17.3	40.7	6.2	9.8	0.8	1.6	1.6	0.5
Private, not public, outdoor recreation areas and facilities	46.4	22.0	29.2	28.0	14.7	23.7	4.9	11.6	4.9	7.8	1.0	6.7

Source: CIC Research, Inc., 1997.

His = Hispanic

Non His = Non-Hispanic

Table 24

TYPE OF OUTDOOR RECREATION AREA PREFERRED FOR HISPANICS AND NON-HISPANICS

Category	Hispanics	Non-Hispanics
Natural and undeveloped areas.	28.7%	40.9%
Nature oriented parks and recreation areas.	26.8	31.1
Highly developed parks and recreation areas.	23.4	7.7
Historical or cultural buildings, sites or areas.	5.7	9.8
Private, not public, outdoor recreation areas and facilities.	15.4	10.6

Source: CIC Research, Inc., 1997.

Table 25

(Hispanic/Non-Hispanic)

ATTITUDES CONCERNING OUTDOOR RECREATION LANDS AND FACILITIES

Statement	Strongly Disagree		Moderately Disagree		Neither Agree Nor Disagree		Moderately Agree		Strongly Agree	
	HIS	NON HIS	HIS	NON HIS	HIS	NON HIS	HIS	NON HIS	HIS	NON HIS
	%	%	%	%	%	%	%	%	%	%
a. There are enough outdoor recreation areas and facilities available that are convenient for me.	17.2	4.3	12.8	19.4	14.3	13.6	40.7	43.0	15.2	19.8
b. More outdoor recreation areas and facilities are needed in or near large cities.	0.9	3.1	2.1	10.0	9.0	22.4	23.7	36.0	64.3	28.5
c. Protection of the natural environment is an important aspect of outdoor recreation areas.	0.0	1.4	0.0	2.2	5.4	4.1	14.0	22.1	80.6	70.1
d. Outdoor recreation areas and facilities in California are often too crowded when I want to use them.	5.2	2.2	11.2	11.2	13.8	29.4	25.3	30.8	44.4	26.3
e. Recreational facilities and programs for special populations such as the elderly, the very poor or disabled people should be increased.	0.0	5.4	1.7	10.6	12.4	29.2	12.1	31.3	73.8	23.6
f. Outdoor recreation areas and programs help to reduce crime and juvenile delinquency in my community.	2.9	3.2	4.8	9.4	9.7	29.8	18.8	32.1	63.9	25.5
g. Outdoor recreation areas and facilities improve a community's "quality of life."	0.8	1.1	1.7	2.0	5.7	6.9	22.3	33.8	69.5	56.2
h. Outdoor recreation areas and facilities attract undesirable people and activities.	18.0	18.9	25.2	32.6	26.0	28.5	18.5	16.5	12.4	3.5
i. Outdoor recreation areas and facilities can create jobs and spending in the community, helping its economy.	0.5	1.0	0.7	4.3	16.3	18.1	22.1	49.9	60.4	26.6
j. Outdoor recreation areas and facilities should be used to promote tourism.	2.4	4.4	4.8	10.4	15.1	21.5	26.0	40.2	51.6	23.5
k. Outdoor recreation areas and facilities increase the value of nearby residential and commercial property.	0.9	1.6	6.5	4.4	15.0	31.8	26.6	38.2	51.0	24.0
l. There should be better regulation of behavior, rules and laws in parks and outdoor recreation areas, which would make my experience more comfortable and safe.	0.9	5.1	2.1	10.3	10.8	24.7	14.9	33.4	71.2	26.5
m. The <u>federal</u> government should continue to give financial assistance to local and state governments for parks and outdoor recreation areas.	0.0	0.0	0.0	0.0	8.1	11.0	9.7	28.0	82.2	52.0
n. The <u>state</u> government should continue to give financial aid to local governments for outdoor recreation.	2.3	2.2	2.3	2.3	3.0	7.4	13.7	33.6	78.6	54.5
o. The quality of the natural setting is an important factor in my enjoyment of outdoor recreation areas.	0.0	0.8	0.0	1.1	4.5	4.0	18.7	29.5	76.8	64.7
p. Wetlands, such as estuaries and marshes, are of substantial ecological and recreational importance and should be protected by the government.	4.8	2.3	1.7	4.8	26.2	15.0	22.7	28.9	44.6	49.0
q. Additional campgrounds should be constructed that are more developed and have hot showers, including some campsites for which there would be an extra fee with hook-ups for electricity and water.	2.2	9.1	3.3	12.1	11.4	22.4	18.7	28.9	64.4	27.6
r. Increased tourism at parks, wildlife and recreation areas should be encouraged if it is a means to generate additional funds for the operation and maintenance of those areas.	0.6	4.7	0.0	10.3	16.8	22.7	22.5	36.9	60.1	

Source: CIC Research, Inc., 1997.

His = Hispanic
Non His = Non-Hispanic

groups. Hispanics also felt strongly that special recreational programs are effective at reducing crime and delinquency, with more than 90 percent supporting this position. In contrast, 57.6 percent of respondents of the other ethnic groups supported this statement.

Hispanics were more positive about the statements “recreation facilities increase property values,” and “recreation areas should be used to promote tourism” (see questions J and K in Table 25). Hispanics strongly responded (86% moderately or strongly agreed) that better regulation of behavior in outdoor recreation areas is needed. In contrast, 60 percent of respondents of other ethnic groups supported this statement.

Funding Park and Recreation Areas and Spending Changes

Hispanics are generally more supportive than non-Hispanics of using a variety of funding options to provide monies for park and recreation areas. Hispanics are also more supportive of using money from the State lottery, having a tax on natural resource extraction, dedicating a portion of the existing sales tax, passing a voter approved park bond act,

and adding a vehicle registration tax to fund park and recreation areas (Table 26). The greatest difference in the level of support was “passing a voter approved park bond act,” with about 67 percent of Hispanic respondents supporting this idea, as compared to 46 percent of non-Hispanic respondents. In terms of spending changes, Hispanics were considerably more supportive of increasing spending for educational and activity programs for visitors and for building new facilities (Table 27).

Changes in Park and Recreation Facilities and Services

Generally, Hispanics were more supportive of changes that involved development of recreation services and facilities than members of other ethnic groups (Table 28). Support among Hispanics and non-Hispanics was basically the same for additional wilderness-type areas, non-motorized recreation areas, and open space in urban areas. The largest differences in support were found for “providing more picnic sites for large groups” and “more parking at picnic sites,” with Hispanic respondents demonstrating much higher support.



ACTIVITY PARTICIPATION AND LATENT DEMAND

Caution is urged with respect to average activity participation days for Hispanics; many of these averages are based on sample sizes of less than 10 respondents.

Additional sampling efforts would be needed for this question to obtain an acceptable level of statistical confidence with a relatively low (± 5 percentage points) error. For those activities with reasonable sample sizes, Hispanics consistently displayed a lower rate of participation than members of other ethnic groups. Visiting museums and zoos are the two activities Hispanics indicated they would have done more often.

Latent demand for selected activities revealed several differences between Hispanics and non-Hispanics (Table 29). (For discussion on how an index and ratings are derived, refer to page 22). Hispanic responses indicated “high” latent demand for use of open space areas, use of play equipment, and visiting zoos and arboretums, whereas members of other ethnic groups

recorded “moderate” latent demand ratings for these activities. Alternatively, Hispanics responded with “moderate” ratings for trail hiking, camping (both types), and general nature study, whereas the members of other ethnic groups recorded “high” ratings for these activities.

Hispanics and non-Hispanics differed in terms of public support for trail hiking, with non-Hispanics responding with a “high” rating and Hispanics recording a “low” rating (Table 30). For the following activities, public support received the same category rating for Hispanics and all others: walking, camping in developed areas, camping in primitive areas, general nature study, use of open areas or turf areas, use of play equipment, picnicking at developed sites, visiting museums and historic sites, and visiting zoos and arboretums. Among these activities, however, there were differences in the index number computed for “use of open grass” and “visiting zoos.” For use of open grass or turf areas, Hispanics’ index score was 27.15, while non-Hispanics’ score was 10.63. Similarly, for “visiting zoos and arboretums,” Hispanics’ score was 18.42, while all others received a score of 9.96. It is important to remember that 9.9 is the cutoff score between a “high” and “moderate” index. The highest index score computed for Hispanics was a 30.25 for “use of play equipment.” In contrast, the highest score received by members of all other ethnic groups was a 35.43, for “camping in developed sites.” This suggests that different strategies are needed to meet the recreational activity needs of Hispanics versus others.



Table 26

FUNDING PARK AND RECREATION AREAS (HISPANIC/NON-HISPANIC)

	Strongly Oppose										Strongly Support	
	1		2		3		4		5		HIS	NON HIS
	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %		
a. Having a state and/or federal income tax check-off for parks and recreation purposes	10.8	16.8	3.1	6.6	18.6	16.8	19.2	16.1	49.0	43.7		
b. Using money from the State lottery	10.9	19.4	1.1	6.3	13.9	12.4	17.6	13.0	56.5	48.8		
c. Having a state and/or federal tax on the extraction of natural resources such as oil, gravel, and timber	14.7	26.7	6.4	10.3	15.5	20.3	22.8	13.6	40.6	29.1		
d. Increasing the tax on tobacco products	20.0	21.5	2.2	5.2	7.3	8.9	7.4	6.9	63.1	57.5		
e. Increasing the tax on alcoholic beverages	18.0	18.9	1.4	5.7	8.2	14.0	8.6	9.6	63.8	51.8		
f. Having a modest (no more than 20%) increase in user fees at park and outdoor recreation areas	26.8	28.6	6.4	12.2	28.9	25.6	13.6	14.8	24.3	18.9		
g. Dedicating a portion of the existing sales tax	16.4	20.0	5.8	10.0	22.0	23.8	22.2	19.3	33.7	26.7		
h. Passing a voter approved park bond act	7.2	20.7	6.2	8.9	19.1	24.3	21.7	17.0	45.8	29.0		
i. Adding a vehicle registration tax	6.7	59.4	8.9	13.7	14.6	13.8	8.0	5.7	21.8	7.4		

Source: CIC Research, Inc., 1997.

Table 27

SPENDING CHANGES (HISPANIC/NON-HISPANIC)

	Increased Spending		Remain the Same		Decreased Spending	
	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %
	a. Acquire additional land for recreation purposes	62.9	55.1	28.7	35.6	8.4
b. Basic maintenance of existing facilities (painting, small repairs, etc.)	70.5	62.8	26.2	35.3	3.3	1.9
c. Providing educational and activity programs for visitors	63.6	49.9	30.9	43.5	5.4	6.6
d. Building new facilities	68.8	53.5	27.5	37.5	3.7	9.0
e. Rehabilitating and modernizing existing facilities	68.1	68.7	27.6	28.8	4.3	2.6
f. Protection and management of the area's natural and cultural resources	73.2	66.2	24.9	29.1	2.0	4.6

Source: CIC Research, Inc., 1997.

Table 28

**ATTITUDES TOWARD CHANGES
TO PARK AND RECREATION FACILITIES AND SERVICES (HISPANIC/NON-HISPANIC)**

Statement	Strongly Disapprove		Disapprove		Neutral		Approve		Strongly Approve	
	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %
a. Providing more educational programs and services in park and outdoor recreation areas.	0.0	1.5	0.9	4.3	10.9	29.2	28.2	35.1	60.0	29.8
b. Construction of more simple campgrounds with picnic tables, cold water, and restrooms.	0.9	1.9	0.0	0.0	6.3	18.1	29.9	44.9	62.9	30.1
c. Construction of more campgrounds that are intensely developed and have hot showers, including some campsites (for which there is an extra fee) with hook-ups for electricity and water.	3.2	8.9	2.9	11.7	9.8	23.9	24.7	27.5	59.4	28.0
d. Developing more local community parks.	1.0	1.5	0.6	4.6	8.8	18.5	26.0	39.6	63.6	35.8
e. Providing more commercial hotels, motels, restaurants, shops, gas stations within public park and outdoor recreation areas.	6.7	28.8	14.8	24.9	22.3	27.6	17.2	13.0	38.9	5.8
f. Providing stronger enforcement of laws and regulations which deal with public use and behavior in parks and recreation areas.	0/0	3.4	1.5	5.5	14.6	24.9	21.0	29.9	62.8	36.2
g. Providing more areas for the legal use of off-road vehicles such as motorcycles, dune buggies, 4-wheel drive vehicles, and all-terrain vehicles.	16.0	26.8	9.3	17.1	29.2	26.9	13.9	20.4	33.7	14.8
h. Developing more horseback riding, hiking, and/or mountain biking areas where no motorized vehicles are allowed.	3.3	2.8	3.7	4.0	20.8	16.2	13.9	35.4	58.4	41.5
i. An increase in the number of wilderness type areas where no vehicles or developments are allowed.	0.9	5.6	4.3	5.7	20.8	20.1	23.4	28.0	50.6	40.6
j. Providing more open space in urban areas.	2.4	2.0	1.4	5.1	23.6	28.1	33.0	32.1	39.6	32.1
k. Construct more RV sewage dump stations.	5.5	12.0	4.2	14.0	15.9	43.5	21.0	16.0	53.4	19.0
l. Provide more picnic sites for large groups.	3.9	5.2	1.3	10.3	18.0	42.0	30.1	27.1	46.7	15.3
m. Provide more parking at picnic sties.	3.9	5.2	1.9	8.3	10.2	40.4	23.2	30.1	60.7	16.0

Source: CIC Research, Inc., 1997.520.128.0

Table 29

SELECTED LATENT DEMAND HISPANICS VS. NON-HISPANICS

Activity #	HISPANIC		NON-HISPANIC	
	Index Number	High/Moderate/Low	Index Number	High/Moderate/Low
01 Walking (recreational)	18.72	High	20.32	High
02 Trail hiking	5.48	Moderate	17.97	High
09 Camping in developed sites	9.19	Moderate	22.11	High
10 Camping in primitive areas/backpacking	6.09	Moderate	11.09	High
12 General nature study	9.13	Moderate	11.00	High
13 Use of open grass or turf areas	20.64	High	7.97	Moderate
14 Use of play equipment	15.93	High	6.43	Moderate
15 Picnicking in developed sites	9.77	Moderate	10.22	High
40 Visiting museums, historic sites	20.63	High	12.30	High
41 Visiting zoos and arboretums	24.87	High	7.50	Moderate

Source: CIC Research, Inc., 1997

High demand = >9.9
 Moderate = 4.95–9.9
 Low = <4.95

Table 30

PUBLIC SUPPORT HISPANICS VS. NON-HISPANICS

Activity #	HISPANIC		NON-HISPANIC	
	Index Number	High/Moderate/Low	Index Number	High/Moderate/Low
01 Walking (recreational)	15.65	High	14.26	High
02 Trail hiking	3.83	Low	21.67	High
09 Camping in developed sites	21.26	High	35.43	High
10 Camping in primitive areas/backpacking	10.01	High	14.38	High
12 General nature study	14.36	High	18.53	High
13 Use of open grass or turf areas	27.15	High	10.63	High
14 Use of play equipment	30.25	High	13.20	High
15 Picnicking in developed sites	22.24	High	13.17	High
40 Visiting museums, historic sites	19.24	High	15.82	High
41 Visiting zoos and arboretums	18.42	High	9.96	High

Source: CIC Research, Inc., 1997

Motives for Participation

Several differences were found between Hispanics and non-Hispanics regarding factors influencing enjoyment of respondents' most important activity (Table 31). The largest difference was found for the item "meeting new people," with 45.7 percent of the Hispanic portion stating this was very important versus 15.8 percent for members of other ethnic groups. Similarly, a greater proportion of Hispanics stated being with family and friends was very important (83% versus 68.9% for all others). Other differences were found for the items "feeling in harmony with nature" and "achieving spiritual fulfillment." For both of these items, a higher proportion of Hispanics stated this factor was very important.

Implications of Pilot Study of Hispanic Recreation Patterns when Compared to Previous Studies

Data on recreation participation and preferences of Hispanics do not reveal any major differences when compared to previous studies of Hispanics conducted in California. However, there are major differences in Hispanic recreational preferences and activity participation relative to the other ethnic groups in California. It is interesting to note that in a household survey of Hispanic and non-Hispanics in the Phoenix, Arizona area, Gramann and Floyd (1991) found statistically significant differences in activity participation for only 5 of 23 activities. However, other studies of Hispanic recreation patterns in California support the results of this 1997 study. An important follow-up action is to

Table 31

FACTORS INFLUENCING ENJOYMENT OF MOST IMPORTANT ACTIVITY (HISPANIC/NON-HISPANIC)

	NOT IMPORTANT		SOMEWHAT IMPORTANT		VERY IMPORTANT	
	HIS %	NON HIS %	HIS %	NON HIS %	HIS %	NON HIS %
Being in the outdoors	1.5	1.9	3.2	12.7	95.3	85.4
Getting away from crowded situations	7.0	5.7	29.4	23.6	63.6	70.7
Relaxing	0.0	4.0	13.3	19.2	86.7	76.8
Releasing or reducing tension	1.5	4.1	18.7	21.1	79.8	74.8
Quality of the natural setting	1.5	3.1	17.2	20.0	81.3	76.9
Being with family and friends	0.0	9.9	17.0	21.2	83.0	68.9
Beauty of the area	1.7	2.4	14.3	20.7	84.0	76.9
Having a change from daily routine	2.2	5.1	21.3	20.4	76.5	74.5
Doing something your youth enjoyed	8.9	23.7	1.5	18.5	89.7	57.7
Feeling in harmony with nature	4.8	9.9	14.1	26.9	81.1	63.1
Keeping fit and healthy	5.6	11.2	15.8	31.0	78.6	57.8
Availability of facilities	0.7	9.1	34.9	29.0	64.4	62.0
Experiencing challenge and excitement	12.8	21.6	42.7	35.6	44.4	42.8
Achieving spiritual fulfillment	7.5	24.8	37.4	35.0	55.1	40.1
Meeting new people	18.1	50.3	36.1	34.0	45.7	15.8

Source: CIC Research, Inc., 1997.

determine why Hispanic participation is low, particularly among those activities for which there is high latent demand. The 1997 results consistently showed less Hispanic participation for the activities surveyed. Are recreation planners and policymakers overlooking some of the outdoor recreation activities participated in by Hispanics? One possible overlooked activity in the 1997 survey might be religious celebrations. Chavez et al. (1993) found that religious holidays were related to high use of the Mecca Hills Bureau of Land Management site by Hispanics.

The one element of the Hispanic recreation experience common to nearly all the conducted studies is the emphasis on recreational opportunities that promote family affiliation. A recent study conducted by Shaull and Gramann (1997, in press) indicated that even among Hispanics who are highly assimilated into the dominant U.S. culture, the family-related benefits of recreational participation are relatively resistant to changes associated with cultural assimilation.

Additional facility development to accommodate Hispanic recreational demand should consider other factors. Previous studies have demonstrated the importance expressed by Hispanics about having adequate law enforcement at recreation sites. A study of visitors to a BLM area in southern California (Chavez et al., 1993) found that a safe area was given the highest rating (4.7 on a scale of 1 to 5) by Hispanics,

but “law enforcement,” and “friendly, informative rangers” also were rated high in importance (4.4 and 4.2, respectively). These findings suggest that park improvement actions targeted towards Hispanics should also consider having a law enforcement presence which would contribute to a safe recreation site.

For Hispanics, the highest latent demand among the activities investigated in 1997 was for visiting zoos. As with other follow-up efforts suggested for activities with high latent demand, there is a need to more accurately specify the constraints to visiting zoos and arboretums. If the constraints are supply oriented, then planners and policymakers need to determine to what extent they can address this issue. (This might be an issue more appropriately addressed by local governments and non-profit organizations.) Even so, it is possible that the state and federal agencies could have some role in addressing a need that relates to environmental education and conservation. An example of a federal-local govern-

ment partnership is the National Park Service Rivers and Trails Program. This program focuses on providing local entities with support and advice for acquisition of federal properties for trail development by local entities. Perhaps a similar program could be devised to deal with local recreation needs in those locations where latent demand is higher than the statewide averages obtained in this study.



SECTION IV

COMPARISONS – OTHER STUDIES



IV. COMPARISONS – OTHER STUDIES

COMPARISON OF THE 1997 STUDY WITH THE 1987 AND 1992 STUDIES

Trends assessment relative to outdoor recreation attitudes and activity participation can provide meaningful information to recreation planners and policymakers. Accurate information on recreation trends can help practitioners to:

- prioritize funding allocation for various recreation programs and facilities,
- reallocate funds based on shifting recreation preferences and activity participation patterns,
- confirm those programs for which recreation service delivery is working well,
- identify recurring problems or issues, and
- identify new problems or issues.

However, very few federal or state agencies regularly collect comprehensive, accurate, and quantitative data on the public's recreational preferences and activity patterns that can be compared over time. Studies done in this context of regional or statewide trends are often changed when they are repeated in terms of sampling methods, questions asked, and analyses conducted, thus limiting their comparability.

The California Parks and Recreation Public Opinion survey is a notable exception. Over the last decade, this statewide outdoor recreation study has been conducted three times by the same consulting firm, CIC Research, Inc. For each study, the sampling plan has been basically the same, and the data collection format—a telephone and mail survey—has remained constant. Although there have been some modifications of and additions to questions asked, many have remained the same as those on the 1987 survey, thus affording direct comparability.

Eighteen of the questions on the 1997 telephone survey were also on the 1987 and 1992 telephone surveys; on the 1997 mail survey, 14 of the questions were also on the two previous surveys.

The following sections compare changes in recreation participation and attitudes over the last decade. These sections are followed by a discussion of factors that have changed in California since 1987 that may be responsible for changes, and a summary of results of two national recreation trends studies. These other studies are not directly comparable to the results of the 1997, 1992, and 1987 California household studies, but they do provide some context for results interpretation.

Summary of Changes in Responses – 1987, 1992, and 1997 studies

Generally, there were few major changes in attitudes or behavior over the last decade. Some changes are noticeable for preferences for funding mechanisms, and changes are apparent in the average number of days among participants for walking, general nature study, basketball, surfing, sailboating and windsurfing, kayaking and other non-motorized watercraft use, and freshwater fishing. Direct comparability for some activities is not possible due to changes in activity definition since 1987. For example, in 1987 trail hiking was combined with mountain climbing. When examining the average days of participation data for all three surveys, several activities (walking, camping—both types, kayaking and related activities) exhibit an “inverted U” curve, implying that participation increased in 1992, then decreased to about 1987 levels. Between 1997 and 1992, “high” latent demand was basically unchanged for those activities identified in 1992, but willingness to pay changed for all

those activities. Finally, there is growing support for increased facility maintenance, increased construction of new facilities, and increased acquisition of lands for park and recreation purposes.

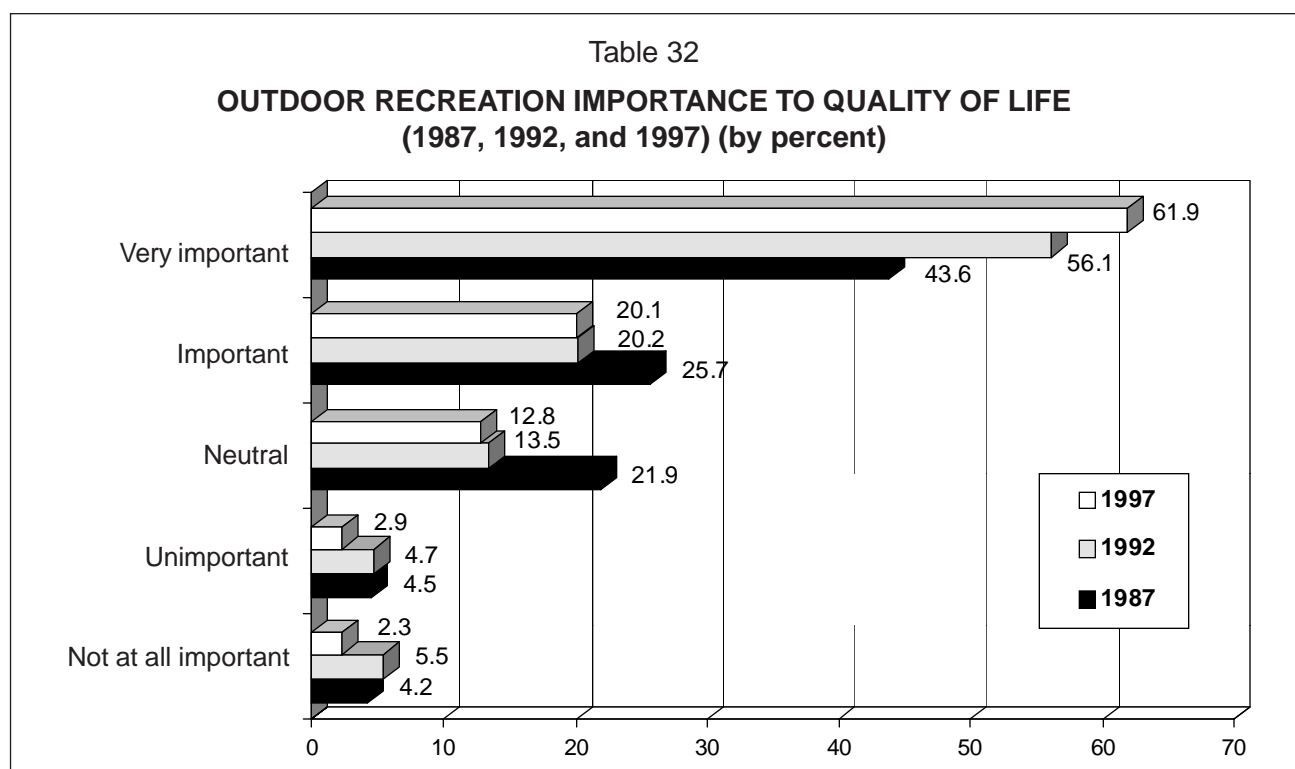
Attitudes and Beliefs toward Outdoor Recreation

Attitudes indicative of respondents' satisfaction with and the importance of recreation in California have remained unchanged since 1987 (Tables 32 and 33). The types of outdoor recreation areas preferred has changed slightly; there may be a possible increase in the use of undeveloped areas since 1987 (Table 34). Around 30 percent (27.6%) in 1987 indicated they preferred natural and undeveloped areas; by 1992 this figure had increased to about 40 percent and has remained relatively unchanged in 1997.

Similarly, the proportion of respondents that indicated they preferred highly developed parks and recreation areas decreased from 21.1 percent in 1987, to 14.2 percent in 1992 and 10.2 percent in 1997 (Table 35). This

possible shift in use to more undeveloped areas is consistent with a review of wilderness use by Cole (1996), who reported that backcountry and wilderness use was increasing on a national level.

Attitudes toward funding park and recreation areas and on spending changes have shifted. Support for a state and/or federal income tax checkoff for parks and recreation purposes has decreased from about 62 percent in 1992 to 54 percent in 1997; in 1987, support was at 47 percent (Table 36). More noticeable changes are found in the responses to the spending changes question. Support for acquiring more land for recreational purposes increased to 57.1 percent in 1997 from 45 percent (1992, 1987). Similarly, support for basic maintenance increased to 64.8 percent in 1997 from 52.1 percent in 1992. Finally, support for building new facilities increased to 57.5 percent in 1997 from 41.3 percent in 1992. These changes only pertain to the 1997 data when compared to the previous two surveys. Between 1987 and 1992, the responses to these three items only varied by a few percentage points (Table 37).



Source: CIC Research, Inc., 1997.

Table 33
SATISFACTION
 (1987, 1992, and 1997)

Satisfaction with public outdoor recreation areas and facilities currently available.

Category	1987	1992	1997
Very satisfied	28.7	21.4	27.3
Satisfied	34.0	28.2	32.7
Neutral	27.7	34.8	29.2
Unsatisfied	6.4	9.8	7.5
Not at all satisfied	3.1	5.8	3.4

Comparison of outdoor recreation areas and facilities today with five years ago.

Category	1987	1992	1997
Better	37.8%	28.7%	34.6%
Same	36.2	32.1	35.9
Not as good	18.2	32.9	25.8
Not here 5 years ago	7.7	6.4	3.7

Source: CIC Research, Inc., 1997.

Table 34
VISITS TO OUTDOOR RECREATION AREAS
 (1987, 1992, and 1997)

	Not At All		Once Or Twice Per Year		Several Times Per Year		Once Or Twice Per Month		Once Per Week		At Least 2-3 Times Per Week							
	1987 %	1992 %	1987 %	1992 %	1987 %	1992 %	1987 %	1992 %	1987 %	1992 %	1987 %	1992 %						
Natural and undeveloped areas	50.3	9.3	9.7	26.2	25.4	28.7	16.5	37.0	36.8	4.5	15.7	13.0	1.0	6.3	5.9	1.6	6.3	5.8
Nature-oriented parks and recreation areas	31.4	9.7	8.8	30.5	27.7	22.1	27.7	39.9	43.3	7.8	14.8	16.0	1.4	4.9	5.6	1.2	3.1	4.1
Highly developed parks and recreation areas	21.2	12.6	11.0	16.3	21.6	20.9	28.5	30.1	28.5	19.3	17.3	19.0	8.8	10.5	12.0	6.0	7.9	8.5
Historical or cultural buildings, sites or areas	40.0	13.1	12.8	31.4	39.8	38.4	21.3	32.3	37.2	6.5	12.3	9.5	.4	1.2	1.4	.4	1.3	.8
Private, not public, outdoor recreation areas and facilities	51.4	30.2	25.8	16.7	23.9	28.0	17.1	24.7	22.7	7.8	11.4	10.6	3.3	5.7	7.4	3.7	3.9	5.5

Source: CIC Research, Inc., 1997

Table 35

**TYPE OF OUTDOOR RECREATION AREA PREFERRED
(1987, 1992, and 1997)**

Category	1987	1992	1997
Natural and undeveloped areas	26.5%	41.8%	39.4%
Nature oriented parks and recreation areas	29.2	26.3	30.0
Highly developed parks and recreation areas	21.1	14.2	10.2
Historical or cultural buildings, sites or areas	9.3	7.1	9.3
Private, not public, outdoor recreation areas and facilities	9.8	10.6	11.1

Source: CIC Research, Inc., 1997.

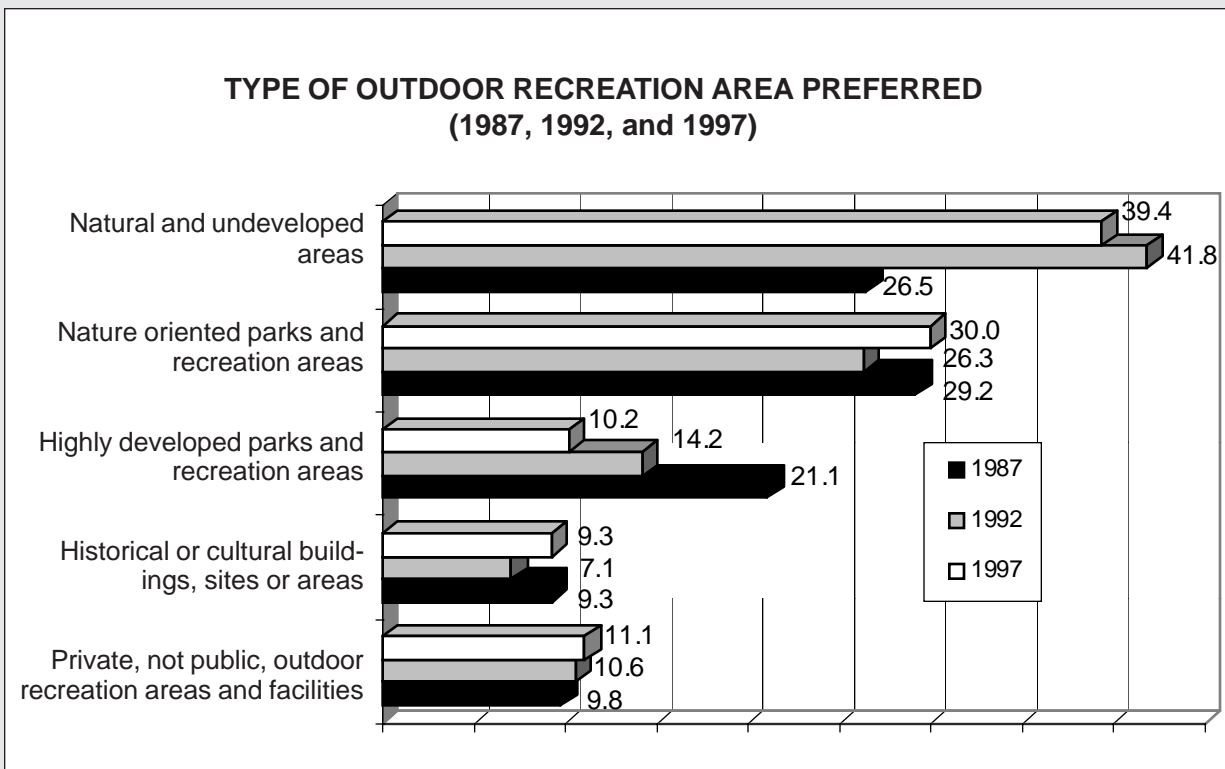


Table 36
FUNDING PARK AND RECREATION AREAS
(1987, 1992, and 1997)

Funding	Strongly Oppose						Strongly Support								
	1		2		3		4		5						
	1987 %	1992 %	1997 %	1987 %	1992 %	1997 %	1987 %	1992 %	1997 %	1987 %	1992 %	1997 %			
a. Having a state and/or federal income tax check-off for parks, and recreation purposes	21.1	18.2	15.6	8.5	9.5	5.6	23.2	20.5	16.9	15.1	16.2	16.7	32.1	35.6	45.2
b. Using money from the State lottery	34.4	19.2	17.7	6.1	6.0	5.2	11.7	15.0	12.6	14.4	12.8	13.9	33.0	47.0	50.7
c. Having a state and/or federal tax on the extraction of natural resources such as oil, gravel, and timber	23.7	24.3	24.5	10.3	9.6	9.3	18.5	23.3	18.9	14.4	15.0	15.6	33.0	27.8	31.8
d. Increasing the tax on tobacco products	19.7	18.3	21.1	4.8	5.9	4.4	8.3	8.6	8.5	8.5	8.1	7.1	58.8	59.0	58.9
e. Increasing the tax on alcoholic beverages	17.1	17.5	19.0	4.5	7.6	4.5	13.4	10.2	12.4	14.9	12.2	9.2	50.1	52.5	54.8
f. Having a modest (no more than 20%) increase in user fees at park and outdoor recreation areas	13.7	28.8	28.5	11.2	13.5	11.0	24.6	21.6	26.1	20.9	16.1	14.4	29.5	20.0	20.0
g. Dedicating a portion of the existing sales tax	14.3	18.9	19.5	8.9	11.5	9.3	19.4	23.2	23.0	21.6	17.5	19.8	35.8	28.8	28.4

Source: CIC Research, Inc., 1997

Table 37

**SPENDING CHANGES
(1987, 1992, and 1997)**

	Increased Spending			Remain the Same			Decreased Spending		
	1987 %	1992 %	1997 %	1987 %	1992 %	1997 %	1987 %	1992 %	1997 %
a. Acquire additional land for recreation purposes	45.5	45.9	57.1	41.7	39.4	33.5	12.8	14.6	9.4
b. Basic maintenance of existing facilities (painting, small repairs, etc.)	54.6	52.1	64.8	43.5	43.9	32.8	1.9	4.1	2.4
c. Providing educational and activity programs for visitors	47.9	45.7	53.2	43.5	40.8	40.2	8.6	13.5	6.6
d. Building new facilities	42.0	41.3	57.5	45.0	38.9	34.7	13.0	19.8	7.8
e. Rehabilitating and modernizing existing facilities	57.8	57.4	68.4	35.0	35.5	28.4	6.4	7.1	3.2
f. Protection and management of the area's natural and cultural resources	71.6	60.8	67.6	26.9	35.3	28.1	1.5	3.8	4.2

Source: CIC Research, Inc., 1997

Changes in Activity Patterns

Activity patterns have changed since 1987. These changes are most evident when reviewing the results on “average activity participation days” for participants only. General nature study and cross-country skiing have steadily increased. Off-highway use of 4-wheel drive vehicles dropped in 1992, and then climbed back to the 1987 level. Use of motorcycles and ATVs was about the same between 1987 and 1992, but increased by about 30 percent in 1997. Bicycling has increased about 10 percent since 1992, but mountain biking off paved surfaces decreased from an average of about 28 to 21 days per year.

Several activities exhibited growth in 1992 and then declined to about their 1987 levels. Activities in this category include walking; camping in developed sites; camping in primitive areas; picnicking in developed sites; kayaking, rowboating, canoeing, and rafting; saltwater and freshwater fishing. Among participants, slight decreases are evident in the number of days camped, both for developed and primitive camping. For both types of camping, the average number of participation days dropped about 20 percent between 1992 and 1997.

At an overall level, several explanations of the inverted “U” curve are possible. One explanation is the shifting demographic structure of California’s population. Dwyer (1994) and English et al. (1983) have demonstrated that age has a major impact on recreation participation. An analysis of the 1987, 1992, and 1997 data with respect to age and income showed statistically significant differences for age, suggesting the distribution of ages did differ between the five-year time periods between data collection. The proportion of respondents in the less than 25-year category has steadily declined over the decade, while the proportion of respondents in the 41-50 year-old age group has steadily increased.

The age shift found in the respondent sample coincides with changes occurring at the state and national levels. In 1900, only about 3 million Americans, or 1 in 25, were over age 65, whereas in 1994 this figure had increased to 1 in 8, or about 33 million (U.S. Census Bureau, 1995). Due to the aging of the baby boomer cohort, the proportion of the U.S. population that is elderly will continue to increase during the next 50 years. Most of the elderly are and will be women who live alone. In 1993, California had the highest number of elderly, at 3.3 million individuals, and by 2020, the number of elderly in California should double (Campbell, 1995).

A change in income is another possible explanation for the inverted “U” curve. The distribution of incomes over the three data collection times differed only between 1987 and 1997, with a tripling in the proportion of respondents reporting household incomes of \$50,000 a year or greater. This difference also was statistically significant and is important because some recreation researchers hypothesize that outdoor recreation participation drops drastically at very low and high incomes.

Changing ethnicity patterns may be reducing overall rates of participation. Results of the 1997 survey show that Hispanics consistently showed underparticipation in the majority of outdoor recreation activities for which the 1997 data were collected. Census Bureau data confirm that the number of Hispanics in California has steadily increased in the last five years. Another general explanation is that there may be displacement occurring, people may be tired of crowded conditions, difficult access, or other unmentioned constraints, and as a result have reduced their level of participation. Among the activities that demonstrate an inverted “U” curve since 1987, five have shown high latent demand in 1992 and 1997, indicating some persistent, unmet needs. These activities include walking, both types of camping, picnicking, and freshwater fishing.

Another explanation concerns the nature of the 1992 sample. Despite use of a random sampling approach, an unusual sample may have been obtained in 1992. For any given sampling event, there is always a low probability—usually 5 percent or less—that the sample estimates of population parameters may not accurately reflect the population's true characteristics. The 1992 survey data were sampled with a 95 percent confidence level with an error for parameter estimates of ± 5 percent. There is a small chance that the sample may not reflect the true values of the California population's recreation preferences and participation patterns.

Finally, given the time constraints of the new California economy, people may have reduced their recreation participation since 1992. A national recreation survey conducted by Roper Starch and the American Recreation Coalition (1996) reported "streamlining" of recreation activities as a national occurrence. Whereas people participated in an average of four activities two years ago, last year their mean participation had decreased to 3.3 activities. Despite a revitalized California economy and more disposable income, people may not have the necessary time to spend on outdoor recreation activities. Harvard economist Juliet Schorr (1989) predicted that Americans would have less free time as we move to the next century.

Activity specific explanations are more speculative. Regarding the reduction in walking, it is possible that people have shifted their interests to other similar activities. Letscher (1997) reports that the use of both home fitness equipment and rollerblading have increased dramatically from 1992 to 1995 on a national level. He also speculates that these changes are not simply fads, but are long-term trends. Regarding the change in camping, it is possible that dissatisfaction with crowded conditions is motivating people to reduce their frequency of participation. It is not unusual to

be required to book reservations at certain California State Parks campgrounds and national parks campgrounds several months in advance. Those individuals not inclined to practice advanced planning may find themselves prevented from using public campgrounds when they want.

Changes in Willingness to Pay

For camping in developed and primitive areas, latent demand remained high in 1997, but general willingness to pay decreased. For developed camping, willingness to pay decreased from about \$24 to \$22 per day over the last five years, while for primitive camping, it decreased from about \$12 per day to \$10 per day. Willingness to pay also decreased for walking and freshwater fishing. However, willingness to pay increased for trail hiking, use of open grass or turf areas, visiting museums and historic sites, and visiting zoos and arboretums.

Implications Pertaining to Trends Assessment

Activities that have consistently received high latent demand scores for 1992 and 1997 should be priority considerations for recreation planners and policymakers. Clearly, more effort will be needed to meet the needs of those interested in developed camping. To develop an effective service delivery strategy, more targeted visitor surveys, conducted at a regional or local level, are advised to determine more specifically the reasons for latent demand. It will be important to determine why people are not using existing areas, making sure to include questions about crowding, awareness of opportunities, and awareness of reservation systems. Obtaining some of this information might best be accomplished using focus groups. A related area of inquiry would be to determine how and where people want to see newly generated

federal fee revenues spent as funding becomes more readily available through increased federal fees returned to where the revenues were generated. Increased involvement from local recreationists where the fees were generated should help to determine how this money should be spent.

Given the high cost of capital improvement projects, the need to build additional facilities and trails to meet latent demand should be prudently determined. Recreation demand projections are often more closely related to social and demographic variables than to the supply of facilities (English et al., 1993). Similarly, latent demand may be most strongly influenced by other factors, such as lack of transportation, age, lack of income, or lack of awareness about recreation sites and facilities.

Other areas needing improved service delivery are historic sites, cultural sites, and zoos and arboretums. As a first step it would be helpful to determine the location of existing opportunities and facilities to meet these latent demands and overlay them with residential locations of those demonstrating high latent demand. If opportunities seem relatively close (i.e., less than a one-hour drive), a useful follow-up study would be to determine why people aren't using these facilities.



COMPARISONS WITH OTHER RECENT NATIONAL OR REGIONAL SURVEYS

Discussion of trends assessment addresses two questions. How do these study results (from the 1987, 1992, and 1997 surveys) compare with other trends assessment type studies? And, when considered along with major social and demographic changes, what do these study results tell us about the future of outdoor recreation participation in California?

Two national recreation surveys focus on trends in recreational activity participation that are relevant to the 1997 California Parks and Recreation Department/CIC study. Because of different sampling protocols and survey questionnaire design, direct comparisons are not possible. However, these surveys do provide a context for interpretation of study results.

National Survey on Recreation and the Environment

The National Survey on Recreation and the Environment was conducted as a cooperative effort between the US Forest Service, University of Georgia, and several other federal agencies (Cordell et al., 1997). This survey, conducted in 1982 and 1994, focused on trends in recreation activities at a national level, and it reports data on a regional basis as well. Data were collected for two separate studies from 17,000 respondents, 16 years or older, on activity patterns, recreation site attributes, and preferred sources of financing for different public recreational services and facilities. Sample results were then projected to determine regional and national trends in recreation activity participation. Sampling of respondents was stratified to ensure representation across four broadly defined areas: the North, South, Rocky Mountains, and Pacific Coast regions. Results were reported for the national and the regional samples. The Pacific Coast results were the most relevant to the California study and include responses of those sampled in Oregon, Washington, California, Alaska, and Hawaii. Attitudinal measures were only taken for the 1994-95 study.

NSRE Report Highlights

Similar to the results of the California survey, walking was found to be the most popular activity, estimated to include 134 million Americans. Several activities had numbers of participants ranging from 60 to 99 million participants nationwide. These include picnicking; visiting a nature center; visiting an historic site; playing yard games; attending outdoor sporting events and concerts; pool swimming; swimming in lakes, streams, and rivers; visiting a visitor center; and wildlife viewing. Since 1982, the nation's population has increased about 13 percent, and participation in nearly all the 81 activities surveyed increased as well. For most activities participation is lower for people with family incomes less than \$25,000 and for people with incomes above \$100,000, as compared to the rest of the sample.

In terms of the proportion of the population that participates, about two-thirds of the national sample engaged in walking. For the California study, 84 percent reported walking as an activity. About a third of the national sample reported engaging in wildlife viewing, while for the California study, 54 percent engaged in general nature study or wildlife viewing. Differences in question wording may account for the wide discrepancy in participation rates. Nearly three-fourths of Californians queried in the 1997 survey indicated they visited historic sites or museums as compared to 44 percent from the NSRE national sample. When comparing California study results with the NSRE "Pacific Coast" region, some of the discrepancies diminish, but California still shows higher rates of

participation. Some examples include trail hiking (34.8% Pacific Coast, 58% California), mountain climbing (6.9% Pacific Coast, 10.1% California), picnicking (Pacific Coast 50.4%, California 65%), and freshwater fishing (18.4% Pacific Coast, 37.3% California).

Among the Pacific Coast subsample, the responses for general attitudes toward recreation sites were more consistent with the 1997 Parks and Recreation/CIC study. Cleanliness of restrooms, facilities, and grounds at the areas received the highest level of support, with 77 percent of respondents indicating this item was very or extremely important. Safety and security of the area was mentioned as being very or extremely important by almost 75 percent of the respondents, and the scenery of the area was considered very or extremely important by almost 77 percent of the respondents.

Another set of questions concerned attitudes towards financing. Respondents were asked to indicate if they preferred to provide financing for a particular item with taxes, fees, or both, or not to fund that item. Similar to the results of the California study, the Pacific Coast sample did not offer strong support for user fees. Using fees as a funding mechanism was most preferred (63.6%) for boat ramps, followed by special exhibits and presentations (44.9%). For campgrounds, 40 percent preferred user fees; for visitor centers, 29 percent; and only 25 percent preferred funding trails with user fees. These results, and those of the California study, suggest the federal agency fee demonstration projects may have some public relations work to do before enjoying widespread public support.



Roper Starch 1996 Survey

A more recent survey effort was conducted by Roper Starch Worldwide with the American Recreation Coalition. Their survey was conducted among 2,000 adults 18 years or older. Key findings regarding activity participation revealed recreational walking to be the most popular activity with 39 percent of Americans participating (down 6% from 1995), followed by pleasure driving, 33 percent; swimming, 28 percent; picnicking, 24 percent; fishing, 22 percent, bicycling, 16 percent; running or jogging, 13 percent; and hiking, 12 percent. For all these activities, Roper Starch reported decreases in participation from 1995. The author of the report suggests Americans are “streamlining” their activities, and their results show a drop in mean number of activities participated in from 4.0 to 3.3 from 1995 to 1996.

Overall satisfaction is comparable to that reported in the California survey: 59 percent of the respondents in the Roper Starch survey said they were “extremely” or “quite” satisfied with the quality of their outdoor recreation experiences. Again, Californians on the 1997 survey scored a little higher, with about 65 percent indicating they were “satisfied” or “very satisfied” with public outdoor recreation areas currently available. Differences in the question wording and scaling may be responsible for the differences in response. An interesting finding from the Roper Starch survey concerns satisfaction with local recreation versus vacation recreation. For three categories—“amount of activities/instruction available,”

“quality of service from park management/employees,” and, “value received for admission/user fees”—satisfaction was consistently at least 10 percentage points higher for vacation recreation. The Roper Starch survey also found that recreation satisfaction varied with income, and that more affluent respondents reported higher levels of satisfaction. For those with annual incomes less than \$15,000, 39 percent reported being satisfied with their recreation experiences, as compared to 71 percent being satisfied for those earning more than \$50,000 per year.

Another finding of interest in the Roper Starch study is that there were two groups for whom a composite measure of recreation quality had dropped: African Americans and women. This composite variable, the “Recreation Quality Index” (RQI), was created by combining responses to questions on actual and expected participation, satisfaction levels with recent recreation experiences, and perceptions of the opportunities for recreation. The 1996 national average RQI was 109. In 1997, the RQI dropped 8 points for all females and 12 points for employed females. For African Americans, the RQI declined 13 points, increasing the substantial gap between this racial group when compared to the American public overall. It is possible that women and African

Americans in California show similar declines. Investigating latent demand, recreation participation, and satisfaction among these groups is an area of inquiry that should be considered in future California studies.



SECTION V

FACTORS AFFECTING FUTURE RECREATION USE



V. FACTORS AFFECTING FUTURE RECREATION USE

SOCIAL AND DEMOGRAPHIC FACTORS AFFECTING FUTURE RECREATION USE

Since 1987, California has experienced several changes that can affect participation in outdoor recreation activities. These changes include a revitalized, more service-oriented economy; increased immigration; introduction of user fees at national forest sites and increased fees at selected national parks; increased lands dedicated for open space or recreational uses; and growth in the elderly sector of the population.

Economic Revitalization and Increased Consumer Spending

During the 1990s, the California economy stagnated and then rebounded in dramatic fashion. The economic recession of the early 1990s was influenced to a large extent by the loss of jobs in the Department of Defense and related industries. The recession persisted for about three years; then, in 1994, it began to recover. Job growth stagnated in 1991-1994 (job loss ranged from 0.9-2.0 percent annually). In 1995, new job growth in California increased steadily each month, and this trend persists in 1997 (*1997 Economic Report to the Governor*). The revitalized economy is being driven by job growth in high skills industries such as electronics manufacturing, software and hardware development, multimedia software, and biotechnology. Although there were 380,000 jobs added in 1997, and 350,000 new jobs added in 1996, there have been continued job losses in the communications and utilities industries and from the closure of military bases. Job growth was most robust in the San Francisco Bay

area, especially in San Jose. Personal income rose 6 percent from 1995 to 1996, and retail sales grew by 4.9 percent from 1995 to 1996. Adjusting for inflation, real income should rise 4.5 percent this year (1997). Current job growth outpaced the national economy, and projections for 1998 indicate this trend will continue (*1997 Economic Report to the Governor*). It is possible that increases in income and retail sales involve the purchase of more recreation products and services.

Data reported at the national level from the Outdoor Recreation Coalition of America (1996) showed substantial increases in recreation equipment purchases. Wholesale purchases of tents, backpacks, and sleeping bags increased to about 320 million from about \$270 million from 1992 to 1993. From 1993 to 1994, retail mountain bike sales increased to \$4.2 billion from \$3.8 billion. It is likely that some of this increased purchase activity is occurring in California, and, if this is true, Californians at least have the intent to engage in outdoor recreation activities.

Changes in Employment and Amount of Free Time

Despite having the intent to participate in outdoor recreation activities, people may not have the necessary time to spend on outdoor recreation activities. Harvard economist Juliet Schor (1989) predicted that Americans would have less free time as we move to the next century.

The new economy has created several subgroups of workers that have implications for recreation service delivery. Crispell (1997) reported that 6 percent of working Americans

hold more than one job. Among multiple job holders, men work an average of 52 hours a week, women work an average of 43 hours. Money is the obvious reason for moonlighting, but some people, such as musicians, consider their "second" job their true vocation. Yet another subset of people are working part time simply because they cannot find full-time work. In California, this group numbered 609,000 in 1994. Another group includes the number of people voluntarily working part time (Bureau of Labor Statistics, 1997). In California, this figure increased to 2 million workers in 1994 from about 1.8 million workers in 1987. What is unknown is what percentage of the voluntary part-time workers are stay at home parents; they too may not have much leisure time, choosing to occupy their non-work time with child rearing responsibilities.

As people shift to alternative work schedules, recreation providers will have to shift to accommodate the free time that recreationists have available. In a talk given at the National Association of Resource Recreation Planners, Dr. Joseph O'Leary stated that some providers are offering opportunities for midnight basketball. Similarly, health clubs now boast of 24-hour service to their clients.

Another group of workers may not have disposable income for recreation. These individuals are known as the "working poor" (O'Hare and Schwartz, 1997). In 1973, 13 percent of working men earned poverty level wages, but in 1993 this figure had increased to 21 percent. In 1995, a person working full-time, year-round at minimum wage had an income 30 percent below the poverty line, defined as \$15,569 for a family of four. At this low level of income it is likely that income does negatively affect an individual or family's

participation level in outdoor recreation activities. Previous studies have shown that income levels positively influence recreation activity participation (Roper Starch, 1996).

Aging Population Impacts

Aging trends have implications for recreation planning and service delivery, some of which are unexpected. One obvious implication is that a large group of individuals will have more free time on their hands. However, less obvious implications pertain to adult education and high risk activities. One group of interest is the "lifelong learners" (Miller, 1997). These are elderly individuals enrolled in some form of adult education. Most of these 5 million individuals take classes for personal and social reasons. The number of elderly American students grew by 55 percent between 1990 and 1995, as compared to a 33 percent growth rate for the total student body during the same time period. Furthermore, Census Bureau projections indicate the elderly of the future will be more well educated than previous cohorts. It is conceivable that this group may have a strong desire to engage in learning about nature, wildlife viewing, visiting museums, etc.

Another atypical segment among older Americans could be the "high risk" recreationists. Heath (1997) indicated that many people over age 40 are starting to engage in activities such as skydiving and rock climbing. The U.S. Parachute Association (cited in Heath, 1997) reported that 22 percent of their members were age 40 or older, 7 percent were 50 or older, and another 7 percent were 60 or older. As growth in the elderly population in California continues over the next 20 years, this will have several different implications for recreational service delivery.

Introduction or Increase in Entrance Fees on Federal Lands

In 1997, the U.S. Forest Service embarked on a recreation fee demonstration project at selected sites throughout California. The program is in its first year and has been implemented at selected sites at eight national forests. At the four national forests in southern California, visitors can purchase an Adventure Pass for \$5 per day or \$30/season. In northern California, a fee is required for entry into the Desolation Wilderness, a high use area in the El Dorado National Forest. For the first time, a climbing fee is required for ascending Mt. Shasta in the Shasta-Trinity National Forest. Anecdotal evidence suggests people are skeptical about paying fees but are supportive when they understand the rationale for the fee and the return of 80 percent of the fee increase to the units where they were collected (Owe, 1997, personal communication).

Opponents of fee programs have argued that fees are discriminatory and could have the effect of reducing or displacing use. Preliminary research conducted in California has shown mixed results. A study conducted by Chavez (1997) at fee demonstration sites at national forests in southern California, showed that many visitors stated a fee would not influence the types of activities in which they participated or the number of times they visited a site.

Another study conducted to assess recreation constituency group perceptions of fees (Winter et al., 1997) revealed some skepticism about the necessity of fee collection, the effects on family recreation, and the spontaneity of recreation outings previously available at non-fee sites.

A fee demonstration program is in place in many national parks in California. These units include Death Valley National Park, Golden Gate National Recreation Area, Joshua Tree National Park, Point Reyes National Seashore,

Redwood National Park, Sequoia and Kings Canyon National Park, Whiskeytown National Recreation Area, and Yosemite National Park. These fee increases have immense implications for additional funding for recreation amenities and environmental protection. Anecdotal evidence suggests good public support for these fee increases (Finley, 1997, personal communication), but formal evaluations have not yet been conducted. While the effects on recreation use are unknown, there are some positive effects on agency funding with increased autonomy in determining how these new funds shall be spent. This clearly has implications for service delivery for the Forest Service and National Park Service fee units in California. Once recreationists realize their money is remaining at the unit where it was collected, it is possible their expectations for service delivery will increase, along with their involvement in local recreation scoping and planning.

Increased Open Space

There are some indications that in California more land is becoming available for outdoor recreational pursuits. This is the result of closures and reuse of military bases, such as those at Long Beach, Treasure Island, and Alameda. Open space districts and local park and recreation departments are acquiring new lands throughout the San Francisco Bay area (Look, 1997, personal communication). The Mid-Peninsula Open Space District in San Mateo and Santa Clara counties, has been actively pursuing land acquisitions in the last year. Much of the funding for these acquisitions is the result of a portion of property taxes reserved specifically for this activity. Increased open space may help address some of the persistent latent demand issues identified in this and in the 1992 and 1987 studies. If people feel their needs are going unmet for various recreation opportunities, they may be more supportive of local initiatives to raise money to acquire open space.

RECOMMENDATIONS BASED ON TRENDS ASSESSMENT

Several recommendations are made relative to trends assessment and in learning more about socially or economically disadvantaged groups.

1. **Obtain, compile, and update comprehensive data on recreation trails and facilities.** There is not a comprehensive database of recreation trails and facilities for this state. Determining what trails and facilities are available and where they are located is a crucial step in addressing those recreation activities for which there has been high latent demand identified in the 1997 and previous studies.
2. **Conduct a geographically based breakdown of latent demand.** This could be done with the existing data sets for 1987, 1992, and 1997. This will allow more localized studies to be initiated in areas of California where latent demand is the highest.
3. **Cross-tabulate the results of recommendation #2 with ethnic group composition.** This would enable planners to target areas and underserved populations where additional, locally focused studies could be conducted.
4. **Using the 1997 data, compute latent demand and public support scores for females and African Americans.** Given the results of the Roper Starch survey, these groups are likely to have the lowest activity participation levels and highest latent demand.



APPENDIX A

TELEPHONE SURVEY WITH *UNWEIGHTED SUMMARY STATISTICS

** Reflects characteristics of the survey sample but not necessarily the characteristics of the California population as a whole.*

CALIFORNIA OUTDOOR RECREATION TELEPHONE SURVEY

Hello. My name is _____ and I'm conducting a short survey for the California Dept. of Parks and Recreation regarding outdoor recreation areas and facilities. I'm not selling anything. This survey is being conducted to obtain input on how to improve service to the public. Are you the man/woman of the house? **(IF YES, CONTINUE. IF NO, ASK TO SPEAK TO ONE AND REPEAT INTRO, ARRANGE CB IF NECESSARY.)**

This survey will take approximately 5 minutes. When answering the following questions, please remember we are talking about any and all public outdoor recreation areas, parklands, and facilities. These public areas that we are concerned with can be large or small, located anywhere within California. They can be operated by any city, county, state or federal government. They may be highly developed urban and suburban sites or undeveloped rural areas such as forest lands or deserts. Now, with all this in mind, let me start with a few basic questions.

Q1. On a scale of 1 to 5, where 1 means not at all important and 5 means very important, how important are public outdoor recreation areas and facilities to you and the quality of your life?

<u>Not at all Important</u>		<u>Very Important</u>	<u>DK</u>	
1.9%	3.0%	12.8%	22.3%	59.9%
				n = 2003

Q2. On a scale of 1 to 5, where 1 means not at all satisfied and 5 means very satisfied, how would you rate your satisfaction with the public outdoor recreation areas and facilities currently available to you in California?

<u>Not at all Satisfied</u>		<u>Very Satisfied</u>	<u>DK</u>	
3.1%	7.8%	31.0%	34.9%	23.2%
				n = 1972

Q3. If you have lived in California for five years or more, how would you compare the condition and operation of public outdoor recreation areas and facilities in California today with five years ago? Would you say that today they are.....? **(READ CHOICES)**

<u>31.2%</u> Better than,	<u> </u> DK (DO NOT READ)	
<u>37.9%</u> The same as, or	<u>4.1%</u> Haven't lived here for five years	(DO NOT READ)
<u>26.8%</u> Not as good as they were five years ago?		n=1883

Q4. Do you spend more time, about the same amount of time or less time in outdoor recreation activities now than you did 5 years ago?

<u>34.8%</u> More time	<u>36.5%</u> Less time	
<u>28.7%</u> About the same	<u> </u> DK (DO NOT READ)	n = 1991

Q5. Do you think that spending by public government agencies that provide outdoor recreation areas and facilities should be increased, remain the same, or be decreased for each of the following: **(READ LIST, ROTATE)**

	<u>Increased Spending</u>	<u>Remain the Same</u>	<u>Decreased Spending</u>	<u>DK</u>
a. Acquire additional land for recreation purposes	n=1951	56.3%	34.6%	9.1%
b. Basic maintenance of existing facilities (painting, small repairs, etc.)	n=1974	63.7	34.3	2.0
c. Providing educational and activity programs for visitors	n=1936	51.5	42.1	6.4
d. Building new facilities	n=1944	56.1	35.5	8.4
e. Rehabilitating and modernizing existing facilities.	n=1964	68.6	28.4	3.0
f. Protection and management of the area's natural and cultural resources	n=1955	67.2	28.4	4.4

Q6. With government agencies facing more restricted budgets, some new sources of money have been suggested for funding the acquisition, development, and day-to-day operation of public recreation areas and facilities. Once again using a scale of 1 to 5, where 1 means strongly oppose and 5 means strongly support, how would you rate the following suggestions for obtaining new funding for public park and recreation areas? **(READ LIST. ROTATE)**

		Strongly <u>Oppose</u>			Strongly <u>Support</u>	DK
a. Having a state and/or federal income tax check-off for parks, and recreation purposes.	n=1948	16.0%	5.9%	16.4%	16.5%	45.2%
b. Using money from the State lottery	n=1977	18.8	5.8	11.7	13.4	50.3
c. Having a state and/or federal tax on the extraction of natural resources such as oil, gravel, and timber.	n=1914	25.7%	9.2	19.4	14.3	31.3
d. Increasing the tax on tobacco products	n=1994	20.6	4.4	8.8	7.2	59.1
e. Increasing the tax on alcoholic beverages	n=1996	19.0	5.0	13.2	9.8	53.1
f. Modest increase in user fees	n=1914	27.9	11.8	25.5	14.7	20.1
g. Dedicating a portion of the existing sales tax.	n=1915	19.8	9.1	23.3	19.7	28.1
h. Passing a voter approved park bond act	n=1853	20.2	8.2	23.3	17.2	31.1
i. Adding a vehicle registration tax	n=1987	57.4	13.2	13.7	6.1	9.6

Q7. These last few questions will help us group your answers with those of others. What is the highest grade or level of education you have completed? **(READ IF NECESSARY)**

<u>8.4%</u> Less than high school graduate	<u>25.9%</u> College graduate
<u>19.9%</u> High school graduate	<u>13.9%</u> Graduate degree
<u>31.8%</u> Some college/technical training	<u>9 (DK/REFUSED-DO NOT READ)</u> n=1991

Q8. Which of the following best describes your household?

<u>1.2%</u> Single person(s), no children under 18 at home	<u>36.7%</u> Couple, with children under 18 at home
<u>21.2%</u> Couple, no children under 18 at home	<u>13.1%</u> More than two adults
<u>7.8%</u> Single persons(s), with children under 18 at home	_____ DK n=1991

Q9. Including yourself, how many persons live in your household? Mean = 3.0 Persons

Q10. How many of those are.... **(READ CATEGORIES, PUT NUMBER IN BLANKS)** n=1997

<u>Number</u>	<u>Number</u>
n=2010 <u>22.3%</u> Under 6 years (21)	n=2005 <u>21.7%</u> 36 to 40 years (27)
n=2009 <u>25.4%</u> 6 to 12 years (22)	n=2005 <u>30.2%</u> 41 to 50 years (28)
n=2009 <u>18.6%</u> 13 to 17 years (23)	n=2005 <u>22.6%</u> 51 to 64 years (29)
n=2007 <u>22.2%</u> 18 to 25 years (24)	n=2005 <u>9.7%</u> 65 to 74 years (30)
n=2005 <u>16.3%</u> 26 to 30 years (25)	n=2005 <u>5.2%</u> 75 years or over (31)
n=2005 <u>19.5%</u> 31 to 35 years (26)	

Q11. **(IF RESPONDENT'S AGE IS NOT OBVIOUS, ASK:)** Which one of those includes your age?
(CIRCLE CATEGORY ABOVE)

Q12. Which of the following categories includes your total annual income for all members of your household before taxes? Is it.... **(READ CHOICES)**

- | | |
|-----------------------------------|---------------------------------------|
| <u>7.0%</u> Under \$10,000 | <u>12.2%</u> \$40,000 to \$49,999 |
| <u>12.9%</u> \$10,000 to \$19,999 | <u>20.9%</u> \$50,000 to \$74,999, |
| <u>13.8%</u> \$20,000 to \$29,999 | <u>10.8%</u> \$75,000 to \$99,999, or |
| <u>13.6%</u> \$30,000 to \$39,999 | <u>8.8%</u> \$100,000 or more |

9 **(REFUSED - DO NOT READ)** n=1618

Q13. Which of the following racial or ethnic backgrounds best describes your household? Is it....
(READ CHOICES)

- | | |
|---|--|
| <u>12.9%</u> Mexican-American | <u>1.1%</u> American Indian |
| <u>3.0%</u> Other Hispanic, e.g., Central America | <u>2.6%</u> Other |
| <u>65.1%</u> Caucasian/White | <u>8.5%</u> (MIXED - DO NOT READ) |

3.6% Black/Afro-American _____ **(REFUSED - DO NOT READ)** n=1935

3.3% Asian (including Pacific Islanders)

Q14. How long have you lived in the State of California? _____ years or _____ months n=1993

Q15. Last question. What is your ZIP Code? _____

We'd like to send you a brief follow-up questionnaire with more questions concerning outdoor recreation issues, which you can fill out and mail back to us. In return for your doing this, we'll send you a map called "The Official Guide to California State Parks" and a 100 page booklet entitled California Escapes listing state park activities and opportunities. These materials can help you plan your future weekend and vacation trips. Would you be willing to participate in this follow-up survey? **(IF YES, WRITE NAME AND ADDRESS BELOW. IF NO, WRITE "REFUSED" BELOW)**

Thank you very much for your time and cooperation!

(INTERVIEWER - RECORD SEX OF RESPONDENT:)

40.2% Male 59.8% Female

Name _____

Address _____

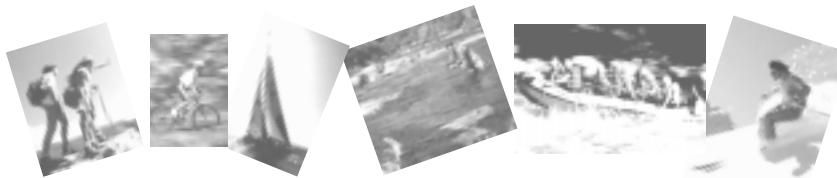
City _____

ZIP _____

APPENDIX B

MAIL SURVEY WITH *UNWEIGHTED SUMMARY STATISTICS

* *Reflects characteristics of the survey sample but not necessarily the characteristics of the California population as a whole.*



OUTDOOR RECREATION QUESTIONNAIRE

1. The following is a list of statements concerning outdoor recreation lands and facilities in California. For each statement, indicate the degree to which you agree or disagree with it.

		Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
a. There are enough outdoor recreation areas and facilities available that are convenient for me.	n=799	5.0%	19.3%	12.9%	42.3%	20.5%
b. More outdoor recreation areas and facilities are needed in or near large cities.	n=797	3.3	9.5	22.1	34.6	30.5
c. Protection of the natural environment is an important aspect of outdoor recreation areas.	n=797	1.4	2.0	4.6	21.3	70.6
d. Outdoor recreation areas and facilities in California are often too crowded when I want to use them.	n=796	2.3	11.4	27.4	31.2	27.8
e. Recreational facilities and programs for special populations such as the elderly, the very poor or disabled people should be increased.	n=801	4.2	9.9	27.8	30.3	27.7
f. Outdoor recreation areas and programs help to reduce crime and juvenile delinquency in my community.	n=799	3.6	9.5	28.3	30.3	28.3
g. Outdoor recreation areas and facilities improve a community's quality of life."	n=795	0.9	2.1	6.8	33.1	57.1
h. Outdoor recreation areas and facilities attract undesirable people and activities.	n=786	19.0	32.1	28.8	15.9	4.3
i. Outdoor recreation areas and facilities can create jobs and spending in the community, helping its economy.	n=801	1.2	3.9	19.2	47.9	27.7
j. Outdoor recreation areas and facilities should be used to promote tourism.	n=793	4.3	10.2	21.7	40.1	23.7
k. Outdoor recreation areas and facilities increase the value of nearby residential and commercial property.	n=794	1.5	5.7	29.2	37.9	25.7
l. There should be better regulation of behavior, rules and laws in parks and outdoor recreation areas, which would make my experience more comfortable and safe.	n=799	4.5	9.4	24.0	33.2	28.9
m. The federal government should continue to give financial assistance to local and state governments for parks and outdoor recreation areas.	n=800	3.3	4.6	11.3	27.5	53.4
n. The state government should continue to give financial aid to local governments for outdoor recreation.	n=798	2.0	2.3	7.6	32.7	55.4
o. The quality of the natural setting is an important factor in my enjoyment of outdoor recreation areas.	n=796	0.8	1.0	4.3	29.6	64.3
p. Wetlands, such as estuaries and marshes, are of substantial ecological and recreational importance and should be protected by the government.	n=797	2.6	4.8	15.3	27.2	50.1
q. Additional campgrounds should be constructed that are more developed and have hot showers, including some campsites for which there would be an extra fee with hook-ups for electricity and water.	n=802	9.1	12.0	21.6	28.2	29.2
r. Increased tourism at parks, wildlife and recreation areas should be encouraged if it is a means to generate additional funds for the operation and maintenance of those areas.	n=800	4.5	10.0	23.4	36.3	25.9

2. On a scale of 1 to 5, how would you rate your attitude toward the following possible changes to park and recreation facilities and services?

		Strongly Disapprove			Strongly Approve		
a. Providing more educational programs and services in park and outdoor recreation areas.	n=799	1.1%	4.3%	27.2%	35.7%	31.8%	
b. Construction of more basic campgrounds with picnic tables, cold water, and restrooms.	n=800	2.0	5.4	18.3	43.1	31.3	
c. Construction of more developed campgrounds with hot showers, including some campsites (for which there is an extra fee) with hook-ups for electricity and water.	n=798	8.5	12.2	22.7	27.6	29.1	
d. Developing more local community parks.	n=791	1.5	4.6	16.3	41.0	36.7	
e. Providing more commercial hotels, motels, restaurants, shops, gas stations within public park and outdoor recreation areas.	n=800	26.8	25.6	26.5	12.8	8.4	
f. Providing stronger enforcement of laws and regulations which deal with public use and behavior in parks and recreation areas.	n=799	3.0	5.3	23.7	30.4	37.7	
g. Providing more areas for the legal use of off-road vehicles such as motorcycles, dune buggies, 4-wheel drive vehicles, and all-terrain vehicles.	n=796	26.0	17.2	20.7	21.0	15.1	
h. Developing more trails for horseback riding, hiking, and/or mountain biking where no motorized vehicles are allowed.	n=797	2.6	4.3	16.4	34.4	42.3	
i. An increase in the number of wilderness type areas where no vehicles or developments are allowed.	n=799	5.3	5.4	19.8	27.2	42.4	
j. Providing more open space in urban areas.	n=795	2.0	5.0	26.8	33.2	33.0	
k. Construction of more RV sewage dump stations.	n=797	11.2	13.4	42.8	16.9	15.7	
l. Providing more picnic sites that can handle large groups.	n=798	4.6	9.9	42.6	27.8	15.0	
m. Providing more parking areas at day use picnic sites.	n=799	5.0	8.5	38.5	30.4	17.5	

In the box below, we have listed 43 outdoor recreation activities that are most commonly enjoyed by Californians. Please read through this list and then answer Questions 3-8 by referring to this list.

3. For each activity, please give us your best estimate of the total number of days during which you participated in that activity during the last 12 months. Include even those days when you did the activity for only a short period of time. Write your estimates on the line to the right of each activity. If you did not do an activity at all, leave the line blank.

For this question only, please count ALL of your outdoor recreation activities, including those which take place at PRIVATE facilities as well as at PUBLIC facilities.

Activity Number	Activity	Number of Days	Activity Number	Activity	Number of Days
01	Walking (Recreational)	<u>79.9</u>	23	Beach activities, including sunning and games	<u>15.1</u>
02	Trail hiking	<u>12.7</u>	24	Swimming (in outdoor pools)	<u>16.2</u>
03	Bicycling (on paved surfaces)	<u>20.8</u>	25	Swimming in lakes, rivers, and the ocean (not in pools)	<u>9.6</u>
04	Mountain biking (not on paved surfaces)	<u>4.0</u>	26	Surfing	<u>1.6</u>
05	Jogging and running	<u>17.1</u>	27	Sailboating and windsurfing	<u>0.7</u>
06	Driving for pleasure	<u>32.9</u>	28	Kayaking, rowboating, canoeing, and rafting	<u>1.3</u>
07	Horseback riding	<u>4.4</u>	29	Power boating	<u>3.7</u>
08	Hunting	<u>1.8</u>	30	Water skiing	<u>1.8</u>
09	Camping in developed sites with tent or vehicle	<u>6.9</u>	31	Fishing - saltwater	<u>2.7</u>
10	Camping in primitive areas and backpacking	<u>3.0</u>	32	Fishing - freshwater	<u>6.2</u>
11	Mountain climbing	<u>1.1</u>	33	Downhill (Alpine) skiing	<u>1.6</u>
12	General nature study, wildlife viewing	<u>21.8</u>	34	Cross-country skiing	<u>0.6</u>
13	Use of open grass or turf areas for casual and unstructured activities, like games, sitting, sunning	<u>22.1</u>	35	Other non-mechanized winter sports activities - sledding, snow play, ice skating	<u>2.0</u>
14	Use of play equipment, tot-lots	<u>11.1</u>	36	Snowmobiling	<u>0.3</u>
15	Picnicking in developed sites	<u>7.7</u>	37	Motorcycles, dirt bikes, ATVs, dune buggies used off paved roads	<u>2.7</u>
16	Softball and baseball	<u>7.1</u>	38	4-Wheel drive vehicles used off paved roads	<u>3.3</u>
17	Basketball	<u>5.1</u>	39	Attending outdoor cultural events, like concerts, theater, etc., in outdoor settings	<u>5.0</u>
18	Football	<u>0.9</u>	40	Visiting museums, historic sites	<u>7.6</u>
19	Soccer	<u>4.2</u>	41	Visiting zoos and arboretums	<u>4.5</u>
20	Golf	<u>5.9</u>	42	Skateboarding and rollerblading	<u>5.5</u>
21	Tennis	<u>3.5</u>	43	Attending outdoor sports or athletic events, professional or amateur.	<u>7.7</u>
22	Target shooting (including pistol and skeet)	<u>2.8</u>			

For all remaining questions, consider only outdoor recreation activities which take place in government-operated park and outdoor recreation areas and facilities.

4. From the above list of 43 activities, please select up to 10 which you probably would have done more often, or would like to have tried, if good public opportunities, facilities and programs had been available to you. Place the activity numbers for up to 10 of these activities in the boxes below.

Top Ten	40	39	09	02	12	01	41	23	25	15
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From the activities you just selected above, pick the five which are the most important and rank them. Indicate your ranking below.

The most important is: # _____

The 2nd most important is: # _____

The 3rd most important is: # _____

The 4th most important is: # _____

The 5th most important is: # _____

5. Because of budgetary problems, it may be that some public agencies will have to charge for providing outdoor recreation areas and facilities. Indicate how much you would be willing to pay for one day's worth of each of those five activities which you would most likely to do more of, as indicated in Question 4 above. Assume the facilities will be of high quality and uncrowded. Indicate your willingness to pay in whole dollars.

Most important activity (#____): I would pay \$_____ per day's worth

Second most important (#____): I would pay \$_____ per day's worth

Third most important (#____): I would pay \$_____ per day's worth

Fourth most important (#____): I would pay \$_____ per day's worth

Fifth most important (#____): I would pay \$_____ per day's worth

6. It would help us to plan for your outdoor recreation needs if we knew how you thought government agencies should spend public money to improve recreation opportunities. Please review once again the 43 activities listed in the activities box. Then, in the boxes below, place the numbers of up to 10 activities which you think public agencies should do the most to provide for and to improve.

Top Ten	9	40	12	2	15	41	10	13	39	23
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From the activities you have just selected above, pick the five which you think public agencies should give the highest priority when spending public money. Indicate your ranking below.

The highest priority is: # _____

The 1st highest priority is: # _____

The 2nd highest priority is: # _____

The 3rd highest priority is: # _____

The 4th highest priority is: # _____

The 5th highest priority is: # _____

7. From the above list of 43 activities, please select up to 10 which are the most important to you. Place the numbers for these activities in the boxes below.

Top Ten	1	40	9	2	12	23	41	15	13	25
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From the activities you have just selected above, please rank the five which are the most important to you.

The most important is: # _____

The 2nd most important is: # _____

The 3rd most important is: # _____

The 4th most important is: # _____

The 5th most important is: # _____

8. The last time you participated in your most important activity “(most important”, Question 7 above), how important were the following factors to your enjoyment?

		Not Important	Somewhat Important	Very Important
Relaxing	n=757	.8%	18.9%	77.3%
Keeping fit and healthy	n=755	10.2	29.8	60.0
Experiencing challenge and excitement	n=736	21.7	35.9	42.4
Meeting new people	n=744	48.5	33.5	18.0
Being with family and friends	n=753	10.0	21.5	68.5
Doing something your children enjoyed	n=720	24.7	16.0	59.3
Releasing or reducing tension	n=757	3.8	21.0	75.2
Having a change from daily routine	n=758	5.5	21.9	72.6
Getting away from crowded situations	n=753	6.0	24.0	70.0
Being in the outdoors	n=761	2.0	11.6	86.5
Feeling in harmony with nature	n=754	9.5	25.9	64.6
Achieving spiritual fulfillment	n=752	23.7	34.2	42.2
Beauty of the area	n=758	2.5	20.3	77.2
Availability of facilities	n=754	8.5	29.4	62.1
Quality of the natural setting	n=757	3.0	19.9	77.0

9. During the past year, how often did you visit each of the following types of outdoor recreational areas?

Area Type	Not at All	Once or Twice/Year	Several Times/Year	Once or Twice/Month	Once/Week	At Least 2-3 Times/Week
1. <u>Natural and undeveloped areas</u> , that is, large areas in a natural or nearly natural condition, with few developments; for example, forests, deserts, mountains, wetlands and seashores. n=789	8.5%	26.9%	38.1%	13.9%	6.5%	6.1%
2. <u>Developed nature-oriented parks and recreation areas</u> , located outside of or on the fringe of urban areas, including developments like campgrounds, picnic areas, trails, and information centers. Generally, they're national, state, or large county and regional parks or beaches. n=785	7.3	20.9	43.9	18.2	5.7	3.9
3. <u>Highly developed parks and recreation areas</u> , in or near urban areas. They receive heavy visitor use. They may include playgrounds, sports facilities, and highly developed beaches. City parks and county parks are examples. n=788	10.8	22.1	28.3	18.8	11.9	8.1
4. <u>Historical or cultural buildings, sites, or areas</u> , regardless of their location. n=788	9.9	36.9	40.4	10.3	1.6	0.9
5. <u>Private, not public, outdoor recreation areas and facilities</u> , such as private campgrounds, hunting preserves, amusement parks, golf clubs, tennis or swimming facilities at clubs or in apartment complexes. n=787	22.9	22.8	23.8	10.9	7.9	5.7

10. Of the five types of areas listed in Question 9 above, which one do you most enjoy visiting? This may not necessarily be the one you visit most often.

Area Type # 1 40.7% n=766

11. How do you generally get information about public parks, recreation areas and facilities? **(CHECK ALL THAT APPLY)**

33.2% Friends and family 10.3% TV
11.4% Government agency brochures 21.6% Maps
8.1% Any private organization's newsletter 4.0% Radio
11.4% Other (PLEASE SPECIFY) _____

n=7916

12. Many government outdoor recreation agencies contract out some of their work to private, profit-making firms. Which of the following activities do you think a private firm should be allowed to provide in public park and recreation areas?

		Provided by Private Firm			
		Yes	No	No Opinion	
a.	Sale of ready-to-eat food and beverages	n=784	69.7%	17.3%	12.9%
b.	Sponsorship of contests, races and special events	n=782	59.6	18.5	21.9
c.	Maintenance of facilities and grounds	n=779	61.2	28.2	10.5
d.	Patrol and law enforcement duties	n=784	42.6	45.4	12.0
e.	Guided nature walks, educational activities	n=784	53.2	32.8	14.0
f.	Total operation and management of the park or recreation area	n=782	23.7	61.0	15.3

13. Finally, please use the space below for any additional comments you may have about the public parks and outdoor recreation areas and facilities which exist today in California. You may include complaints, suggestions, observations, praise, etc. Use the back of this page if you need more space. Thanks again for your assistance.

THANK YOU FOR YOUR TIME AND PARTICIPATION. PLEASE RETURN YOUR QUESTIONNAIRE IN THE ENCLOSED RETURN ENVELOPE. YOU CAN EXPECT TO RECEIVE YOUR FREE "OFFICIAL GUIDE TO CALIFORNIA STATE PARKS" AND "CALIFORNIA ESCAPES" IN 2 - 3 WEEKS.

APPENDIX C

SURVEY METHODOLOGY

OVERALL METHODS

The research study design consisted of a telephone survey with a follow-up mail survey. First, adult respondents were interviewed using randomly chosen telephone sample points. A total of 2,010 telephone interviews were conducted throughout California. After a short telephone interview, respondents were asked if they would be willing to complete a follow-up mail questionnaire in return for a state or federal publication. A total of 1,506 respondents were each mailed a questionnaire with a follow-up postcard for mail non-respondents. A total of 47 Spanish questionnaires were sent to Spanish-speaking households. Non-responding Spanish-speaking households were sent a second questionnaire with a cover letter. A total of 805 mail questionnaires were returned. The collected data was analyzed on a personal computer using the Statistical Package for the Social Sciences (SPSS/PC).

SPECIFIC TASKS

The survey methodology consisted of a number of specific tasks: (1) Questionnaire design, (2) Sample frame development, (3) Data collection, (4) Code book development, and (5) Analysis.

Questionnaire Design

The questionnaire design was conducted with extensive input from previous studies as well as Parks and Recreation staff. Parks and Recreation staff provided additional areas of inquiry that were important in the decision making process. These subjects had been discussed and reviewed by recreation professionals, academicians, and agency managers throughout California and elsewhere in the nation. The 1987 and 1992 questionnaires were reviewed and integrated. Meetings were held to discuss both the subjects and questions

to assure that the contents of the designed questionnaire would meet the needs of the Department.

Two questionnaires emerged from this effort. First, one questionnaire was designed that was suitable for administering to respondents over the telephone. This questionnaire was used in conjunction with a random-digit-dialing sampling plan. The questionnaire was designed to be completed in a maximum of 5 minutes of a respondent's time to alleviate interviewee fatigue and maintain response rates. Second, a mail questionnaire was designed for self-administration. Since the Department needed more information than could reasonably be obtained in the telephone survey, CIC recruited telephone survey respondents for the mail survey. Both questionnaires make heavy use of the Likert scale to determine the strength of response and both contain open-ended questions. Each of the questionnaires was translated into Spanish for the Spanish-speaking respondents.

After circulating questionnaires among Department staff, the telephone survey was pretested with 25 randomly chosen households. The mail questionnaire was pretested among CIC staff. The pretest revealed that no changes to the questionnaires were necessary. Examples of each of the questionnaires may be found in Appendices A and B.

Sample Frame Development

To diminish the impact of southern California's relatively large population, the sampling plan for this study involved geographic stratification of the sample points. The square root approach was utilized, which involves taking the square root of the most up-to-date population figure (California Department of Finance, 1995) for each county in California. This figure was then divided out as a percentage of the total. These percentage figures were used to calculate the number of sample points to be interviewed in each county, the total

amounting to approximately 2,002. The square root approach was used as a means of providing the desired statewide coverage; it penalizes large counties and assists small counties. Proportional sampling, on the other hand, would have allocated an excessively large number of sample points to the large counties and possibly excluded the small counties.

Once the number of sample points per county was determined, CIC utilized its random-digit dialing software program. This program creates random-digit telephone numbers in proportion to the issuance of prefixes that are designated for specific geographic locations. Designated prefixes are weighted according to each one's issuance, thus ensuring a random sample, including those with new or unlisted numbers. A total of 2,012 telephone interviews was conducted with respondents in California. Every county in the state was represented (Table C-1). A sample frame for the mail survey could not be predetermined as it was dependent upon the willingness of telephone survey respondents to accept and complete this survey.

Data Collection

Data collection involved a telephone survey followed by a mail survey. Prior to commencing the telephone survey, interviewers attended a briefing session where they were given a short description of the project, its purposes and objectives, and the questionnaire was explained in detail. Telephone call records were then prepared, which allowed for documentation of attempted calls and of prearranged callbacks, when necessary.

Most interviews were conducted from CIC Research's central telephone room facility located in San Diego, California. However, due to a contractual requirement, 210 interviews were conducted by Taylor Research, from its central telephone room facilities. Completed

surveys from Taylor Research were later entered into CIC's CATI system. Interviewing commenced on April 29 and ended on July 7, 1997. During this period, interviews were conducted on weekdays, between 12:15 p.m. and 8:45 p.m., as well as on weekends between 10:00 a.m. and 6:30 p.m. A CIC staff supervisor was on duty at all times to monitor approximately 10 percent of each interviewer's work, to assure quality control, and to answer any questions that may have arisen. Bilingual interviewers were always available to complete the interviews with respondents who spoke only Spanish.

The survey was controlled, on a county basis, so that the number of completed interviews per county approximated the number specified as per the sample frame (Table C-1). Disposition of the calls is given in Table C-2. Before concluding the telephone survey, respondents were asked to participate in a mail follow-up survey, in return for which they were told they would receive a state or federal outdoor publication. A total of 2,010 telephone interviews were conducted; 1,506 respondents agreed to complete the mail survey. The 2,010 telephone survey respondents were made up of 308 Hispanics (Mexican-American and Other Hispanic groups), 1,622 respondents from other ethnic groups, and 75 respondents who refused to give their ethnic background.

The first mailing to all English-speaking respondents (1,459) was sent out by the California Department of Parks and Recreation. This mailing included a color insert showing what the incentive would look like (page C-7). Spanish questionnaires for Spanish-speaking respondents (47) were mailed from CIC's offices. All reply envelopes were stamped with a number that identified each respondent; this enabled CIC to determine those respondents who had returned their questionnaires versus those who had not.

Table C-1
RESPONDENTS BY COUNTY

County	Frequency	Percent
Alameda	73	3.6%
Alpine	3	0.1
Amador	11	0.5
Butte	29	1.4
Calaveras	12	0.6
Colusa	8	0.4
Contra Costa	60	3.0
Del Norte	10	0.5
El Dorado	25	1.2
Fresno	55	2.7
Glenn	12	0.6
Humboldt	23	1.1
Imperial	23	1.1
Inyo	9	0.4
Kern	50	2.5
Kings	20	1.0
Lake	15	0.7
Lassen	10	0.5
Los Angeles	192	9.6
Madera	21	1.0
Marin	31	1.5
Mariposa	8	0.4
Mendocino	19	0.9
Merced	29	1.4
Modoc	6	0.3
Mono	7	0.3
Monterey	38	1.9
Napa	22	1.1
Nevada	19	0.9

County	Frequency	Percent
Orange	103	5.1%
Placer	29	1.4
Plumas	9	0.4
Riverside	75	3.7
Sacramento	68	3.4
San Benito	14	0.7
San Bernardino	80	4.0
San Diego	104	5.2
San Francisco	55	2.7
San Joaquin	46	2.3
San Luis Obispo	30	1.5
San Mateo	53	2.6
Santa Barbara	39	1.9
Santa Clara	80	4.0
Santa Cruz	31	1.5
Shasta	26	1.3
Sierra	4	0.2
Siskiyou	14	0.7
Solano	39	1.9
Sonoma	42	2.1
Stanislaus	41	2.0
Sutter	17	0.8
Tehama	16	0.8
Trinity	7	0.3
Tulare	38	1.9
Tuolumne	14	0.7
Ventura	54	2.7
Yolo	25	1.2
Yuba	16	0.8
	2,010	100.0%

Source: CIC Research, Inc., 1997.

Table C-2
TELEPHONE SURVEY CALL RESULT SUMMARY

	Number	Percent
Not in service	3,056	9.8%
Business	1,712	5.5
No good (language, etc.)	754	2.4
No answer	10,562	33.9
Refusal	2,500	8.0
Answering Machine	6,174	19.8
Call Backs	2,301	7.4
Terminates	268	1.0
Busy	1,781	5.7
Completes	2,010	6.5
Total	31,118	100.0%

Source: CIC Research, Inc., 1997.

A follow-up postcard (for English-speaking respondents) and a follow-up questionnaire (for Spanish-speaking respondents) was thus sent to those who had not returned their questionnaires by the two week cutoff date. Four weeks after the follow-up postcard/questionnaire, the final cutoff date was made. A total of 803 questionnaires were returned by the cut-off date reflecting a 53.3 percent response rate for the mail survey, up from 40.0 percent for the 1992 study. These respondents were made up of 81 Hispanics (Mexican-American and other Hispanic groups), 696 respondents from other ethnic groups, and 26 respondents who refused to give their ethnic background.

Code Book Development

The 1992 survey effort along with the first responses to each questionnaire provided the foundation for the 1997 codebook. The devel-

oped codebooks defined numerical codes for all questions in each survey including open-ended responses. Questionnaires were marked with an identification code; once they had been computerized, mail surveys could be matched up with the corresponding telephone survey (i.e., the same respondent). This enabled various analyses and crosstabulations to be performed.

Analysis

Once the data had been quality assured, descriptive statistics were computed using SPSS/PC for the entire telephone and mail questionnaire responses. The survey design permitted complete control over nonrespondents to the mail portion of the survey. Essentially, the survey characteristics of those individuals who only responded to the telephone survey (i.e., declined to participate in

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the mail survey or agreed to participate but did not respond) were compared to individuals who responded to both the telephone and the mail surveys. In general, the characteristics of the two groups were fairly similar.

In addition, survey responses were compared to published information. Two major discrepancies were found between survey respondents and the published figures: the survey's distribution of education and of ethnicity differed from published sources.² As a consequence, SPSS/PC was used to weight the survey dataset to reflect California's distribution of education. By weighting the data by this variable, ethnicity variations were accounted for. In this sense, the weighted survey dataset reflects the opinions of adult Californians on a statewide basis.

The survey data was analyzed in unweighted and weighted configurations. The unweighted data may be found in Appendices A and B. The weighted findings may be found in the Findings, page 22, 23, and 24. In addition, a number of crosstabulations of the data were run. Crosstabulation categories included sex of respondent, coastal vs. noncoastal county, educational levels, income categories, and family type. These crosstabulations are submitted separately along with a floppy diskette containing the data in a DBF file format.

RECOMMENDED METHODOLOGICAL CHANGES AND SCOPE OF WORK CHANGES

A number of methodological changes are recommended should a similar study be conducted in the future.

First, the respondent burden for the mail questionnaire may have been too burdensome. A four-page legal-size document with relatively small print may have deterred response. The length of the mail questionnaire appears formidable.

Second, the change in the follow-up to the mail survey from a second mailing of the questionnaire (1992) to a reminder postcard (1997) improved the response rate to the mail survey. It is recommended that this means of follow-up be continued in the future.

Third, future studies should continue to include a color insert with the mail survey that visually shows incentive.

Fourth, all surveys were conducted in a relatively brief period of time. As a consequence, seasonal variations in responses cannot be identified. Future studies might consider conducting the survey over time to determine if seasonal response variability exists. It should be noted that the 1992 study was conducted in spring, whereas the 1997 study was conducted in summer. This may have had some impact on results.

² *U.S. Census, Summary of Population and Housing Characteristics, 1990 (education data) and Estimated 1997 (ethnicity data).*

APPENDIX D

DEMOGRAPHIC DETAILS

(Type of household, number of people in the household,
income, education, ethnicity)

AND CROSSTABULATIONS³

(Selected characteristics by income, education,
type of household, gender, coastal vs. non-coastal counties)

³ A crosstabulation is a table showing the joint value of two or more characteristics.

This Appendix summarizes the demographics of the survey respondents after the data has been weighted for education. In addition, selected crosstabulations are provided for demographic variables. Specifically, crosstabulations are tables that show the joint distribution of two or more variables that have distinct values. For example, the average number of days for each outdoor activity could be tabulated by gender.

GENERAL PROFILE

Respondents were asked how they generally get information about public parks, recreation areas and facilities. Table D-1 summa-

rizes the responses similar to results from the 1992 study. The most prevalent sources of information noted for the 1997 study were friends and family (34.0%), followed by maps (21.2%). Government agency brochures increased three-fold from 3.2 percent in 1992 to 10.7 percent in 1997.

Table D-2 and Table D-3 provide insight to the composition of the households in the survey. The proportion of couples without children under 18 at home dropped from 25.0 percent in the 1992 study to 18.7 percent in 1997. The average number of individuals per household remained at 3.2 for both the 1992 and 1997 studies.

Table D-1
HOW INFORMATION IS OBTAINED

Category	Percent
Friends and family	34.0%
Maps	21.2
TV	11.3
Government agency brochures	10.7
Other	10.4
Any private organization's newsletter	7.5
Radio	4.9
TOTAL	100.0%

Source: CIC Research, Inc., 1997.

Table D-2
TYPE OF HOUSEHOLD

Category	Percent
Single person(s), no children under 18 at home	18.9%
Couple, no children under 18 at home	18.7
Single person(s), with children under 18 at home	7.9
Couple with children under 18 at home	41.7
More than two adults	12.8
Total	100.0%

Source: CIC Research, Inc., 1997.

Table D-3
**DISTRIBUTION OF NUMBER OF PEOPLE
 IN HOUSEHOLD**

Number of People	Percent
1	12.9%
2	28.8
3	16.6
4	19.3
5	12.1
6	5.8
7 or more	4.5
Total	100.0%

Source: CIC Research, Inc., 1997.

Tables D-4, D-5, and D-6 present the survey's distribution of income, education, and ethnicity. The median income for the actual 1997 survey respondents (unweighted) was calculated at \$42,172, which is similar to the median calculated from the 1997 Estimated Census data (\$45,515). The survey education categories were weighted to match the 1990 Census, Population and Housing Characteristics. Once weighted by education, the ethnic distribution of households fell in line with that of the Census.

Table D-4

INCOME DISTRIBUTION

Category	Percent
Under \$10,000	10.8%
\$10,000 to \$19,999	17.0
\$20,000 to \$29,999	15.8
\$30,000 to \$39,999	12.9
\$40,000 to \$49,999	10.3
\$50,000 to \$74,999	17.9
\$75,000 or over	15.3
Total	100.0%

Source: CIC Research, Inc., 1997.

Table D-5

EDUCATIONAL DISTRIBUTION

Category	Percent
Less than high school graduate	23.7%
High school graduate	22.3
Some college/technical training	22.6
College graduates	23.3
Graduate degree	8.1
Total	100.0%

Source: CIC Research, Inc., 1997.

Table D-6

DISTRIBUTION OF ETHNICITY

Category	Percent
Mexican/American and other Hispanic	26.3%
Caucasian/White	56.2
Black	3.1
Asian	2.7
American Indian	1.2
Other	10.5
Total	100.0%

Source: CIC Research, Inc., 1997.

DEMOGRAPHIC CROSSTABULATIONS

Crosstabulations of the survey dataset were performed by key demographic variables such as income, education, type of household, respondent gender and coastal vs. noncoastal counties. The value of crosstabulation is to determine if a systematic difference exists by different demographic characteristics. For example, a crosstabulation by income permits one to determine if the behavior and opinion of higher income households differs from lower income households. The following tables highlights were significant differences were found in demographic crosstabulations. The size of these tables indicate that there are not that many differences that can be associated with demographics. On the whole, Californians appear to be very homogeneous in their opinions and attitudes regardless of demographics when parks and recreation are considered.

Income

Table D-7 provides selected characteristics related to income levels. As for the 1992 study, the 1997 table indicates the proportion of single individuals with no youth diminish as incomes rise. The proportion of Mexican-Americans and other Hispanics also tend to fall with increasing income levels. The strong connection between income and education, is also evident. Average days of jogging and running tends to increase with income levels. Not too surprisingly, activities such as horseback riding, golf and skiing also rise with income. Apparently, the lower income levels are spending less time outdoors compared to five years ago and visiting fewer outdoor recreation areas, than are the higher income categories. Higher income categories tend to be less in

agreement than lower income categories that recreational programs and facilities should be increased for special populations (elderly, poor, disabled, etc...), and that there should be better regulations of behavior in parks and recreation areas, and that there should be more hotels/restaurants/shops in public parks and recreation areas.

Education

A number of characteristics vary by educational levels. As Table D-8 indicates consistent with results from the income crosstabulation, the portion of Mexican-Americans and Other Hispanics tend to fall as the level of education increases. In addition, the proportion of individuals who believe that recreational areas and facilities today are better than five years ago falls as education rises. The same is true for satisfaction with outdoor areas. In addition, a smaller proportion of more educated individuals than lower educated individuals, strongly approve of many of the changes suggested for park and recreation facilities and services. A number of activities tend to increase with educational levels including walking, jobbing, soccer, and swimming in outdoor pools.

The proportion of individuals to whom meeting new people, being with family and friends and doing things the children enjoy, is very important to the enjoyment of the activity, decreases with education. This is true also for the proportion of individuals who do not visit natural undeveloped areas, historical/cultural buildings and private outdoor recreation areas. Similarly, the more educated the individual, the less they agree with the statement that "recreation areas and facilities attract undesirable people".

Table D-7

SELECTED CHARACTERISTICS BY INCOME LEVELS

Category		\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	\$75,000
		to \$19,999	to \$29,999	to \$39,999	to \$49,999	to \$74,999	and over
Single with no youth (%)	25.3	21.3	22.4	21.1	18.7	13.5	10.9
Mexican-American (%)	50.0	43.3	35.2	20.1	8.4	5.6	4.5
Less than high school graduate (%)	60.7	48.9	35.5	16.3	4.8	4.8	—
College graduate (%)	5.2	9.9	13.7	21.6	28.3	35.3	47.0
Average number of days jogging and running	3.5	14.9	20.1	10.7	16.7	14.5	32.3
Average number of days horseback riding	0.2	2.8	2.2	2.3	11.5	2.0	3.0
Average number of days playing softball and baseball	1.4	3.6	4.0	7.4	6.4	7.1	8.0
Average number of days of golf	1.5	0.3	3.4	2.6	9.8	8.3	9.6
Average number of days of downhill skiing	0.6	0.2	0.6	1.0	1.1	2.5	3.0
Less time spent outdoors than 5 years ago (%)	47.1	41.7	39.1	30.3	36.4	28.8	30.6
Very satisfied with outdoor areas (%)	41.5	40.0	36.0	30.0	17.1	15.8	22.1
Moderately or strongly agree that recreational programs or facilities for special populations should be increased (%).	62.5	87.1	74.8	60.2	56.9	49.0	40.8
Moderately or strongly agree that there should be better regulation of behavior in parks and recreation areas (%).	76.9	75.9	77.9	69.2	62.0	55.6	54.8
Strongly approve in providing more hotels / restaurants/shops in public parks and recreation areas (%).	20.5	20.0	2.6	9.0	12.7	4.8	3.9
Do not visit private outdoor recreation areas (%).	51.4	41.0	33.0	28.9	21.1	14.0	12.5

Source: CIC Research, Inc., 1997.

Table D-8
SELECTED CHARACTERISTICS BY EDUCATION

	Less Than High School	High School Graduate	Some College/ Technical	College Graduate	Graduate Degree
Mexican-American (%)	64.4	12.7	10.0	4.9	3.3
Other Hispanic (%)	10.4	4.6	2.1	1.1	1.3
Compare public recreation areas and facilities today with 5 years ago (%)					
Better than	48.1	36.2	31.4	24.4	22.4
Same as	27.6	35.0	40.0	40.5	38.8
Not as good as	21.9	25.1	26.7	27.8	29.9
Very satisfied with outdoor areas (%)	44.4	28.3	19.9	20.9	16.4
Strongly approve of:					
More simple campgrounds with tables (%)	61.9	40.5	26.9	27.6	27.4
More developed campgrounds (%)	57.4	39.9	24.6	25.7	24.7
More local community parks (%)	67.6	42.9	30.1	34.4	38.9
More commercial hotels/ restaurants/shops	34.6	12.0	6.3	5.5	5.5
Stronger enforcement of laws dealing with use and behavior in parks and recreation areas (%)	57.4	46.2	34.9	35.2	32.4
More areas for use of off-road vehicles (%)	34.3	22.8	15.9	12.0	4.2
More RV sewage dump stations (%)	57.4	22.8	15.9	7.8	10.8
More picnic sites for large groups (%)	57.9	23.4	13.1	9.6	6.8
More parking areas at picnic sites (%)	65.7	25.3	14.2	12.8	11.0
Average number of days walking	34.9	65.4	83.9	85.3	91.1
Average number of days jogging	15.4	10.6	9.9	25.0	23.9
Average number of days of soccer	3.8	3.6	2.8	5.7	5.0
Average number of days swimming in outdoor pools	13.3	12.7	15.1	19.6	18.6
Meeting new people - very important to enjoyment of activity (%)	36.6	23.6	21.1	14.8	7.2
Being with family and friends - very important to the enjoyment of activity (%)	75.5	81.4	72.3	66.4	50.7
Doing things the children enjoy - very important to enjoyment of activity (%)	88.5	71.1	63.1	48.7	52.3
Do not visit natural undeveloped areas (%)	17.2	11.1	6.4	8.3	5.4
Do not visit historical/cultural buildings (%)	33.3	13.0	9.9	8.7	1.4
Do not visit private outdoor recreation areas (%)	50.0	27.7	24.6	16.6	17.6
Moderately or strongly agree that recreation areas and facilities attract undesirable people (%)	32.4	25.5	20.3	17.8	15.1

Source: CIC Research, Inc., 1997.

Type of Household

Table D-9 identified differences associated with the type of households. In essence, households with youth appear to be more alike than non-youth households. The proportion of Mexican-American households with children is higher than that without. The opposite is true for white households. While households with youth average fewer days of trail hiking, and downhill skiing, they average a greater number of days for softball/baseball, basketball, mountain climbing and use of play equipment. Needless to say, doing things for youth in the outdoors tends to be very high. Households with children are less likely to agree, than households without children, that there are sufficient convenient outdoor recreation areas.

Respondent's Gender

Table D-10 identifies areas where gender may be an important consideration. Activity levels and opinions of men and women in California are much more alike than different. Men tend to average more days of bicycling and target shooting. Women are more likely than men to agree that recreational facilities and programs for special populations should be increased. They are also more likely than men to rank meeting new people "very important" to the enjoyment of an activity, and to strongly support increasing the tax on alcoholic beverages.

Table D-9

SELECTED CHARACTERISTICS BY TYPE OF HOUSEHOLD

Category	Single No Children	Couple No Children	Single With Children	Couple With Children	More Than Two Adults
Mexican-American (%)	6.9	6.4	22.9	36.5	18.3
White (%)	74.2	79.0	48.4	41.5	51.5
Average days of trail hiking	13.6	17.2	9.0	8.0	12.6
Average days of downhill skiing	1.7	2.4	0.6	1.0	1.2
Average days of softball and baseball	2.4	1.7	8.7	10.1	9.3
Average days of basketball	1.8	1.6	12.1	7.9	6.4
Average days of mountain climbing	0.4	0.3	1.1	2.2	0.6
Average days of use of play equipment	3.5	3.4	23.4	18.4	9.5
Moderately or strongly agree there are enough convenient outdoor recreation areas (%)	27.3	25.7	9.3	13.4	17.8

Source: CIC Research, Inc., 1997.

Table D-10

SELECTED CHARACTERISTICS BY GENDER OF RESPONDENT

Category	Male	Female
Average number of days bicycling	55.0	39.2
Average number of days target shooting	20.6	9.3
Moderately or strongly agree that recreational facilities and programs for special populations should be increased (%)	52.8	64.3
Meeting new people very important to enjoyment of activity (%)	16.8	22.5
Strongly support increasing the tax on alcoholic beverages (%)	46.1	59.9

Source: CIC Research, Inc., 1997.

Coastal vs. Non-Coastal

Table D-11 compares Californians living in coastal counties vs. non-coastal counties. In general, individuals in coastal counties make greater use of coastal activities such as beach activities and surfing, whereas individuals in non-coastal counties tend to average more days of bicycling, horseback riding and soccer. However, most of the geographical differences between Californians appear to be somewhat minor. Individuals in coastal counties are more

likely to agree, than those in non-coastal counties that move outdoor recreation areas/facilities are needed in or near large cities. They are also more likely to approve of developing more local community parks, an increase in the number of wilderness type areas and providing more open space in urban areas. Not surprisingly, individuals in non-coastal counties are more likely than those in coastal counties, to approve of providing more areas for legal use of off-road vehicles.

Table D-11

SELECTED CHARACTERISTICS BY COASTAL VS. NON-COASTAL COUNTIES

Category	Coastal County	Non-Coastal County
Average days of bicycling	39.1	52.3
Average days of horseback riding	17.7	39.3
Average days of playing soccer	19.5	38.3
Average days of beach activities	24.7	16.3
Average days of surfing	35.6	7.4
Moderately or strongly agree that more outdoor recreation areas/facilities are needed in or near large cities (%)	73.4	63.3
Moderately or strongly approve of developing more local community parks (%)	82.9	73.8
Moderate or strongly approve of providing more areas for legal use of off-road vehicles (%)	32.2	41.0
Moderately or strongly approve of an increase in the number of wilderness type areas (%)	74.5	65.4
Moderately or strongly approve of providing more open space in urban areas (%)	74.6	58.4

Source: CIC Research, Inc., 1997.

APPENDIX E

REFERENCES: RECREATION TRENDS ANALYSIS

References: Recreation trends analysis

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