

# Factors Related to Beach Use

Irving A. Spaulding

Sea Grant



University of Rhode Island  
Marine Technical Report Series  
Number 13

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# **Factors Related to Beach Use**

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## Abstract

Users of a relatively isolated Rhode Island beach, referred to as "Sand Beach" in this report, were interviewed on site. We sought to determine selected characteristics of these people and the benefits they received from using Sand Beach.

About half of the groups of Sand Beach users were family groups; about half of the non-family groups were male and female. All-female groups were more numerous than all-male ones, but males on the beach alone were more numerous than females alone. While ages of individuals ranged from less than one year to between 70 and 79 years, groups in which the average age of members was from 20 to 22 years were most numerous. User households represented high, middle and low status.

Among reasons for going to a beach, weather and personal feelings ranked high with the latter also ranking high as a factor encouraging beach use. Work and time were seen as the most prevalent factors limiting beach use.

Most of the persons interviewed were residents of Rhode Island; among out-of-state users, those from Connecticut were most numerous. Users tended to travel either less than 12 miles or between 28 and 42 miles to reach Sand Beach with an interval of from 30 to 90 minutes mentioned most frequently as the amount of time used in travelling there. Most persons arrived at the beach between 9:00 a.m. and noon, although about two-fifths arrived between noon and 3:00 p.m.

Nearly all of the informants had used Sand Beach previously. Relatively few, however, used it daily. Not knowing about it was the reason given

most frequently by those who had not used this beach previously. Among reasons given for coming to Sand Beach, the lack of crowds was reported most frequently.

Experiencing the solitude of the setting, involvement with the natural environment, and the sensations experienced while in this setting were cited most frequently as the greatest benefits received from use of this beach.

These factors could appropriately be considered in making decisions relevant to beach management.

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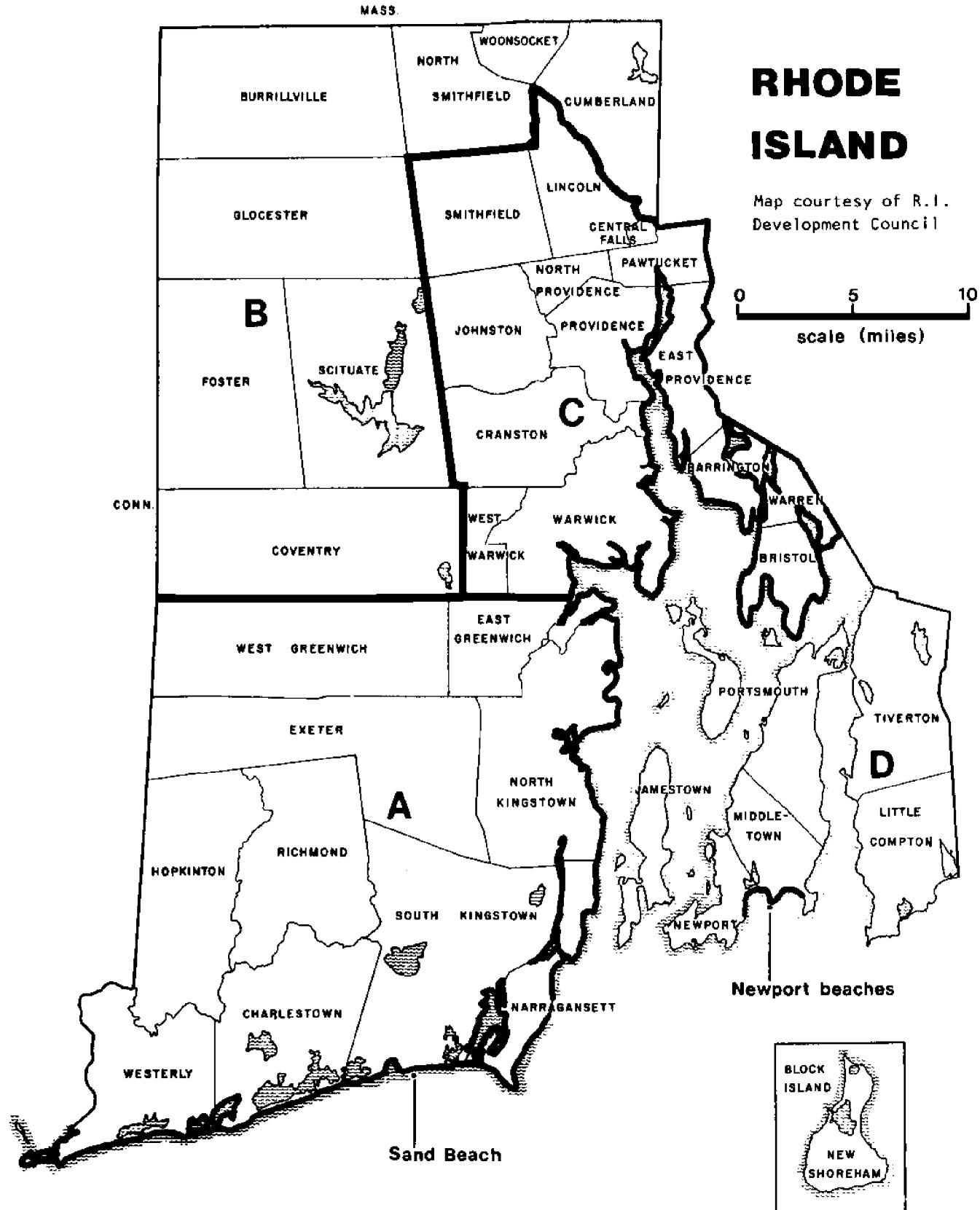
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# RHODE ISLAND

Map courtesy of R.I.  
Development Council

0 5 10  
scale (miles)



*In-state areas from which Sand Beach users came included (A) southern Rhode Island, (B) northern Rhode Island, (C) the Providence Metropolitan Area and (D) eastern Rhode Island.*

## Introduction

This study examines factors associated with beach use as a marine-oriented recreational activity. The beach selected for study is on the Rhode Island south shore and is characterized by only a slight, recent degree of commercialization and an environment both "natural" and "remote." A parking fee, charged non-residents of the town having jurisdiction over the beach, is the extent of commercialization; there are no concessions in the area. The beach faces open ocean and extends several miles on each side of the municipally-owned area; behind it are saltwater ponds and marsh areas which provide a swimming area, indigenous vegetation, and a refuge for wildlife. Aside from one summer cottage, the nearest dwellings and buildings are no closer than one mile to the beach entrance, the last few hundred yards of which have to be traversed on foot. These characteristics all contribute to the natural and remote beach environment. In this report, the beach is referred to as "Sand Beach."

Data were collected on 31 successive days during July, 1972, in interviews with beach users. Inter-

viewing was done with a deliberate effort to cover uniform time intervals (8:00 a.m.-8:00 p.m.), irrespective of weather conditions.

We attempted to select informants representing family groups with children of varying ages, non-family groups of peers, other combinations of persons, and people alone at the beach. In a group which had driven to the beach in an automobile or on a motorcycle, the person who was driving the vehicle when the group reached the beach was requested to give an interview. If the group had walked to the beach or had used two or more motorcycles or bicycles in coming, the person who seemed to be group leader was asked to give an interview.

Usually, after their initial enthusiasm upon reaching the beach had been given vent in the form of walks along the beach, swimming, playing ball, throwing Frisbees, or sculpting sand, groups were approached by interviewers. Refusals were infrequent, and 400 interviews were secured. Interviewing was done by the principal investigator and a graduate student in sociology. Data are reported here in the following chapters.



# The People

## Group size

"Groups" in this study ranged in size from one person to nine or more. Most of them had from two to five members. Almost half, 44.5 percent, of the 400 considered were combinations of two people. Combinations of three, four and five persons accounted for 13.5 percent, 14.5 percent, and 10.0 percent, respectively, of the groups. The range from two to five persons accounted for 82.5 percent of the 400 groups.

No other combination of people accounted for as much as 10.0 percent of the total number of groups; among these, however, table 1 shows that persons alone were more prevalent (8.8 percent) than combinations of six, seven, eight, nine or more persons. (See table 1.)

## Family and non-family groups

Slightly over half, 52.8 percent, of the groups studied were family groups; table 2A shows that other combinations of persons accounted for 47.2 percent. (See table 2A.)

### Family groups

Members of nuclear families (defined as one male, one female and their offspring) in varying combinations accounted for 56.8 percent of the family groupings. Among these, married couples were more prevalent than other combinations; parents with a child or children, however, ac-

counted for 19.0 percent of the family groups. One parent with a child or children comprised only 9.5 percent of the family groups, while combinations of brothers and/or sisters accounted for 1.8 percent of them. Nuclear family members with friends accounted for 26.1 percent of the family groups.

Extended family combinations (two or three generations and/or combinations of uncles, aunts and cousins) accounted for only 15.2 percent of the family groups. Most of these, 12.3 percent, were combinations of adults (persons at least 18 years old) and children. Extended-family adults accounted for only 2.4 percent of the family groups while extended-family children comprised only 0.5 percent of them. Combinations of extended family members and friends accounted for only 1.9 percent of the family groups. (See table 2B.)

### Non-family groups

Non-family groups were of two types, either based on friendship or from an institutional base, such as a school, camp or church. Of the 189 non-family groups considered, only three were institutional groups. The remaining 186, all friendship groups, can be distinguished from each other on the basis of their sexual composition; some were all males, some all females, some had both sexes, and some were males or females alone. Groups of male-female composition accounted for more than one-half, 53.5 percent, of the non-family groups. All-female groups accounted for about one-fifth,

**Table 1.** Number of persons in groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Groups  | Number of Persons |      |      |      |      |     |     |     |     |       |
|---------|-------------------|------|------|------|------|-----|-----|-----|-----|-------|
|         | 1                 | 2    | 3    | 4    | 5    | 6   | 7   | 8   | 9   | Total |
| Number  | 35                | 178  | 54   | 58   | 40   | 14  | 12  | 5   | 4   | 400   |
| Percent | 8.8               | 44.5 | 13.5 | 14.5 | 10.0 | 3.5 | 3.0 | 1.2 | 1.0 | 100.0 |

**Table 2A.** Family and non-family groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

|            | Groups |         |
|------------|--------|---------|
|            | Number | Percent |
| Family     | 211    | 52.8    |
| Non-family | 189    | 47.2    |
| TOTAL      | 400    | 100.0   |

**Table 2B.** Composition of family groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Composition                 | Family Groups |         |
|-----------------------------|---------------|---------|
|                             | Number        | Percent |
| A parent and child(ren)     | 20            | 9.5     |
| Parents and child(ren)      | 40            | 19.0    |
| Married couple              | 56            | 26.5    |
| Siblings                    | 4             | 1.8     |
| Extended family:            |               |         |
| Adults and children         | 28            | 12.3    |
| Adults only                 | 5             | 2.4     |
| Children only               | 1             | 0.5     |
| Nuclear family and friends  | 55            | 26.1    |
| Extended family and friends | 4             | 1.9     |
| TOTAL                       | 211           | 100.0   |

19.1 percent, while all-male groups accounted for 7.5 percent of them. Males alone accounted for 10.7 percent, while females at the beach alone accounted for 7.5 percent. (See table 2C.)

### Ages

#### Average ages

Average ages of persons in groups ranged from less than 14 years to more than 31 years. Groups in which the average age of members was from 20 to 22 years were more numerous (27.5 percent) than other groups. The average ages tended to concentrate in the range between 17 and 25 years, accounting for 59.5 percent of the 400 groups. The only other age range which accounted for more than 10.0 percent of the groups was the open-ended range of 32 years or more. Average ages of less than 14 years were least numerous, totalling 3.3 percent. (See table 3.)

#### Ages of oldest persons

The ages of the oldest persons in groups ranged from 14 years to 41 years or more. These ages tend to concentrate in the range from 20 to 28 years; this interval accounts for 49.8 percent of the 400 groups. The 20-22, 23-25, and 26-28 year intervals accounted for 22.5 percent, 15.8 percent, and 11.3 percent of the groups, in that sequence. Only one other age interval accounted for more than 10.0 percent of the groups; 19.5 percent of the groups had an oldest person of 41 years of age or older.

**Table 2C.** Composition of non-family groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Type and Composition | Non-family Groups |              |
|----------------------|-------------------|--------------|
|                      | Number            | Percent      |
| Friendship           |                   |              |
| Same Sex:            |                   |              |
| Male                 | 14                | 7.5          |
| Female               | 36                | 19.1         |
| Both sexes           | 101               | 53.5         |
| Male alone           | 21                | 10.7         |
| Female alone         | 14                | 7.5          |
| Institutional        | 3                 | 1.7          |
| <b>TOTAL</b>         | <b>189</b>        | <b>100.0</b> |

Oldest persons between 14 and 16 years were least numerous, totalling only 0.5 percent. (See table 4.)

#### Ages of youngest persons

The youngest persons in groups ranged in age from one year or less to 26 years or more. The greatest concentration was 17 years of age or older. The age categories from 17 to 25 years accounted for 47.4 percent of the groups; in sequence, the 17-19, 20-22, and 23-25 year intervals accounted for 17.3 percent, 20.0 percent and 10.1 percent of them. The open-ended interval of 26 years or more accounted for 16.0 percent. In age intervals for years under 17, each of which accounted for less than 10.0 percent of the groups, table 5 shows that the youngest persons between five and seven years old were least numerous (4.5 percent).

**Table 3.** Mean age of persons in groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Mean Age in Years | Groups     |              |
|-------------------|------------|--------------|
|                   | Number     | Percent      |
| 0-13              | 13         | 3.3          |
| 14-16             | 32         | 8.0          |
| 17-19             | 74         | 18.5         |
| 20-22             | 110        | 27.5         |
| 23-25             | 54         | 13.5         |
| 26-28             | 29         | 7.2          |
| 29-31             | 24         | 6.0          |
| 32 +              | 64         | 16.0         |
| <b>TOTAL</b>      | <b>400</b> | <b>100.0</b> |

**Table 4.** Age of oldest persons in groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Ages of Oldest Persons | Groups     |              |
|------------------------|------------|--------------|
|                        | Number     | Percent      |
| 14-16                  | 2          | 0.5          |
| 17-19                  | 31         | 7.8          |
| 20-22                  | 90         | 22.5         |
| 23-25                  | 63         | 15.8         |
| 26-28                  | 45         | 11.3         |
| 29-31                  | 29         | 7.3          |
| 32-34                  | 28         | 7.0          |
| 35-37                  | 13         | 3.3          |
| 38-40                  | 21         | 5.0          |
| 41 +                   | 78         | 19.5         |
| <b>TOTAL</b>           | <b>400</b> | <b>100.0</b> |

### Household social status

Information about the occupation and education of the head of each informant's household, along with annual household income, was used to construct a social status index (See Appendix A). These indices show that members of households of low and middle status were more prevalent than those from households of high status. Comparisons of the actual distribution with an arbitrary distribution of 100, 200, and 100 households suggest that the actual distribution is significantly different than chance distribution. (See table 6.)

**Table 5.** Age of youngest persons in groups using beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Ages of Youngest Persons | Groups     |              |
|--------------------------|------------|--------------|
|                          | Number     | Percent      |
| 1 year or less           | 23         | 5.8          |
| 2-4                      | 36         | 9.0          |
| 5-7                      | 18         | 4.5          |
| 8-10                     | 22         | 5.5          |
| 11-13                    | 20         | 5.0          |
| 14-16                    | 27         | 6.8          |
| 17-19                    | 69         | 17.3         |
| 20-22                    | 80         | 20.0         |
| 23-25                    | 41         | 10.1         |
| 26 +                     | 84         | 16.0         |
| <b>TOTAL</b>             | <b>400</b> | <b>100.0</b> |

### Summary

The people in this study of Sand Beach users tended to come to the beach in groups of from two to five people. Slightly over half, 52.8 percent, of these were family groups; 56.8 percent of the family groups were nuclear family members, while the remainder were extended family members. Friendship groups accounted for almost all of the non-family groups, and most of these, 53.5 percent, had both male and female members. The remainder were all-male or all-female groups or males or females alone at the beach.

**Table 6.** Social status of informants' households; 400 Sand Beach users in July, 1972, Rhode Island.

| Social Status Index | Households |              |
|---------------------|------------|--------------|
|                     | Number     | Percent      |
| 100-166 (low)       | 150        | 37.5         |
| 167-233 (middle)    | 159        | 39.8         |
| 234-300 (high)      | 91         | 22.7         |
| <b>TOTAL</b>        | <b>400</b> | <b>100.0</b> |

*This distribution differs significantly from a 100, 200, 100 distribution of households among the three status categories;  $\chi^2 = 34.22$ ;  $df = 2$ ;  $P < 0.001$ .*

## Factors Related to Beach Use

### Other summer leisure activities

Informants were asked questions about their summer activities other than going to a beach. Of 375 who furnished responses, only 10.1 percent indicated that they took part in no other activities. One or more other activities were reported by 80.8 percent of the informants; 17.3 percent indicated that they engaged in these activities more frequently than they went to a beach, while 40.8 percent said they took part in them less often than they went to a beach. A total of 22.7 percent took part in some more often than they went to a beach and in others less often. Equal frequency for beach use and other activities was reported by 8.3 percent of the 375 informants. (See table 7.)

### Reasons for going to a beach

In indicating how they happened to go to a beach on the day they were interviewed, rather than do something else, 71.5 percent of the informants gave a single reason for coming to a beach. The remainder, 28.50 percent, gave more than one reason. Classification of the single reasons and the first two given by other informants is shown in table 8. For informants giving only one reason, each of three reasons accounts for more than 10.00 percent of the 400 informants' answers: personal feelings, 15.25 percent; weather, 19.50 percent, and miscellaneous "other" reasons, 14.00 percent. For informants giving a pair of reasons, only one combination, personal feelings and weather, accounts

Table 7. Beach use and other summer leisure activities; 375 Sand Beach users in July, 1972, Rhode Island.

| Relationship between Beach Use and Other Summer Leisure Activities | Beach Users |              |
|--|-------------|--------------|
|  | Number      | Percent      |
| No activities other than beach use                                 | 38          | 10.1         |
| One activity or more:  |             |              |
| More frequently than beach use                                     | 65          | 17.3         |
| Less frequently than beach use                                     | 153         | 40.8         |
| More frequently than beach use and less frequently than beach use  | 85          | 22.7         |
| Equal frequency for beach use and other activities                 | 31          | 8.3          |
| Other  | 3           | 0.8          |
| <b>TOTAL</b>   | <b>375</b>  | <b>100.0</b> |

for more than 5.00 percent of the informants; the combination was reported by 5.75 percent. Two other combinations are relatively frequent: personal feelings and a break in work routine, 4.00 percent, and weather and a break in work routine, 3.75 percent.

The single reasons and pairs of reasons in combination can be arranged in a rank order derived from the frequency with which they are mentioned. (See appendix B.) Weather and personal feelings ranked highest with rank order indices of 680 and 630. The next approximate clustering is for miscellaneous "other" reasons, a break in work, and a planned event; in sequence these have indices of 375, 290 and 245. The third clustering is for interpersonal influences, repeated activity (routine and non-routine) and the nearness of the beach; in sequence, indices for these reasons are 120, 110, 85 and 35. These indices are interpreted as reflecting the relative importance of the reasons for the beach users studied. (See table 8.)

### Factors encouraging beach use

When asked about circumstances which encouraged and supported their use of beaches, 81.75 percent of the informants indicated one major factor while 18.25 percent indicated two or more. Classification of these single factors and reported first pairs is shown in table 9. Among single factors, four were mentioned by at least 10.00 percent of the informants; these are personal feelings, 23.00 percent; contrast from city, 12.50 percent; beach characteristics, 10.50 percent, and miscellaneous "other" factors, 10.75 percent. Among pairs of factors, none accounted for as many as 5.00 percent of the informants. In combination, personal feelings and contrast from the city accounted for 3.50 percent, while contrast from the city and beach characteristics accounted for 1.50 percent. Each of the other combinations accounted for 1.00 percent or less.

When single factors and pairs are studied in combination, personal feelings are seen as most prevalent, with a rank index of 620. Relatively, contrast from the city, beach characteristics, and miscellaneous "other" factors tend to cluster with rank indices of 385, 305, and 240. Weather and nearness to the beach cluster with indices of 215 and 205. Not having work, interpersonal influences, access to the beach, and a lack of fees to use the

**Table 8.** Reasons for going to a beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Reason Combinations | Reasons and Number and Percent for Beach Users |       |                                 |      |           |       |                   |      |                    |      |                      |      | TOTAL           |      |                 |      |      |       |       |       |
|---------------------|--|-------|---------------------------------|------|-----------|-------|-------------------|------|--------------------|------|----------------------|------|-----------------|------|-----------------|------|------|-------|-------|-------|
|                     | 1 Personal Feelings                            |       | 2 Influence of Family & Friends |      | 3 Weather |       | 4 Beach is Nearby |      | 5 Routine Activity |      | 6 Repeated Activity* |      | 7 Break in Work |      | 8 Planned Event |      |      |       |       |       |
|                     | No.  | %     | No.                             | %    | No.       | %     | No.               | %    | No.                | %    | No.                  | %    | No.             | %    | No.             | %    |      |       |       |       |
| One Reason Only     | 61   | 15.25 | 13                              | 3.25 | 78        | 19.50 | 3                 | 0.75 | 11                 | 2.75 | 8                    | 2.00 | 22              | 5.50 | 34              | 8.50 | 56   | 14.00 | 286   | 71.50 |
| Each Combined With: | 2  | 2     | 0.50                            | —    | —         | —     | —                 | —    | —                  | —    | —                    | —    | —               | —    | —               | —    | 2    | 0.50  |       |       |
|                     | 3  | 23    | 5.75                            | 3    | 0.75      | —     | —                 | —    | —                  | —    | —                    | —    | —               | —    | —               | —    | 26   | 6.50  |       |       |
|                     | 4  | 1     | 0.25                            | 0    | 0.00      | 0     | 0.00              | —    | —                  | —    | —                    | —    | —               | —    | —               | —    | 1    | 0.25  |       |       |
|                     | 5  | 5     | 1.25                            | 0    | 0.00      | 4     | 1.00              | 0    | 0.00               | —    | —                    | —    | —               | —    | —               | —    | 9    | 2.25  |       |       |
|                     | 6  | 6     | 1.50                            | 0    | 0.00      | 2     | 0.50              | 0    | 0.00               | 0    | 0.00                 | —    | —               | —    | —               | —    | 8    | 2.00  |       |       |
|                     | 7  | 16    | 4.00                            | 2    | 0.50      | 15    | 3.75              | 1    | 0.25               | 0    | 0.00                 | 1    | 0.25            | —    | —               | —    | 35   | 8.75  |       |       |
|                     | 8  | 5     | 1.25                            | 2    | 0.50      | 4     | 1.00              | 1    | 0.25               | 2    | 0.50                 | 0    | 0.00            | 0    | 0.00            | —    | 14   | 3.50  |       |       |
|                     | 9  | 7     | 1.75                            | 2    | 0.50      | 7     | 1.75              | 1    | 0.25               | 0    | 0.00                 | 0    | 0.00            | 1    | 0.25            | 1    | 0.25 | 19    | 4.75  |       |
|                     | TOTAL  | 126   | 31.50                           | 22   | 5.50      | 110   | 27.50             | 6    | 1.50               | 13   | 3.25                 | 9    | 2.25            | 23   | 5.75            | 35   | 8.75 | 56    | 14.00 | 400   |

\* Repeated, but not routine.

| Reason | Rank Index | Rank | Reasons by Rank and Index             |       |
|--------|------------|------|---------------------------------------|-------|
|        |            |      | 1—Weather                             | (880) |
| 1      | 630        | 2    | 2—Personal feelings                   | (630) |
| 2      | 120        | 6    | 3—Miscellaneous "other"               | (375) |
| 3      | 680        | 1    | 4—Break in work                       | (290) |
| 4      | 35         | 9    | 5—A planned event                     | (245) |
| 5      | 110        | 7    | 6—Interpersonal influences            | (120) |
| 6      | 85         | 8    | 7—Routine activity                    | (110) |
| 7      | 290        | 4    | 8—Repeated, but not routine, activity | (85)  |
| 8      | 245        | 5    | 9—Beach is nearby                     | (35)  |
| 9      | 375        | 3    |                                       |       |

beach, in sequence, had indices of 125, 120, 100, and 50. The indices are interpreted as reflecting the importance of these factors to the beach users studied. (See table 9.)

### Factors limiting beach use

In response to questions about factors limiting their use of beaches, 60.50 percent of the informants reported one major factor while 39.50 percent reported two or more. Classification of the single factors and first reported pairs is shown in table 10. The only single factor which accounted for 10.00 percent or more of the informants was work and time; 23.50 percent of the informants indicated that these limited their use of beaches. Among combinations of factors, only three accounted for 5.00 percent or more of the informants' responses. Distance to the beach, along with work and time, were reported by 7.00 percent of them; weather and work and time accounted for 6.75 percent of them. Transportation and traffic, com-

bined with work and time, accounted for 5.00 percent.

When the single factors and combinations are considered together, that of work and time is seen as the most prevalent factor with a rank index of 945. Distance to the beach is second most prevalent with an index of 475. Transportation and traffic, weather, and crowds tended to cluster with indices of 340, 325 and 285. Miscellaneous "other" reasons have an index of 170. Indices for all other limiting factors were less than 100; these range from 90 for costs to 10 for personal feelings. Indices reported here reflect the significance of the factors to the beach users studied. (See table 10.)

### Summary

Approximately 90.0 percent of 375 informants took part in other summer activities in addition to going to a beach. About 40.0 percent went to a beach more frequently than they took part in other activities; almost 20.0 percent went to a beach less frequently. Slightly over 20.0 percent engaged in

**Table 9. Factors encouraging beach use; 400 Sand Beach users in July, 1972, Rhode Island.**

| Factor Combinations | Factors and Number and Percent for Beach Users |        |                     |                                  |                     |        |                           |        |                      |        |           |      | TOTAL     |      |           |      |                         |       |          |         |            |
|---------------------|--|--------|---------------------|----------------------------------|---------------------|--------|---------------------------|--------|----------------------|--------|-----------|------|-----------|------|-----------|------|-------------------------|-------|----------|---------|------------|
|                     | 1 Interpersonal Influences                     |        | 2 Personal Feelings |                                  | 3 Nearness of Beach |        | 4 Access to Beach         |        | 5 Contrast from City |        | 6 No Cost |      | 7 No Work |      | 8 Weather |      | 9 Beach Characteristics |       | 10 Other |         |            |
|                     | No.  | %      | No.                 | %                                | No.                 | %      | No.                       | %      | No.                  | %      | No.       | %    | No.       | %    | No.       | %    | No.                     | %     | No.      | %       |            |
| One Factor Only     | 16   | 4.00   | 92                  | 23.00                            | 29                  | 7.25   | 14                        | 3.50   | 50                   | 12.50  | 3         | 0.75 | 13        | 3.25 | 25        | 6.25 | 42                      | 10.50 | 43       | 10.75   | 327 81.75  |
| Each Combined With: | 2  | 5 1.25 | —                   | —                                | —                   | —      | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 5 1.25  |            |
|                     | 3  | 1 0.25 | 0 0.00              | —                                | —                   | —      | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 1 0.25  |            |
|                     | 4  | 0 0.00 | 0 0.00              | 1 0.25                           | —                   | —      | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 1 0.25  |            |
|                     | 5  | 0 0.00 | 14 3.50             | 0 0.00                           | 0 0.00              | —      | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 14 3.50 |            |
|                     | 6  | 1 0.25 | 0 0.00              | 2 0.50                           | 1 0.25              | 1 0.25 | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 5 1.25  |            |
|                     | 7  | 0 0.00 | 2 0.50              | 2 0.50                           | 2 0.50              | 2 0.50 | —                         | —      | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 8 2.00  |            |
|                     | 8  | 0 0.00 | 5 1.25              | 2 0.50                           | 2 0.50              | 4 1.00 | 0 0.00                    | 3 0.75 | —                    | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 16 4.00 |            |
|                     | 9  | 0 0.00 | 6 1.50              | 2 0.50                           | 0 0.00              | 6 1.50 | 2 0.50                    | 1 0.25 | 1 0.25               | —      | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 18 4.50 |            |
|                     | 10   | 1 0.25 | 0 0.00              | 2 0.50                           | 0 0.00              | 0 0.00 | 0 0.00                    | 0 0.00 | 1 0.25               | 1 0.25 | —         | —    | —         | —    | —         | —    | —                       | —     | —        | 5 1.25  |            |
| TOTAL               | 24   | 6.00   | 119                 | 29.75                            | 40                  | 10.00  | 19                        | 4.75   | 83                   | 15.75  | 5         | 1.25 | 17        | 4.25 | 27        | 6.75 | 43                      | 10.75 | 43       | 10.75   | 400 100.00 |
|                     | Factors  |        | Rank Index          |                                  | Rank                |        | Factors by Rank and Index |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 1  | 120    | 8                   | 1—Personal feelings (620)        |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 2  | 620    | 1                   | 2—Contrast from city (385)       |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 3  | 205    | 6                   | 3—Beach characteristics (305)    |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 4  | 100    | 9                   | 4—Miscellaneous "other" (240)    |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 5  | 385    | 2                   | 5—Weather (215)                  |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 6  | 50     | 10                  | 6—Nearness of beach (205)        |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 7  | 125    | 7                   | 7—No work (125)                  |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 8  | 215    | 5                   | 8—Interpersonal influences (120) |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 9  | 305    | 3                   | 9—Access to beach (100)          |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |
|                     | 10   | 240    | 4                   | 10—No cost (50)                  |                     |        |                           |        |                      |        |           |      |           |      |           |      |                         |       |          |         |            |

some activities more frequently than they used a beach and took part in other activities less frequently. Only 10.0 percent indicated that they took part in no other activities.

Among reasons for going to a beach, users cited weather conditions and personal feelings most frequently. Having a break in work activity and planning the event were mentioned with intermediate frequency. Interpersonal influences, repeated activity and nearness of the beach were mentioned least frequently while miscellaneous reasons were mentioned with high frequency.

Among factors encouraging and supporting one's use of a beach, relative to other factors, personal feelings were mentioned with conspicuous frequency. The beach's contrast to the city and the beach's physical characteristics were mentioned with high frequency. Weather and nearness of the beach were intermediate, while lack of work, interpersonal influences, accessibility of the beach and lack of cost were mentioned least frequently.

Miscellaneous factors were mentioned with intermediate frequency.

Among factors limiting their beach use, informants cited work and time with conspicuous frequency. Relatively, distance to the beach was mentioned with high frequency, while transportation and traffic were mentioned with intermediate frequency. Weather and crowds at the beach were also mentioned with intermediate frequency. Costs, having no impediments to beach use, access to the beach, interpersonal influences and personal feelings were mentioned with low frequency.

For the informants studied, beach use is described as most critically contingent upon work and time, weather conditions and personal feelings. Distances, transportation and traffic, contrast between the city and the beach and the physical characteristics of the beach also influence beach use strongly. Costs, interpersonal influences and nearness and accessibility of a beach are among the least critical influences.

**Table 10.** Factors limiting beach use; 400 Sand Beach users in July, 1972, Rhode Island.

| Factor Combinations | Factors and Number and Percent for Beach Users |      |                     |                              |                     |       |                           |      |                         |       |         |      | TOTAL         |       |           |      |          |      |          |      |            |      |     |       |
|---------------------|--|------|---------------------|------------------------------|---------------------|-------|---------------------------|------|-------------------------|-------|---------|------|---------------|-------|-----------|------|----------|------|----------|------|------------|------|-----|-------|
|                     | 1 Inter-personal Influences                    |      | 2 Personal Feelings |                              | 3 Distance to Beach |       | 4 Access to Beach         |      | 5 Transport and Traffic |       | 6 Costs |      | 7 Work & Time |       | 8 Weather |      | 9 Crowds |      | 10 Other |      | 11 Nothing |      |     |       |
|                     | No.  | %    | No.                 | %                            | No.                 | %     | No.                       | %    | No.                     | %     | No.     | %    | No.           | %     | No.       | %    | No.      | %    | No.      | %    | No.        | %    | No. | %     |
| One Factor Only     | 1  | 0.25 | 0                   | 0.00                         | 37                  | 9.25  | 4                         | 1.00 | 19                      | 4.75  | 5       | 1.25 | 94            | 23.50 | 21        | 5.25 | 22       | 5.50 | 22       | 5.50 | 17         | 4.25 | 242 | 60.50 |
| Each Combined With: | 2  | 0    | 0.00                | —                            | —                   | —     | —                         | —    | —                       | —     | —       | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | 0   | 0.00  |
|                     | 3  | 0    | 0.00                | 0                            | 0.00                | —     | —                         | —    | —                       | —     | —       | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | 0   | 0.00  |
|                     | 4  | 0    | 0.00                | 0                            | 0.00                | 0     | 0.00                      | —    | —                       | —     | —       | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | 0   | 0.00  |
|                     | 5  | 1    | 0.25                | 0                            | 0.00                | 9     | 2.25                      | 1    | 0.25                    | —     | —       | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | 11  | 2.75  |
|                     | 6  | 0    | 0.00                | 0                            | 0.00                | 1     | 0.25                      | 0    | 0.00                    | 4     | 1.00    | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | 5   | 1.25  |
|                     | 7  | 1    | 0.25                | 0                            | 0.00                | 28    | 7.00                      | 3    | 0.75                    | 20    | 5.00    | 6    | 1.50          | —     | —         | —    | —        | —    | —        | —    | —          | —    | 58  | 14.50 |
|                     | 8  | 2    | 0.50                | 2                            | 0.50                | 8     | 2.00                      | 0    | 0.00                    | 3     | 0.75    | 0    | 0.00          | 27    | 6.75      | —    | —        | —    | —        | —    | —          | —    | 42  | 10.50 |
|                     | 9  | 0    | 0.00                | 0                            | 0.00                | 10    | 2.50                      | 0    | 0.00                    | 9     | 2.25    | 2    | 0.50          | 8     | 2.00      | 1    | 0.25     | —    | —        | —    | —          | —    | 30  | 7.50  |
|                     | 10   | 0    | 0.00                | 0                            | 0.00                | 2     | 0.50                      | 0    | 0.00                    | 2     | 0.50    | 0    | 0.00          | 2     | 0.50      | 1    | 0.25     | 5    | 1.25     | —    | —          | —    | 12  | 3.00  |
|                     | 11   | —    | —                   | —                            | —                   | —     | —                         | —    | —                       | —     | —       | —    | —             | —     | —         | —    | —        | —    | —        | —    | —          | —    | —   |       |
| TOTAL               | 5  | 1.25 | 2                   | 0.50                         | 95                  | 23.75 | 8                         | 2.00 | 57                      | 14.25 | 13      | 3.25 | 131           | 32.75 | 23        | 5.75 | 27       | 6.75 | 22       | 5.50 | 17         | 4.25 | 400 | 100.0 |
|                     | Factors  |      | Rank Index          |                              | Rank                |       | Factors by Rank and Index |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 1  | 25   | 10                  | 1—Work and time              | (945)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 2  | 10   | 11                  | 2—Distance to beach          | (475)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 3  | 475  | 2                   | 3—Transportation and traffic | (340)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 4  | 40   | 9                   | 4—Weather                    | (325)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 5  | 340  | 3                   | 5—Crowds                     | (285)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 6  | 90   | 7                   | 6—Miscellaneous "other"      | (170)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 7  | 945  | 1                   | 7—Costs                      | ( 90)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 8  | 325  | 4                   | 8—Nothing                    | ( 85)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 9  | 285  | 5                   | 9—Access to beach            | ( 40)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 10   | 170  | 6                   | 10—Interpersonal influences  | ( 25)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |
|                     | 11   | 85   | 8                   | 11—Personal feelings         | ( 10)               |       |                           |      |                         |       |         |      |               |       |           |      |          |      |          |      |            |      |     |       |

# Getting to Sand Beach

## Locational factors

### Informants' residences

Sand Beach is located in the town of South Kingstown; 21.6 percent of the beach users who were interviewed resided in South Kingstown. Located in the rest of Rhode Island were 45.6 percent of the people studied. Almost one-fifth, 17.1 percent, came from Connecticut, 9.1 percent came from Massachusetts and 6.6 percent came from other states. (See table 11.)

### Origins of the trips

Informants coming to Sand Beach tended to come from the southern part of Rhode Island (47.0 percent) and from the Providence Metropolitan area (28.5 percent). People starting their trip to the beach at an out-of-state location totalled 18.5 percent of the informants. From northern Rhode Island came 5.2 percent, while 0.8 percent came from eastern Rhode Island. (See table 12 and map.)

**Table 11.** Location of residence; 400 Sand Beach users in July, 1972, Rhode Island.

| Location of Residence | Beach Users |              |
|-----------------------|-------------|--------------|
|                       | Number      | Percent      |
| South Kingstown       | 86          | 21.6         |
| Other Rhode Island    | 182         | 45.6         |
| Connecticut           | 68          | 17.1         |
| Massachusetts         | 36          | 9.1          |
| Other states          | 28          | 6.6          |
| <b>TOTAL</b>          | <b>400</b>  | <b>100.0</b> |

**Table 12.** Location of origin of trip to beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Location of Origin    | Beach Users |              |
|-----------------------|-------------|--------------|
|                       | Number      | Percent      |
| Providence            |             |              |
| Metropolitan Area     | 114         | 28.5         |
| Northern Rhode Island | 21          | 5.2          |
| Southern Rhode Island | 188         | 47.0         |
| Eastern Rhode Island  | 3           | 0.8          |
| Out of state          | 74          | 18.5         |
| <b>TOTAL</b>          | <b>400</b>  | <b>100.0</b> |

### Distances travelled

Distances travelled ranged from less than one mile to 98 miles or more. Only one five-mile distance category (eight-to-twelve miles) accounted for as many as 20.5 percent of the informants; the three-to-seven-mile category accounted for 11.7 percent of them. Each other category accounted for less than 10.0 percent. In combination, the two distance categories mentioned above accounted for 32.9 percent of the informants. One other relative concentration of cases is for the distances between 28 and 42 miles; this 15-mile range accounted for 26.2 percent of the informants. A total of 58.4 percent of the informants fit into these two clusterings; the remainder were distributed variously throughout other distance categories. (See table 13.)

### Transportation

Vehicles used most frequently by informants to come to Sand Beach were middle-line automobiles manufactured in the United States; these were used

**Table 13.** Distances travelled to beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Distances (in miles)    | Beach Users |              |
|-------------------------|-------------|--------------|
|                         | Number      | Percent      |
| Less than 1             | 6           | 1.5          |
| 1- 2                    | 23          | 5.9          |
| 3- 7 ( 5 ) <sup>a</sup> | 47          | 11.7         |
| 8-12 (10)               | 82          | 20.5         |
| 13-17 (15)              | 13          | 3.2          |
| 18-22 (20)              | 17          | 4.2          |
| 23-27 (25)              | 14          | 3.6          |
| 28-32 (30)              | 39          | 9.7          |
| 33-37 (35)              | 34          | 8.5          |
| 38-42 (40)              | 32          | 8.0          |
| 43-47 (45)              | 6           | 1.5          |
| 48-52 (50)              | 24          | 6.1          |
| 53-57 (55)              | 4           | 0.9          |
| 58-62 (60)              | 9           | 2.3          |
| 63-67 (65)              | 1           | 0.3          |
| 68-72 (70)              | 12          | 3.0          |
| 73-77 (75)              | 1           | 0.3          |
| 78-82 (80)              | 10          | 2.5          |
| 83-87 (85)              | 6           | 1.5          |
| 88-92 (90)              | 3           | 0.8          |
| 93-97 (95)              | 0           | 0.0          |
| 98 or more              | 16          | 4.0          |
| <b>TOTAL</b>            | <b>400</b>  | <b>100.0</b> |

<sup>a</sup> Mid-points

by 48.0 percent of the informants. The next largest category of vehicles was foreign compact cars; these were used by 27.3 percent of the informants. Domestic low-line cars were used by 12.2 percent of them, while between 3.0 percent and 3.5 percent of them used domestic compacts, domestic top-line cars or vans or campers. About 2.0 percent (1.8 percent) walked to the beach and 0.7 percent used bicycles or motorcycles. (See table 14.)

### Time factors

#### Time travelled

Time used by informants in travelling to Sand Beach ranged from less than 30 minutes to between six and one-half to seven and one-half hours. Those using less than 30 minutes constituted 24.0 percent of the informants, while those using the latter amounts of time totalled 0.2 percent. On the other hand, well over one-half, 56.8 percent, used between 30 and 90 minutes to reach the beach. Between 90 minutes and two and one-half hours were used by 14.0 percent of them. Briefly, 94.8 percent of the informants used less than two and one-half hours to get to Sand Beach. (See table 15.)

#### Departure time

Over one-half of the informants, 56.5 percent, began their trip to Sand Beach between 9:00 a.m. and noon. About one-fourth of them, 23.8 percent, started between noon and 3:00 p.m., while 17.8 percent started between 6:00 and 9:00 a.m. None

started earlier than 3:00 a.m., but 0.2 percent started between 3:00 and 6:00 a.m. None started later than 6:00 p.m., and only 1.7 percent started between 3:00 and 6:00 p.m. (See table 16.)

#### Arrival time

Slightly more than one-half, 53.5 percent, of the informants arrived at Sand Beach between 9:00 a.m. and noon. Arriving between noon and 3:00 p.m. were 37.8 percent, while 6.0 percent arrived between 6:00 and 9:00 a.m. None had arrived either before 6:00 a.m. or after 6:00 p.m. (See table 17.)

#### Summary

Among informants, most, 67.2 percent, of the Sand Beach users were residents of Rhode Island; about two-thirds of these came from outside the town in which the beach was located. Among out-of-state users those from Connecticut were most numerous.

Most of the informants, 81.5 percent, started their trip to the beach on the day they were interviewed from a location within Rhode Island; almost one-half started in the southern part of the state, and almost one-third came from the Providence Metropolitan Area. Only 18.5 percent started their trip to the beach from a location out-of-state.

Distances travelled to reach the beach clustered in two ranges; one was between 3 and 12 miles, while the other was between 28 and 42 miles. The two clusterings accounted for 58.4 percent of the informants.

Table 14. Transportation to beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Beach Users           |            |              |
|-----------------------|------------|--------------|
| Transportation        | Number     | Percent      |
| Walked                | 7          | 1.8          |
| Compact car:          |            |              |
| Foreign               | 109        | 27.3         |
| Domestic              | 14         | 3.5          |
| Domestic cars:        |            |              |
| Low line              | 49         | 12.2         |
| Middle line           | 192        | 48.0         |
| Top line              | 14         | 3.5          |
| Camper or van         | 12         | 3.0          |
| Bicycle or motorcycle | 3          | 0.7          |
| <b>TOTAL</b>          | <b>400</b> | <b>100.0</b> |

Table 15. Time used in travelling to beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Time<br>(in hours)            | Beach Users |              |
|-------------------------------|-------------|--------------|
|                               | Number      | Percent      |
| Less than $\frac{1}{2}$ hour  | 96          | 24.0         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 227         | 56.8         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 56          | 14.0         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 15          | 3.8          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 3           | 0.7          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 2           | 0.5          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 0           | 0.0          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 1           | 0.2          |
| <b>TOTAL</b>                  | <b>400</b>  | <b>100.0</b> |

Cars used most frequently by informants were middle-line vehicles manufactured in the United States.

While 94.8 percent of the informants used less than two and one-half hours in getting to the beach, 80.8 percent used less than one and one-half hours and 24.0 percent used less than one-half hour.

**Table 16.** Departure time for trip to beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Departure Time | Beach Users |              |
|----------------|-------------|--------------|
|                | Number      | Percent      |
| 12 m. - 3 a.m. | 0           | 0.0          |
| 3 - 6 a.m.     | 1           | 0.2          |
| 6 - 9 a.m.     | 71          | 17.8         |
| 9 -12 n.       | 226         | 56.5         |
| 12 n. - 3 p.m. | 95          | 23.8         |
| 3 - 6 p.m.     | 7           | 1.7          |
| 6 - 9 p.m.     | 0           | 0.0          |
| 9 -12 m.       | 0           | 0.0          |
| <b>TOTAL</b>   | <b>400</b>  | <b>100.0</b> |

Most informants, 56.5 percent, started their trip to the beach between 9:00 a.m. and noon; most, 53.5 percent, arrived between those hours. Only 23.8 percent started between noon and 3:00 p.m., while 37.8 percent arrived during that interval.

**Table 17.** Arrival time at beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Arrival Time   | Beach Users |              |
|----------------|-------------|--------------|
|                | Number      | Percent      |
| 12 m. - 3 a.m. | 0           | 0.0          |
| 3 - 6 a.m.     | 0           | 0.0          |
| 6 - 9 a.m.     | 24          | 6.0          |
| 9 -12 n.       | 214         | 53.5         |
| 12 n. - 3 p.m. | 151         | 37.8         |
| 3 - 6 p.m.     | 11          | 2.7          |
| 6 - 9 p.m.     | 0           | 0.0          |
| 9 -12 m.       | 0           | 0.0          |
| <b>TOTAL</b>   | <b>400</b>  | <b>100.0</b> |

## Using Sand Beach

### Prior beach use and frequency

Of the 400 informants studied, 77.5 percent had used Sand Beach previously. (See table 18.)

With respect to their seasonal use of Sand Beach, 310 people gave information on a weekly, monthly, yearly, daily or non-seasonal basis. About one-third, 35.48 percent, of the 310 informants said they used the beach on a weekly basis; one-third, 32.26 percent, on a monthly basis; one-fifth, 20.32 percent, on a yearly basis, while 4.20 percent responded that they used it on a daily basis and 7.74 percent responded with a non-seasonal orientation.

For respondents using the beach on weekly, monthly, and yearly bases, the number indicating that they came once or twice is slightly greater than the number indicating that they came more frequently. Among informants using it on a weekly basis, those indicating that they came once or twice were 21.61 percent of the 310 considered; those coming more than twice were 13.87 percent. The difference between the two percentages is 7.74. Among monthly beach users, 18.39 percent came once or twice, while 13.87 percent came more frequently; the difference between these is 4.52. Yearly, 10.65 percent came once or twice and 9.67 percent came more frequently; for these percentages, the difference is 0.98.

These data indicate that during the interval in which about one-half, 50.65 percent, of the informants are using the beach one or two times, almost

all of the other half, 41.61 percent, are using it three or more times. The data given is an indication of the frequency of repetitious use of the beach. A relatively small proportion, 7.42 percent, reported using the beach once daily and more frequently than seven times a week; these, along with those who used the beach from three to six times per week accounted for 18.07 percent of the 310 informants.

Another suggestion of the relative transience of beach users is seen when those using the beach four, five, six and seven times per month are combined with those using it once a week; this indicates that 20.97 percent of the informants could be using the beach between once and twice a week. When those using it eight or nine times a month are combined with those using it twice a week, there is indication that 10.32 percent could be using the beach between two and three times a week. This suggests that about one-third, 31.29 percent, of the informants used the beach once or twice a week, while about one-fifth, 18.07 percent, used the beach three times a week or more; thus approximately one-half, 49.36 percent, used the beach at least once a week. The remainder use the beach in a manner which suggests a distribution of less than one time per week. (See table 19.) The above observations can be summarized as follows:

Table 18. Prior use of Sand Beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Prior Use | Beach Users |         |
|-----------|-------------|---------|
|           | Number      | Percent |
| Yes       | 310         | 77.5    |
| No        | 90          | 22.5    |

| Beach Use      |  | Percent of users |
|----------------|--|------------------|
| Times per week |  |                  |
| 7 or more      |  | 7.42             |
| 3 to 6         |  | 10.65            |
| 1 to 2         |  | 31.29            |
| Less than 1    |  | 50.64            |
| TOTAL          |  | 100.00           |

Table 19. Frequency of coming to Sand Beach; 310 prior users of Sand Beach, July, 1972, Rhode Island.

| Use Interval | Frequency, Number and Percent of Beach Users |       |     |       |     |      |     |      |     |      |     |        |
|--------------|--|-------|-----|-------|-----|------|-----|------|-----|------|-----|--------|
|              | No.  | %     | No. | %     | No. | %    | No. | %    | No. | %    | No. | %      |
| Week         | 38   | 12.26 | 29  | 9.35  | 23  | 7.42 | 7   | 2.26 | 3   | 0.97 | 0   | 0.00   |
| Month        | 14   | 4.52  | 43  | 13.87 | 13  | 4.19 | 17  | 5.48 | 5   | 1.61 | 3   | 0.97   |
| Year         | 19   | 6.13  | 14  | 4.52  | 17  | 5.48 | 4   | 1.29 | 4   | 1.29 | 0   | 0.00   |
| Daily        | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | 13     |
| Other        | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | 24     |
| TOTAL        | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | 310    |
|              |  |       |     |       |     |      |     |      |     |      |     | 100.00 |

On the whole, there are indications of a relatively few people who use the beach repetitiously with a high degree of frequency. The number of people using the beach increases as the frequency with which they use it decreases.

#### Reasons for previous non-use

Among the 90 informants who had not been to Sand Beach previously, a little over two-fifths, 44.4 percent, indicated they had not known of its existence. Being new in the locality and having family and friends who went elsewhere accounted, respectively, for 7.9 percent and 6.7 percent of these informants. Among additional reasons given, only a collection of general reasons accounted for more than 5.0 percent of the informants; these included characteristics which might have precluded any kind of recreational activity at a distance from one's residence: time, distance, traffic, transportation, and the availability and use of facilities near or at home. These accounted for 28.9 percent of the informants. The data indicate that a lack of knowledge about Sand Beach and general barriers to engaging in recreational activity at a distance from one's residence were the most prevalent reasons for not having used Sand Beach previously. (See table 20.)

#### Hours spent at Sand Beach

Most beach users indicated on the day they were interviewed that they would spend between one and one-half and five and one-half hours on the beach that day. Most, 28.8 percent of the 400 informants, indicated that they would spend approxi-

mately four hours on the beach; 20.8 percent indicated that they would spend approximately three hours there. About five hours was the length of time indicated by 14.7 percent of the informants, while approximately two hours was indicated by 14.0 percent. Shorter and longer intervals were indicated by the remaining informants; 4.0 percent said that they would be on the beach less than one and one-half hours, while 17.7 percent said that they would be on the beach between five and one-half and eight and one-half hours. (See table 21.)

#### Reasons for going to Sand Beach

When asked why they came to Sand Beach rather than another beach, 66.00 percent of the 400 informants gave only one reason; 34.00 percent gave two reasons or more. The single reasons and the first two given are classified in table 22. Only one single reason, the beach is not crowded, accounts for more than 10.00 percent of the informants' answers; 20.25 percent of the informants gave this single reason. For pairs of reasons, only two accounted for more than 5.00 percent of the answers; one of these, natural environment and lack of crowds, accounted for 5.75 percent of them, while having been to the beach before, along with lack of crowds there, accounted for 5.25 percent.

When the single reasons and combined reasons are considered together, other emphases become evident. Lack of crowding at the beach, with a rank index of 810, is shown to have the highest rank. Having been to Sand Beach before, with an index of 435, ranks second. For personal feelings the

**Table 20.** Reasons for not using Sand Beach previously; 90 Sand Beach users in July, 1972, Rhode Island.

| Reasons                           | Beach Users |              |
|-----------------------------------|-------------|--------------|
|                                   | Number      | Percent      |
| Did not know about it             | 40          | 44.4         |
| New in this locality              | 7           | 7.9          |
| Family and friends went elsewhere | 6           | 6.7          |
| Live out of state                 | 4           | 4.4          |
| Explore to locate beaches         | 3           | 3.3          |
| Not beach users                   | 2           | 2.2          |
| Thought it was a private beach    | 2           | 2.2          |
| Other                             | 26          | 28.9         |
| <b>TOTAL</b>                      | <b>90</b>   | <b>100.0</b> |

**Table 21.** Number of hours at beach on day interviewed; 400 Sand Beach users in July, 1972, Rhode Island.

| Hours                         | Beach Users |              |
|-------------------------------|-------------|--------------|
|                               | Number      | Percent      |
| Less than $\frac{1}{2}$ hour  | 6           | 1.5          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 10          | 2.5          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 56          | 14.0         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 83          | 20.8         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 115         | 28.8         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 59          | 14.7         |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 36          | 9.0          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 13          | 3.2          |
| $\frac{1}{2}$ - $\frac{1}{2}$ | 22          | 5.5          |
| <b>TOTAL</b>                  | <b>400</b>  | <b>100.0</b> |

index is 330, and for the fact that the beach was recommended it is 285. Miscellaneous other reasons and the natural environment tend to cluster, with indices of 220 and 210, respectively. Also similarly placed in the rank order are exploration of beaches, management policies, and nearness of the beach; in this sequence, the rank indices were 150, 135, and 100. These rankings, based on the frequency with which reasons were given, are interpreted as reflecting the relative importance of the reasons as bases for going to Sand Beach rather than to another beach. (See table 22.)

### Activities at Sand Beach

In indicating what they would do while at Sand Beach, 33.50 percent of the informants identified one type of activity; 66.50 percent identified two or more. Table 23 classifies the single activities and the first two identified. Among the 400 informants, 22.25 percent identified as their single activity a type of passivity, such as lying in the sand, getting a tan, resting or just "lying around." No other single activity accounted for as many as 10.00 percent of

the informants. For combinations of activities, passivity combined with walking, reading, or swimming. Each combination accounted for at least 5.00 percent of the informants; in sequence, the percentages were 5.25 percent, 7.25 percent and 29.00 percent.

Passive activities, with an index of 1395, have the highest rank; swimming, with an index of 875, ranks well below passive activities and above walking and reading, which have indices of 345 and 325, respectively. Miscellaneous other activities have an index of 205, while eating, talking, enjoying scenery and enjoying sounds all have indices of less than 100. Passive activities and swimming tend to be predominant, while walking, reading, and miscellaneous other activities have a secondary clustering in the rank order. Eating, talking, and enjoying scenery and sounds are least prevalent. (See table 23.)

### Greatest benefit from use of Sand Beach

Of the 400 informants, only 1.7 percent indicated that they were not impressed with Sand Beach or

**Table 22.** Reasons for coming to Sand Beach rather than another beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Combi-<br>nation of<br>Reasons | Reasons, Number and Percent of Beach Users |       |                          |       |                                |       |                       |      |                                  |      |                                 |       |                           |      |                                  |      |            |      |       |        |
|--------------------------------|--|-------|--------------------------|-------|--------------------------------|-------|-----------------------|------|----------------------------------|------|---------------------------------|-------|---------------------------|------|----------------------------------|------|------------|------|-------|--------|
|                                | 1<br>Personal<br>Feelings                  |       | 2<br>Been Here<br>Before |       | 3<br>Beach<br>Recom-<br>mended |       | 4<br>Explora-<br>tion |      | 5<br>Natural<br>Environ-<br>ment |      | 6<br>Beach<br>Is Not<br>Crowded |       | 7<br>Nearness<br>of Beach |      | 8<br>Manage-<br>ment<br>Policies |      | 9<br>Other |      | TOTAL |        |
|                                | No.  | %     | No.                      | %     | No.                            | %     | No.                   | %    | No.                              | %    | No.                             | %     | No.                       | %    | No.                              | %    | No.        | %    | No.   | %      |
| One<br>Reason<br>Only          | 26   | 6.50  | 38                       | 9.50  | 30                             | 7.50  | 20                    | 5.00 | 14                               | 3.50 | 81                              | 20.25 | 12                        | 3.00 | 12                               | 3.00 | 31         | 7.75 | 264   | 66.00  |
| Each<br>Combined<br>With:      | 2  | 15    | 3.75                     | —     | —                              | —     | —                     | —    | —                                | —    | —                               | —     | —                         | —    | —                                | —    | —          | —    | 15    | 3.75   |
|                                | 3  | 2     | 0.50                     | 5     | 1.25                           | —     | —                     | —    | —                                | —    | —                               | —     | —                         | —    | —                                | —    | —          | —    | 7     | 1.75   |
|                                | 4  | 1     | 0.25                     | 2     | 0.50                           | 5     | 1.25                  | —    | —                                | —    | —                               | —     | —                         | —    | —                                | —    | —          | —    | 8     | 2.00   |
|                                | 5  | 1     | 0.25                     | 3     | 0.75                           | 1     | 0.25                  | 0    | 0.00                             | —    | —                               | —     | —                         | —    | —                                | —    | —          | —    | 5     | 1.25   |
|                                | 6  | 13    | 3.25                     | 21    | 5.25                           | 10    | 2.50                  | 0    | 0.00                             | 23   | 5.75                            | —     | —                         | —    | —                                | —    | —          | —    | 67    | 16.75  |
|                                | 7  | 5     | 1.25                     | 0     | 0.00                           | 0     | 0.00                  | 0    | 0.00                             | 0    | 0.00                            | 1     | 0.25                      | —    | —                                | —    | —          | —    | 6     | 1.50   |
|                                | 8  | 2     | 0.50                     | 0     | 0.00                           | 3     | 0.75                  | 1    | 0.25                             | 0    | 0.00                            | 7     | 1.75                      | 2    | 0.50                             | —    | —          | —    | 15    | 3.75   |
|                                | 9  | 1     | 0.25                     | 3     | 0.75                           | 1     | 0.25                  | 1    | 0.25                             | 1    | 0.25                            | 6     | 1.50                      | 0    | 0.00                             | 0    | 0.00       | —    | 13    | 3.25   |
| TOTAL                          | 66   | 16.50 | 72                       | 18.00 | 50                             | 12.50 | 22                    | 5.50 | 38                               | 9.50 | 95                              | 23.75 | 14                        | 3.50 | 12                               | 3.00 | 31         | 7.75 | 400   | 100.00 |

| Reasons | Rank Index | Rank | Reasons by Rank and Index      |
|---------|------------|------|--------------------------------|
| 1       | 330        | 3    | 1—Beach is not crowded (810)   |
| 2       | 435        | 2    | 2—Been here before (435)       |
| 3       | 285        | 4    | 3—Personal feelings (330)      |
| 4       | 150        | 7    | 4—Beach recommended (285)      |
| 5       | 210        | 6    | 5—Other (220)                  |
| 6       | 810        | 1    | 6—Natural environment (210)    |
| 7       | 100        | 9    | 7—Exploration (150)            |
| 8       | 135        | 8    | 8—Policies of management (135) |
| 9       | 220        | 5    | 9—Nearness to beach (100)      |

received no benefit from it. Less than 1.0 percent made specific reference to change in location as the greatest benefit received from use of the beach. A total of 10.5 percent indicated that their greatest benefits were the activities in which they engaged, while another 10.8 percent indicated that for them the greatest benefit was in the size, cleanliness, and nearness of Sand Beach. Almost 30.0 percent (29.0 percent) indicated that for them the greatest benefit was in sensory experiences. In some cases these were specific, like feeling the sand or wind or hearing the waves; in others they were aesthetic—experiencing beauty or grandeur; in others, these experiences were oriented to values, such as freedom or independence. The largest proportion of informants, 44.8 percent, said they felt their greatest benefit to be in involvement with a natural environment. Among these informants, most indicated their appreciation of the solitude of the setting and their lack of involvement with people. Others liked "to be out with nature," or liked "to get into the water," or liked "to lie on the sand," but made no reference to specific sensory experience.

Over all, involvement with a natural environment and sensory experiences accounted for approximately 75.0 percent of the informants' indications of the greatest benefits they received from their use of Sand Beach. Their own activities and characteristics of the beach each accounted for about 10.0 percent of the responses from informants. The remaining indications were distributed primarily between miscellaneous other responses and indications that no benefit accrued from use of the beach. (See table 24.)

#### Characteristics of Sand Beach liked least

Informants were asked what they like least about coming to Sand Beach. Almost one-fifth, 18.0 percent, indicated that there was nothing they liked least. Slightly more than one-fifth, 22.7 percent, indicated that they cared least for the parking situation and problems, while approximately another one-fifth, 21.7 percent, cared least for the physical characteristics of the beach. Poor swimming was mentioned by 10.3 percent, and 9.4 percent mentioned the lack of concessions and other facilities. The actual trip to the beach was mentioned

**Table 23. Activities at beach; 400 Sand Beach users in July, 1972, Rhode Island.**

| Activity Combinations | Activities, Number and Percent of Beach Users |       |            |       |      |      |                              |      |               |       |                 |        |      |       |
|-----------------------|---|-------|------------|-------|------|------|------------------------------|------|---------------|-------|-----------------|--------|------|-------|
|                       | 1   |       | 2          |       | 3    |      | 4                            |      | 5             |       | 6               |        |      |       |
|                       | No.   | %     | No.        | %     | No.  | %    | No.                          | %    | No.           | %     | No.             | %      |      |       |
| One Activity Only     | 89  | 22.25 | 14         | 3.50  | 2    | 0.50 | 8                            | 1.50 | 0             | 0.00  | 0               | 0.00   |      |       |
| Each Combined With:   |   |       |            |       |      |      |                              |      |               |       |                 |        |      |       |
| 2                     | 21  | 5.25  | —          | —     | —    | —    | —                            | —    | —             | —     | —               | 21     | 5.25 |       |
| 3                     | 6   | 1.50  | 1          | 0.25  | —    | —    | —                            | —    | —             | —     | —               | 7      | 1.75 |       |
| 4                     | 29  | 7.25  | 4          | 1.00  | 3    | 0.75 | —                            | —    | —             | —     | —               | 36     | 9.00 |       |
| 5                     | 3   | 0.75  | 2          | 0.50  | 1    | 0.25 | 3                            | 0.75 | —             | —     | —               | 9      | 2.25 |       |
| 6                     | 2   | 0.50  | 1          | 0.25  | 0    | 0.00 | 1                            | 0.25 | 0             | 0.00  | —               | 4      | 1.00 |       |
| 7                     | 0   | 0.00  | 0          | 0.00  | 0    | 0.00 | 0                            | 0.00 | 0             | 0.00  | —               | 0      | 0.00 |       |
| 8                     | 116   | 29.00 | 18         | 4.50  | 1    | 0.25 | 17                           | 4.25 | 8             | 2.00  | 0               | 0.00   | 160  | 40.00 |
| 9                     | 13  | 3.25  | 8          | 2.00  | 0    | 0.00 | 2                            | 0.50 | 1             | 0.25  | 0               | 0.00   | 1    | 0.25  |
| TOTAL                 | 279   | 69.75 | 48         | 12.00 | 7    | 1.75 | 29                           | 7.25 | 9             | 2.25  | 0               | 0.00   | 15   | 3.75  |
|                       |   |       |            |       |      |      |                              |      |               |       |                 |        |      |       |
|                       | Activity                                      |       | Rank Index |       | Rank |      | Activities by Rank and Index |      |               |       |                 |        |      |       |
|                       | 1   | 1395  | 1          |       | 2    | 345  | 3                            | 3    | Walking       | (345) | 1—Passivity     | (1395) |      |       |
|                       | 2   | 345   | 3          |       | 3    | 70   | 7                            | 2    | Swimming      | (875) | 2—Swimming      | (875)  |      |       |
|                       | 3   | 70    | 7          |       | 4    | 325  | 4                            | 4    | Reading       | (325) | 3—Walking       | (345)  |      |       |
|                       | 4   | 325   | 4          |       | 5    | 90   | 6                            | 5    | Other         | (205) | 4—Reading       | (325)  |      |       |
|                       | 5   | 90    | 6          |       | 6    | 20   | 8                            | 6    | Eating        | (90)  | 5—Other         | (205)  |      |       |
|                       | 6   | 20    | 8          |       | 7    | 5    | 9                            | 7    | Talking       | (70)  | 6—Eating        | (90)   |      |       |
|                       | 7   | 5     | 9          |       | 8    | 875  | 2                            | 8    | Enjoy scenery | (20)  | 7—Talking       | (70)   |      |       |
|                       | 8   | 875   | 2          |       | 9    | 205  | 5                            | 9    | Enjoy sounds  | (5)   | 8—Enjoy scenery | (20)   |      |       |
|                       |   |       |            |       |      |      |                              |      |               |       | 9—Enjoy sounds  | (5)    |      |       |

by 7.2 percent, while weather was mentioned by only 1.2 percent of the informants. Miscellaneous other responses were given by 8.5 percent of them. (See table 25.)

### Using other beaches

#### Other beaches used

When informants were asked about the beaches which they used, 34.25 percent indicated that they used no other beach; 43.25 percent indicated that they used only one other beach, while 22.50 percent indicated that they used two or more other beaches. Classification of these beaches is shown in table 26, and their locations are suggested on the map. Informants who used one other beach tended to go to beaches on the west side of Narragansett Bay and to those on the southern shore of the state, both east and west of Sand Beach; each of these areas accounted for more than 10.00 per-

cent of the 400 informants. Among the combinations of two or more other beaches, only the combination of those on the west side of Narragansett Bay and on the south shore east of Sand Beach accounted for as much as 5.00 percent.

When the beaches used were ranked according to the number of informants indicating their use, Sand Beach was first with a rank index of 685. Those on the west side of Narragansett Bay and on the south shore east of Sand Beach tended to cluster with indices of 575 and 550. Those on the south shore west of Sand Beach had an index of 415. Newport beaches, inland lake and river beaches, those on the east side of Narragansett Bay and others each had indices of 100 or less.

On the whole, most of the informants, 65.75 percent, used at least one other beach in addition to Sand Beach. Those used by most of the informants were located on the west side of Narragansett Bay and on Rhode Island's south shore. (See table 26.)

#### Frequency of using other beaches

Of the 263 informants indicating the frequency with which they used other beaches, 39.16 percent responded on a weekly basis; 33.08 percent, on a monthly basis, and 13.69 percent, on a yearly basis. A total of 3.04 percent responded on a daily basis, while 11.03 percent used a non-seasonal orientation for their response.

On the question of using another beach on weekly, monthly, and yearly bases, the number of informants indicating that they went once or twice is consistently larger than the number indicating

Table 24. Greatest benefit from use of beach; 400 Sand Beach users in July, 1972, Rhode Island.

| Benefits  | Beach Users |              |
|---|-------------|--------------|
|   | Number      | Percent      |
| None  | 7           | 1.7          |
| Sensory experience:                                     |             |              |
| Specific  | 44          | 11.0         |
| Aesthetic   | 12          | 3.0          |
| Value expressing  | 60          | 15.0         |
| Physical movement:                                      |             |              |
| Active  | 7           | 1.7          |
| Passive   | 35          | 8.8          |
| Involvement with natural environment:                   |             |              |
| Specific aspect   | 66          | 16.5         |
| Absence of man's influence                              | 9           | 2.3          |
| Solitude of setting and lack of involvement with people | 104         | 26.0         |
| Characteristics and location of beach:                  |             |              |
| Space   | 24          | 6.0          |
| Cleanliness   | 14          | 3.5          |
| Proximity   | 5           | 1.3          |
| Change in location and reaction                         |             |              |
| Other to that change                                    | 12          | 3.0          |
|   | 1           | 0.2          |
| <b>TOTAL</b>  | <b>400</b>  | <b>100.0</b> |

Table 25. Characteristics of beach liked least; 400 Sand Beach users in July, 1972, Rhode Island.

| Characteristics                    | Beach Users |              |
|------------------------------------|-------------|--------------|
|                                    | Number      | Percent      |
| Nothing                            | 72          | 18.0         |
| Parking                            | 91          | 22.7         |
| Physical characteristics           | 87          | 21.7         |
| Swimming                           | 42          | 10.3         |
| Lack of concessions and facilities | 38          | 9.4          |
| Trip to beach                      | 29          | 7.2          |
| Weather                            | 5           | 1.2          |
| Other                              | 36          | 8.5          |
| <b>TOTAL</b>                       | <b>400</b>  | <b>100.0</b> |

three times or more. For informants replying on a weekly basis, those indicating that they came once or twice were 22.06 percent of the 263 considered; those coming more than twice were 17.10. The difference between these percentages is 4.96. Among the monthly users of other beaches, 21.30 percent came once or twice, while 11.78 percent came more than twice; the difference between these percentages is 9.52. Yearly, 9.12 percent came once or twice and 4.56 percent came more frequently; for these percentages, the difference is 4.56.

These data indicate that during the interval in which slightly more than one-half, 52.48 percent, of the informants are using another beach once or twice, about one-third, 36.48 percent, are using other beaches three or more times. A slight proportion, 7.22 percent, reported using another beach daily, or more than seven times per week; these, along with the informants who used other beaches from three to six times a week, accounted for 20.14 percent of the 263 considered.

Further insight into the use of other beaches is gained when informants using other beaches four, five, six and seven times per month are combined with those using others once a week; this indicates

that 19.39 percent of the informants could have been using another beach between once and twice a week. Combining the number of informants using another beach eight or nine times a month with those using another twice a week indicates that 11.41 percent could be using another beach between two and three times a week. This suggests that a little less than one-third, 30.80 percent, used another beach once or twice a week, while one-fifth, 20.14 percent, used other beaches three times a week or more; approximately one-half, 50.94 percent, used another beach at least once a week. The rest of the informants used other beaches with a frequency of less than once a week or gave a non-seasonally-oriented response. (See table 27.) The above observations can be summarized as follows:

#### Use of Another Beach

| Times per week | Percent of users |
|----------------|------------------|
| 7 or more      | 7.22             |
| 3 to 6         | 12.92            |
| 1 to 2         | 30.80            |
| Less than 1    | 49.06            |
| <b>TOTAL</b>   | <b>100.00</b>    |

Table 26. Other beaches used; 400 Sand Beach users in July, 1972, Rhode Island.

| Beach Combi- nations | Beaches and Number and Percent of Beach Users |       |                                  |      |                  |      |      |       |   |       |      |       |      |      |                    |       |     |        |
|----------------------|---|-------|----------------------------------|------|------------------|------|------|-------|---|-------|------|-------|------|------|--------------------|-------|-----|--------|
|                      | 1<br>No Other<br>(only<br>Sand Beach)         |       | 2<br>Inland<br>Lake and<br>River |      | Narragansett Bay |      |      |       | South Shore:<br>Direction from Sand Beach |       |      |       | 7    | 8    | All: for<br>hiking | TOTAL |     |        |
|                      | No.   | %     | No.                              | %    | No.              | %    | No.  | %     | No.                                       | %     | No.  | %     | No.  | %    |                    |       |     |        |
| One only             | 137   | 34.25 | 9                                | 2.25 | 0                | 0.00 | 50   | 12.50 | 54  | 13.50 | 54   | 13.50 | 5    | 1.25 | 1                  | 0.25  | 310 | 77.50  |
| Each Combined With:  | 2   | —     | —                                | —    | —                | —    | —    | —     | —   | —     | —    | —     | —    | —    | —                  | —     |     |        |
|                      | 3   | —     | —                                | 1    | 0.25             | —    | —    | —     | —   | —     | —    | —     | —    | —    | 1                  | 0.25  |     |        |
|                      | 4   | —     | —                                | 5    | 1.25             | 2    | 0.50 | —     | —   | —     | —    | —     | —    | —    | 7                  | 1.75  |     |        |
|                      | 5   | —     | —                                | 3    | 0.75             | 0    | 0.00 | 36    | 9.00                                      | —     | —    | —     | —    | —    | 39                 | 9.75  |     |        |
|                      | 6   | —     | —                                | 1    | 0.25             | 0    | 0.00 | 16    | 4.00                                      | 11    | 2.75 | —     | —    | —    | 28                 | 7.00  |     |        |
|                      | 7   | —     | —                                | 0    | 0.00             | 2    | 0.50 | 6     | 1.50                                      | 6     | 1.50 | 1     | 0.25 | —    | 15                 | 3.75  |     |        |
|                      | 8   | —     | —                                | —    | —                | —    | —    | —     | —   | —     | —    | —     | —    | —    | —                  | —     |     |        |
| TOTAL                | 137   | 34.25 | 19                               | 4.75 | 4                | 1.00 | 108  | 27.00 | 71  | 17.75 | 55   | 13.75 | 5    | 1.25 | 1                  | 0.25  | 400 | 100.00 |

| Other Beaches | Rank Index | Rank | Beaches by Rank and Index           |
|---------------|------------|------|-------------------------------------|
| 1             | 685        | 1    | 1—No other (only Sand Beach) (685)  |
| 2             | 95         | 6    | 2—Narragansett Bay: west side (575) |
| 3             | 25         | 7    | 3—South shore: east (550)           |
| 4             | 575        | 2    | 4—South shore: west (415)           |
| 5             | 550        | 3    | 5—Newport (100)                     |
| 6             | 415        | 4    | 6—Inland lake and river ( 95)       |
| 7             | 100        | 5    | 7—Narragansett Bay: east side ( 25) |
| 8             | 5          | 8    | 8—All: for hiking ( 5)              |

**Table 27.** Frequency of using other beaches; 263 Sand Beach users in July, 1972, Rhode Island.

| Use<br>Interval | Frequency, Number and Percent of Beach Users |       |     |       |     |      |     |      |     |      |     |      | TOTAL |      |     |      |     |       |        |       |
|-----------------|--|-------|-----|-------|-----|------|-----|------|-----|------|-----|------|-------|------|-----|------|-----|-------|--------|-------|
|                 | 1  |       | 2   |       | 3   |      | 4   |      | 5   |      | 6   |      | 7     |      | 8   |      | 9   |       |        |       |
|                 | No.  | %     | No. | %     | No. | %    | No. | %    | No. | %    | No. | %    | No.   | %    | No. | %    | No. | %     |        |       |
| Week            | 34   | 12.93 | 24  | 9.13  | 8   | 3.04 | 17  | 6.46 | 6   | 2.28 | 3   | 1.14 | 0     | 0.00 | 7   | 2.66 | 4   | 1.52  | 103    | 39.16 |
| Month           | 28   | 10.65 | 28  | 10.65 | 8   | 3.04 | 9   | 3.42 | 5   | 1.90 | 3   | 1.14 | 0     | 0.00 | 4   | 1.52 | 2   | 0.76  | 87     | 33.08 |
| Year            | 8  | 3.04  | 16  | 6.08  | 6   | 2.28 | 3   | 1.14 | 1   | 0.38 | 1   | 0.38 | 0     | 0.00 | 1   | 0.38 | 36  | 13.68 |        |       |
| Daily           | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | —    | —     | —    | —   | —    | —   | 8     | 3.04   |       |
| Other           | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | —    | —     | —    | —   | —    | —   | 29    | 11.02  |       |
| <b>TOTAL</b>    | —  | —     | —   | —     | —   | —    | —   | —    | —   | —    | —   | —    | —     | —    | —   | —    | —   | 263   | 100.00 |       |

### Summary

About three-fourths of the informants had used Sand Beach previously. There are indications that only a relatively few people use Sand Beach repetitiously with a high degree of frequency; as the number of people using the beach increases, the frequency with which they use it decreases. Among people who had not used Sand Beach previously, a lack of knowledge about it was the most prevalent reason. About four hours was the most frequently reported interval spent on the beach. People tended to come to Sand Beach specifically because it was not crowded, and they tended to engage primarily

in passive, restful beach activities. The solitude of the setting, the natural environment, and the sensory experience while at the beach were reported most frequently as being its greatest benefits. Parking problems and physical characteristics of the beach were reported most frequently as factors liked least; about one-fifth of the respondents indicated that there was nothing which they liked least.

People who used Sand Beach tended, also, to use beaches on the west side of Narragansett Bay and on the eastern part of Rhode Island's south shore. There are indications that about one-half of them used another beach at least once a week.

# Appendices

## A. Social status index

The social status index used to differentiate households in this study contained three components: (1) household income, i.e., the total household income for the prior calendar year; (2) education of the household head, i.e., the highest grade of school completed by that person; and (3) occupation of the household head, identified as "the type of work you did during 1971 to earn your living." The classification system for each variable was divided in three sections designated low, middle and high. These were weighted 1, 2 and 3, respectively, and are shown below.

| Weight | Income             | Education                           | Occupation   |
|--------|--------------------|-------------------------------------|--|
| 1      | Less than \$12,000 | Less than completion of high school | Retired<br>Laborers<br>Service workers<br>Operatives |
| 2      | \$12,000-23,999    | High school, some college           | Craftsmen<br>Sales workers<br>Clerical workers       |
| 3      | \$24,000 or more   | College or more                     | Professionals<br>Managers                            |

For each household, weights for the variables were added and divided by three; the average obtained was multiplied by 100 and became an index which made possible the grouping of households in broad status categories. Index intervals for the categories were: low, 100-166; middle, 167-233; high, 234-300.

## B. Rank order index

The rank order index used in this report is based on the number of times an item is mentioned. It is necessary to secure a total derived from the number of times an item is mentioned singly and in combination with another item; to do this, as was done for data in table 8, appropriate column and row totals for each item were added. This sum was then divided by 2; the quotient was then rounded to one decimal place and multiplied by 10 to eliminate the decimal. An exception to this procedure exists for item 1; the number of times this item is mentioned, singly and in combination with another, is the total for the first column in the table. Hence, this total, *not* combined with another one, is used for the first item.

## C. Questionnaire

UNIVERSITY OF RHODE ISLAND  
COLLEGE OF RESOURCE DEVELOPMENT  
Department of Resource Economics  
KINGSTON, RHODE ISLAND

bui \_\_\_\_\_ No. \_\_\_\_\_  
7/72 Int \_\_\_\_\_ Date \_\_\_\_\_

1. How far have you traveled today to get to this beach? \_\_\_\_\_
2. Where did you start? (P.O. address) \_\_\_\_\_
3. Time, depart there \_\_\_\_\_ 4. Time, arrive here \_\_\_\_\_
5. Weather \_\_\_\_\_ 6. Vehicle: (a) Make \_\_\_\_\_  
(b) Model \_\_\_\_\_ (c) Year \_\_\_\_\_
7. Vehicle occupants: (Person 1 is the driver)  
Person: : 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 : 10 :  
Age: : : : : : : : : : : : : : : : : : :  
Sex: : : : : : : : : : : : : : : : : : :  
Ms: : : : : : : : : : : : : : : : : : :  
Rel. to 1: : : : : : : : : : : : : : : : : :  
8. How did you happen to go to a beach today, rather than do something else? \_\_\_\_\_
9. How did you happen to come to this beach rather than another one? \_\_\_\_\_
10. Is this your first time at this beach? Y \_\_\_\_\_; N \_\_\_\_\_
11. (If 10-N) About how often do you come here? \_\_\_\_\_
12. (If 10-Y) How does it happen that you have not come before? \_\_\_\_\_
13. Which other Rhode Island beaches do you use? \_\_\_\_\_
14. How often do you use other Rhode Island beaches? \_\_\_\_\_
15. (What's the biggest benefit you get from) coming to this beach?  
(What do you like most about it?) \_\_\_\_\_
16. What do you like least about coming to this beach? \_\_\_\_\_
17. While here, what (will you be doing) most of the time?  
(have you done) \_\_\_\_\_
18. How long (do you plan to be) here today?  
(have you been) \_\_\_\_\_
19. In your situation, what things encourage your use of beaches? \_\_\_\_\_
20. In your situation, what things limit your use of beaches? \_\_\_\_\_
21. In what other summer activities do you participate? \_\_\_\_\_
22. In what summer activities do you participate more than going to the beach? \_\_\_\_\_
23. Residence: S.K. Y \_\_\_\_\_ N \_\_\_\_\_; Other R.I. Y \_\_\_\_\_  
N \_\_\_\_\_; Other state \_\_\_\_\_  
(Specify) \_\_\_\_\_

