

# A Descriptive Analysis of a Five-County Attitude Study: Outdoor Recreation and Industrialization

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# A Descriptive Analysis of a Five-County Attitude Study: Outdoor Recreation and Industrialization

TED L. NAPIER, JOHN M. PIERCE, and DOUGLAS C. BACHTEL<sup>1</sup>

## INTRODUCTION

Decision making relative to community development<sup>2</sup> does not take place in a social vacuum but rather in symbiotic relationships with numerous other factors. Community groups have limited social, economic, and natural resources which may be employed in the resolution of collective community problems and consequently groups must be selective relative to the types of problems addressed. One of the most important tasks of community decision makers is to determine how limited resources will be allocated for planned change efforts.

The first step in the decision-making process relative to planned change efforts is to determine the priority of development needs as perceived by the directly affected group members. The social action process (1, 19, 21) posits that the basic steps in the decision-making process consist of analysis of the existing social situation (determining if problems exist), determination of problem priorities, alternative mechanisms for problem amelioration, and the extent of support for problem solution among the affected group members.

The typical research approach employed in the determination of the existing social situation has been the use of recognized formal and informal leadership among local groups (4, 19). Local leaders are often able to provide considerable insight into social phenomena within community groups, but they are seldom able to provide in-depth assessment of perceived needs and potential support for development action from all socio-economic status groups (10). Recognized leaders are unable to represent all interest groups, especially the lowest socio-economic classes since leaders do not often interact with them.

Rural development benefits would probably be more evenly distributed if a broad spectrum of status groups are involved in the decision making (11). In hopes of broader involvement in decision making, the Ohio Agricultural Research and Development Center with funds provided by the 1972 Rural Development Act commissioned an attitude study to

evaluate perceptions held by local people toward selected types of development efforts. The study was conducted in a five-county area in southeastern Ohio. A systematic random selection approach was chosen as the sampling technique so that all socio-economic status levels would have the opportunity to be involved in the future development planning of the study area. The five-county study area, located in the Appalachian region of Ohio, was selected for extensive planned change efforts by the Ohio Rural Development Advisory Council in consultation with community development specialists in the Ohio Cooperative Extension Service. Considerable development potential is perceived to exist in that region of the state and numerous development problems exist in the region.

Preliminary investigation by Extension development personnel among the leadership of the region focused attention upon two types of development needs which were perceived by the leaders to have priority for development emphasis. The two identified development research areas were: 1) rural industrialization and 2) outdoor recreation development. The primary purposes of the research study being reported here were to determine the priority of development problems to be addressed as perceived by local people and to evaluate attitudes of the respondents toward outdoor recreation and industrial development.

Emphasis was placed on the respondents' perception of the desirability of additional rural industrial development activity and/or expansion of existing firms. The development of new outdoor recreation facilities in the region was also evaluated from a perceptual perspective. Additional data relative to development preferences, ranking of community problem priorities, determination of perceived regional identity, and sources of information were also researched. These data were collected since each type of information would hopefully add insight into what the people wished to have developed in their region and what they would be willing to support.

As noted earlier, the group cannot attack the universe but must pick selected topics for assessment. It is often asserted that development must occur in a regional context (21, 22, 23) and good socio-economic cases can be made that such change efforts are justified, but implementation of regional change programs is contingent upon the local people recognizing

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<sup>2</sup>Community development is defined as planned change efforts designed to enhance the goal achievement potential of a group. This definition encompasses both process type and project type development efforts (6).

that a viable development region exists. In essence, the group must perceive that a development region is a reality.

Lastly, to accomplish the goal of group involvement in decision making, some knowledge of the sources used to gather information is essential. To have an informed populace, channels of communication of information are essential.

The data derived from the above questions will provide relevant answers to these and other issues addressed in this publication.

## **STUDY METHODS**

### **Sampling**

A very large, systematic, random sample was drawn from the five-county study area. Interviewers were instructed to make an effort to secure an interview from selected residences chosen by systematic sampling. The interviewers were to select every fifth occupied dwelling, with the initial dwelling chosen at random. The interviewers were instructed to begin the selection process at different places in the sampling area at the beginning of each day. A structured questionnaire was developed and administered to the respondents via personal interviews of an adult member of the selected families. The interviewers were trained in the use of the questionnaire and informed relative to the sampling technique to use in the selection of respondents.

The location of each respondent's residence was noted on detailed county maps secured from the Ohio Department of Transportation which provided a means of pictorial display of the sampling distribution. Careful visual monitoring of the distribution of the sample during the data collection phase and subsequent evaluation revealed that the sample was not clustered and approximated the population distribution by township.

The respondents drawn from villages and towns were selected using the same systematic sampling technique which had been modified to be appropriate to more densely populated areas (streets were selected as the starting points and were randomly selected). Maps of the towns with chosen residences revealed that the urban sample was not clustered.

Approximately 95 percent of the randomly selected people agreed to participate in the study and the total number of respondents to the study was 1,474. The characteristics of the sample are presented in Tables 1-3.

The characteristics of the sample population indicate that the respondents to the study were middle aged people with very few children living at home. The age variable indicates that most of the children would be adults and have their own nuclear families. The study participants were long-term residents of

the region, and were basically working class with moderate incomes and a high school education achievement level. Most spent their early years in small towns or less densely populated areas (farm and rural nonfarm). A large majority of the respondents owned their homes and were not actively engaged in many formal organizations.

A small minority were farmers and most of those who indicated that they were farmers noted that they were engaged in part-time farming. This finding partially explains why the mean farm size was only 104.0 acres. A relatively large portion of those interviewed when compared to the national unemployment figures were without work for a portion of the last year and those who were unemployed tended to have remained without work for an extended period of time. The respondents indicated that they commuted an average distance of 11.0 miles one way each day to work.

### **Questionnaire Construction**

The questionnaire used in the data collection phase of the study was formulated using many different methodological techniques for instrument construction. Attitudes toward industrial and recreational development were measured with Likert-type scales (8), while problem priorities and preferences were measured with hierarchical rankings. Several variables were measured by asking the respondents to rank their responses on a continuum which had been divided into equal interval divisions.

The questionnaire was pretested using a comparable group from a different county and the pretest data were assessed to determine the necessity for reformulation of the questions. The questionnaire was revised and submitted to the selected sample. The content of the questions used in the measurement instruments was derived from several sources (see 14, 15, 16, 17, 18 for specific identification of the sources).

Professional community development specialists at The Ohio State University, Extension development personnel, and selected local "knowledgeables" reviewed the questionnaire for clarity and relevance of the questions before the questionnaire was submitted to the selected subjects. A copy of the questionnaire is provided in the Appendix.

Interviewers were selected from the five-county area and trained in the use of the questionnaire. The interviewers were not totally informed of the meaning of each section, which served to reduce interviewer biasing since they were cautioned not to interpret questions for the respondents. The field interviewers were primarily selected from the multi-county study region to enhance the rapport between the interviewer and the interviewee, but were not permitted to conduct interviews within their own community of resi-

**TABLE 1.—Summary Characteristics of the Selected Sample from Five South-eastern Ohio Counties.**

|   |                     |                  |
|---|---------------------|------------------|
| Males 657 (44.6%)   | Females 813 (55.2%) | No Data 4 (0.3%) |
| Mean age of respondents—44.4 years  |                     |                  |
| Mean years of formal education completed: respondent 11.5; spouse 11.4  |                     |                  |
| Mean number of children living at home—1.24   |                     |                  |
| Early childhood residence (first 15 years of life): rural farm 574 (38.9%); rural nonfarm 224 (15.2%); small town [under 2,500] 482 (32.7%); city [over 10,000] 190 (12.9%); no data 4 (0.3%) |                     |                  |
| Mean length of residence—31.0 years   |                     |                  |
| Ownership of home—80.3%   |                     |                  |
| Mean number of organization memberships—1.6   |                     |                  |
| Percent unemployed last year—22.3% (mean number of months unemployed 7.4)   |                     |                  |
| Percent engaged in farming—17.3%  |                     |                  |
| Full time farming—5.6%  |                     |                  |
| Part time farming—11.7%   |                     |                  |
| Mean farm size—104.0 acres  |                     |                  |
| Major income earner retired—23.8%   |                     |                  |
| Mean number of miles income earner commutes (one way) each day—11.0 miles   |                     |                  |

dence to minimize the probability that personal association would be a problem. While it is desirable to have local people conducting the interviews, it is undesirable to have people interviewing close friends since some data are sensitive (income, for example).

## FINDINGS

### Perception of Region Identity

The descriptive statistical findings of the study are presented below with commentary relative to the significance for development activity in the study region. The first question in the study was designed to ascertain the perceived geographic boundaries of the development region to which the respondents associated themselves. Numerous researchers (5, 12, 21, 23) have observed that many local problems must be attacked on a large social unit basis since sufficient human, economic, and natural resources are seldom available in small communities for initiating more than token development efforts. It is very difficult to reduce local poverty, for example, without involvement of extralocal groups or to introduce pollution abatement equipment to solve a pollution problem. Expertise, social organization, capital, and other resources are often not available in local communities to address such problems. This suggests that cooperation on the part of county and/or multi-county groups is essential for the accomplishment of certain tasks.

The question addressed in the initial portion of the questionnaire was identification with geographic region. To accomplish certain goals, multi-county cooperation is essential, but given the localistic orientation of social groups, it was hypothesized that larger

social arrangements (multi-county groups) would not be perceived as the area to which people identified. Since people tend to satisfy most of their social needs on the local level, it was hypothesized that the county would be the most frequently designated area of identification.

The respondents were provided maps which ranged from all of the Appalachian counties in the United States to the county level. The alternatives

**TABLE 2.—Distribution of Major Income Earner's Occupation (Sample Characteristics).**

|                       |     |       |
|-----------------------|-----|-------|
| Unclassified          | 61  | 4.1%  |
| Service Workers       | 116 | 7.9%  |
| Farmers               | 119 | 8.1%  |
| Unskilled Laborers    | 401 | 27.2% |
| Skilled Blue Collar   | 375 | 25.4% |
| White Collar          | 178 | 12.1% |
| Manager-Administrator | 86  | 5.8%  |
| Professional          | 138 | 9.4%  |

**TABLE 3.—Distribution of Total Family Income (Sample Characteristics).**

| Income Category  | Frequency | Percent |
|------------------|-----------|---------|
| \$ 0 - 2,999     | 149       | 10.1    |
| 3,000 - 5,999    | 244       | 16.5    |
| 6,000 - 8,999    | 257       | 17.5    |
| 9,000 - 11,999   | 301       | 20.4    |
| 12,000 - 14,999  | 198       | 13.4    |
| 15,000 - 17,999  | 122       | 8.3     |
| 18,000 and above | 118       | 8.0     |
| No response      | 85        | 5.8     |

**TABLE 4.—Responses of Study Respondents to Area of Personal Identity.**

| Region                   | Absolute Freq. | Relative Freq. (%) | Rank Order |
|--------------------------|----------------|--------------------|------------|
| Appalachia               | 34             | 2.3                | 6          |
| Ohio                     | 53             | 3.6                | 4          |
| Southeast Ohio           | 36             | 2.4                | 5          |
| Five-County Study Region | 143            | 9.7                | 3          |
| Pivotal                  | 218            | 14.8               | 2          |
| County                   | 988            | 67.0               | 1          |
| No response              | 2              | 0.1                |            |
|                          | 1474           | 100.0              |            |

from which the respondents were to choose the area to which they identified were: the Appalachian counties of the United States, the state of Ohio, southeastern Ohio counties, the five-county study region, the counties immediately surrounding and including the county of residence (termed pivotal), and the county of residence. The results of the rankings are presented in Table 4.

These data clearly indicate that the geographical area to which the greatest majority of people identified was the county of residence. The pivotal area was second and the study region third. If the study region is to become a viable development area, then considerable effort must be expended to create a regional identity among residents of the area. These data indicate that strong identity remains with the county and relatively little identity with larger social entities. These data would suggest that multi-county programs which necessitate collective identity to effectively implement development projects will encounter difficulty and will probably require considerable educational efforts to create the situation

where inter-group cooperation may emerge. If Warren (21) and others are correct that large social (multiple group) units are the most viable form of social organization to accomplish many types of development goals, then the five-county study region will encounter considerable problems since the residents of the counties do not identify with a regional entity but with a more micro-level unit (county).

#### Ranking of Priority Problems

One of the first steps in the development process is the delineation of a hierarchy of collective problems. The primary function of such information is to focus attention on the most critical issues which need to be addressed given the limited development resources. Most groups cannot initiate programs to resolve all problems simultaneously; therefore, some means must be derived to isolate the problems to be addressed. It is recognized that to address a problem such as jobs, the group may have to enhance the social infrastructure to become attractive to industry. The targeting of the priorities, however, is most useful in the delineation of problems to research and to focus development efforts.

The rural development literature was carefully reviewed relative to the identification of the most frequently encountered social problems confronting community groups. An extensive list of variables associated with qualitative aspects of community living (factors which make things good or bad in a community) was developed and screened by the questionnaire reviewers. To ascertain the more important development problems, the respondents were asked to rank the three most important development problems for their region. The findings are presented in Table 5.

**TABLE 5.—Responses of Study Respondents to Priority Problems in the Region to Which They Identified.**

| Problem for Region            | First Choice   |                    |            | Second Choice  |                    |            | Third Choice   |                    |            |
|-------------------------------|----------------|--------------------|------------|----------------|--------------------|------------|----------------|--------------------|------------|
|                               | Absolute Freq. | Relative Freq. (%) | Rank Order | Absolute Freq. | Relative Freq. (%) | Rank Order | Absolute Freq. | Relative Freq. (%) | Rank Order |
| Jobs and Industrial Expansion | 683            | 46.3               | 1          | 257            | 17.4               | 1          | 148            | 10.0               | 5          |
| Drug Abuse                    | 134            | 9.1                | 2          | 214            | 14.5               | 2          | 142            | 9.6                | 6          |
| Education                     | 124            | 8.4                | 3          | 190            | 12.9               | 4          | 161            | 10.9               | 4          |
| New Housing                   | 116            | 7.9                | 4          | 120            | 8.1                | 6          | 94             | 6.4                | 7          |
| Highway Improvement           | 97             | 6.6                | 5          | 195            | 13.2               | 3          | 208            | 14.1               | 3          |
| Crime, Vandalism, Trespassing | 91             | 6.2                | 6          | 153            | 10.4               | 5          | 272            | 18.5               | 1          |
| Sewage Improvements           | 54             | 3.7                | 7          | 71             | 4.8                | 9          | 57             | 3.9                | 9          |
| Solid Waste Pick-up           | 47             | 3.2                | 8          | 52             | 3.5                | 10         | 35             | 2.4                | 10         |
| Water Supply                  | 47             | 3.2                | 8          | 74             | 5.0                | 8          | 73             | 5.0                | 8          |
| Recreational Facilities       | 41             | 2.8                | 10         | 95             | 6.4                | 7          | 213            | 14.5               | 2          |
| Other                         | 23             | 1.6                | 11         | 19             | 1.3                | 12         | 27             | 1.8                | 12         |
| Planning and Zoning           | 16             | 1.1                | 12         | 30             | 2.0                | 11         | 31             | 2.1                | 11         |
| Missing Data                  | 1              | 0.1                |            | 4              | 0.3                |            | 13             | 0.9                |            |
|                               | 1474           | 100.0              |            | 1474           | 100.0              |            | 1474           | 100.0              |            |

**TABLE 6.—Weighted Rank Order of Problem Priorities in the Study Area: Survey Results.**

| Problem for Region               | Frequency Multiplied by Weighting Factors | Weighted Score | Weighted Rank Order |
|----------------------------------|---|----------------|---------------------|
|                                  |   | Sample Size    |                     |
| Jobs and Industrial Expansion    | 2711                                      | 1.84           | 1                   |
| Drug Abuse                       | 972                                       | .66            | 2                   |
| Education                        | 913                                       | .62            | 3                   |
| Highway Improvements             | 889                                       | .60            | 4                   |
| Crime, Vandalism and Trespassing | 851                                       | .58            | 5                   |
| New Housing                      | 682                                       | .46            | 6                   |
| Recreation Facilities            | 526                                       | .36            | 7                   |
| Water Supply                     | 362                                       | .25            | 8                   |
| Sewage Improvements              | 361                                       | .24            | 9                   |
| Solid Waste Pick-up              | 280                                       | .19            | 10                  |
| Planning and Zoning              | 138                                       | .09            | 11                  |
| Other                            | 137                                       | .09            | 12                  |

The data from Table 5 were used to calculate weighted rankings for the problem areas. The absolute frequencies for each category in choice 1 were multiplied by a value of 3. The absolute frequencies in the categories of choice 2 were multiplied by a value of 2 and the absolute frequencies in each category of choice 3 were included in the analysis without a weighted factor. The values generated from the procedure above were summed to give a row value and divided by the total sample size. An example would be housing where:  $116 \times 3 = 348 + (120 \times 2 = 240) + 94 = 682$ ; when divided by 1474, the weighted rank score equals 0.46. The same procedure was used for all problem categories. The findings are presented in Table 6.

The data revealed that jobs and industrial development were the most significant development problem as perceived by the respondents to the survey. Drug abuse was next and education concerns were third. Highway improvements and crime were fourth and fifth, respectively. New housing, recreation facilities, water supply, sewage improvements, solid waste pick up, planning, and zoning followed in that order.

These data suggest that provision of new economic activity is the greatest perceived need for development emphasis among the study respondents. Deviant behavior in the form of drug abuse and crime are also very important issues. If drug abuse, which is a specific form of criminal behavior, is considered in conjunction with other types of crime, then the combined factor would be a very strong second to jobs for development attention (the weighted rank score for drug abuse and crime, vandalism, and trespassing combined is 1.3). Improvement of the existing education system also has high priority for the people.

Over-emphasis upon economic development does not appear to be warranted since several other critical social issues were identified and should receive corrective attention, especially deviant behavior. Programs designed to counteract deviant behavior would be very appropriate in the context of these findings.

These data show that the need for recreation development is not seen as a high priority problem among the respondents to the study. This finding would suggest that the leadership of the area who perceive recreation development as a high priority problem have not identified some of the most critical development issues, at least in terms of the priority placed on the problems by the region's residents.

#### **Type of Industrial Development Desired**

The respondents were asked to rank six different industrial enterprises in the order of priority of perceived importance to the region. The respondents were asked to rank only the two most important industrial types in terms of perceived *benefit for them* as individuals, assuming that new industries would be attracted to the region. The findings from the respondent rankings are presented in Table 7.

The study respondents were given specific information relative to each type of industry to be ranked. Examples of industries in each of the industrial categories were provided so the respondents had common referents. Heavy manufacturing examples were steel mills and tire plants. Service industry examples were economic enterprises such as dry cleaners and repair shops. Resource industry examples were coal mining, forestry, and agriculture. The construction example was pipeline contractors. Handicraft industry examples were weaving and woodcarving, while light industry examples included

**TABLE 7.—Ranking of Industrial Types by Study Respondents: Perceived Individual Benefit to be Derived.**

| Industry Type       | First Choice   |                    |            | Second Choice  |                    |            | Weighted Rank Order* |
|---------------------|----------------|--------------------|------------|----------------|--------------------|------------|----------------------|
|                     | Absolute Freq. | Relative Freq. (%) | Rank Order | Absolute Freq. | Relative Freq. (%) | Rank Order |                      |
| Heavy Manufacturing | 444            | 30.1               | 1          | 250            | 17.0               | 3          | 1                    |
| Resource Industry   | 419            | 28.4               | 2          | 275            | 18.7               | 2          | 2                    |
| Light Manufacturing | 262            | 17.8               | 3          | 549            | 37.2               | 1          | 3                    |
| Construction        | 175            | 11.9               | 4          | 176            | 11.9               | 4          | 4                    |
| Service Industry    | 114            | 7.7                | 5          | 119            | 8.1                | 5          | 5                    |
| Handicraft Industry | 58             | 3.9                | 6          | 98             | 6.6                | 6          | 6                    |
| No Choice           | 2              | 0.1                |            | 7              | 0.5                |            |                      |
|                     | 1474           | 100.0              |            | 1474           | 100.0              |            |                      |

\*The weighted rank order was calculated by weighting each category frequency in choice 1 by the value of 2 and summing the frequency of the corresponding category in choice 2. The sum was divided by the total number of responses and the resulting value was used to determine final rank order.

textile mills and canning factories. The examples were for purposes of giving a representative type of industry for each category and not for ranking purposes *per se*. The interviewer was cautioned to indicate that the respondent was to rank the category (industrial type) and not the specific example, since other types of industries could be subsumed under the same category.

The results indicated a strong preference for the creation and expansion of heavy industry in the area. This is interpreted to be associated with the number of jobs and secondary economic impact which tends to be associated with heavy capital industries. It is highly probable that the people do not know the difficulty associated with attracting heavy manufacturing firms and the frequent negative social impact of major capital industries upon local groups (see 20 for a discussion of the industrial impacts). Considerable support was noted for expansion of the resource industries as well. Light manufacturing was also perceived to be quite desirable. If decisions are made to seek external industries which would be most fa-

vored by the local people, then heavy or light industry, as well as the expansion of the resource industries, would be the most appropriate. Efforts to expand handicraft and service type industries will probably be met with much less enthusiasm.

#### Outdoor Recreation Priorities

The respondents were asked to rank the two most important types of outdoor recreation facilities which they believed would be *most beneficial to the region* if they were to be constructed. The findings are presented in Table 8.

The recreation facilities examples used to give the respondents common referents were as follows: 1) examples of heavy recreation use areas were: pools, recreation centers, Kings Island, Inc.; 2) examples of general outdoor recreation areas were: multi-purpose camping, picnic areas, boating areas; 3) examples of natural environment areas were: bird watching, wildlife area, forest preserve area; 4) examples of special natural areas were: Old Man's Cave, Yellowstone geysers; 5) examples of wild areas were: backpack tenting, removed from sights and

**TABLE 8.—Ranking of Outdoor Recreation Development Priorities by GROW Respondents: Perceived Benefit to be Derived for Region.**

| Recreation Type                  | First Choice   |                    |            | Second Choice  |                    |            | Weighted Rank Order* |
|----------------------------------|----------------|--------------------|------------|----------------|--------------------|------------|----------------------|
|                                  | Absolute Freq. | Relative Freq. (%) | Rank Order | Absolute Freq. | Relative Freq. (%) | Rank Order |                      |
| General Outdoor Recreation Areas | 514            | 34.9               | 1          | 405            | 27.5               | 1          | 1                    |
| Heavy Use Recreation Areas       | 507            | 34.4               | 2          | 190            | 12.9               | 5          | 2                    |
| Wild Areas                       | 136            | 9.2                | 3          | 236            | 16.0               | 3          | 3                    |
| Historic and Cultural Areas      | 130            | 8.8                | 4          | 260            | 17.6               | 2          | 4                    |
| Natural Environment Areas        | 123            | 8.3                | 5          | 225            | 15.3               | 4          | 5                    |
| Special Natural Areas            | 57             | 3.9                | 6          | 142            | 9.6                | 6          | 6                    |
| No Choice                        | 7              | 0.5                |            | 16             | 1.1                |            |                      |
|                                  | 1474           | 100.0              |            | 1474           | 100.0              |            |                      |

\*The calculation for this weighted factor was the same as used in Table 5.



**TABLE 9.—Perceptions of Regional Characteristics: Survey Results Presented in Frequency Counts (Row Percentages Presented Within Parentheses).**

| Characteristic<br>Polar Extreme | 1            | 2             | 3             | 4            | 5             | 6             | 7             | Mean | Characteristic<br>Polar Extreme |
|---------------------------------|--------------|---------------|---------------|--------------|---------------|---------------|---------------|------|---------------------------------|
| Smooth                          | 24<br>(1.6)  | 64<br>( 4.3)  | 188<br>(12.8) | 58<br>(3.9)  | 522<br>(35.4) | 424<br>(28.8) | 194<br>(13.2) | 5.1  | Rugged                          |
| Dirty                           | 46<br>(3.1)  | 88<br>( 6.0)  | 217<br>(14.7) | 64<br>(4.3)  | 509<br>(34.5) | 419<br>(28.4) | 131<br>( 8.9) | 4.8  | Clean                           |
| Worthless                       | 14<br>(0.9)  | 35<br>( 2.4)  | 64<br>( 4.3)  | 69<br>(4.7)  | 314<br>(21.3) | 547<br>(37.1) | 431<br>(29.2) | 5.7  | Valuable                        |
| Hostile                         | 12<br>(0.8)  | 19<br>( 1.3)  | 44<br>( 3.0)  | 56<br>(3.8)  | 277<br>(18.8) | 499<br>(33.9) | 566<br>(38.4) | 5.9  | Friendly                        |
| Ugly                            | 14<br>(0.9)  | 15<br>( 1.0)  | 42<br>( 2.8)  | 44<br>(3.0)  | 287<br>(19.5) | 536<br>(36.4) | 536<br>(36.4) | 5.9  | Beautiful                       |
| Poor                            | 105<br>(7.1) | 210<br>(14.2) | 359<br>(24.4) | 144<br>(9.8) | 427<br>(29.0) | 157<br>(10.7) | 72<br>( 4.9)  | 3.9  | Rich                            |

sounds; 6) examples of historic and cultural sites were: canal and railroad restoration, museums. Again, it must be noted that these examples were provided as representative of the recreation facility types and the respondents were asked to rank the general category and not the examples *per se*.

The findings demonstrated that the respondents held mixed feelings about the type of recreation development which would have the greatest benefit to the region. General recreation areas were ranked as the most beneficial, followed by heavy use and wild areas in that order. The latter two are not compatible since heavy use recreation projects would preclude wild areas and vice versa. General recreation and heavy use areas would be complementary to each other and compose about 65 percent of the first choice selection. The selection of high intensity recreation facilities may be a partial function of the concern for economic development which was shown to be very high in priority for the region. People may be favorable to many types of development efforts that would provide local people with jobs. The findings indicate that the respondents desired considerable diversity in the types of recreation facilities which they would like to see incorporated into recreation projects created in the future.

General consensus was not discovered but priority of the respondents was placed on multiple use type of facilities. Again it must be noted that recreation development was not perceived as a high priority development problem by the respondents.

#### Perception Findings

**Perception of Region:** A series of questions were presented to the respondents which were associated with the perceptions held regarding the identity with the development region, outdoor recreation development, industrial development, and tourists.

The respondents were given an incomplete sentence with alternative responses and asked to circle the response that best represented the degree of intensity of their feelings. The region was defined as the area selected in question 1 (data presented in Table 4) and a continuum of responses was provided. The incomplete sentence to which the respondent was asked to react was: My region is:\_\_\_\_\_ . Basically opposite concepts were provided at the extremes of the continuum, with varying degrees of commitment associated with each alternative answer (see Appendix for the operationalization of the measurement instrument). The findings for regional perceptions are presented in Table 9.

The mean scores demonstrate that the respondents possessed a relatively positive perception of the region to which they identified. Most people indicated that their region is clean, valuable, friendly, and beautiful. Their perception of the area is that it is mildly rugged and tends to be somewhat poor. The awareness of the region's relatively poor state could partially explain the study group's commitment to jobs as being the most important development problem.

**Perception of Industrial Development:** The techniques used in the assessment of regional perceptions were employed to evaluate the respondents' perceptions of industrial development. The incomplete sentence to which the respondents were asked to respond was: Industrial development is:\_\_\_\_\_ . The responses by frequency count and percentages as well as mean scores are presented in Table 10.

The data presented in Table 10 reveal that the respondents possessed very positive perceptions about industrial development. They believed that industrial development was very desirable and valuable. Industrial development was perceived as being basic-

**TABLE 10.—Perceptions of Respondents Toward Industrial Development: Survey Results Presented in Frequency Counts (Row Percentages Presented Within Parentheses).**

| Characteristic<br>Polar Extreme | 1            | 2            | 3             | 4             | 5             | 6             | 7             | Mean | Characteristic<br>Polar Extreme |
|---------------------------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|------|---------------------------------|
| Bad                             | 100<br>(6.8) | 78<br>(5.3)  | 100<br>( 6.8) | 42<br>( 2.8)  | 237<br>(16.1) | 318<br>(21.6) | 599<br>(40.6) | 5.4  | Good                            |
| Dirty                           | 72<br>(4.9)  | 110<br>(7.5) | 221<br>(15.0) | 269<br>(18.2) | 390<br>(26.5) | 262<br>(17.8) | 150<br>(10.2) | 4.5  | Clean                           |
| Undesirable                     | 31<br>(2.1)  | 40<br>(2.7)  | 56<br>( 3.8)  | 56<br>( 3.8)  | 207<br>(14.0) | 398<br>(27.0) | 686<br>(46.5) | 5.9  | Desirable                       |
| Worthless                       | 16<br>(1.1)  | 11<br>(0.7)  | 34<br>( 2.3)  | 51<br>( 3.5)  | 173<br>(11.7) | 433<br>(29.4) | 756<br>(51.3) | 6.2  | Valuable                        |
| Unwelcome                       | 25<br>(1.7)  | 30<br>(2.0)  | 32<br>( 2.2)  | 58<br>( 3.9)  | 163<br>(11.1) | 370<br>(25.1) | 796<br>(54.0) | 6.1  | Welcome                         |
| Ugly                            | 52<br>(3.5)  | 68<br>(4.6)  | 156<br>(10.6) | 333<br>(22.6) | 335<br>(22.7) | 272<br>(18.5) | 257<br>(17.4) | 4.8  | Beautiful                       |

ally good and would be welcome in the region to which they identified. The respondents did not believe that industry was dirty but did not perceive it as being clean or beautiful (basically near the middle range). There were more positive perceptions relative to the concepts termed welcome, valuable, and desirable, with less positive perceptions about industry being beautiful and clean. These findings suggest that the respondents would probably be willing to sacrifice some aesthetic value to have the economic advantages of industrial development.

**Perception of Outdoor Recreation Development:** The same procedures used for regional and industrial development were employed to evaluate the respondents' perceptions of outdoor recreation development. The incomplete sentence used to elicit the responses was: Outdoor recreation development

is:\_\_\_\_\_ . The findings are presented in Table 11.

The findings in Table 11 reveal that outdoor recreation development was perceived in a very positive manner by the survey respondents. All of the mean scores were higher than the median possible score of 4 with the exception of crowded and empty. The respondents associated outdoor recreation with crowded facilities which supports the position taken in the priorities question (Table 8) where the respondents placed higher priority on multi-purpose and intensive use recreation development. Future outdoor recreation development should be perceived in a positive manner if conceived in the context of the expressed desires of the people. Given the low priority placed upon outdoor recreation development as a problem, limited development resources should not be expended in this development content area.

**TABLE 11.—Perceptions of Respondents Toward Outdoor Recreation Development: Survey Results Presented in Frequency Counts (Row Percentages Within Parentheses).**

| Characteristic<br>Polar Extreme | 1             | 2             | 3             | 4             | 5             | 6             | 7             | Mean | Characteristic<br>Polar Extreme |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------|---------------------------------|
| Undesirable                     | 53<br>( 3.6)  | 36<br>( 2.4)  | 44<br>( 3.0)  | 50<br>( 3.4)  | 198<br>(13.4) | 383<br>(26.0) | 710<br>(48.2) | 5.9  | Desirable                       |
| Worthless                       | 30<br>( 2.0)  | 25<br>( 1.7)  | 34<br>( 2.3)  | 39<br>( 2.6)  | 167<br>(11.3) | 459<br>(31.1) | 720<br>(48.8) | 6.1  | Valuable                        |
| Ugly                            | 12<br>( 0.8)  | 14<br>( 0.9)  | 16<br>( 1.1)  | 55<br>( 3.7)  | 168<br>(11.4) | 459<br>(31.1) | 750<br>(50.9) | 6.2  | Beautiful                       |
| Unnecessary                     | 29<br>( 2.0)  | 28<br>( 1.9)  | 39<br>( 2.6)  | 62<br>( 4.2)  | 228<br>(15.5) | 408<br>(27.7) | 680<br>(46.1) | 6.0  | Necessary                       |
| Crowded                         | 235<br>(15.9) | 241<br>(16.4) | 223<br>(15.1) | 207<br>(14.0) | 253<br>(17.2) | 187<br>(12.7) | 127<br>( 8.6) | 3.7  | Empty                           |
| Dirty                           | 16<br>( 1.1)  | 29<br>( 2.0)  | 77<br>( 5.2)  | 122<br>( 8.3) | 278<br>(18.9) | 498<br>(33.8) | 454<br>(30.8) | 5.7  | Clean                           |
| Bad                             | 28<br>( 1.9)  | 27<br>( 1.8)  | 48<br>( 3.3)  | 61<br>( 4.1)  | 160<br>(10.9) | 400<br>(27.1) | 750<br>(50.9) | 6.1  | Good                            |

**TABLE 12.—Perceptions of Respondents Toward Tourists: Survey Results Presented in Frequency Counts (Row Percentages Within Parentheses).**

| Characteristic<br>Polar Extreme | 1           | 2           | 3           | 4             | 5             | 6             | 7             | Mean | Characteristic<br>Polar Extreme |
|---------------------------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|------|---------------------------------|
| Dishonest                       | 8<br>(0.5)  | 10<br>(0.7) | 35<br>(2.4) | 395<br>(26.8) | 376<br>(25.5) | 437<br>(29.6) | 213<br>(14.5) | 5.2  | Honest                          |
| Unpleasant                      | 13<br>(0.9) | 15<br>(1.0) | 27<br>(1.8) | 202<br>(13.7) | 334<br>(22.7) | 521<br>(35.3) | 362<br>(24.6) | 5.6  | Pleasant                        |
| Disruptive                      | 17<br>(1.2) | 28<br>(1.9) | 99<br>(6.7) | 256<br>(17.4) | 335<br>(22.7) | 484<br>(32.8) | 255<br>(17.3) | 5.3  | Peaceful                        |
| Bad                             | 9<br>(0.6)  | 12<br>(0.8) | 22<br>(1.5) | 210<br>(14.2) | 358<br>(24.3) | 512<br>(34.7) | 351<br>(23.8) | 5.6  | Good                            |
| Dirty                           | 18<br>(1.2) | 34<br>(2.3) | 81<br>(5.5) | 332<br>(22.5) | 405<br>(27.5) | 410<br>(27.8) | 194<br>(13.2) | 5.1  | Clean                           |
| Worthless                       | 8<br>(0.5)  | 7<br>(0.5)  | 14<br>(0.9) | 171<br>(11.6) | 243<br>(16.5) | 493<br>(33.4) | 538<br>(36.5) | 5.9  | Valuable                        |
| Unwelcome                       | 8<br>(0.5)  | 6<br>(0.4)  | 12<br>(0.8) | 106<br>(7.2)  | 203<br>(13.8) | 475<br>(32.2) | 664<br>(45.0) | 6.1  | Welcome                         |

**Perceptions of Tourists to the Region:** The final area evaluated using the technique employed in the three preceding tables was respondents' perceptions of tourists. Change agents cannot expect to bring about outdoor recreation development, or any other type of planned change, among directly affected groups if the change producing forces result in significant negative consequences for the affected group. Outdoor recreation may attract external users of the facilities to the region and positive perceptions of local residents toward external recreators is a critical issue in the determination of whether or not to proceed to plan for such recreation development. To address the question regarding the perception of local people to external recreators, the respondents were requested to complete the following sentence: Tourists are:—\_\_\_\_\_. The means of responding to the question was the same as the three previous series of items. The data are presented in Table 12.

The findings basically reveal that the respondents possessed a relatively positive perception of tourists. Development of outdoor recreation facilities designed to attract external tourists should not be challenged on the basis of negative attitudes toward tourists. If recreation development should be resisted, the reasons will probably not be tourist perception based.

#### **Evaluation of Knowledge About Outdoor Recreation Development Impact**

A series of questions was presented to the selected respondents which was designed to ascertain their knowledge base relative to the probable economic impact of recreation development and tourism upon directly affected groups. The literature was thoroughly reviewed (2, 3, 7, 9) to determine relevant factors upon which to assess knowledge of probable impact.

Statements were derived from studies conducted in several areas impacted by recreation development.

The respondents were asked to check the response that best reflected their answer to the statement presented. The possible responses were agree, disagree, or uncertain. The responses were tabulated in terms of Responses Indicating Knowledge of Impact which are defined as basically correct responses, and Responses Indicating Little Knowledge of Impact which were incorrect and undecided responses. Questions 1, 2, and 7 were basically false and should have elicited a disagree response to have been consistent with the existing literature. Questions 3, 4, 5, 6, and 8 should have elicited agreement to be consistent with the existing research literature reviewed for this study. Uncertain responses were combined with inconsistent responses since the study goal was to measure the respondents' knowledge about the impact of recreation development and tourism.

When respondents selected an appropriate answer which indicated Knowledge of Impact, they were assessed a value of 1 for each correct response and these values were summed. The possible range of scores was 0 to 8, with 8 indicating complete knowledge of the potential impact and 0 indicating no knowledge. The group mean knowledge score was 3.5, which indicates that the respondents were not well informed relative to the probable impact of outdoor recreation development. The findings are presented in Table 13.

The data indicate that the respondents were not well informed about the probable economic impact of outdoor recreation and tourism in their area. Most people believe: 1) that tourists tend to spend the greatest percentage of vacation budgets at the recreation site; 2) that wages paid to recreation workers

**TABLE 13.—Knowledge of Outdoor Recreation Development and Tourist Impact Upon Local Community Groups: Survey Results Presented in Frequency Counts (Percentages Presented Within Parentheses).**

| Questions Asked  | Responses<br>Indicating Knowledge<br>of Impact | Responses Indicating<br>Little Knowledge of<br>Impact |
|--|--|---|
| 1. Income from tourist dollars in a region has a greater economic impact than most other business activities.                  | 730<br>(49.5)                                  | 744<br>(50.5)   |
| 2. Visitors to a regional recreation or tourist attraction generally spend the largest part of the trip's budget in the area.  | 282<br>(19.1)                                  | 1192<br>(80.9)  |
| 3. Land values usually increase near recreational/tourist developments.  | 1162<br>(78.8)                                 | 312<br>(21.2)   |
| 4. Wages or salaries paid by recreational businesses are among the lowest in the economy.                                      | 493<br>(33.4)                                  | 981<br>(66.6)   |
| 5. Outdoor recreation facilities are usually used by the public about three (3) or four (4) months a year.                     | 1022<br>(69.3)                                 | 452<br>(30.7)   |
| 6. Investment in outdoor recreation or tourism businesses is risky.  | 435<br>(29.5)                                  | 1039<br>(70.5)  |
| 7. Sale of expensive, imported objects will usually provide more economic gain for an area than the sale of local handicrafts. | 681<br>(46.2)                                  | 793<br>(53.8)   |
| 8. Increased property taxes on recreation businesses will force some private operators out of business.                        | 339<br>(23.0)                                  | 1134<br>(77.0)  |

are not among the lowest in the economy; 3) that outdoor recreation investment is not risky; and 4) that increased property taxes would not drive many recreation enterprises out of business. Each of these statements is not generally supported in the existing literature about outdoor recreation. These findings suggest that the respondents probably anticipate greater economic returns to the area than would be achieved if outdoor recreation development projects are implemented.

The responses to questions 1 and 7 basically indicated that people were about evenly divided in terms of the responses. Tourist dollars usually do not generate greater economic benefit than other types of economic enterprises and cheaper local handicrafts usually provide more economic gain to an area than importation of expensive handicrafts. The respondents were aware that land values usually increase near outdoor recreation development sites and that most recreation facilities operate only 3 or 4 months a year. Given that the respondents were knowledgeable of the seasonality of outdoor recreation and still perceived such economic development as desirable would suggest that such employment is perceived as an acceptable behavior pattern.

The major finding of this section of the survey is that local people who were interviewed possessed

basically inadequate knowledge about the potential economic benefits and costs to be derived from outdoor recreation development. Expectations of the local people relative to outdoor recreation development will probably not be realized if research findings about the effects of such development in other parts of the country are applicable to the study area. These findings suggest that an educational program relative to the probable impact of outdoor recreation development should be conducted prior to the pursuit of such development efforts. Both positive and negative consequences of outdoor recreation development should be presented to the client group.

#### **Industrial Development Attitudes Among Selected Residents of Southeast Ohio**

A series of attitude items were developed to evaluate the perceptions of the respondents relative to industrial development in the study region. Likert-type items (8) were drawn from an existing research instrument developed by the principal author (13, 14, 15, 16, 17 and others). The selected items were chosen on the basis of item analysis statistics which identified the items with the strongest differentiating power. The instrument from which the items were drawn has been demonstrated to be a reliable measure of commitment to other phenomena. Evaluation of the attitude scales used in this study follow-

ing the data collection again demonstrated that the measurement devices were quite good.<sup>8</sup> The possible responses to each item were strongly agree, agree, undecided, disagree, and strongly disagree and were weighted 5 through 1.

Questions 1 through 8 in Table 14 were adopted from Napier's previous research and were reworded to measure the attitude toward rural industrial development. Questions 9-12 were added to evaluate specific aspects of rural industrial development. Factor analyses of the scales used in this study added further proof that the items load well together to form a composite index.

The reader is cautioned that some items were worded to be negative and the mean score for the item must be interpreted in the context of the question. For example, high values may be positive or negative depending upon the wording of the question. The negative items were added to the positive statements to prevent a response set (respondents answer-

<sup>8</sup>Item analysis has been used to assess the reliability of the scale used in previous research situations (13, 14, 16, 17).

ing all questions with the same response without reading and reacting to each question) which is a major problem in attitude measurement. The findings are presented in Table 14.

Table 14 clearly indicates that the respondents were very favorable to rural industrial development in their region. They believed that industrial development in the region would benefit them or family members as well as the region. The respondents believed that industrial development was essential to the maturation of their region and that costs of industrial growth could be justified. The respondents indicated that they did not believe that industrial development would create major problems for directly affected communities and that the advantages of industrial development would offset any disadvantages. The people believed that employment of women would not threaten family life. The data indicate that no efforts should be expended to discourage industrial development in the region since such expansion would mean jobs for local people (No. 1 priority problem noted in Table 6).

**TABLE 14.—Attitudes of Survey Respondents to Industrial Development: Presented in Frequency Counts (Percentages Within Parentheses).**

| Question   | Strongly Agree<br>5* | Agree<br>4*   | Undecided<br>3* | Disagree<br>2* | Strongly Disagree<br>1* | Mean for Question Response |
|--|----------------------|---------------|-----------------|----------------|-------------------------|----------------------------|
| 1. Industrial development in my region will benefit me or some member of my household.               | 720<br>(48.8)        | 489<br>(33.2) | 76<br>( 5.2)    | 126<br>( 8.5)  | 63<br>( 4.3)            | 4.1                        |
| 2. The costs of industrial development in my region can be justified.                                | 377<br>(25.6)        | 679<br>(46.1) | 329<br>(22.3)   | 70<br>( 4.7)   | 19<br>( 1.3)            | 3.9                        |
| 3. Industrial development is not needed in my region.  | 34<br>( 2.3)         | 74<br>( 5.0)  | 78<br>( 5.3)    | 552<br>(37.4)  | 736<br>(49.9)           | 1.7                        |
| 4. The disadvantages brought to my region by industrial development will offset the advantages.      | 61<br>( 4.1)         | 205<br>(13.9) | 225<br>(15.3)   | 614<br>(41.7)  | 369<br>(25.0)           | 2.3                        |
| 5. Industrial development in my region will create many problems for people living here.             | 37<br>( 2.5)         | 227<br>(15.4) | 175<br>(11.9)   | 688<br>(46.7)  | 347<br>(23.5)           | 2.3                        |
| 6. Industries should not be encouraged to locate in my region.                                       | 45<br>( 3.1)         | 85<br>( 5.8)  | 79<br>( 5.4)    | 610<br>(41.4)  | 655<br>(44.4)           | 1.8                        |
| 7. Industrial development of my region will provide many jobs for local people.                      | 748<br>(50.7)        | 599<br>(40.6) | 67<br>( 4.5)    | 39<br>( 2.6)   | 21<br>( 1.4)            | 4.4                        |
| 8. Industrial development will make my region a better place in which to live.                       | 550<br>(37.3)        | 640<br>(43.4) | 167<br>(11.3)   | 84<br>( 5.7)   | 33<br>( 2.2)            | 4.1                        |
| 9. New industries employing mostly women would be harmful to family life in my region.               | 107<br>( 7.3)        | 216<br>(14.7) | 254<br>(17.2)   | 555<br>(37.7)  | 342<br>(23.2)           | 2.5                        |
| 10. Industrial development will benefit my region.   | 611<br>(41.5)        | 694<br>(47.1) | 94<br>( 6.4)    | 50<br>( 3.4)   | 25<br>( 1.7)            | 4.2                        |
| 11. New jobs are more important to me than the air or water pollution that new industries may cause. | 217<br>(14.7)        | 399<br>(27.1) | 267<br>(18.1)   | 402<br>(27.3)  | 189<br>(12.8)           | 3.0                        |
| 12. Planned industrial parks are very important for industrial development.                          | 326<br>(22.1)        | 773<br>(52.4) | 277<br>(18.8)   | 80<br>( 5.4)   | 18<br>( 1.2)            | 3.9                        |

\*Weighted values given to each designated response.

While the respondents indicated that industrial development was extremely important for the region, the group was less favorable to the creation of new jobs at the cost of air and water pollution. This suggests that the respondents would assess the situation before supporting the establishment or expansion of an industry which would possibly pollute the environment.

The respondents basically agreed that industrial development is often dependent on the availability of industrial parks. Existing industrial development literature would tend to support the beliefs of the respondents in this matter. The development implication is that the people in the area are cognizant of at least one of the prerequisites for industrial development.

#### Attitudes of Selected Respondents to Outdoor Recreation Development

A series of attitude questions were developed from existing scales formulated by Napier (see discussion in previous section) to measure attitudes toward outdoor recreation development in the region. The

similarity of the questions used to measure attitudes toward outdoor recreation development and industrial development was by design to compare the responses to the two types of development activity. The attitude findings for outdoor recreation development items are presented in Table 15. Again, several of the questions are worded in a negative manner to prevent a response set, which means that the descriptive statistics for the responses must be interpreted in the context of the question wording (sometimes a low value may be positive for one item but negative for another statement).

The findings reveal that the respondents were very positive about outdoor recreation development in their region, even though the perceived economic benefit in terms of jobs (question 1) is probably overstated. The people also believed that outdoor recreation was needed even though it was given relatively low priority in Table 6. The respondents believed recreation development would prove to be beneficial to the region. The data indicate that the respondents believed that advantages brought to the region by

**TABLE 15.—Attitudes of Survey Respondents to Outdoor Recreation Development: Presented in Frequency Counts (Percentages Within Parentheses).**

| Question  | Strongly Agree 5* | Agree 4*      | Undecided 3*  | Disagree 2*   | Strongly Disagree 1* | Mean for Question Response |
|---|-------------------|---------------|---------------|---------------|----------------------|----------------------------|
| 1. Outdoor recreation development of my region will provide many jobs for local people.   | 312<br>(21.2)     | 809<br>(54.9) | 197<br>(13.4) | 134<br>( 9.1) | 22<br>( 1.5)         | 3.9                        |
| 2. Outdoor recreation development will make my region a better place in which to live.  | 366<br>(24.8)     | 872<br>(59.2) | 141<br>( 9.6) | 79<br>( 5.4)  | 16<br>( 1.1)         | 4.0                        |
| 3. Outdoor recreation development is not needed in my region.   | 34<br>( 2.3)      | 99<br>( 6.7)  | 129<br>( 8.8) | 785<br>(53.3) | 427<br>(29.0)        | 2.0                        |
| 4. Development of outdoor recreation will benefit my region.  | 381<br>(25.8)     | 899<br>(61.0) | 113<br>( 7.7) | 64<br>( 4.3)  | 17<br>( 1.2)         | 4.1                        |
| 5. The costs of outdoor recreation development in my region can be justified.   | 226<br>(15.3)     | 705<br>(47.8) | 422<br>(28.7) | 97<br>( 6.6)  | 24<br>( 1.6)         | 3.7                        |
| 6. The disadvantages brought to my region by outdoor recreation development will offset the advantages.                                   | 39<br>( 2.6)      | 210<br>(14.2) | 267<br>(18.1) | 716<br>(48.6) | 242<br>(16.4)        | 2.4                        |
| 7. Outdoor recreation development in my region will create many problems for people living here.  | 17<br>( 1.2)      | 124<br>( 8.4) | 200<br>(13.6) | 845<br>(57.3) | 288<br>(19.5)        | 2.1                        |
| 8. My region will not benefit much from new outdoor recreational development.   | 33<br>( 2.2)      | 137<br>( 9.3) | 159<br>(10.8) | 832<br>(56.4) | 313<br>(21.2)        | 2.1                        |
| 9. Existing recreation facilities in my region are adequate for my needs.   | 171<br>(11.6)     | 557<br>(37.8) | 196<br>(13.3) | 391<br>(26.5) | 159<br>(10.8)        | 3.1                        |
| 10. Expansion of existing outdoor recreation and tourism attractions in my region will reduce my travel to other areas outside my region. | 203<br>(13.8)     | 505<br>(34.3) | 270<br>(18.3) | 389<br>(26.4) | 107<br>( 7.3)        | 3.2                        |
| 11. Outdoor recreation development is usually harmful to the environment.   | 13<br>( 0.9)      | 67<br>( 4.5)  | 136<br>( 9.2) | 848<br>(57.5) | 410<br>(27.8)        | 1.9                        |

\*Weighted values given to each designated response.

**TABLE 16.—Perceived Commitment of Survey Respondents to Outdoor Recreation and Industrial Development: Presented in Frequency Counts (Percentages Within Parentheses).**

| Question   | Strongly Agree<br>5* | Agree<br>4*   | Undecided<br>3* | Disagree<br>2* | Strongly Disagree<br>1* | Mean for Question Response |
|--|----------------------|---------------|-----------------|----------------|-------------------------|----------------------------|
| 1. I am willing to donate my time to work for outdoor recreational development in my region.           | 140<br>( 9.5)        | 521<br>(35.3) | 363<br>(24.6)   | 341<br>(23.1)  | 109<br>( 7.4)           | 3.2                        |
| 2. I would support local increased tax levies to finance the development of industrial location sites. | 191<br>(13.0)        | 498<br>(33.8) | 325<br>(22.0)   | 284<br>(19.3)  | 176<br>(11.9)           | 3.2                        |
| 3. I would support local zoning regulations for development purposes.                                  | 254<br>(17.2)        | 746<br>(50.6) | 292<br>(19.8)   | 125<br>( 8.5)  | 57<br>( 3.9)            | 3.7                        |
| 4. I would support local tax levies for local outdoor recreation projects.                             | 173<br>(11.7)        | 543<br>(36.8) | 308<br>(20.9)   | 290<br>(19.7)  | 160<br>(10.9)           | 3.2                        |

\*Weighted values given to each designated response.

outdoor recreation development would offset any disadvantages and that relatively few problems would be created for local residents as a direct result of recreation development efforts.

The need for outdoor recreation development may be somewhat questionable when the data are evaluated in the context of the perceived adequacy of existing recreation facilities. The data relative to adequacy of existing recreational facilities reveal that the respondents were neither positive nor negative on the issue. The respondents were basically undecided about the impact on their travel outside the region if the existing recreation facilities in the region were expanded. However, there was general agreement among the respondents that outdoor recreation development is usually not harmful to the environment.

The findings in essence replicate the data for industrial development since there were positive perceptions toward outdoor recreation development in the region.

#### **Evaluation of Personal Commitment to Regional Development**

While it is clear that the study participants hold positive perceptions about industrial and outdoor recreation development, the authors wished to assess the relative degree of personal commitment that people would make to each type of development. To achieve this objective, several questions were developed which were designed to evaluate the degree of personal commitment that the local people would be willing to make for development efforts in their region. The types of commitment ranged from donation of time to tax levies for support of development programs. The findings are presented in Table 16.

The central tendency data revealed that the respondents were basically undecided in terms of the questions relating to personal commitment they would be willing to make for development efforts.

The only commitment issue that tended to be strongly supported was the use of zoning for development purposes. The other issues (donated time and tax levies) were not as positively perceived, even though the means were higher than the undecided weight of 3.0. The data suggest that personal commitment for development efforts will be more difficult to achieve than creating interest for development. Even though there were very positive perceptions toward the development efforts evaluated, there was less commitment to action. The study participants were positive toward development activity but many people were undecided about committing themselves or their resources to goal achievement. It is possible that many people in the undecided category could become involved but would obviously have to assess the nature of the development effort before becoming actively engaged in the change programs.

If community members do not commit themselves in terms of time and/or other resources, the expectations of the people relative to the leadership of the collective group may be unrealistic. It is often impossible for community leaders to facilitate the development of change programs without the commitment of personal resources by local group members. To be favorable toward development efforts is a necessary but not sufficient condition for development. It also takes personal commitment which appears to be less favorably perceived by the study participants.

#### **Attitudes Toward Tourists and Tourist Recreation Development**

If outdoor recreation development programs are to be successfully integrated into the matrix of social relationships in an affected community group without continual social conflict, a positive attitude toward extra-local recreators must be present among residents of the affected area. The respondents were

**TABLE 17.—Perceptions of Survey Respondents Toward Tourists and Tourist-Oriented Recreation Development.**

| Question   | Strongly Agree<br>5* | Agree<br>4*   | Undecided<br>3* | Disagree<br>2* | Strongly Disagree<br>1* | Mean for Question Response |
|--|----------------------|---------------|-----------------|----------------|-------------------------|----------------------------|
| 1. It is more important to provide recreation facilities for local people than for tourists. | 241<br>(16.4)        | 753<br>(51.1) | 215<br>(14.6)   | 219<br>(14.9)  | 46<br>( 3.1)            | 3.6                        |
| 2. Most of my meetings with tourists to my region have been pleasant.                        | 401<br>(27.2)        | 824<br>(55.9) | 233<br>(15.8)   | 14<br>( 0.9)   | 2<br>( 0.1)             | 4.1                        |
| 3. I am against new outdoor recreation facilities which will attract tourists to my region.  | 17<br>( 1.2)         | 69<br>( 4.7)  | 98<br>( 6.6)    | 860<br>(58.3)  | 430<br>(29.2)           | 1.9                        |

\*Weighted values given to each designated response.

requested to evaluate the interaction experience with tourists. Three questions were directed toward the respondents which were designed to evaluate their attitudes toward tourists as people and their perceptions relative to creation of outdoor recreation facilities designed primarily for tourists. The findings are presented in Table 17.

The data basically indicate that the respondents believed that outdoor recreation facilities should be designed primarily for local people but also revealed that they were not opposed to recreation development which would attract tourists to their region. The relative positive attitude toward tourism development may be a partial function of the very positive attitude of the respondents toward recent contact with tourists. These data indicate that the survey participants be-

lieved that outdoor recreation development should proceed along the lines of providing for local outdoor recreation needs first and then accommodating extra region groups if they are attracted to the facilities.

#### Recreation Participation

The respondents were asked to rank the four most important outdoor recreation activities for their family. The responses were weighted using the same techniques used in the problem priorities and a weighted rank score was computed and rank orders assigned from these values. The recreation categories were selected from existing literature relative to outdoor recreation activities which resulted in a total of 14 different activities being presented to the respondents. It should be noted that only 1.4 percent of the responses to the question could not be subsumed

**TABLE 18.—Survey Response to Outdoor Recreation Activity.**

| Outdoor Recreation Activity | 1st Choice | 2nd Choice | 3rd Choice | 4th Choice | Weighted Rank Order* |
|-----------------------------|------------|------------|------------|------------|----------------------|
| Fishing                     | 193        | 215        | 103        | 68         | 1                    |
| Gardening                   | 134        | 123        | 113        | 96         | 2                    |
| Swimming                    | 129        | 144        | 128        | 116        | 3                    |
| Picnicking                  | 60         | 117        | 164        | 136        | 4                    |
| Camping                     | 154        | 69         | 64         | 68         | 5                    |
| Hunting                     | 149        | 90         | 113        | 138        | 6                    |
| Bike Riding                 | 39         | 56         | 81         | 59         | 7                    |
| Local Sightseeing           | 31         | 46         | 91         | 93         | 8                    |
| Hiking                      | 36         | 58         | 38         | 55         | 9                    |
| Boating-Canoeing            | 22         | 40         | 55         | 59         | 10                   |
| Golf                        | 37         | 20         | 23         | 30         | 11                   |
| Horseback Riding            | 29         | 31         | 19         | 15         | 12                   |
| Tennis                      | 11         | 19         | 21         | 20         | 13                   |
| Other                       | 20         | 8          | 8          | 25         | 14                   |
| Water Skiing                | 6          | 13         | 15         | 13         | 15                   |
| No Choice†                  | 424        | 425        | 438        | 483        |                      |

\*The frequencies designated as the first choice were weighted with a value of 4, the second by 3, the third by 2, and the fourth by 1. The values were multiplied by the frequency of responses and summed across the category and divided by the total number of respondents ranking (excludes those who did not rank any choice).

†424 people indicated they did not engage in outdoor recreation activity and some people elected not to rank four choices.



Completely Satisfied with Facilities

| 1      | 2      | 3      | 4      | 5      | 6     | 7      |
|--------|--------|--------|--------|--------|-------|--------|
| 259    | 153    | 256    | 328    | 175    | 141   | 157    |
| (17.6) | (10.4) | (17.4) | (22.3) | (11.9) | (9.6) | (10.7) |

Completely Dissatisfied with Facilities

under a specified category, which means the activities provided to the respondents as possible responses were quite relevant. The findings are presented in Table 18.

The findings demonstrated that the respondents participated more frequently in fishing than any other outdoor recreation endeavor. Gardening, swimming, picnicking, and camping were the next most important types of activities in order of participation.

If decisions are made relative to future outdoor recreation development from the top five choices, then multiple-use facilities incorporating fishing, picnicking, camping, and swimming would appear to be relevant to the survey group's outdoor recreation activities (gardening was not included since this is usually a home activity). More intensive and multiple-use outdoor recreation development would appear to be relevant and consistent with existing outdoor recreation participation activity. It is also consistent with the preferences for type of outdoor recreation development the respondents would like to have expanded in their region.

The respondents were asked to evaluate the existing outdoor recreation facilities relative to how well the facilities satisfy the family's needs for outdoor recreation experiences. The respondents were asked to note on a scale of 1 to 7 their degree of satisfaction with the existing facilities. A value of 1 indicated complete satisfaction while a 7 indicated complete dissatisfaction. The distribution of responses is shown at the top of this page.

The mean of the group responses was 3.7, which indicates a slight propensity to be more satisfied than dissatisfied with existing facilities.

These data support the finding presented earlier (question 9 in Table 15) that the respondents were not significantly dissatisfied with existing facilities. These perceptions would partially explain why they placed higher priority upon industrial development

and such a low priority on outdoor recreation development. There is greater perceived need for industrial development since outdoor recreation opportunities are at least partially meeting the respondents' needs now.

A question was included in the study which asked the respondents to compare industrial and outdoor recreation development in terms of the priority placed upon each. The question was: My region needs industrial development more than it needs outdoor recreation development. The possible responses were: strongly agree, agree, undecided, disagree, and strongly disagree. The responses were weighted 5 through 1, with strongly agree equal to 5 and strongly disagree equal to 1. The frequency counts and percentages are shown at the bottom of this page.

The mean was 3.9, which indicates that the survey respondents placed much higher priority on industrial development than they did on recreation development.

#### Perceived Ability of Region to Provide Resources to Industry

Data were gathered relative to the respondents' perception of the region's ability to provide needed resources to industry considering locating in the area. The respondents were requested to respond to the questions on a scale of 1 to 7, with 1 indicating inability of the region to provide resources while 7 indicated complete ability to provide the specific resources to industry. The findings are presented in Table 19. Caution must be noted relative to the findings since these data indicate perceptions of respondents and not necessarily whether or not the region is able to provide the resources to industry.

These data indicate that the people surveyed believe that the region could supply the basic resource needs of industry. The resource perceived as being the most difficult to provide was available housing for workers. This supports the findings

| Strongly Agree | Agree  | Undecided | Disagree | Strongly Disagree |
|----------------|--------|-----------|----------|-------------------|
| 550            | 535    | 187       | 154      | 48                |
| (37.3)         | (36.3) | (12.7)    | (10.4)   | (3.3)             |

**TABLE 19.—Survey Respondents' Perceived Ability of the Region to Provide for Industrial Resource Needs.**

| Resource                                     | Mean of Responses | Not Able to Provide |               |               |               |               |               |               | Able to Provide |
|--|-------------------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|
|  |                   | 1                   | 2             | 3             | 4             | 5             | 6             | 7             |                 |
| Available Energy Supplies                    | 5.4               | 52<br>( 3.5)        | 32<br>( 2.2)  | 62<br>( 4.2)  | 274<br>(18.6) | 272<br>(18.5) | 250<br>(17.0) | 532<br>(36.1) |                 |
| Local Vocational-Technical Training Programs | 5.4               | 53<br>( 3.6)        | 61<br>( 4.1)  | 74<br>( 5.0)  | 216<br>(14.7) | 256<br>(17.4) | 275<br>(18.7) | 539<br>(36.6) |                 |
| Local Investors                              | 4.4               | 86<br>( 5.8)        | 93<br>( 6.3)  | 135<br>( 9.2) | 528<br>(35.8) | 263<br>(17.8) | 179<br>(12.1) | 190<br>(12.9) |                 |
| Available Trained Workers                    | 5.0               | 53<br>( 3.6)        | 66<br>( 4.5)  | 118<br>( 8.0) | 315<br>(21.4) | 278<br>(18.9) | 283<br>(19.2) | 361<br>(24.5) |                 |
| Good Schools for Workers' Children           | 5.5               | 80<br>( 5.4)        | 57<br>( 3.9)  | 60<br>( 4.1)  | 132<br>( 9.0) | 212<br>(14.4) | 396<br>(26.9) | 537<br>(36.4) |                 |
| Housing for Plant Workers                    | 3.7               | 233<br>(15.8)       | 224<br>(15.2) | 221<br>(15.0) | 294<br>(19.9) | 242<br>(16.4) | 126<br>( 8.5) | 134<br>( 9.1) |                 |
| Low Local Taxes                              | 4.2               | 164<br>(11.1)       | 85<br>( 5.8)  | 128<br>( 8.7) | 477<br>(32.4) | 270<br>(18.3) | 182<br>(12.3) | 168<br>(11.4) |                 |

in Table 6 which demonstrate that housing was perceived as a problem in the region. The respondents believed that the region could provide good schools, energy supplies, local vocational-technical training programs, and a trained labor pool to interested industry.

#### Sources of Information

If community groups are to effectively bring collective action to bear upon identified problems, then diffusion of information must be accomplished in a rapid and efficient manner. To achieve the goal of information diffusion, the provider of the information needed for democratic decision making must be cognizant of the sources used by the client group for specific information needs so that effective use may be made of limited resources. A portion of the survey was designed to ascertain the most important information source used by the respondents. Selected content areas and the major information sources were used to evaluate the use made of different media. The respondents were asked to note the single most important source of information for each type of information noted. The findings are presented in Table 20.

The data indicate that the mass media are the most important sources of information for seven of the eight issues evaluated. Newspapers were the most frequently used source of information for five of the eight issues evaluated, while radio and special interest magazines were most important for one interest area each. The county extension agent was insignificant as a source of information on all issues with the exception of agricultural information. In terms of agricultural information, the county agent played the most significant role. Even though public officials were not the most important sources for any

issue, they were relatively important for several local issues.

The data clearly show that for most issues the survey respondents utilized the mass media. These findings are basically consistent with previous research conducted by the principal author. The mass media were shown to be the most frequently used sources for nearly all information in two previous studies. The implications for community development are that change agents should place considerable emphasis on the use of the mass media for information dissemination when they desire to involve local people in decision making. Informed people can more effectively participate in decisions affecting their lives.

#### SUMMARY

The study findings revealed that the respondents held very positive attitudes and perceptions of rural industrial and outdoor recreation development. It was discovered that the respondents placed highest priority on industrial development and relatively low priority on outdoor recreation development programs. They were much less willing, however, to make personal commitments to accomplish development goals. Contributions of personal time and financial support for development efforts were perceived less favorably but the respondents were positive toward the use of zoning to facilitate industrial development. The undecidedness of the respondents in terms of taxing and donation of time to work for development efforts would suggest that direct involvement of the people in the region would depend on the type of development project undertaken.

The respondents exhibited very positive attitudes about their region and about tourists with whom they have interacted in the recent past. This would sug-

**TABLE 20.—Most Important Source of Information for Survey Respondents Presented in Frequency Counts with Percentages Within Parentheses.**

| Type of Information               | Do Not Seek<br>This Type of<br>Information | Public<br>Officials | Radio         | County<br>Extension<br>Agent | Television    | Newspapers    | Family<br>or<br>Neighbors | Special<br>Interest<br>Magazines | Extension<br>Bulletins | No<br>Response |
|-----------------------------------|--|---------------------|---------------|------------------------------|---------------|---------------|---------------------------|----------------------------------|------------------------|----------------|
| General Community Problems        | 72<br>( 4.9)                               | 318<br>(21.6)       | 239<br>(16.2) | 39<br>( 2.6)                 | 67<br>( 4.5)  | 485<br>(32.9) | 245<br>(16.6)             | 2<br>( 0.1)                      | 3<br>( 0.2)            | 4<br>(0.3)     |
| Local News                        | 2<br>( 0.1)                                | 1<br>( 0.1)         | 623<br>(42.3) | 3<br>( 0.2)                  | 197<br>(13.4) | 530<br>(36.0) | 115<br>( 7.8)             | 0<br>( 0.0)                      | 1<br>( 0.1)            | 2<br>(0.1)     |
| Information About Your Occupation | 524<br>(35.5)                              | 125<br>( 8.5)       | 57<br>( 3.9)  | 73<br>( 5.0)                 | 18<br>( 1.2)  | 131<br>( 8.9) | 113<br>( 7.7)             | 382<br>(25.9)                    | 40<br>( 2.7)           | 11<br>(0.7)    |
| New Development Programs          | 151<br>(10.2)                              | 236<br>(16.0)       | 151<br>(10.2) | 72<br>( 4.9)                 | 167<br>(11.3) | 579<br>(39.3) | 72<br>( 4.9)              | 24<br>( 1.6)                     | 18<br>( 1.2)           | 4<br>(0.3)     |
| Recreation Activities             | 169<br>(11.5)                              | 153<br>(10.4)       | 158<br>(10.7) | 50<br>( 3.4)                 | 87<br>( 5.9)  | 601<br>(40.8) | 192<br>(13.0)             | 46<br>( 3.1)                     | 13<br>( 0.9)           | 5<br>(0.3)     |
| Taxing Issues                     | 68<br>( 4.6)                               | 520<br>(35.3)       | 93<br>( 6.3)  | 27<br>( 1.8)                 | 78<br>( 5.3)  | 637<br>(43.2) | 40<br>( 2.7)              | 4<br>( 0.3)                      | 4<br>( 0.3)            | 3<br>(0.2)     |
| Local School Issues               | 117<br>( 7.9)                              | 402<br>(27.3)       | 127<br>( 8.6) | 14<br>( 0.9)                 | 31<br>( 2.1)  | 622<br>(42.2) | 148<br>(10.0)             | 5<br>( 0.3)                      | 7<br>( 0.5)            | 1<br>(0.1)     |
| Agricultural Information          | 283<br>(19.2)                              | 19<br>( 1.3)        | 90<br>( 6.1)  | 618<br>(41.9)                | 29<br>( 2.0)  | 139<br>( 9.4) | 68<br>( 4.6)              | 42<br>( 2.8)                     | 183<br>(12.4)          | 3<br>(0.2)     |

\*The most important source of information for each issue is enclosed in boxes.

gest that outdoor recreation which attracted extra region participants would not be opposed by the local people on the basis of their perceptions of tourists. The respondents were not well informed about the probable economic impact of outdoor recreation development but held very positive attitudes about such development. The survey respondents basically were marginally satisfied with existing outdoor recreation facilities in the region and expressed much more concern about expanding the industrial base. They indicated that if industry was attracted to the region, they would like to see resource, heavy, and light industries expanded.

The concern for industrial expansion was noted in the problem priority question which revealed that jobs were the single most important problem for the region, with crime, drug abuse, housing, education, and transportation perceived as important concerns. New development programs for the region should encompass these issues.

The respondents indicated a preference for general and heavy use types of recreation development and noted that new facilities should be designed to accommodate local needs first but that tourists were welcome in the region. The outdoor recreation activities in which the respondents frequently engaged suggest that multiple-use facilities which included fishing, swimming, picnicking, and camping would be most appropriate.

It should be observed that the survey was content specific in that industrial and outdoor recreation development were emphasized. While the people surveyed indicated positive attitudes toward such development efforts, the priority question would suggest that other development efforts would also be perceived positively and would have higher priority in terms of commitment of limited resources. For example, drug abuse and crime programs would probably be strongly supported.

## LITERATURE CITED

1. Beal, George M. 1964. Social Action: Instigated Social Change in Large Social Systems. Chapter 7 in *Our Changing Rural Society*, edited by James Copp, Iowa State Univ. Press, Ames.
2. Beardsley, Wendell G. 1971. The Economic Impact of Recreation Development: A Synopsis. In *Recreation Symposium Proceedings*, N. E. For. Exp. Sta., U. S. For. Serv., Upper Darby, Pa.
3. Bevins, Malcolm I. 1971. Private Recreation Enterprise Economics. In *Recreation Symposium Proceedings*, N. E. For. Exp. Sta., U. S. For. Serv., Upper Darby, Pa.
4. Bottum, J. Carroll. 1974. The Philosophy and Process of Community Development. Chapter 1 in *The Development of Rural America*, George Brinkman, Editor, Univ. Press of Kansas, Lawrence.
5. Broberg, Don. 1973. Decision Making at the Community Level. Chapter 5 in *Rural Development Research Priorities*, edited by Larry R. Whiting, Iowa State Univ. Press, Ames.
6. Cary, Lee. 1970. *Community Development as a Process*. Univ. of Missouri Press, Columbia.
7. Ching, C. T. K. and G. E. Frick. 1973. Economic Effects of Pawtuckaway State Park. Research Report 31, New Hampshire Agri. Exp. Sta. and Econ. Res. Serv., USDA, Durham, N. H.
8. Edwards, Allen. 1957. *Techniques of Attitude Scale Construction*. Appleton-Century Crofts, Inc., New York.
9. Gilbert, Alphonse H. 1975. Expenditure Patterns of Resident Sportsmen in Vermont, 1970. Research Report MP82, Vermont Agri. Exp. Sta., Burlington.
10. Haggstrom, Warren C. 1970. The Psychological Implications of the Community Development Process. Chapter 4 in *Community Development as a Process*, edited by Lee Cary, Univ. of Missouri Press, Columbia.
11. Kaufman, Harold. 1959. Toward an Interactional Conception of Community. *Social Forces*, Vol. 38, pp. 8-17.
12. Miller, Paul. 1971. Federalism and Domestic Development. Chapter 11 in *Sociological Perspectives of Domestic Development*, edited by George M. Beal, Ronald C. Powers, and E. Walter Coward, Jr., Iowa State Univ. Press, Ames.
13. Napier, Ted L. 1976. A Longitudinal Analysis of the Attitudinal Response of Rural People to Natural Resource Development: A Case Study of the Impact of Water Resource Development. *Ohio Agri. Res. and Dev. Center, Res. Bull.* 1083.
14. Napier, Ted L. 1975. An Analysis of the Social Impact of Water Resource Development and Subsequent Forced Relocation of Population Upon Rural Community Groups: An Attitude Study. *Ohio Agri. Res. and Dev. Center, Res. Bull.* 1080.
15. Napier, Ted L. 1972. Social Psychological Response to Forced Relocation Due to Watershed Development. *Amer. Water Resources Assoc., Water Resources Bull.*, 8 (4):784-794.
16. Napier, Ted L. 1971. The Impact of Water Resource Development Upon Local Rural Communities: Adjustment Factors to Rapid Change. Ph.D. Dissertation, The Ohio State Univ.
17. Napier, Ted L. and Cathy J. Wright. 1974. An Evaluation of Forced Relocation of Population Due to Rural Community Development. *Ohio Agri. Res. and Dev. Center, Res. Bull.* 1073.
18. Pierce, John M. 1976. The Social-Psychological Dimensions of Perception and Attitude: Their Relationship to Outdoor Recreation and Tourism in a Regional Development Context. Ph.D. Dissertation, The Ohio State Univ.
19. Powers, Ronald C. 1971. Sociological Strategies in a Multicounty Development Program: A Case in Sociologing. Chapter 8 in *Sociological Perspectives of Domestic Development*, edited by George Beal, Ronald C. Powers, and E. Walter Coward, Jr., Iowa State Univ. Press, Ames.
20. Scott, John T., Jr. and Gene F. Summers. 1974. Problems in Rural Communities After Industry Arrives. Chapter 8 in *Rural Industrialization Problems and Potentials*, Larry Whiting, editor, Iowa State Univ. Press, Ames.
21. Warren, Roland. 1972. *The Community in America*. 2nd ed., Rand McNally College Pub. Co., Chicago.
22. Widner, Ralph. 1974. Regional Coordination of Communities with Industrial Potential. Chapter 11 in *Rural Industrialization: Problems and Potentials*, edited by Larry R. Whiting, Iowa State Univ. Press, Ames.
23. Wilkinson, Kenneth. 1974. Consequences of Decline and Social Adjustment to It. Chapter 4 in *Communities Left Behind*, edited by Larry Whiting, Iowa State Univ. Press, Ames.

## APPENDIX

Office  
Use  
Only

**Instructions:**

The interviewer will give you several maps which show six (6) different areas. Choose the map which **best describes** the region to which you identify.

1. \_\_\_\_\_ Map selected \_\_\_\_\_

**Instructions:**

Please read the list below. Which do **you** think are the three (3) most important development problems in your region? Place a one (1) by the **most important** problem. Place a two (2) by the second most important problem, and place a three (3) by the third most important problem. (Mark only **three**.)

- |           |                                     |                                       |
|-----------|-------------------------------------|---------------------------------------|
| 2. _____  | _____ New housing                   | _____ Education                       |
| 3. _____  | _____ Solid waste (garbage) pick-up | _____ Water supply                    |
| 4. _____  | _____ Jobs and industrial expansion | _____ Highway improvements            |
| 5. _____  | _____ Planning and zoning           | _____ Recreational facilities         |
| 6. _____  | _____ Drug abuse                    | _____ Crime, vandalism, trespassing   |
| 7. _____  | _____ Sewage improvements           | _____ Other (Please note the problem) |
| 8. _____  |                                     | _____                                 |
| 9. _____  |                                     |                                       |
| 10. _____ |                                     |                                       |
| 11. _____ |                                     |                                       |
| 12. _____ |                                     |                                       |
| 13. _____ |                                     |                                       |

**Instructions:**

Businesses and companies may move into your region. Which two companies do you think would have the **greatest benefit to you**? Mark one (1) for your first choice, a two (2) for your second choice. (Mark only **two**.)

- |           |  |
|-----------|--|
| 14. _____ | _____ <b>Heavy manufacturing</b> (Example: steel mill or tire plant)         |
| 15. _____ | _____ <b>Service industry</b> (Example: dry cleaner or repair shop)          |
| 16. _____ | _____ <b>Resource industry</b> (Example: coal mining, forestry, agriculture) |
| 17. _____ | _____ <b>Construction</b> (Example: pipeline contractors)                    |
| 18. _____ | _____ <b>Handicraft industry</b> (Example: weaving, woodcarving)             |
| 19. _____ | _____ <b>Light manufacturing</b> (Example: textile mill or canning factory)  |

**Instructions:**

New outdoor recreation and park facilities may be built in your region. Which two types do you think would have the **greatest benefit to your region**? Mark one (1) for your first choice, a two (2) for your second choice. (Mark only **two**.)

- |           |  |
|-----------|--|
| 20. _____ | _____ <b>Heavy-use recreation areas</b> (Example: pools, recreation centers, Kings Island, Inc.)     |
| 21. _____ | _____ <b>General outdoor recreation areas</b> (Example: multi-purpose camping, picnic, boating area) |
| 22. _____ | _____ <b>Natural environment areas</b> (Example: bird watching, wildlife area, forest preserve area) |
| 23. _____ | _____ <b>Special natural areas</b> (Example: Old Man's Cave, Yellowstone geysers)                    |
| 24. _____ | _____ <b>Wild areas</b> (Example: backpack tenting, removed from sights and sounds)                  |
| 25. _____ | _____ <b>Historic and cultural sites</b> (Example: canal and railroad restoration, museums)          |

Office  
Use  
Only

**Instructions:**

The statements listed below refer to the regional map you have just selected. What are your feelings about your region? Please circle the letter which best describes your feelings about your region.

**Example:**

Snow White is:  
Beautiful

**VS**  
Very  
Strong

S  
Strong

M  
Mild

O  
No  
Opinion

M  
Mild

S  
Strong

VS  
Very  
Strong

Ugly

**(Scale Meaning)**

|         |                         | VS          | S      | M    | O          | M    | S      | VS          |           |
|---------|-------------------------|-------------|--------|------|------------|------|--------|-------------|-----------|
|         |                         | Very Strong | Strong | Mild | No Opinion | Mild | Strong | Very Strong |           |
| 26.____ | My region is: Smooth    | VS          | S      | M    | O          | M    | S      | VS          | Rugged    |
| 27.____ | My region is: Dirty     | VS          | S      | M    | O          | M    | S      | VS          | Clean     |
| 28.____ | My region is: Worthless | VS          | S      | M    | O          | M    | S      | VS          | Valuable  |
| 29.____ | My region is: Hostile   | VS          | S      | M    | O          | M    | S      | VS          | Friendly  |
| 30.____ | My region is: Ugly      | VS          | S      | M    | O          | M    | S      | VS          | Beautiful |
| 31.____ | My region is: Poor      | VS          | S      | M    | O          | M    | S      | VS          | Rich      |

These statements are about industrial development of your region. Industrial development means building new plants or companies in your region.

|         |                                      |    |   |   |   |   |   |    |             |
|---------|--------------------------------------|----|---|---|---|---|---|----|-------------|
| 32.____ | Industrial development is: Good      | VS | S | M | O | M | S | VS | Bad         |
| 33.____ | Industrial development is: Clean     | VS | S | M | O | M | S | VS | Dirty       |
| 34.____ | Industrial development is: Desirable | VS | S | M | O | M | S | VS | Undesirable |
| 35.____ | Industrial development is: Valuable  | VS | S | M | O | M | S | VS | Worthless   |
| 36.____ | Industrial development is: Welcome   | VS | S | M | O | M | S | VS | Unwelcome   |
| 37.____ | Industrial development is: Beautiful | VS | S | M | O | M | S | VS | Ugly        |

These statements are about outdoor recreation and park development. Recreation development means building new outdoor recreation and park areas within your region.

|         |  |    |   |   |   |   |   |    |           |
|---------|--|----|---|---|---|---|---|----|-----------|
| 38.____ | Outdoor recreation development is: Undesirable | VS | S | M | O | M | S | VS | Desirable |
| 39.____ | Outdoor recreation development is: Worthless   | VS | S | M | O | M | S | VS | Valuable  |
| 40.____ | Outdoor recreation development is: Ugly        | VS | S | M | O | M | S | VS | Beautiful |
| 41.____ | Outdoor recreation development is: Unnecessary | VS | S | M | O | M | S | VS | Necessary |
| 42.____ | Outdoor recreation development is: Crowded     | VS | S | M | O | M | S | VS | Empty     |
| 43.____ | Outdoor recreation development is: Dirty       | VS | S | M | O | M | S | VS | Clean     |
| 44.____ | Outdoor recreation development is: Bad         | VS | S | M | O | M | S | VS | Good      |

Office  
Use  
Only

**Instructions:**

These statements deal with your feelings about tourists who come to your region. By tourists we mean people who visit your area for recreation and vacation purposes.

- |         |                          |    |   |   |   |   |   |    |            |
|---------|--------------------------|----|---|---|---|---|---|----|------------|
| 45.____ | Tourists are: Pleasant   | VS | S | M | O | M | S | VS | Unpleasant |
| 46.____ | Tourists are: Honest     | VS | S | M | O | M | S | VS | Dishonest  |
| 47.____ | Tourists are: Disruptive | VS | S | M | O | M | S | VS | Peaceful   |
| 48.____ | Tourists are: Good       | VS | S | M | O | M | S | VS | Bad        |
| 49.____ | Tourists are: Clean      | VS | S | M | O | M | S | VS | Dirty      |
| 50.____ | Tourists are: Valuable   | VS | S | M | O | M | S | VS | Worthless  |
| 51.____ | Tourists are: Welcome    | VS | S | M | O | M | S | VS | Unwelcome  |

**Instructions:**

After reading the sentences below, check if you agree or disagree with the statement. If you don't have any feelings about it, then check uncertain.

- |         |   | <b>Agree</b> | <b>Disagree</b> | <b>Uncertain</b> |
|---------|---|--------------|-----------------|------------------|
| 52.____ | Income from tourist dollars in a region has a greater economic impact than most other business activities.                  | _____        | _____           | _____            |
| 53.____ | Visitors to a regional recreation or tourist attraction generally spend the largest part of the trip's budget in the area.  | _____        | _____           | _____            |
| 54.____ | Land values usually increase near recreational/tourist developments.  | _____        | _____           | _____            |
| 55.____ | Wages or salaries paid by recreational businesses are among the lowest in the economy.                                      | _____        | _____           | _____            |
| 56.____ | Outdoor recreation facilities are usually used by the public about three (3) or four (4) months a year.                     | _____        | _____           | _____            |
| 57.____ | Investment in outdoor recreation or tourism businesses is risky.  | _____        | _____           | _____            |
| 58.____ | Sale of expensive, imported objects will usually provide more economic gain for an area than the sale of local handicrafts. | _____        | _____           | _____            |
| 59.____ | Increased property taxes on recreation businesses will force some private operators out of business.                        | _____        | _____           | _____            |



Office  
Use  
Only

**Instructions:**

Listed below are several statements about development in your region. How do you feel about the following statements? There are no right or wrong answers.

If you completely agree with the statement, circle **strongly agree** (SA). If you basically agree with the statement, circle **agree** (A). If you have no feelings about the statement or are uncertain, circle **undecided** (U). If you basically disagree with the statement, circle **disagree** (D). If you completely disagree, circle **strongly disagree** (SD).

**Example:**

President Gerald Ford  
has done a good job  
in his first year in office.

**(Scale Meaning)**

|                                     |       |           |          |                      |
|-------------------------------------|-------|-----------|----------|----------------------|
| <input checked="" type="radio"/> SA | A     | U         | D        | SD                   |
| Strongly<br>Agree                   | Agree | Undecided | Disagree | Strongly<br>Disagree |

| 60._____ | Industrial development in my region will benefit me or some member of my household.                                    | SA | A | U | D | SD |
|----------|--|----|---|---|---|----|
| 61._____ | The costs of industrial development in my region can be justified  | SA | A | U | D | SD |
| 62._____ | Industrial development is not needed in my region.   | SA | A | U | D | SD |
| 63._____ | The disadvantages brought to my region by industrial development will offset the advantages.                           | SA | A | U | D | SD |
| 64._____ | Industrial development in my region will create many problems for people living here.                                  | SA | A | U | D | SD |
| 65._____ | Industries should not be encouraged to locate in my region.  | SA | A | U | D | SD |
| 66._____ | Industrial development of my region will provide many jobs for local people  | SA | A | U | D | SD |
| 67._____ | Industrial development will make my region a better place in which to live.  | SA | A | U | D | SD |
| 68._____ | New industries employing mostly women would be harmful to family life in my region.                                    | SA | A | U | D | SD |
| 69._____ | My region needs industrial development more than it needs outdoor recreational development.                            | SA | A | U | D | SD |
| 70._____ | Mobile home development should not be permitted in my region.  | SA | A | U | D | SD |
| 71._____ | New residents are usually welcome in my region.  | SA | A | U | D | SD |
| 72._____ | My community must change in order to progress.   | SA | A | U | D | SD |
| 73._____ | I am basically satisfied with my community   | SA | A | U | D | SD |
| 74._____ | Someone in my household would qualify for some of the new jobs formed by outdoor recreation or industrial development. | SA | A | U | D | SD |

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|          |   |    |   |   |   |    |
|----------|---|----|---|---|---|----|
| 75.____  | Planned industrial parks are very important for industrial development.   | SA | A | U | D | SD |
| 76.____  | I would support local increased tax levies to finance the development of industrial location sites.                                   | SA | A | U | D | SD |
| 77.____  | I would support local zoning regulations for development purposes.  | SA | A | U | D | SD |
| 78.____  | I would support local tax levies for local outdoor recreation projects.   | SA | A | U | D | SD |
| 79.____  | Existing recreation facilities in my region are adequate for my needs.  | SA | A | U | D | SD |
| 80.____  | Expansion of existing outdoor recreation and tourism attractions in my region will reduce my travel to other areas outside my region. | SA | A | U | D | SD |
| 81.____  | Outdoor recreation development of my region will provide many jobs for local people.  | SA | A | U | D | SD |
| 82.____  | Outdoor recreation development will make my region a better place in which to live.   | SA | A | U | D | SD |
| 83.____  | Outdoor recreation development is not needed in my region.  | SA | A | U | D | SD |
| 84.____  | Development of outdoor recreation will benefit my region.   | SA | A | U | D | SD |
| 85.____  | The costs of outdoor recreation development in my region can be justified.  | SA | A | U | D | SD |
| 86.____  | The disadvantages brought to my region by outdoor recreation development will offset the advantages.                                  | SA | A | U | D | SD |
| 87.____  | Outdoor recreation development in my region will create many problems for people living here.   | SA | A | U | D | SD |
| 88.____  | I am willing to donate my time to work for outdoor recreational developments in my region.  | SA | A | U | D | SD |
| 89.____  | It is more important to provide recreation facilities for local people than for tourists.   | SA | A | U | D | SD |
| 90.____  | Outdoor recreation development is usually harmful to the environment.   | SA | A | U | D | SD |
| 91.____  | New jobs are more important to me than the air or water pollution that new industries may cause.                                      | SA | A | U | D | SD |
| 91a.____ | Industrial development will benefit my region.  | SA | A | U | D | SD |

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|         |  |    |   |   |   |    |
|---------|--|----|---|---|---|----|
| 92.____ | Most of my meetings with tourists to my region have been pleasant.                       | SA | A | U | D | SD |
| 93.____ | I am against new outdoor recreation facilities which will attract tourists to my region. | SA | A | U | D | SD |
| 94.____ | My region will not benefit much from new outdoor recreational development.               | SA | A | U | D | SD |

**Instructions:**

Companies consider many things before locating a new plant. Circle the number after the statement which best shows how you feel about your region's ability to provide each of the things mentioned.

|          |   |                     |   |   |   |   |   |   |   |                 |
|----------|---|---------------------|---|---|---|---|---|---|---|-----------------|
| 95.____  | Available energy supplies:                    | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 96.____  | Local vocational-technical training programs: | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 97.____  | Local investors:                              | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 98.____  | Available trained workers:                    | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 99.____  | Good schools for workers' children:           | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 100.____ | Housing for plant workers:                    | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |
| 101.____ | Low local taxes:                              | Not able to Provide | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Able to Provide |





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125.\_\_\_\_ Age of oldest child living at home? \_\_\_\_\_years

127.\_\_\_\_ Age of youngest child living at home?\_\_\_\_\_years

Which of the following best accounts for where you spent the **first 15 years** of your life?  
(Check **one**.)

129.\_\_\_\_ Rural farm \_\_\_\_\_ Small town (under 2,500) \_\_\_\_\_

Rural non-farm \_\_\_\_\_ City (over 10,000) \_\_\_\_\_

130.\_\_\_\_ How long have you lived in this region? \_\_\_\_\_years

132.\_\_\_\_ Do you own your own home? Yes\_\_\_\_\_ No\_\_\_\_\_

How many organizations do you presently belong? (Example: Rod-Gun Club, Parent Teachers Organization (P.T.O.), Church, Chamber of Commerce)

133.\_\_\_\_ Number of Organizations\_\_\_\_\_

In which of these organizations have you held an office since 1973?

135.\_\_\_\_ \_\_\_\_\_Number of organizations

Has the major income earner in your family been unemployed at any time during the past year (August 1974—August 1975)?

137.\_\_\_\_ Yes\_\_\_\_\_ No\_\_\_\_\_

138.\_\_\_\_ How long was the income earner unemployed? \_\_\_\_\_months

Are you presently engaged in farming? \_\_\_\_\_Yes \_\_\_\_\_No

140.\_\_\_\_ If no, skip to Question 146.

**If yes**, how would you describe your farming activity?

141.\_\_\_\_ \_\_\_\_\_Full time \_\_\_\_\_Part-time (Part-time farming means more than 100 work days  
in non-farm occupation)

If you are a farmer, would you continue farming if you could get a job with a new industry in your region?

142.\_\_\_\_ \_\_\_\_\_Yes \_\_\_\_\_No \_\_\_\_\_Undecided

143.\_\_\_\_ How many acres are you now farming? \_\_\_\_\_acres

146.\_\_\_\_ Is the major income earner retired? \_\_\_\_\_Yes \_\_\_\_\_No

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What is the major income earner's occupation? If retired, what was the occupation before retirement? (Please be specific.)

147. \_\_\_\_\_

How far does the major income earner travel (commute) to work each day (one way)?  
\_\_\_\_\_miles

148. \_\_\_\_\_

Other than travel to work, approximately how many days per week does the major income earner's job require travel out of the county of residence?  
\_\_\_\_\_days per week

150. \_\_\_\_\_

Check the space which best describes your **total family** income last year (1974-1975).

\_\_\_\_\_ \$0 - 999

\_\_\_\_\_ \$11,000 - 11,999

\_\_\_\_\_ \$ 1,000 - 1,999

\_\_\_\_\_ \$12,000 - 12,999

\_\_\_\_\_ \$ 2,000 - 2,999

\_\_\_\_\_ \$13,000 - 13,999

\_\_\_\_\_ \$ 3,000 - 3,999

\_\_\_\_\_ \$14,000 - 14,999

\_\_\_\_\_ \$ 4,000 - 4,999

\_\_\_\_\_ \$15,000 - 15,999

\_\_\_\_\_ \$ 5,000 - 5,999

\_\_\_\_\_ \$16,000 - 16,999

\_\_\_\_\_ \$ 6,000 - 6,999

\_\_\_\_\_ \$17,000 - 17,999

\_\_\_\_\_ \$ 7,000 - 7,999

\_\_\_\_\_ \$18,000 - 18,999

\_\_\_\_\_ \$ 8,000 - 8,999

\_\_\_\_\_ \$19,000 - 19,999

\_\_\_\_\_ \$ 9,000 - 9,999

\_\_\_\_\_ \$20,000 - 24,999

151. \_\_\_\_\_

\_\_\_\_\_ \$10,000 - 10,999

\_\_\_\_\_ Over \$25,000

How far do you live from the **nearest** highway marked in red on the map provided to you by the interviewer?

153. \_\_\_\_\_

\_\_\_\_\_miles

DO NOT WRITE BELOW THIS SPACE

County \_\_\_\_\_

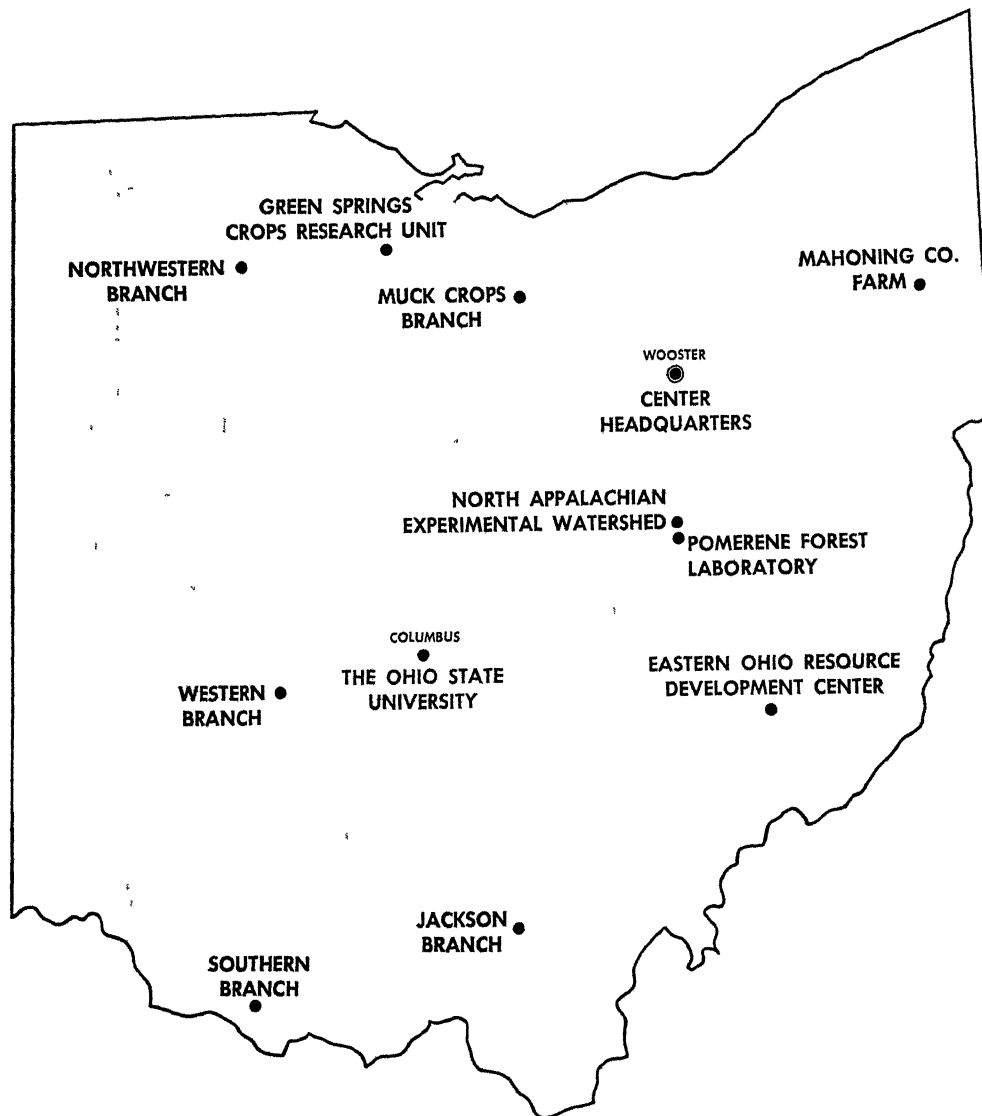
Township \_\_\_\_\_

Interviewer's name \_\_\_\_\_

Time of interview \_\_\_\_\_ a.m. \_\_\_\_\_ p.m.

Day of the Week \_\_\_\_\_

# *The State Is the Campus for Agricultural Research and Development*



Ohio's major soil types and climatic conditions are represented at the Research Center's 12 locations.

Research is conducted by 15 departments on more than 7000 acres at Center headquarters in Wooster, seven branches, Green Springs Crops Research Unit, Pomerene Forest Laboratory, North Appalachian Experimental Watershed, and The Ohio State University.

Center Headquarters, Wooster, Wayne County: 1953 acres

Eastern Ohio Resource Development Center, Caldwell, Noble County: 2053 acres

Green Springs Crops Research Unit, Green Springs, Sandusky County: 26 acres

Jackson Branch, Jackson, Jackson County: 502 acres

Mahoning County Farm, Canfield: 275 acres

Muck Crops Branch, Willard, Huron County: 15 acres

North Appalachian Experimental Watershed, Coshocton, Coshocton County: 1047 acres (Cooperative with Agricultural Research Service, U. S. Dept. of Agriculture)

Northwestern Branch, Hoytville, Wood County: 247 acres

Pomerene Forest Laboratory, Coshocton County: 227 acres

Southern Branch, Ripley, Brown County: 275 acres

Western Branch, South Charleston, Clark County: 428 acres