

Factors Influencing Attitudes Toward  
the Commitment of Resources to Outdoor  
Recreation Development

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### Abstract

Data were collected from 1,386 Ohio residents in the summer and fall of 1985 on a statewide sampling basis to examine the factors that were predictive of willingness to commit economic resources to improve outdoor recreation facilities in the state. A vested interest model was created to guide the investigation. The theoretical model basically argued that people would be more willing to commit limited resources to development efforts which have the potential of producing benefits for them. The study findings revealed that the theoretical perspective had some utility for understanding willingness to commit economic resources to outdoor recreation development in Ohio. While the explained variance was relatively low, the associations were consistent with research expectations. People who had the highest probability of benefiting from improved outdoor recreation facilities tended to be most favorable toward allocating public economic resources to such development efforts. The findings revealed that the respondents believed that slightly more economic resources should be allocated to outdoor recreation facility development in Ohio than have been allocated in the past.

## Introduction

One of the most difficult tasks for community development agents to accomplish is motivating clients to commit limited economic resources to implement programs that have been identified as being needed (Cary, 1970; Wiledon, 1970). Many well conceived development projects have been abandoned because members of client groups have been unwilling or unable to provide economic resources to finance them. Carefully conceived projects to solve development problems are useless, if the means is not provided to implement them.

Observers of the community development process should not be too hasty to criticize client groups for refusing to fund development projects because the decision-making process undoubtedly took place in the context of numerous action options. Community groups have many competing uses for the limited economic resources they have to satisfy public service needs. Since resources do not exist to fund all programs, community groups must satisfy as many service needs as possible within the constraints of limited budgets. Most community groups select programs to fund which they believe will produce desirable outcomes at the least cost. If one assumes that community groups attempt to maximize satisfaction, then it follows that individuals will examine action options in terms of potential consequences and make choices in the context of assessments made of possible outcomes.

This line of reasoning suggests that members of client groups will assess alternative uses of existing financial resources. Members of the client group will ultimately choose the set of development options which they perceive will produce the most desirable

combination of benefits for them. Representatives of the group will assemble input from individuals within the group and make decisions that will hopefully maximize satisfaction for the total group. Individuals within the client group will evaluate such development options as improvements in the following: highways, bridges, police and fire protection, public housing, public health care programs, pest control, education facilities, sewerage and water systems, recreation facilities and a multitude of other community development programs. The ultimate outcome of the decision-making will substantially depend on the value system of the members of the client group. If they value participation in recreation activity highly, they will have a higher probability of allocating economic resources to such programs. If they do not value recreation participation, then such programs will probably not be supported.

The purpose of this study is to examine the willingness of Ohio residents to commit public money to the improvement of outdoor recreation facilities in the state. It is argued that people will assess the merits of recreation development in the context of alternative development options and make decisions to support or reject such efforts in terms of perceived benefits to be derived from such programs compared with other action options. A theoretical perspective developed from the concept of utility in exchange theory (Ekeh, 1974; Simpson, 1974; Turner, 1974) and social learning theory (Bandura, 1977) was created to guide this study. The findings are discussed in the context of outdoor recreation planning.

#### Theoretical Modeling

The theoretical perspective used to guide the study was termed "vested interests" (Napier, Carter and Bryant, 1986; Napier and

Maurer, 1978). The perspective basically asserts that people assess alternative development options in the context of personal benefits and costs to be derived from each alternative. The perspective posits that individuals tend to favor development options which generate positive net benefits (benefits minus costs are greater than zero) for them. Benefits are defined as anything that is perceived as being desirable such as money, prestige, recognition, personal pleasure or rewards received by close associates. Costs are defined as being anything which is required to secure the benefits and may range from time and money to physical pain or psychosocial stress.

One of the basic tenets of the vested interest perspective is that human beings are motivated to act by expected rewards. The model suggests that individuals tend to support action options which they believe will benefit them or close associates. The model argues that people attempt to secure benefits from every action taken. While individuals may not attempt to maximize personal benefits, they will attempt to derive some type of benefit from all behaviors enacted. Thus, personal benefits and costs affect how development options will be assessed. Individuals who have the highest probabilities of receiving benefits from a specific development option will tend to favor that development alternative. Conversely, individuals who have the least probability of receiving benefits will tend to be more negative toward the development option.

The vested interest perspective includes an important theoretical concept termed satiation. While benefits are very important considerations in the vested interest model, it is recognized that people can become satiated with specific rewards. When satiation levels are approached for a specific reward, individual

value hierarchies will begin to shift and alternative action options will assume higher priority because they will have different rewards attached to them. This suggests that decision-making in terms of development alternatives must consider satiation levels associated with specific rewards. Once satiation levels are approached, existing development programs will tend to be valued significantly less and other rewards will become more prized.

One of the basic components of the vested interest perspective is the propensity for people to repeat behavior which has proved to be rewarding in the past. The vested interest model also argues that people will tend to desire to enact those behaviors more often until a satiation level is reached. This portion of the perspective suggests that individuals will continue to support action options which will reinforce existing behavioral patterns and will provide them greater opportunities to participate more frequently in activities which they have enjoyed in the past.

The vested interest perspective argues that individual characteristics affect a person's probability of securing benefits and internalizing costs associated with specific action options. Some individuals have a comparative advantage over others in terms of receiving benefits from specific development options. It is assumed in the model that benefits and costs of specific action options are not equally distributed among affected people. It is argued that some people will receive greater benefits from specific development actions and that others will internalize more costs. Since people value rewards, individuals with more relevant characteristics to receive benefits from specific development efforts will tend to be more supportive of those action options which produce benefits for them.

While direct benefits associated with development options are very important, there are indirect benefits which can influence perceptions of development actions. People may receive great satisfaction from supporting specific development actions which will not benefit them or close associates directly. People may also become very supportive of development actions which appeal to their altruism. Economists use the concept of option value to refer to this concept (Cicchetti and Freeman, 1971; Howe, 1979; Randall, 1986). Option value posits that people will support development alternatives which have the potential to benefit them in future (possible direct benefit). Arguments advanced by option value proponents also suggest that people will support programs to create opportunities for others to gain desired rewards (altruism) or to preserve unique artifacts or customs. Rewards are much more subtle in this regard but are important motivators.

The Application of the "Vested Interests"  
Model to Commitment of Resources to Outdoor  
Recreation Facility Development

In the context of outdoor recreation development, direct benefits primarily accrue to people who participate in outdoor recreation activities offered at the recreation site. Unfortunately, when research is conducted on decision-making associated with future development options, data does not exist to determine who is using or has used improved recreation facilities. It is, therefore, impossible to determine the specific nature of the benefits derived from the creation of new recreation opportunities for specific individuals. If such data were available, it would be relatively easy to determine who would benefit most from new investments in outdoor recreation

development. The test of the vested interests model would be more easily accomplished with such data. In lieu of direct measures of who has benefited from investments made in outdoor recreation development, it was necessary in this study to rely on predictive variables which influence the probabilities that individuals will receive benefits from investments made in outdoor recreation facilities. The vested interests model posits that relevant characteristics will affect probabilities of receiving benefits. The following section outlines the arguments used to build a predictive model using factors that theoretically should affect whether or not a person will benefit from investments made in outdoor recreation development. It is argued that individuals who have a higher probability of receiving benefits from investments made in outdoor recreation will recognize that they will benefit disproportionately and will be more supportive of such efforts than people who have lower probabilities of receiving benefits associated with investments made in outdoor recreation facilities.

The predictive factors selected for examination in this study are as follows: distance to recreation sites, desire to participate more often, adequacy of facilities at recreation sites, participation in outdoor recreation activities by family members, impact of fuel costs, household size, age of primary income earner, number of hours usually worked by the primary income earner, total outdoor recreation participation during the past year, and satisfaction with existing outdoor recreation opportunities. Each of these factors will be discussed below.

#### Recreation Areas Too Far Away

Researchers (Boothby, et al., 1981; Neipoth, 1973) have recognized that distance to recreation sites can affect outdoor



recreation participation. If people do not have access to sites where desired recreation behaviors can be enacted, they will not be able to participate (Jackson, 1983). These observations suggest that public investments made in outdoor recreation facilities should be more strongly favored by individuals who perceive that desirable outdoor recreation facilities are too far away to be used frequently. Investments committed to improving outdoor recreation facilities should be perceived as increasing the opportunity for participation by people previously barred from using distant recreation sites. New options would be made available to this group which could encourage participation. Therefore, it is hypothesized that distance to desirable recreation sites acts as a barrier to participation in outdoor recreation activities and will be positively related to willingness to commit public resources to improve outdoor recreation facilities.

#### No Desire to Participate More Often

Neipoth (1973) argued that outdoor recreation participation was significantly affected by desire to become involved in such activities. He posited that individuals would not commit personal resources such as time, effort and money to activities which they did not value. In similar manner, it is unlikely that individuals who do not wish to participate more often than they presently do in outdoor recreation activities would be willing to support public investment in development efforts which will produce few rewards for them. There would undoubtedly be alternative development options that would generate more profitable outcomes for such people. Also, individuals who do not wish to recreate more often than they presently do would not be as strongly influenced by possible future participation which

suggests that option value would not be a significant factor for them. Subsequently, such people would tend to favor more profitable alternative development options. Therefore, it is hypothesized that lack of desire to participate more often in outdoor recreation activities will be negatively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Inadequate Facilities at Recreation Sites

The availability of facilities at outdoor recreation sites can influence participation because the opportunities provided will affect who uses the recreation areas and how frequently they will be used. If people perceive existing facilities to be inadequate, they should favor the commitment of state money to improve them so that recreation opportunities will be more closely aligned to their perceived needs. Therefore, it is hypothesized that perceptions of inadequacy of outdoor recreation facilities will be positively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Family Members Do Not Participate

Many researchers have shown that outdoor recreation is a social activity which frequently occurs in the context of the group (Buchanan, et al., 1981; Christensen and Yoesting, 1973; Dottavio, et al., 1980; Napier, Baron and McClaskie, 1986; O'Leary, et al., 1982). The rewards a person derives from outdoor recreation participation is significantly affected by the availability of associates who simultaneously engage in the activity. Thus, availability of friends and family during involvement in recreation activities becomes a relevant characteristic for participation to occur. If potential

recreation participants do not have people with whom they can share their experiences during the enactment of the activity, there is a higher probability that they will recreate less often than they would otherwise or cease participation completely. This line of reasoning suggests that individuals will receive greater benefits from public investments made in outdoor recreation development, if they have persons with whom they can share the recreation experience. Therefore, it is hypothesized that lack of participation in outdoor recreation activities by family members will be inversely related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Impact of Fuel Costs

Participation in most outdoor recreation activities usually requires some type of monetary investment (Romsa and Hoffman, 1980; Jackson, 1983) and any action which increases a person's purchasing power should affect participation rates. A major contributor to the costs associated with outdoor recreation participation is travel and the cost of fuel is a significant component of these expenditures. If the price of fuel decreases, then purchasing power of money allocated to outdoor recreation participation will increase. Increased purchasing power should result in reassessment of existing recreation behaviors. One of the options is to recreate more often which suggests that such people would tend to be more willing to commit public economic resources to improve recreation facilities so that they will have greater recreation opportunities available to them. Therefore, it is hypothesized that anticipated increases in outdoor recreation participation due to reduced fuel cost will be positively related with willingness to support the use of public economic

resources to improve outdoor recreation facilities.

#### Household Size

The number of people in a household will affect participation in outdoor recreation activities (Kelly, 1974; McClaskie, *et al.*, 1985). The presence of children in the household can have a "recreation effect" on participation in outdoor recreation activities because parents wish to provide their children with such experiences (Kelly, 1974; McClaskie, *et al.*, 1985). Also, as the size of a family unit increases there is a corresponding increase in the probability that some person in the household will participate in outdoor recreation. People should be more willing to support development programs which provide benefits for family members even though they do not participate themselves. The option value concept is applicable because individuals will desire to make provisions for future participation by their children by supporting investment in public recreation facilities. Therefore, it is hypothesized that household size will be positively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Age of Primary Income Earner

Age has been shown to affect outdoor recreation participation (Bultena and Field, 1981; Cicchetti, 1972), since increasing age is frequently associated with reduction in ability to physically engage in certain recreation activities (Jackson, 1983, Kelly, 1974). If people are not able to participate in outdoor recreation activities due to physical constraints, it is unlikely that they will be supportive of committing public economic resources to development efforts that probably not benefit them (Pierce and Napier, 1981). Therefore, it is

hypothesized that age of the primary income earner will be negatively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Hours Usually Worked by the Primary Income Earner

Work commitments have been shown to be the most frequently noted barrier to participation in outdoor recreation activities (Jackson, 1983). Research by Ramsa and Hoffman (1980) revealed that lack of time was one of the most important impediments to participation. These studies strongly suggest that competing demands of time can influence recreation participation rates. The only manner in which the creation of new or improved recreation facilities can benefit people is for the facilities to be used. If individuals have little discretionary time, they cannot be expected to participate regardless of the opportunities made available by public investment in recreation facilities. If people do not have time to participate because of work commitments, it is unlikely that they will receive many benefits from improvements made in outdoor recreation facilities. If they do not expect to receive benefits, they will not favor using public funds when alternative options will generate benefits for them. Therefore, it is hypothesized that number of hours usually worked by the primary income earner will be negatively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Total Participation in Outdoor Recreation

Individuals who are more frequent participants in outdoor recreation activities have demonstrated commitments to the activities being enacted. The vested interests perspective argues that desired behaviors will be repeated and frequency increased, if opportunities

to do so are provided. Persons who are frequent participants in outdoor recreation activities will have a much higher probability of benefitting from improved recreation facilities than infrequent or nonparticipants and should be more favorable toward allocating public money to such development efforts. More frequent participants should also be motivated to support recreation development because they may become more frequent participants in the future (option value arguments). Therefore, it is hypothesized that frequency of participation in outdoor recreation activities will be positively related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

#### Satisfaction With Existing Outdoor Recreation Opportunities

The theoretical arguments for this variable are similar to those advanced for perceived adequacy of outdoor recreation facilities. If people perceive that existing recreation opportunities are basically satisfactory, they will tend to be less willing to support use of scarce economic resources for the creation of additional recreation opportunities because other service needs will tend to have higher priority for funding. The vested interest perspective suggests that satiation can become operative. Once basic needs for recreation have been satisfied, people will tend to value additional recreational opportunities less as satiation levels are approached. Alternative services will tend to be more highly valued because basic needs for the alternative services will not have been satisfied. If a satiation level is reached, then individuals would tend to favor a decrease in funding for recreation services, since an over supply would be perceived to exist. Therefore, it is

hypothesized that satisfaction with existing outdoor recreation opportunities will be inversely related with willingness to support the use of public economic resources to improve outdoor recreation facilities.

## Methodology

### Sample Selection

Data to examine the merits of the theoretical perspective outlined above were collected in the summer and fall of 1985 from a statewide sample of Ohio residents. A random sample of 4,999 names and addresses of Ohio licensed drivers was drawn from lists maintained by the Ohio Department of Motor Vehicles. A questionnaire was posted to the selected sample with a cover letter explaining the purpose of the study and requesting their participation. A self-addressed and stamped envelope was included with each of the questionnaires to facilitate return of the completed schedule. Approximately 4 weeks after the first mailing a second questionnaire was posted to nonrespondents using the same procedures used in the first mailing. A third questionnaire was mailed to nonrespondents approximately 4 weeks after the second mailing.

Questionnaires for 2,690 of the study respondents were returned during the data collection phase of the study. However, 1,304 of the questionnaires were excluded from the analyses of the data due to missing information or inability to locate the respondent. It was deemed more desirable to eliminate respondents with extensive missing data rather than introduce error into the statistical analyses because of large numbers of missing values. The usable response rate was 37.5 percent. The characteristics of the sample are presented in Table 1 and show that the study group was primarily composed of people

employed in skilled white and blue collar occupations. A majority of the sample lived in communities less than 50, 000 in population. Total family income reported averaged \$24,574 per year. Other data about the study group is presented in Table 3 and shows that the study group was basically middle-aged with children living at home.

(Table 1 Here)

Given the size of the nonrespondent group, an attempt was made to determine if there were any identifiable systematic errors in the data. Analysis of variance was used to compare information provided by early and late respondents. Nine variables were selected to compare the responses of people who returned their questionnaires as a result of the first 2 mailings and those who returned their questionnaires as a result of the last mailing. The 9 variables used to compare the two groups were as follows: age of the primary income earner in the household, geographic location of the household, education of the primary income earner in the household, number of hours usually worked by the primary income earner each week, total outdoor recreation participation, occupation of the primary income earner in the household, total household income, household size, and number of weeks unemployed by the primary income earner during the previous year. The analysis of variance findings revealed that no significant differences existed between the study groups for any of the variables assessed.

#### Measurement of Study Variables

The dependent variable was termed "willingness to support the use of public economic resources to improve outdoor recreation facilities in Ohio." The variable was measured by asking the respondents to indicate how much money the State of Ohio should spend



on improving a variety of outdoor recreation facilities. The possible responses to each recreation facility assessed ranged from "Greatly Reduce Investment" which was given a value of 0 to "Invest Much More" which received a value of 4. The 8 outdoor recreation facilities assessed by the respondents were as follows: development of Lake Erie, development of the Ohio River, development of new state parks, improvement of existing state parks, development of new recreation facilities near cities, development of inland river recreation opportunities, development of inland lake recreation opportunities, and other recreation development option. The responses to the 8 items were submitted to item analysis (Cronbach, 1951; Nunnally, 1977) and an alpha of 0.80 was produced which means that the item responses were sufficiently intercorrelated to justify building a composite index. Subsequently, the responses to the 8 items were summed to form a composite index of willingness to support the use of economic resources to improve outdoor recreation facilities.

The independent variables selected for examination were as follows: satisfaction with outdoor recreation opportunities, total outdoor recreation participation, distance to recreation site as a barrier to participation, lack of desire to participate more often, inadequacy of existing facilities, lack of participation by family members, impact of fuel costs, household size, age of primary income earner, and number of hours primary income earner usually works each week. The methods used to measure each of the independent variables are presented below.

Satisfaction with existing opportunities was measured by asking the respondents to indicate how satisfied they were with 13 different outdoor recreation opportunities in Ohio. The opportunities

assessed were as follows: fishing, hunting, camping, sailing, swimming, sunbathing, picnicking, water-skiing, winter sports, pleasure boating, trail activities, trapping, and other. The possible responses ranged from "Completely Dissatisfied" which received a value of 0 to "Completely Satisfied" which received a 4. Item analysis of the responses produced an alpha of 0.89. Such a high alpha indicated that the items could be legitimately combined into a composite index. The weighting values were summed to form a composite index.

Total participation in outdoor recreation activities in the previous year was measured by asking the respondents to note how frequently they participated in 13 different types of outdoor recreation activities. The activities examined were as follows: fishing, hunting, camping, sailing, swimming, sunbathing, picnicking, water-skiing, winter sports, pleasure boating, trail activities, trapping and other. The response categories were 0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, and 31 times or more. The response categories were weighted from 0 to 7 with 0 receiving a 0 and 31 times or more receiving a 7. Item analysis produced an alpha of 0.82 which indicated that the items could be legitimately combined into a composite index. The weighting values were summed.

Blockages to outdoor recreation participation were assessed by asking the respondents to select from 14 possible barriers the 3 most important factors that prevented them from participating more often in outdoor recreation activities. The responses were treated as dummy variables. The 4 independent variables measured in this manner were "distance to desirable recreation site," "lack of desire to recreate more often," "inadequacy of existing outdoor recreation facilities," and "family members do not participate in outdoor recreation

activities." If the respondent selected any of these factors as being one of the three most important reasons for not participating more often, the person received a 1 for the variable chosen.

Potential barriers not chosen as being important factors received a 0.

Hours worked was measured by asking the respondent to note the number of hours usually worked by the primary income earner each week.

Impact of fuel costs was measured by asking the respondents to note what impact decreasing fuel costs will have on future outdoor recreation participation in Ohio. The possible responses ranged from "Greatly Reduce Participation" which received a value of 0 to "Greatly Increase Participation" which received a weighting value of 4.

Household size was measured by asking the respondent to indicate the number of people living in the household at the time of the study.

Age of the primary income earner was measured in terms of years of age at last birthday.

#### Data Analysis

The data were examined using descriptive and multivariate statistics. The descriptive statistics were used to examine general trends in the data while multivariate analyses were used to examine the merits of the study hypotheses and to ascertain how useful the independent variables were in predicting the variability in willingness to support the use of public economic resources for the improvement of outdoor recreation facilities in Ohio. Missing data were assigned the variable mean which has been shown to be the best method for salvaging cases when the amount of missing data is small, the size of the sample is large, and the correlations are low to moderate (Donner, 1982). The perception scales used to build the

composite indexes were assumed to produce metric level data which permitted the use of parametric statistics (Ableson and Tukey, 1970; Kim, 1975). Linear relationships were assumed to be operative among the study variables.

#### Findings

The descriptive findings for willingness to support the use of public economic resources for improving outdoor recreation facilities are presented in Table 2. These findings indicate that the respondents favor the allocation of more public money to the improvement of outdoor recreation facilities in Ohio. The mean scores for each development option reveal that the respondents feel that all outdoor recreation facilities assessed should be funded at existing levels or higher.

(Table 2 Here)

The type of outdoor recreation facility that was ranked highest in terms of receiving priority for funding was improvement of existing state parks. A large majority of the respondents (92.4%) favored maintaining or increasing the present level of public financial support to the existing park system. The creation of new state parks was ranked second in terms of priority given to the funding of outdoor recreation options assessed. Only 8.6 percent of the respondents favored reduction of investments in the development of new state parks. Public funding of improvements made at Lake Erie, new recreation facilities near cities, and inland lake recreation opportunities were perceived favorably by most respondents but less favorably than the state park options. Public investment in the development of the Ohio River and inland river recreation opportunities were also perceived favorably but less so than those

noted above. In sum, the respondents indicated that outdoor recreation facilities in the state were worthy of greater funding from state sources.

Descriptive findings for level of satisfaction with existing outdoor recreation facilities are provided in Table 3 and show that the respondents were slightly satisfied with existing outdoor recreation opportunities in the state. Previous research, which examined the present data set in terms of predicting total outdoor recreation participation, revealed that all outdoor recreation opportunities assessed in the state were perceived to be at least adequate on an aggregate level. That study indicated that picnicking, sunbathing, camping and trail activities were the activities which the respondents indicated the highest level of satisfaction. The respondents were least satisfied with trapping, hunting, winter sports, water skiing, sailing, and swimming opportunities even though these opportunities were perceived to be basically satisfactory (Napier, Baron and McClaskie, 1986:20).

(Table 3 Here)

Table 3 also indicates that the respondents participated in outdoor recreation activities 32.3 times during the study period and that decreasing fuel costs will generate a slight increase in future outdoor recreation participation. About 38.2 percent of the respondents indicated that distance to desirable recreation sites was a barrier to greater outdoor recreation participation. About 30.4 percent of the respondents indicated that inadequate facilities at recreation sites acted as a barrier. Approximately 20.2 percent of the respondents indicated that lack of desire to participate more often served to prevent more participation. Only 15.9 percent

indicated that lack of family participation acted as a barrier.

#### Correlation and Regression Findings

Correlation analysis was used to examine the bivariate relationships between the willingness to support the use of public economic resources to improve outdoor recreation facilities and the predictive variables selected for examination in this study. The correlation findings are presented in Table 4.

(Table 4 Here)

The correlation findings revealed that 8 of the 10 independent variables were shown to be significantly related with the dependent variable at the .05 level and were in the expected direction. The variables shown to be significant were as follows: desirable recreation sites are too far away, no desire to recreate more often, inadequate facilities at recreation sites, family members do not participate in outdoor recreation activities, impact of decreasing fuel costs, household size, age of the primary income earner, and total outdoor recreation participation. Number of hours usually worked each week by the primary income earner and satisfaction with existing recreation facilities were not significant at the .05 level.

Regression analysis was used to examine the relative explanatory power of the independent variables included in the model when all factors were considered simultaneously. The findings are presented below in standardized regression coefficient form (beta). The standard error of the beta is presented in parentheses.

$$Y = -0.139X_1 + 0.155X_2 + 0.141X_3 + 0.137X_4 + 0.104X_5$$

$$(0.027) \quad (0.026) \quad (0.026) \quad (0.026) \quad (0.026)$$

where:

Y = Willingness to support use of public economic resources to improve outdoor recreation facilities

- X = Do not desire to participate more often  
1
- X = Total outdoor recreation participation  
2
- X = Inadequate facilities at recreation sites  
3
- X = Desirable recreation sites too far away  
4
- X = Impact of decreasing fuel costs.  
5

The coefficient of determination for the 5 variable model was 0.133 which means that approximately 13.3 percent of the variance in the willingness to support the use of public money for improving outdoor recreation facilities could be explained with the independent variables included in the model. Respondents who were most favorable toward the use of public money to improve of outdoor recreation facilities possessed the following characteristics: desired to recreate more often, were more active in outdoor recreation participation, perceived existing outdoor recreation facilities as being inadequate, perceived that desirable recreation areas were too far away, and anticipated greater participation in outdoor recreation activities due to decreasing fuel costs.

#### Summary and Conclusions

The descriptive findings indicated that the respondents were active in the outdoor recreation activities examined and expected to slightly increase involvement in the future, if fuel prices remained relatively low. The respondents were slightly satisfied with all outdoor recreation opportunities examined but perceived that several barriers were operative to present greater participation. The most important barrier was distance to desirable recreation areas. The descriptive findings for the dependent variable revealed that respondents were supportive of greater public resources being used to improve outdoor recreation development.

The correlation findings were basically consistent with research expectations. When the respondents perceived that distance to recreation sites was a barrier to participation and that the facilities offered at existing sites were inadequate, there was a corresponding increase in willingness to support the use of public resources to improve facilities. Expected increases in outdoor recreation participation due to decreasing fuel costs and greater outdoor recreation participation during the past year contributed to greater support for increases in public expenditures for improving outdoor recreation facilities. When other family members participated in outdoor recreation activities and when the size of families increased, there were corresponding increases in the willingness to use public resources to improve recreation facilities. As age of the primary income earner increased there was a decline in support for willingness to use public money to improve outdoor recreation facilities as expected. When people indicated they had no desire to recreate more often than they presently do, there was a decline in support for use of public funds to finance recreation development.

Satisfaction with existing facilities was not significantly related to willingness to use public resources to improve recreation facilities. This is surprising since it was argued that individuals who were basically satisfied with existing recreation opportunities would favor using public resources to finance alternative development options. This finding indicates that some people who were satisfied were also supportive of greater public resources being allocated to recreation development efforts. There were some individuals who were dissatisfied with existing opportunities but favored public funding of improvements in facilities.



The number of hours the primary income earner worked did not serve to reduce willingness to support the use of public resources to improve recreation facilities as expected. It is possible that hours worked by the primary income earner does not serve to impede participation in outdoor recreation activities as expected. Apparently many persons with fewer hours of work commitments each week are not interested in spending available hours engaged in outdoor recreation activity and would not be interested in improving recreation opportunities through improved facilities. Conversely, many people who work greater numbers of hours each week perceive such investments as potentially benefiting them.

The regression findings revealed that 5 variables explained about 13.3 percent of the variance in willingness to commit resources to outdoor recreation facilities. The most important predictive variable was lack of desire to participate more often. While the amount of explained variance is relatively low, the fact that the relationships shown to be significant were consistent with the vested interest perspective suggests that further theoretical modeling using this approach may produce a good predictive model.

The study findings support the basic arguments advanced in the theory section of this paper. When people have a higher probability of benefiting from increased investments in outdoor recreation development now and in the future, they tend to support allocating public resources for improvement of recreation facilities.

The major implication of these findings for community development specialists is that action agents should always seek to demonstrate how planned change programs will benefit client groups. If the proposed program does not have the potential to benefit client

populations, then efforts should be initiated to ascertain if there are indirect benefits such as option values which can be identified. If it can be demonstrated that some form of personal benefit will result from the development action, perceptions of proposed development programs will probably become more positive. Ultimately, positive perceptions about proposed programs will be translated into action in the form of political, social and/or economic support for the proposed development program. Change agents should recognize that monetary benefits are only one of several types of benefits client groups may value. For example, participation in outdoor recreation activities is a nonmonetary reward that people value. People also are influenced by value attached to having recreation facilities available to satisfy possible demands they may have in the future (option demand).

It is highly probable that the usefulness of the vested interest perspective will be enhanced substantially in the future with better measures of perceived benefits to be derived from public investments in outdoor recreation development. Measures such as perceived benefits to self, family members and community residents should be assessed in future research. Economic benefits to the community and region may be other useful factors to integrate into expanded modeling. Measures of altruism may also prove to be good predictive factors. Lastly, the model may be substantially improved by greater specificity of the uses made of public funds. If people are made aware of where proposed development will occur and the type of improvements which will be made, they will be better able to assess whether or not they will benefit from such investments. Using these measures, the explained variance will probably be substantially increased.

Table 1: Characteristics of Study Sample (N=1,386)

| Characteristic                      | Descriptive Data  |
|-------------------------------------|---|
| Education of Primary Income Earner  | Mean=13.8 years<br>S.D.= 2.8 years                            |
| Location of Household               | Open country 17.9%  |
|                                     | Village less than 2,500 6.2%                                  |
|                                     | Small Town (2,500-50,000) 32.4%                               |
|                                     | City or suburb of city (50,000-250,000) 22.2%                 |
|                                     | Large city or suburb of large city (250,000 and larger) 19.5% |
|                                     | No data 1.9%  |
| Occupation of primary income earner | Executive-professional 6.7%                                   |
|                                     | Skilled white collar 36.2%                                    |
|                                     | Skilled blue collar 21.4%                                     |
|                                     | Unskilled white collar 10.4%                                  |
|                                     | Unskilled blue collar 17.5%                                   |
|                                     | Permanently unemployed 2.3%                                   |
|                                     | Missing data 5.6%   |
| Total family income                 | Mean=\$24,574<br>S.D.=\$ 7,291                                |

Table 2: Willingness to Commit Economic Resources to the Development of Outdoor Recreation Facilities in Ohio (N=1,386)

| Type of Recreation Development In Order of Priority | Possible Responses        |                   |                   |             |                  | MD  | $\bar{X}$ |
|---|---------------------------|-------------------|-------------------|-------------|------------------|-----|-----------|
|   | Greatly Reduce Investment | Reduce Investment | Invest About Same | Invest More | Invest Much More |     |           |
|   | 0                         | 1                 | 2                 | 3           | 4                |     |           |
| 1. Improve Existing State Parks                     | 13                        | 17                | 358               | 672         | 251              | 75  | 2.9       |
| 2. New State Parks                                  | 43                        | 76                | 420               | 502         | 255              | 90  | 2.7       |
| 3. Lake Erie  | 47                        | 54                | 519               | 466         | 219              | 81  | 2.6       |
| 3. New Recreation Facilities Near Cities            | 50                        | 72                | 429               | 504         | 248              | 83  | 2.6       |
| 3. Inland Lake Recreation Opportunities             | 35                        | 49                | 537               | 484         | 187              | 94  | 2.6       |
| 6. Ohio River                                       | 33                        | 58                | 614               | 413         | 157              | 111 | 2.5       |
| 6. Inland River Recreation Opportunities            | 38                        | 62                | 603               | 419         | 171              | 93  | 2.5       |
| 8. Other Option                                     | 71                        | 65                | 643               | 158         | 91               | 358 | 2.1       |
| Mean Total Index Scale Score=20.4                   |                           |                   | S.D.=4.4          |             |                  |     |           |
| Possible Range of Scores=0-32                       |                           |                   |                   |             |                  |     |           |

Table 3: Descriptive Statistics for Independent Variables Used to Predict Willingness to Commit Economic Resources to Outdoor Recreation Development (N=1,386)

| Variable Name  | Descriptive Data                 |       |
|--|----------------------------------|-------|
| Mean index score for satisfaction with existing recreation opportunities | mean=30.4<br>Possible range 0-52 |       |
| Outdoor recreation participation   | mean=32.3 times                  |       |
| Barriers to Participation  |                                  |       |
| 1. Desirable recreation areas too far away                               | 38.2 percent                     |       |
| 2. Inadequate facilities at site   | 30.4 percent                     |       |
| 3. Do not wish to participate more often                                 | 20.2 percent                     |       |
| 4. Family members do not participate in outdoor recreation activities    | 15.9 percent                     |       |
| Hours worked each week   | mean=43.6 hours                  |       |
| Impact of increasing fuel costs  | Greatly reduce participation     | 0.9%  |
|  | Somewhat reduce participation    | 2.1%  |
|  | No change in participation       | 68.4% |
|  | Somewhat increase participation  | 19.7% |
|  | Greatly increase participation   | 4.5%  |
|  | No response                      | 4.5%  |
| Household size   | mean=3.5 people                  |       |
| Age of primary income earner   | mean=43.1 years                  |       |

Table 4: Bivariate Correlations Between Willingness to Commit Money to Outdoor Recreation Facilities and Selected Independent Variables (N=1,386)

| Independent Variable                                      | Zero-Order Correlation |
|---|------------------------|
| 1. Distance to Desirable Recreation Site                  | 0.182*                 |
| 2. No Desire to Recreate More Often                       | -0.242*                |
| 3. Inadequate Facilities                                  | 0.172*                 |
| 4. Family Does Not Participate                            | -0.116*                |
| 5. Impact of Fuel Costs                                   | 0.173*                 |
| 6. Household Size   | 0.069*                 |
| 7. Age of Primary Income Earner                           | -0.094*                |
| 8. Number of Hours Worked Weekly By Primary Income Earner | 0.013                  |
| 9. Total Outdoor Recreation Participation                 | 0.226*                 |
| 10. Satisfaction With Outdoor Recreation Facilities       | 0.025                  |

\*Significant at the .05 level.

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