# OKLAHOMA RESIDENTS’ PERCEPTIONS OF 

## STATE PARKS

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TABLE OF CONTENTS
Chapter Page
I. INTRODUCTION ..... 1
Statement of the Problem ..... 2
Purpose of the Study. ..... 3
Significance of the Study ..... 3
Research Questions ..... 4
Delimitations ..... 5
Assumptions ..... 5
Limitations ..... 5
Definitions ..... 6
II. LITERATURE REVIEW ..... 7
Introduction ..... 7
Benefits of Leisure ..... 7
Leisure Constraints ..... 13
Needs Assessment ..... 20
Dillman Total Design Method ..... 25
Outdoor Activities ..... 26
Demographics ..... 32
State Parks ..... 37
Oklahoma State Parks ..... 41
III. METHODOLOGY ..... 49
Introduction ..... 49
Subjects ..... 49
Data Collection ..... 50
Research Instrument ..... 51
Methods and Procedures ..... 51
Statistical Analysis and Treatment of Data ..... 52
Research Questions ..... 52
IV. RESULTS ..... 54
Introduction ..... 54
Chapter ..... Page
Response Rate ..... 54
Visitor Demographics ..... 55
Activities and Amenities ..... 57
Visitation Patterns and Use ..... 58
Overall Satisfaction With Oklahoma State Parks ..... 60
Inadequate Cell Counts ..... 64
V. DISCUSSION AND RECOMMENDATIONS ..... 107
Introduction ..... 107
Discussion ..... 108
Recommendations ..... 115
REFERENCES ..... 118
APPENDICES ..... 123
APPENDIX A - Survey Question ..... 124
APPENDIX B - "Other" Responses to Survey Question \#6 ..... 130

## LIST OF TABLES

Table ..... Page

1. Summary of PAL Study ..... 10
2. Six Dimensions of Constraint ..... 19
3. Number in Household ..... 55
4. Primary Racial/Ethnic Affiliation ..... 56
5. Highest Level of Education ..... 56
6. Most Recently Participated Activities While Visiting an Oklahoma State Park ..... 57
7. Top Eight Amenities Used at Park ..... 57
8. Most Recent Visit to an Oklahoma State Park ..... 58
9. Reasons for Not Visiting Within Past Two Years ..... 58
10. Group Visited With at Oklahoma State Parks ..... 59
11. Type of Stay on Most Recent Visit to an Oklahoma State Park ..... 59
12. Respondents' Opinions of State Parks Funding ..... 60
13. Type of Funding Most Favored ..... 61
14. Respondent Opinions of Oklahoma State Park Lodges ..... 61
15. Primary Purpose for Oklahoma State Parks ..... 62
16. Highest Priority for Oklahoma State Parks ..... 62
17. Satisfaction with Park Maintenance and Upkeep ..... 63
18. Satisfaction With Park Management ..... 63
Table ..... Page
19. Overall Letter Grade ..... 64
20. Most Recent Visit/Type of Visit ..... 68
21. Most Recent Visit/Type of Group Visited With at Park ..... 69
22. Most Recent Visit/Total Number in Household ..... 70
23. Most Recent visit/Highest Level of Education ..... 71
24. Most Recent Visit: Primary Racial/Ethnic Group Affiliation ..... 72
25. Type of Visit/Type of Group Visited With at Park ..... 73
26. Type of Visit Made/Number in Household ..... 74
27. Type of Visit Made/Highest Level of Education ..... 75
28. Type of Visit Made/Primary Racial or Ethnic Affiliation ..... 76
29. Type of Group Visited With at Park/Type of Funding Favored ..... 77
30. Type of Group Visited With at Park/Total Number in Household ..... 78
31. Type of Group Visited With at Park/Highest Level of Education ..... 79
32. Type of Visit Made/Primary Racial or Ethnic Affiliation ..... 80
33. Opinion of Lodges/Satisfaction With the Maintenance and Upkeep ..... 81
34. Opinion of Lodges/Satisfaction With Management ..... 82
35. Opinion of Lodges/Overall Letter Grade ..... 83
36. Opinion of Lodges/Number in Household ..... 85
37. Opinion of State Park Lodges/Highest Level of Education ..... 86
38. Opinion of Lodges/Primary Racial or Ethnic Group ..... 87
39. Satisfaction With Park Maintenance and Upkeep/Number in Household ..... 88
40. Satisfaction With Park Maintenance and Upkeep/Highest Level of Education ..... 89
Table ..... Page
41. Satisfaction With Park Management/Highest Level of Education ..... 90
42. Satisfaction With Park Management/Primary Racial or Ethnic Affiliation ..... 91
43. Overall Letter Grade/Total Number in Household ..... 92
44. Overall Letter Grade/Highest Level of Education ..... 93
45. Overall Letter Grade/Primary Racial or Ethnic Affiliation ..... 94
46. Opinion of Financial Standing/Type of Additional Funding ..... 95
47. Opinion of Parks Financial Standing/Highest Level of Education. ..... 97
48. Opinion of Park Financial Standing/Primary Racial or Ethnic Affiliation ..... 98
49. Type of Additional Funding Most Favored/Highest Level of Education ..... 99
50. Type of Additional Funding Most Favored/Primary Racial or Ethnic Affiliation. ..... 100
51. Highest Priority for Oklahoma State Parks/Number in Household ..... 101
52. Highest Priority for Oklahoma State Parks/Highest Level of Education ..... 102
53. Highest Priority for Oklahoma State Parks/Primary Racial or Ethnic Affiliation. ..... 103
54. Primary Purpose for Oklahoma State Parks/Number in Household ..... 104
55. Primary Purpose for Oklahoma State Parks/Highest Level of Education ..... 105
56. Primary Purpose for Oklahoma State Parks/Primary Racial or Ethnic Affiliation. ..... 106

## LIST OF FIGURES

Figure
Page

1. Different Recipients Realize Different Benefits at Different Times
and Places ..... 13
2. The Hierarchical Model of Leisure Constraints........................................................ 17

## CHAPTER I

## INTRODUCTION

Many Americans share the assumption that participation in outdoor recreation is a birthright, but from where does this assumption come? For many years people throughout the United States, including Oklahoma, have sought out parks for recreation, relaxation, and as a way to get closer to the natural environment. During the late $19^{\text {th }}$ century many parks were established by local governments to give city dwellers a place to escape from their hectic lives. Increasing demand for lands to build industrial sites limited areas that could be used to build parks, which deprived many people living in poor urban areas recreation outlets (Kelly, 1983). This problem led to the first reform groups in recreation. These groups mainly consisted of those people who were wealthy and could afford to travel to recreate or pay for the recreation they desired. These groups were motivated to help the plight of the working inner city poor and were of the notion that those individuals who could not afford to pay should still have access to the activities that the wealthy could purchase. These groups of recreation reformers are those who led to the beginning of the assumption that outdoor recreation is an American birthright (Douglass, 1993).

In 1958 Congress mandated the first nationwide assessment of outdoor recreation in the United States (Douglass, 1993). The Outdoor Recreation and Review Act created a
commission to determine the outdoor recreational needs of Americans (Douglass, 1993). Up until 1958 individual needs for recreation were not formally addressed by the government. Summers (1987) stated that need assessments for recreation were designed and put in place after World War II.

Over the years, participation in outdoor recreation by Americans has increased. Unfortunately, the availability of lands for recreation has not kept up with the number of people wanting to use those lands. Oftentimes this creates conflict between groups of people who want to use lands for recreational use but for different types of recreation (Sharpe, Odegaard, \& Sharpe, 1994).

The OTRD realizes that the recreational needs of Oklahoma residents must be met in order to serve the constituents in the best possible manner. Oklahoma state parks are examples of recreation areas serving a wide variety of individuals in a wide variety of activities. Visitors of Oklahoma state parks participate in activities such as picnicking, hiking/walking, boating, fishing, relaxing, camping and a host of other diverse activities that can leave individuals competing for space with others. This study was undertaken to provide the Oklahoma Tourism and Recreation Department with information regarding use patterns, thoughts on management, and the needs of Oklahoma residents who visit or who have visited Oklahoma state parks.

## Statement of the Problem

The problem addressed in this study is an investigation of visitor needs related to the Oklahoma state park system. Since recreation patterns may be influenced by demographic factors such as socio-economic background, education level, or ethnicity
this study focused on the use patterns of residents regarding recreation, use of facilities, and amenities within the Oklahoma state park system based on those demographic variables.

## Purpose of the Study

The purpose of this study was to assess the needs of the citizens of Oklahoma regarding the Oklahoma state park system. This assessment was conducted to determine the changes needed to be made by the Oklahoma Tourism and Recreation Department to reflect the wishes of its constituents. The following items will be identified:

1. Identify the present use patterns of visitors to Oklahoma state parks.
2. Identify the frequency of use by visitors to Oklahoma state parks.
3. Identify visitor's and citizen's needs of Oklahoma state parks.
4. Identify overall satisfaction level regarding Oklahoma state parks.

## Significance of the Study

This study provided a needs assessment for the Oklahoma Tourism and Recreation Department regarding its parks system. A needs assessment can be a valuable tool that can provide information to aid in better understanding how Oklahoma residents currently use the state parks, as well as convey the wishes of what constituents would like to see from state park management and employees in their state parks. Needs addressed by constituents may include their views regarding the management and upkeep of the state parks, and views regarding current state park amenities such as swimming areas, boat docks, picnic shelters, and trails. Park visitors may also have views that include how
they feel about the knowledge and helpfulness of staff and management at state parks. Desires regarding programs and facilities in which constituents would be interested having at an Oklahoma state park are also areas in which visitors may have comments. Information from this study can be used by state officials including park managers, rangers, campground hosts, department heads, and state legislators to implement changes and provide improvements to Oklahoma state parks.

## Research Questions

This study used secondary data from a study originally conducted by Jordan and Caneday (2004). Research questions were developed by initial investigators to determine the best and most informative survey questions for participants to answer. The research questions were:

1. Are there differences in the use rate of Oklahoma state parks by residents depending upon demographics of those residents?
2. Are there differences in the types of activities in which visitors to Oklahoma state parks participate depending upon demographics of those residents?
3. Are there differences in the levels of satisfaction with overall condition and management of Oklahoma state parks depending upon the demographics of those respondents?
4. Are there differences in attitudes pertaining to Oklahoma state parks depending upon demographics of respondents?
5. Are there differences in preferences pertaining to Oklahoma state parks depending upon demographics of respondents?

## Delimitations

This study is delimited to data collected through a previous research study. Results from telephone surveys of households in Oklahoma were used as the unit of analysis for this study. The original survey was presented to people within the state of Oklahoma who had personal telephone service and were at least 16 years of age.

## Assumptions

Using secondary data the researcher identified assumptions that were made by the original investigators. There were three major assumptions involved in this study. These assumptions were:

1. The subjects cared about and were knowledgeable about Oklahoma state parks.
2. The households chosen in the random sample were representative of all residents of the State of Oklahoma.
3. The subjects responded honestly to the survey regarding their opinions.

## Limitations

Certain limitations were recognized by the original investigators of this study and are listed below:

1. Non-response bias may result from individuals who chose not to answer certain items on the survey.
2. The sample was chosen by a random dialing system which called Oklahoma telephone numbers; therefore, some residents without phones may have been excluded.
3. This survey was conducted between the months of November 2003 and February 2004 and may have excluded some residents who reside in Oklahoma during warmer months.

## Definitions

Since different individuals have different ideas on what terms mean the following terms were defined:

- Household: consists of all individuals residing at the same address.
- Need: "something that drives individuals to act in a certain way" (DeGraaf, Jordan, \& DeGraaf, 1999, p. 76).
- Needs Assessment: "a systematic inquiry about needs, attitudes, behaviors and patterns of both participants and non-participants" (DeGraaf, Jordan, \& DeGraaf, 1999, p. 75).
- Park: a piece of land that tax supported is kept for recreation and maintained for the most part in a natural state for use by the public.
- Random Sample: refers to those individuals who were randomly selected by the dialing system to receive the survey.
- Recreation: "an activity that is engaged in during one's free time, is pleasurable, and has socially redeeming qualities" (Kraus, 1990, p. 32).
- Visitors: individuals who go to or have been to Oklahoma state parks.


## CHAPTER II

## LITERATURE REVIEW

Introduction

This chapter consists of eight sections that present a review of the literature pertaining to this project. Each section highlights a certain area and contains a brief discussion of the literature. The benefits and constraints of parks and leisure are briefly discussed. During the course of this chapter needs assessments are also discussed. A brief introduction to Dillman's Total Design Method is addressed. Outdoor activities are another topic presented. Pertinent demographics regarding Oklahoma and the effects on recreation patterns are examined. A brief history of state parks in the United States has been provided. The final section of this chapter includes a brief history of Oklahoma state parks including a mention of the Civilian Conservation Corps. and concludes with the current position of Oklahoma State Parks.

## Benefits of Leisure

There are numerous studies pertaining to the benefits of leisure activities. According to Driver, Perry, and Peterson (1991), there are three categories of benefits received from recreation. These include physiological, psychological, and sociological benefits. Participants of outdoor recreation benefit from a large variety of both
intrinsic and extrinsic rewards. Many individuals gain valued experiences while participating in outdoor recreation activities such as learning, the chance for recollection, recollection of one's personal values, and gaining nostalgic memories of their experiences (Driver, Perry, \& Peterson, 1991). With regard to the psychological perspective of leisure benefits there are three attitudinal dimensions; perceived freedom, intrinsic motivation, and goals (Kelly, \& Freysinger, 2000).

Tinsley and Eldredge (1995) documented how many individuals gain a variety of benefits from outdoor environments such as state parks, wilderness, and other outdoor recreation areas. Individuals go to natural environments such as state parks for a variety of reasons. Many go to natural environments to experience them in an appreciative form; while others are there to engage in activity that requires a specific type of outdoor space. Tinsley and Eldredge (1995) documented that leisure activities differ in the needs that they satisfy. What may be satisfying or fulfilling for one person may not be so for another. Leisure activities demonstrate a gratification of an individual's psychological needs through the leisure experiences they choose. An individual's leisure experiences have positive effects on both physical and mental health, life satisfaction and psychological development.

Leisure benefits research is an outgrowth of motivation and experience work. A study by Tinsley and Eldredge 1995 on the psychological benefits of leisure looked at activities based on need-gratifying properties. They concluded that leisure experiences affect both the mental and physical health of an individual. The Tinsley and Eldredge (1995) study involved almost 4,000 participants who responded to the Paragraphs About Leisure (PAL) questionnaire on one of 82 leisure activities. The instrument was designed
to provide information about leisure experiences and identify a full range of participant needs during involvement of a leisure activity. The PAL measured eleven psychological benefits of leisure based upon 44 categories, which were rated by respondents using a five point Likert scale. The 11 benefits identified on the PAL are exertion, affiliation, enhancement, self-expression, nurturance, compensation, sensibility, conscientiousness, status, challenge, and hedonism.

Tinsley and Eldridge (1995) used two groups of individuals for this study. The first group was comprised of college students enrolled in undergraduate psychology courses. The students were given a list of 10 to 18 leisure activities and were asked to identify five activities about which they knew the most, and five activities in which they participated the most. A second group of respondents were non-students from throughout the United States. The respondents were solicited from mailing lists, membership directories, and organizations devoted to certain types of activities. Participants who responded were mailed the PAL and asked to describe the leisure activity that was associated with their organization (Tinsley, \& Eldridge, 1995).

The 82 leisure activities were cluster analyzed using Ward's hierarchical clustering algorithm that identifies homogeneous subgroups of activities; 12 types of leisure categories were revealed (Tinsley, \& Eldridge, 1995). These categories included: agency, novelty, belongingness, service, sensual enjoyment, cognitive stimulation, selfexpression, creativity, competition, vicarious competition, relaxation, and residual. Throughout these clusters of activities, participants relayed different levels of exertion, affiliation, enhancement, self-expression, nurturance, compensation, sensibility,
conscientiousness, status, challenge, and hedonism (Tinsley. \& Eldridge, 1995). Table 1 summarizes the findings of the Tinsley and Eldridge study:

Table 1: Summary of PAL Study


Tinsley and Eldridge (1995)

In 1996 Iso-Ahola and Park found several physical benefits to participating in leisure. Their study focused on physical health problems, mental health problems, and perceived health of 252 Tae Kwan Do participants. Respondents were asked to complete a self-report questionnaire. The investigators found that the mental and physical health problems reported by respondents had a positive relationship with their life stress. The investigators also found that those participating in leisure activities had better perceived health than those who participated in no leisure activities. During this study, Iso-Ahola and Park discovered that a large number of respondents reported high scores in the following areas: cardiovascular fitness, reduction in hypertension, reducing cholesterol levels, a decrease in body fat composition, an increased life expectancy, and reduced mental and physical stress when participating regularly in their chosen activity (1996).

Another study of leisure and recreation benefits was published by Tinsley, Tinsley, and Croskey in 2002. This study involved interviews with 437 individuals who were 55 years of age and older, and who visited a park in Chicago. The respondents included an ethnically and gender diverse group of park users. The instrument was designed by the authors and included a detailed interview protocol. The interviewer asked about age, whether the individual identified with any particular ethnic group, how many times the person visited the park, and the types of activities in which they participated while at the park. The respondents were asked to rate 11 psychological benefits of leisure on a five point Likert scale.

The researchers found that the park users received the largest benefit from an immediate sense of pleasure and the opportunity to participate in non-challenging activities. Users reported an opportunity to escape from duty or obligation and
experienced activities that were missing in their every day routines. Respondents also experienced the achievement of being able to encourage and help others, valued being able to spend time with others, and felt a sense of affiliation with others. Users reported that the park was an outlet for exercise and held pleasure-seeking opportunities (Tinsley, Tinsley, \& Croskey, 2002).

Authors of texts regarding social, cultural, and community benefits report many theories, however, only a limited amount of research supports these ideas. In 1975, Marans and Rodgers produced a comprehensive empirical study on quality of life and found that parks and playgrounds were ranked eighth by respondents as a predictor for community satisfaction. In a regression analysis of a list of community attributes ranked by participants, recreation was found to be the third best predictor of community life satisfaction, while public service and the environment led the list (Allen, Long, and Perdue, 1987).

Overall, the benefits of leisure vary from person to person and group to group. A pattern has emerged from the benefits research that shows that several constant conditions exist. First, an individual or group gains an improvement in skill level, learns about the environment, or creates closer family units from recreating together. Secondly, by providing education to individuals deterioration of physical areas, such as parks and wilderness areas is minimized. Steps are taken to encourage community involvement. Next, there is a decrease in social problems, an increase in stability, and an increase in overall physical health for those individuals who recreate. Finally, those who recreate come to realize a specific satisfying psychological experience, which may include testing one's skills, enjoying an activity, experiencing closeness as a family, or recovering from
mental stress (Jackson, \& Burton, 1999). Figure 1 illustrates the Benefits About Leisure (BAL) model:

Figure 1
Different Recipients Realize Different Benefits At Different Times and Places


While research shows that there are many benefits to individuals provided by leisure; there are some constraints to leisure as well. Oftentimes leisure constraints can reduce the number of benefits an individual can obtain from leisure activities.

## Leisure Constraints

Leisure constraints are another area where much study is devoted; "Leisure constraints are factors that are assumed by researchers and perceived by individuals to inhibit or prohibit participation and enjoyment of leisure" (Jackson, 1991, p. 279). According to Jackson and Burton (1999) non-participation and other barriers have been
of interest to researchers in the area of parks and recreation since the inception of leisure studies.

Early research conducted by the Outdoor Recreation Resources Review Commission from the 1940-1950s focused on various barriers to participation. The research focused broadly on specific items such as lack of facilities as barriers to participation rather than enhancing theory. During the early 1980s there was a shift from solely answering practical questions to focusing on a broader range of constraints. Researchers began to look at not only physical and external barriers of leisure, but began to realize that barriers could also be internal; examples include psychological, social and economic constraints (Crawford, \& Godbey, 1987).

Recent leisure constraint research has led to developments of more sophisticated models that help relate how constraints enter into a person's leisure decisions. Kay and Jackson preformed a constraint study in 1991 to determine if leisure was attained despite constraint. This was a questionnaire survey of adults in 419 households, which included both prompted and unprompted questions meant to identify types of leisure constraints. Over $72 \%$ of the respondents reported factors that contributed to them not being able to participate in activities or not participate as often as they would like during their unobligated time. The two major constraints listed by respondents were money (53\%) and time ( $36 \%$ ). The majority of the sample reported that financial constraints forced them increase their work time and reduce participation in recreational activities. Nearly one fourth of the sample who said financial reasons were constraints for them stated ways of surmounting the issue. Eleven percent of the participants said they saved money to
participate, $8 \%$ found a cheaper way to participate, and $4 \%$ cut out other things so that they could take part in an activity.

Time shortage was the second most widely reported constraint among those sampled. Seventy-one percent of respondents reported that when time was short that they cut down on their leisure; another $27 \%$ reduced household chore activities to increase unobligated time; very few reduced work time to pursue leisure activities. Other constraints included household chores (27\%), which was listed as a major constraint for $6 \%$ of respondents. Being tired was listed by $27 \%$, but only $4 \%$ considered it a major factor as a constraint for participation. Constraints were most widely reported by those living in inner city areas, local authority rented housing areas, and younger middle class areas (Kay, \& Jackson, 1991).

Shaw, Bonen, and McCabe (1991) reported two types of leisure constraints; internal and external. Internal constraints involve the personal skills, abilities, knowledge, and overall health and condition of the individual. External constraints revolve around the individual's lack of time, financial resources, available facilities, the location of those facilities, and transportation issues. Providers are better able to serve individuals when they understand what constraints lead to non-participation (Shaw, Bonen, \& McCabe, 1991).

In another study by Shaw, Bonen, and McCabe (1991) a secondary data set was used to conduct an analysis of the Canadian Fitness survey. The researchers looked at only physically active individuals who engaged in leisure pursuits. The two-part survey included a list of 35 activities considered common recreational activities, and contained questions regarding 11 barriers to participation. Of the 18,693 respondents in the sample,
$82 \%$ reported that they would like to participate in physical activities more than they were currently participating. Lack of time due to work was the most frequently reported barrier to participation, which was indicated by $54 \%$ of the sample. Ten percent of respondents reported injury or disability, ill health, lack of skills, inadequate facilities, and lack of leaders as major constraints. This particular study indicated that more constraints did not necessarily mean less leisure and increased constraints did not lead to lower participation.

According to Crawford, Jackson, and Godbey (1991) three additional constraints are structural barriers, intrapersonal barriers, and interpersonal barriers. Structural constraints are in part an individual's financial status, place where they reside or where the activity is held; and availability of the activity to the individual, season, and the climate. Intrapersonal constraints involve any participant stress or depression, perceived skill level, and anxiety about the activity. The way a person forms relationships with others, existing relationships, and not having a partner with whom to participate contribute to interpersonal constraints.

The authors proposed that constraints are hierarchical; first the intrapersonal level, followed by the interpersonal level, and finally the structural level. With this research they were able to develop a model of leisure constraints. Figure 2 illustrates this model (Crawford, Jackson, \& Godbey, 1991).

Figure 2
The Hierarchical Model of Leisure Constraints


As an example, consider an individual who would like to participate in an activity. First, the individual would have to get beyond any intrapersonal constraints. The person must evaluate her/his perceived ability, skill level, and the appropriateness of the activity in which she/he wished to participate. When the intrapersonal constraints are overcome and the person feels that it is suitable for her/him to participate in the chosen activity, she/he may then move onto the next step of the model.

Interpersonal constraints make up the next obstruction for the willing participant. Some activities require that an individual have a group or a partner with whom to participate in certain activities. For example, if an individual wanted to participate in a doubles tennis league it would be impossible to compete in the activity if she/he did not have a partner with whom to play doubles. Finally, some activities require an individual to have a special area or facility for the chosen activity. Basketball, for example, requires
a basketball court. Therefore, structural constraints may take shape if the participant does not have a place to participate in the activity or some other factor, such as a lack of financial resources, hinders the ability of the individual to participate (Crawford, Jackson, \& Godbey 1991).

Through the hierarchical model Crawford, Jackson, and Godbey (1991) proposed that leisure participation is dependent on multiple factors arranged in systematic order that must be overcome in order to maintain a person's motivation. The researchers concluded with three major propositions:

1. Leisure participation is heavily dependent on a process of negotiating through an alignment of multiple factors, arranged sequentially.
2. The sequential ordering of constraints represents a hierarchy of importance.
3. Social class may have a more powerful influence on leisure participation and nonparticipation than is currently accepted, that is, the experience of constraints is related to a hierarchy of social privilege. (Crawford, Jackson, \&Godbey 1991, p. 317)

Leisure constraints have provided such a vast amount of research that Hultsman (1995) produced a study that identified commonalities among eight different research pieces on leisure constraint. The author stated "that it appears that leisure is not mitigated by a single constraint or even by a single set of constraints" (Hultsman, 1995, p. 228). During her research she identified six dimensions of compromising constraints. Table 2 illustrates these dimensions.

Table 2: Six Dimensions of Constraint

| Dimension | Constraint |
| :--- | :--- |
| Accessibility | Cost of transportation <br> Lack of transportation <br> No opportunity to participate near home |
| Social Isolation | Difficulty in finding others to participate <br> Lack of knowledge for place to participate |
| Personal Reasons | Lack of necessary skills <br> Low energy <br> Physically unable to participate <br> Requires too much self-discipline <br> Lost interest in participating |
| Costs | Cost of equipment, materials, supplies <br> Admission, rental fees, other charges |
| Time Commitments | Work commitments <br> Family commitments |
| Facilities | Lack of time due to other activities <br> Overcrowded recreation facilities <br> Recreation facilities poorly maintained |

(Hultsman, 1995)
In Hultsman's study of 32 adults age $25-59,66 \%$ of participants were female. Respondents were given a survey based on the Multidimensional Scaling (MDS) questionnaire. The MDS uses data bounded by word descriptors to study internal structure. In this study 17 items were used to represent reasons most often described as leisure constraints. The questionnaire was in two parts. The first part contained questions about how similar or different pairwise comparisons were among 17 leisure constraints. From the results the researcher concluded that the strongest similarities between individual constraints were: facilities, cost, and lost interest in participation. Hultsman
also concluded that there was little connection between work commitments and family commitments as leisure constraints. Hultsman found a gender specific difference in which there was significance among females who indicated losing interest in participation and overcrowded facilities compared to that of males.

All in all, leisure constraint research has demonstrated a common theme. Among adults, constraints related to time and money were the most common while facilities and accessibility were of intermediate importance; lack of social skills and physical abilities were seen by participants as least important. While some constraints may be permanent, others may change over time or disappear altogether. Jackson, Crawford, and Godbey (1993) argued that "participation is dependent not on the absence of constraints but on negotiation through them" (p.312).

## Needs Assessments

Needs assessments are a way for an organization or program to assess the needs, goals, and perceptions of its members, participants, or constituents. Assessment is a key ingredient for planning recreational services and designing programs; especially those designed to affect participants (Riddick, \& Russell, 1999).

Before a complete understanding of what a needs assessment is and what providers wish the assessment to accomplish a definition of needs should be given. Rossman and Schlatter (1995) define needs as a "state of deprivation arising out of basic innate biological characteristics of humans" (p. 137). People participate in leisure and recreational activities that they find intrinsically rewarding to fulfill personal needs
(Rossman, \& Schlatter, 2003). DeGraaf, Jordan, and DeGraaf (1999) defined needs as "something that drives individuals to act in a certain way" (p. 76).

DeGraaf, Jordan, and DeGraaf (1999) defined five types of needs. The first is expressed needs, which are activities in which one is already participating. For example, a person who wishes to participate in playing basketball and is involved in playing basketball has met her or his need to participate in that activity. Felt needs are needs that a person has, but has yet to act upon; these types of needs come from when a person feels she or he has a need for a certain type of services or facilities based on social forces. An example of a felt need may be that a person wants to participate in a certain type of activity such as ice hockey because she or he has witnessed others participating in that type of activity or in a certain type of facility such as an ice rink that may or may not be available to her or him. Comparative needs are those needs in which an individual compares activities that are available to her or him to activities available to people in other nearby areas. A person may have comparative needs if they feel that a group of people in a neighboring community recreation center has better facilities and programs than those provided at her or his community recreation center. Normative needs are those needs established by experts in the field; that is to say that these types of needs are objectives and standards that are defined by organizations and groups of people that are qualified to do so based on their training (DeGraaf, Jordan, \& DeGraaf, 1999).

Programmers are often uncertain whether or not they are adequately conducting needs assessments. This usually occurs due to the lack of knowledge and understanding regarding the type of questions needed to be asked in a needs assessment. "A needs assessment is a scientifically reliable statistical study that assists with the understanding
of a communities recreation needs, attitudes, opinions and behaviors and how they believe they are being served by their recreation service providers" (Mitra, 2001, p. 4).

Mitra stated that it is important not to confuse a needs assessment with a master plan. It is ideal that the needs assessment be done before the master plan is written so that the needs assessment can be used as a blueprint for designing a master plan. According to Mitra (2001), one must outline the goals for the needs assessment. Some goals to consider are listed below:

1. Assess satisfaction levels of quality, quantity, and management of existing parks and programs.
2. Determine usage of programs and facilities and appropriateness of times.
3. Identify acceptable levels of spending based on fees and charges.
4. Identify interest in addition of facilities, new programs, and services.
5. Determine communication effectiveness between providers and community.
6. Obtain demographic information and identify perceptions of what programs and facilities are offered.
7. Identify what prohibits non-use and explore and suggest ways of providing opportunities to non-users.
(Mitra, 2001)
Needs assessments and surveys are tools that can assist in gathering information about the needs of individuals. Needs assessments enable leisure professionals to locate participants and citizens who will be willing to provide information about programming ideas, desires, and needs of various groups and communities in which they belong (DeGraaf, Jordan, \& DeGraaf, 1999).

When designing a needs assessment it is important to determine participant awareness and perceptions of current programs and facilities and how well they meet needs of participants. This will aid the investigator in designing a needs assessment tool that will measure the appropriate topics of interest. Working with the National Park Service, Rossman and Schlatter (2003) defined six major categories to identify assessment questions for recreation providers:

1. Set objectives: What do the constituents think the agency should be doing?
2. Identify target markets: What are the wants and needs of constituents? What are the characteristics of those individuals with needs? How many individuals are affected by the needs? Why do individuals use existing services?
3. Product development: Do target markets react differently to various alternatives to their desired needs?
4. Pricing: Should price change?
5. Promotion: How should communication of services be delivered?
6. Distribution: Determine times and locations of services that need to be offered.

With these categories in mind it can be said that a needs analysis is conducted whenever one seeks the answers to these or similar questions in a manner that is systematic and will analyze the responses given by the constituents (Rossman, \& Schlatter, 2003).

Needs assessments arise from an organization's desire to know the needs of the individuals they serve or could potentially serve. Many programmers believe that there is
the possibility that if the assessment is done incorrectly that they may overlook certain points of view and neglect the needs held by some (Rossman, \& Schlatter, 2003).

Other research studies have indicated what information needs assessments should gather and what types of individuals or groups will benefit from needs assessments. According to Rossman and Schlatter (2003), a properly conducted survey will ensure that the views gathered will reflect that of all citizens. Witkin and Altschuld (1995) indicated that the most effective type of needs assessment surveys are those based on questions that ask for informed opinions of respondents regarding personal experiences, background, expertise, and knowledge about themselves and others of whom they have direct knowledge. Participation of citizens in the decision making process is the essence of, and most vital component of, a needs assessment (Summers, 1987). A typical needs assessment is done with the idea that currently unmet needs may be fulfilled by an agency that has the capacity to respond to those needs. Hobbs (1987) identified a series of questions to guide the needs assessment process:

1. Who is the assessment trying to inform, influence or persuade?
2. What questions should be asked?
3. What resources are available to do the assessment including time, organization and funding of the assessment?
4. Whose needs are to be assessed?
5. What is the needs assessment intended to accomplish?

## Dillman Total Design Method

Research design is a key factor to a successful study. Prior to Dillman's (1978) Total Design Method issues such as time constraints, willingness of participants, and cost of face-to-face interviews were difficulties that researchers often faced. To correct what he saw as a dilemma, Dillman developed what is known as the "Total Design Method" for mail and telephone surveys. Dillman's design set out a number of tips and outlines to increase response rate and effectiveness of surveys through telephone or mail.

Dillman suggested that each survey question contain three elements. In the first element the investigator should address what the question will address such as attitudes, beliefs, and behaviors. These items should be specific enough so that there are clear differences between attitudes, beliefs and behaviors. This clarity makes it easier for respondents to be able to firmly decide upon an answer to a question. Secondly, the investigator should look at question structure, and decide whether questions should be open-ended, closed-ended, closed-ended with unordered response choices, or partially closed-ended. These types of choices allow respondents to answer in their own words or make a forced choice answer based upon the choices given. The third element examined choice of words used in the survey. This element encourages researchers to use simple language without talking down to participants, be specific without being too specific, be objective, and avoid hypothetical questions and bias. This type of wording of questions will help eliminate the respondents' unwillingness to answer due to not understanding a question, or feeling as if the question is too broad.

## Outdoor Activities

Whatever it may be, outdoor recreation is a leisure moment outdoors, freely enjoyed. It has no boundaries and no bounds beyond those of wondering and wandering in the outdoor environments; not even the spacious skies, the majestic purple mountains, the sunrise or the sunset, and the ever-changing seasons which bring a new dimension to each moment and each day. Outdoor recreation is life rejoicing in the outdoors. (The Domestic Policy Council's Task Force on Outdoor Recreation Resources and Opportunities, 1998, p. 2)

There have been many studies dedicated to outdoor recreation and travel in the United States. Outdoor recreation plays a large part in the types of recreational activities in which an individual participates. According to Kelly and Freysinger (2000) people visit state parks and outdoor recreation settings for a variety of reasons and motivations. Activities may include things such as visiting an area to appreciate nature, for a change in everyday routines, having an experimental venture from common recreation activities, looking for new personal experiences, or because the space they have chosen is compatible for social gatherings.

The Outdoor Recreation Resources Review Commission (ORRRC) Outdoor Recreation for America Report of 1962 was one the first studies to deal with the outdoor recreation activities in which Americans participated. This report was initiated to study outdoor recreation in America, its place, and its future. During the 1950s, members of Congress were becoming concerned with the state of the outdoors. On June 28, 1958 Congress passed Public Law 85-470. This law had three main goals:

1. To determine recreation needs of Americans at the present as well as the future.
2. To determine resources available for outdoor recreation and to satisfy needs.
3. To determine policies to be set to ensure that needs were satisfied then and for the future (ORRRC, 1962).

The findings and conclusions of the ORRRC stated that simple activities are most popular with individuals; these activities include such things as walking and hiking, picnicking and sightseeing. The ORRRC found that outdoor opportunities were most needed and in the greatest demand in metropolitan areas. The investigators found that a considerable amount of land was available for outdoor recreation; but not enough land was available for the needs of individuals for outdoor recreation. The ORRRC found that the demand for outdoor recreation was increasing; yet more money was needed to meet the demand for programs, facilities, and land. The Commission also found that outdoor recreation was compatible with other resource uses such as a lake being used for both recreation and as source of water for a community. Water was a major point of outdoor recreation. The use of lakes and other bodies of water for activities such as swimming, boating, and fishing was increasing. The ORRRC reported that outdoor recreation brings about economic benefits such as increased spending by visitors in a community near a recreation. Finally, the ORRRC indicated that more needed to be known regarding what individuals value about outdoor recreation.

With these findings and conclusions the ORRRC made several recommendations. The first of these was to develop a national outdoor recreation policy, so that through conservation and wise use of resources the nation would preserve, develop, and establish
accessibility of quality outdoor recreation to all Americans. Secondly, the policy would establish guidelines for the management of outdoor recreation resources, which would urge areas both public and private to designate and classify outdoor recreation areas into six categories; and to promote the best possible use for the resources and areas. Thirdly, the policy stated the need for the expansion, modification, and intensification of programs to meet the increasing needs of the public. This part of the policy entailed the creation of a central agency to develop long range plans for outdoor recreation for the public; to provide interpretive and educational programs and develop systematic and continuing fundamental and applied research. Next, the policy established a Bureau of Outdoor Recreation in the federal government. This Bureau, which no longer exists, was part of the Department of the Interior and was to coordinate the leadership of federal agencies that oversee outdoor recreation activities. Finally, the policy established a general grants-in-aid program to help individual states to establish and stimulate the demand for outdoor recreation (ORRRC, 1962).

Commissions and agencies have played a large role in the expansion of outdoor recreational activities in the United States. One such commission was the President's Commission on Americans Outdoors (PCAO). The PCAO (1986) stated that outdoor recreation helps individuals accomplish personal goals such as personal fitness and longer life, family togetherness, friendship, personal reflection, and appreciation of nature and beauty. The PCAO was charged with reviewing private and public outdoor recreation opportunities, policies and programs, as well as to make recommendations to ensure the future of outdoor recreation in the United States. The PCAO found five types of activities that influenced adults in the United States to participate in outdoor recreation. These
were: fitness, social excitement, experiences of self and nature, conformity, and feeling that one's space was cramped. The Commission reported that $76 \%$ of adults participated in activities such as sightseeing and visiting historic sites (PCAO, 1986).

Another study designed to determine the most popular types of outdoor activities was completed by Maier and Percy (1995). The researchers conducted 687 telephone interviews with Milwaukee County household members. The respondents were asked to rate the importance of recreation and parks in the Milwaukee County district. Over twothirds of the respondents rated park services as very important; with another thirty percent rating recreation and park services as somewhat important. Respondents were asked if they or any of their household members had visited a county park in the past year and over seventy-two percent indicated they had. Over 85 activities were listed by respondents when asked about the types of activities in which they participated at the county parks. Picnicking rated highest with (37.3\%), hiking/walking was second (29.4\%), and swimming was third (15.3 \%). Golf, playground for kids, baseball/softball, general recreation and relaxation, biking, enjoying leaves, flowers and nature, and family reunions/gatherings rounded out the top ten activities respondents listed (Maier \& Percy, 1995).

Through federal and market national surveys researchers have learned that the most popular outdoor activities include walking and hiking, swimming, fishing, camping, and operation of various vehicles (both land and water based). The most common outdoor activity was sightseeing from a car (Kelly, \& Freysinger, 2000). Wellner (1997), conducted a U.S. Forest Service National Survey of Recreation and the Environment and found that the top three outdoor recreational activities for the total population were:
walking $66.7 \%$, sightseeing $56.6 \%$, and picnicking $49.1 \%$; wildlife viewing $31.2 \%$ and fishing $29.1 \%$ were among the top ten outdoor activities.

There are several associations and agencies that gather information regarding participation in recreation activities. One such organization is the National Sporting Goods Association (NSGA). The NSGA gathered information regarding participation in recreational activities first using a mail-based panel of 300,000 U.S. households in 2002. Next, during the first week of January 2003 a self-administered questionnaire was mailed to 10,000 of those households. The sample households were selected based on several characteristics including household composition, household income, age of household head, socio-economic status of household, region, and market size. The questionnaire asked heads of households (and up to two additional household members seven years of age and older) to indicate age, the sports or activities in which they participated during 2002, and the number of days in which they participated. The NSGA found that the top five participated activities in the United States were: exercise walking, camping, exercising with equipment, swimming, and fishing (NSGA, 2003).

In most any outdoor recreation pursuit, including those activities found in state parks, there are no "typical" resource users. While many individuals participate in the same category of activities, typically no two users do the same activity with the same motivations and goals in mind. Take, for instance, the activity of camping. There are a variety of reasons why individuals participate in this activity. Many travelers use campgrounds to save money; they use camping facilities such as those in state parks for low-cost access to resources. According to Kelly and Freysinger (2000), student campers tend to explore or engage in a party atmosphere using camping sites for celebrations.

Family campers use camping sites to seek the togetherness and nurturing they may not get in their hectic lives. There are also those who camp to seek separation and solitude from their daily lives, or those who camp for the sake of a significant other. Comfort campers travel to their camping areas with all the comforts of home. In addition, there are the "extractors"; these types of campers use a camp area as their base of operations, but are otherwise occupied with activities such as sightseeing, fishing, or hunting (Kelly, \& Freysinger, 2000). Budget travelers look for an educational experience and often camp at state parks and other inexpensive public camping areas; these individuals comprise about twenty-eight percent of travelers. Twenty-four percent of travelers are adventure seekers looking for excitement and challenge and are willing to pay for their desired experiences. Homebodies make up 20\% of travelers; they travel very little and usually stay close to home. Seven percent of individuals are considered vacationers. They tend to have lots of plans, take conventional trips, have lower incomes, and travel often. Overall, a common element prevails: companions, cost, and lifestyle consistency (Kelly, \& Freysinger, 2000).

When traveling in the United States $85 \%$ of individuals do their traveling by car and $36 \%$ of individuals say that they travel for pleasure on a regular basis (Kelly, \& Freysinger, 2000). Kelly and Freysinger reported that there are several different types of travel. Twenty percent of those who travel seek peace and quiet, $22 \%$ are looking for aesthetic appreciation, $19 \%$ are in search of warmer winter weather, another $19 \%$ are bound for a grand hotel experience, $9 \%$ are trying to get to where they are going as inexpensively as possible, and $12 \%$ are on a family bonding experience (Kelly, \& Freysinger, 2000).

## Demographics

The types of activities in which people participate and where the activities take place are important factors for recreation planners and managers to consider. When doing needs assessment research many investigators ask questions regarding where an individual lives, household income, household size, and other questions. These types of questions provide responses from participants regarding the demographics of users. Other demographic information can be obtained through the U.S. Census Bureau.

According to the 2002 Census Bureau, the total population of the state of Oklahoma is 3.4 million; $51 \%$ of residents are female. The median age of the population is 36.1 years with just over one-fourth of the population in Oklahoma under the age of $18 ; 13 \%$ of the population is over the age of 65 . In 2002 there were 1.3 million households in Oklahoma and the average household size was 2.52 persons. Families made up $69 \%$ of the households; this number includes both married-couple families and other family structures. The median income of households was $\$ 35,568$; yet $15 \%$ of households were in poverty and $21 \%$ of children under the age of 18 were below the poverty level. Nineteen percent of households received public assistance or non-cash benefits. In 2002, $80 \%$ of residents over the age of 25 had completed high school and 21\% had a bachelor's degree or higher (U.S. Census Bureau, 2002).

The type of activity in which one participates is partly dependant on age. For example, many older adults enjoy participating in bird watching, while younger adults may participate in and enjoy running. Wellner (1997) examined the types of outdoor activities in which people participated. In all age groups in Wellner's survey walking was
listed as the number one activity in which they participated, with swimming and picnicking in the top five of activities by participation (Wellner, 1997).

A 2003 study by Sugarman examined the motivation of adults aged 50 and over who participated in outdoor activities. Sugarman gathered information regarding age, sex, retirement status, and level of skill. A two by two ANOVA was used to examine sex and age of respondents with the 817 surveys returned. Sugarman found that persons over the age of 50 participating in outdoor activities rated nature, physical fitness, and learning as most important to them. Those participants who were not yet retired rated escape from personal and physical pressures highest on the survey, followed by nature and rest as the next most important factor.

Lee, Scott, and Floyd (2001) conducted a telephone survey in 1998. They asked 3,000 Texas residents about their use of state parks, outdoor recreation participation, barriers and constraints to outdoor recreation, and demographic backgrounds. The purpose of their study was to test the multiple hierarchy stratification perspective as it related to involvement in outdoor recreation. The investigators examined the extent to which an individual's socioeconomic status, race, age, result in whether participants recreate away from home, close to home, or in state parks. The authors concluded that age was the most significant factor in explaining individual outdoor recreation participation. In support, Crawford, Jackson, \& Godbey (1991), found that individuals between the ages of 21 and 35 reported that they had the least amount of time in which to recreate while those people between the ages of 65 and 75 reported the most time in which to be involved in recreational activities.

Household size also contributes to the choice of recreational activities in which individuals participate. In 1992, the National Recreation and Park Association sponsored a nationwide survey about the benefits of parks and recreation. Researchers found that households with three to four people were more likely to participate in activities sponsored by parks and recreation departments than those who lived alone. Also, households with at least one child under the age 19 were more likely to participate in a sponsored activity than those households that had no children (Bowker, Donald, English, \& Cordell, 1999).

Education plays a role in the types of activities in which individuals participate. According to results of the National Recreation and Parks Association (NRPA) study in 1999, participation in sponsored activities increases with the level of education a participant holds. Individuals with four or more years of college were more likely to participate in and use park services than those individuals with less than 12 years of school (Bowker, Donald, English, \& Cordell 1999).

Income also plays a large part in an individual's participation of recreational activities. Survey results from the 1999 Roper Starch study indicated that $77 \%$ of respondents with incomes of $\$ 50,000$ or more participated in recreational activities at least once a month (The Recreation Roundtable, 1999). Jackson, Crawford, and Godbey (1993), reported that the higher the income level of an individual the more likely that individual is to pick up a new activity during a one year period. Wellner (1997) found that households with incomes of $\$ 100,000$ or more per year were more likely to spend money on activities that require expensive equipment and travel. For those with incomes
of over $\$ 100,000$ per year the top five activities were: walking, swimming (pool), swimming (non-pool), picnicking, and bicycling (Wellner, 1997).

More and Stevens (2000) conducted a mail survey of 30,000 household respondents. Seventy-one percent of the respondents were male with the average age reported as 54 years old. Respondents had nearly 14 years of education and had household incomes between $\$ 30,000$ and $\$ 45,000$ per year. Twenty-eight percent of participants reported an income of less than $\$ 30,000$ per year, while $18 \%$ reported incomes greater than $\$ 75,000$. Respondents were asked several questions about how often they participated in outdoor recreation activities during the summer and fall of 1998.

Low income respondents participated more in activities such as fishing, backpacking, hunting, and taking trips to watch birds or wildlife, than those in higher income brackets. Another question asked respondents about recreation user fees. In this study researchers found that those in lower to middle class income ranges were more likely to have their recreation choices guided by entrance, user, access, or parking fees while only $11 \%$ of those in the upper class income bracket reported that fees made in a difference in their participation. This mail survey in New Hampshire and Vermont reported that although most individuals accepted user fees in park systems, fees might reduce participation in recreational activities in those households where the income is $\$ 30,000$ per year or lower. People must make choices about when, where, and on what to spend their money. During this study the investigators found that resource-based recreation ranked low among priorities of people with low incomes (More, \& Stevens, 2000).

Investigators Winter, Palucki, and Burkgardt (1999) found that respondents thought that no user fees were linked to high use of areas, as well as damage to forest areas and other public recreation areas. The investigators used focus groups during a four-month period and respondents were recruited based on membership in target populations. The 95 respondents were $63.2 \%$ male, $56.8 \%$ were married, had a mean age of 44.3 years, and $48.6 \%$ had a college or post-graduated degree. The respondents felt that high user fees were a tool to limit the number of individuals visiting and would change the profile of users in resource-based recreation areas.

It was important to the respondents of these focus groups that if fees were implemented or increased that the money stayed within the area. Some focus groups were more inclined to spend money on restrooms, parking lots, and maintained campgrounds, while others wanted to see the money go toward trail maintenance and primitive camping areas. Several groups contended that fee use would mean double taxation and take away what they called "public lands", if fees were required (Winter, Palucki, \& Burkgardt, 1999).

The results led the researchers to the following conclusions: over one-fourth of respondents were not willing to pay any daily fee, while if a fee was in place a median daily fee of $\$ 2.00$ would be acceptable. Local residents were willing to pay up to $\$ 7.35$ per day for recreation fees, while mountain bikers ranked second with the willingness to pay $\$ 5.71$ per day. Those using off road vehicles said they would refuse to pay any fees.

Several points were evaluated regarding annual user fees. Similar to the responses related to daily fees, approximately $25 \%$ reported they would not be willing to pay an annual user fee for recreation. The median response of those willing to pay an annual fee
was $\$ 20.00$. Local resident groups were willing to pay the most for annual recreation fees (up to $\$ 66.59$ ), with mountain bikers again being second at willingness to pay annual user fees $(\$ 33.57)$. Off road vehicle users reported they would pay the least with a willingness to pay $\$ 0.42$ for recreation annual user fees (Winter, Palucki, \& Burkgardt, 1999).

Gender is one demographic area that has been studied by researchers with regards to recreational activities. According to Wellner (1997, p. 25), "The gender gap is still alive and well in outdoor sports and recreation." While men are more likely to participate in fishing, golf, and hunting, women participate more frequently in bird watching, picnicking, walking, and horseback riding (Wellner, 1997). The National Sporting Goods and Manufacturing Association (NSGMA) found that the top five activities in participation for women who participated in activities more than once were; exercise walking ( 50.3 million), exercising with equipment ( 26.3 million), swimming ( 25 million), camping ( 24.3 million), and aerobic exercise ( 21 million). Among women, fishing came in at eleventh (11.3 million), boating was fourteenth, backpacking/wilderness camping twenty-first, and target shooting was the twenty-fifth most popular activity (NSGMA, 2003).

## State Parks

State parks collect more user fees and serve more visitors annually than do national parks, yet they still have smaller budgets (State Park Agencies, 2003). The United States currently has over 200 million acres of federal land available for public recreation. Forty-two million of the acres are owned by individual states for public recreation, while another ten million acres are set aside for local governments and
municipalities for public recreation. Of these millions of acres $50 \%$ are reserved for forested areas, $9 \%$ are designated wilderness areas, $10 \%$ are fish and wildlife preserves, and $6 \%$ are set aside for parks and recreation (Kelly, \& Freysinger, 2000).

State parks in the United States trace back to as early as 1641 when the Bay Colony of Massachusetts put aside 90,000 acres of land and water to be used for hunting and fishing. An early example of a park is Yosemite, which in 1864 Congress set aside as a national park. Two years later, in 1866, California accepted Yosemite from the U.S. government as a state park. In 1906 California returned the park to federal hands.

In 1875 Congress created Mackinac National Park and then turned it over to the state of Michigan for it to designate as a state park in 1895. The first state park created by a state that is still in existence today is Niagara Falls (New York), which was set aside in 1885. During the same year the New York legislature created Adirondack State Park, which had been an area promoted by conservationists for thirteen years. In 1906 Wisconsin became the first state to create a state park agency.

In 1921 Stephen Mather, then director of the National Park Service, called for a conference on state parks. He was concerned about what he felt was the undersized state park movement. At that time there were only nineteen states that had state parks and seven of the states had one area designated as state park land. Two hundred people representing twenty-eight states attended the conference. One-third of those in attendance represented states that had no land areas designated as state parks. The conference was held to help bolster the state park movement (State Park Agencies, 2003).

Management was a topic of interest at the 1921 conference. Speakers at the conference suggested that parks should form agencies within the state and include the
fish and wildlife agencies to form one agency focusing on conservation. This thought fostered the idea that allying with fish and wildlife agencies would help gain funding to buy more area for parks (State Park Agencies, 2003). In 1927, members of the Oregon legislature, several of whom had attended the 1921 conference, did not take the advice from conference speakers regarding bonding with fish and wildlife agencies and began to purchase park lands using highway gas tax and vehicle registration funds. Using this system the Oregon state park system quadrupled in size in the first eighteen months of the gas tax and vehicle registration funding program. Today, state parks that have combined their park agencies with forest agencies have $50 \%$ more land area in parks than agencies that do not combine with forest agencies (State Park Agencies, 2003).

The 1921 conference on state parks promoted building and expanding the state park system was considered a success. By 1940, 45 states had land designated as state parks and 40 of these states had identifiable state park agencies. Excluding Alaska, the last states to formally add state parks were Arizona in 1958 and Colorado in 1959. Oklahoma completed its first state park in 1935 (State Park Agencies, 2003).

During the 1930 National Conference on state parks, park officials estimated that attendance during the year was approximately 45 million, and in 1933 an estimated 61.3 million persons visited state parks nationally (Harmon, \& Putney, 2003). Over the past fifty years, state parks in the United States have seen an increase in attendance of over $400 \%$ to approximately 700 million visitors annually (Harmon, \& Putney, 2003). Due to this rapid increase in attendance many states have looked at the possibility of generating revenue from state parks (Kelly, \& Freysinger, 2000).

The average state park agency serves 14.5 million visitors per year and manages nearly 232,000 acres of land. The state parks receive nearly $\$ 10$ million in revenues each year that come mostly from entrance fees, campgrounds, and other overnight lodging fees. Park officials have no control over much of these revenues unless the state legislature appropriates the funds back to the state parks. The average state park agency's annual budget is nearly $\$ 30$ million, where half of the dollars come from either general state funds or other state tax dollars (State Park Agencies, 2003).

Like other state agencies, state parks feel the pinch when states experience budget crunches; because of this many state parks have increased their user fees dramatically. In 1975, state parks had average user fees of less than $9 \%$ of the park budgets while today more than $34 \%$ of a parks budget may come from user fees (State Park Agencies, 2003).

The planning process used by state parks and other public recreation areas have numerous trends that influence the decisions of park officials and managers (Mertes, \& Hall, 1996). Problems such as disappearing resources, cleanup of environmental hazards, and reduction of waste plague many state park agencies. Factors such as preserving environmentally sensitive lifestyles, sound environmental practices, and the "not in my backyard" syndrome also hamper planning processes. Many area residents become upset and concerned with the thought of a park moving into their neighborhoods. They worry that a park in the neighborhood may cause an increase in traffic, attract crime, or decrease their property values. Other problems park agencies face include management of natural areas and the threat of greenhouse effects. Water quality mandates, land use mandates, and natural disasters are other areas of concern for park agencies. A serious case of water
pollution can close a park for a lengthy period of time not only decreasing revenues, but denying access to large numbers of visitors (Mertes \& Hall, 1996).

Demographic trends play an increasing role in the planning of recreation areas. Issues such as the aging of society in the United States, fewer "traditional" family households, and a desire to place more emphasis on elder and child care are placing demands on park planners to design more programs and activities to meet the needs of these types of individuals and groups (Mertes \& Hall, 1996). In the United States there is an increasing trend towards urban sprawl and boundaries being blurred. A growing increase in the desire for amenities, a public push for historic preservation, and a continuation of gentrification in many cities contribute to various sorts of political pressure (Mertes \& Hall, 1996). Historical literature regarding state parks is beneficial as it helps to understand how a certain state compares to other states.

## Oklahoma State Parks

In 1933 the United States was in the midst of an economic depression. Oklahoma was not spared in this time of economic devastation. Unemployment in Oklahoma was at an all time high and farmers were plagued with a severe drought and extremely low agricultural prices. Newly elected President Franklin D. Roosevelt took on the seemingly overwhelming task of bringing back prosperity to the United States. One of Roosevelt's efforts came in the form of the Civilian Conservation Corps (Holland, 1969).

In March of 1933 Congress passed the bill for the Civilian Conservation Corps (CCC) in hopes to improve the massive unemployment rate across the country. The Department of Labor took on the task of selecting and hiring the thousands of workers,
while the Department of War equipped and processed the workers. The Departments of the Interior and Agriculture were put to the task of planning and developing the CCC projects. Oklahoma embraced the concept of the Civilian Conservation Corps and soon camps were established across the state. Workers with the Corps built bridges and roads, worked on erosion control programs, planted trees and grasses, landscaped, built and stocked lakes and ponds, fought forest fires, and built parks and forested areas.

Eight major recreation areas were built in Oklahoma as a result of the CCC. They include Canadian River State Park, Big Springs State Park, Spavinaw Lake State Park, Quartz Mountain State Park, Lake Murray State Park, Latimer County Recreation Area, McCurtain County Recreation Area, and Osage County Recreation Area (Holland, 1969). Today, some of these areas have been re-appropriated by the state government and are no longer state parks; they remain recreation areas in some fashion.

Today, Oklahoma has fifty state parks that include nearly 85,000 acres of either state-owned or leased property. Lake Murray, Lake Texoma, Western Hills, and Roman Nose are the sites of Oklahoma state parks with lodges while Beavers Bend and Robbers Cave are resort parks with lodges. Oklahoma state parks offer a wide variety of cultural, natural, artificial, and historic areas. The majority of Oklahoma state parks have trails, cabins, campsites, restrooms, fishing areas, playgrounds, dump stations, showers, and boating areas. The annual state appropriations for Oklahoma state parks are \$13.7 million, and the state parks have annual revenue of $\$ 11.5$ million (ORTD, 2003).

Several studies have been conducted in Oklahoma to investigate various aspects of the Oklahoma state park system. A 2000 Eco-Tourism Phone Survey conducted by Hawthorne was used in part to create the 2001 Statewide Comprehensive Outdoor

Recreation Plan (SCORP). Hawthorne's study involved telephone surveys of 15,000 randomly selected residents of Oklahoma. Hawthorne found that there was a high rate of participation in outdoor activities among residents of Oklahoma. At the time of the survey, within the previous 12 months $50 \%$ of respondents had been fishing, $49 \%$ had walked a trail less than two miles, $48 \%$ had visited an Oklahoma state park, and $37 \%$ had been camping (Hawthorne, 2000).

Hawthorne found that over $48 \%$ of respondents had been to a state park in the previous 12 months at the time of the interview. He also found that $58 \%$ of state park visitors were day users, while $42 \%$ had spent at least one night at a state park, within 12 months of time of the interview. Of activities in which respondents had participated, walking was listed by $80 \%$ of respondents, $78 \%$ indicated that they picnicked, $66 \%$ stated they had been fishing, $65 \%$ had been swimming, and $53 \%$ reported they had been hiking.

Of those who stayed overnight in Oklahoma state parks $67 \%$ used campgrounds, $23 \%$ stayed in cabins, and $10 \%$ stayed overnight in lodges. Fifty-eight percent of campers reported that they stayed in tents, while the remaining $42 \%$ listed some other type of arrangement such as a recreational vehicle or tent trailer. Satisfaction was very high among visitors of Oklahoma state parks with $82 \%$ of respondents indicating that they were extremely or very satisfied with their park experience (Hawthorne, 2000).

In 2001 Caneday conducted the Oklahoma Statewide Comprehensive Outdoor Recreation Plan (SCORP) for the Oklahoma Tourism and Recreation Department (OTRD). The SCORP was designed to consider issues regarding the subject of planning programs, policies and development that affect outdoor recreation. The 2001 SCORP involved telephone surveys of more than 2000 residents of Oklahoma from a list of

15,000 contacts; another 4000 Oklahoma households received a mail or electronic survey. Caneday's 2001 SCORP study revealed several findings. One such finding was that Oklahoma has only about 4\% land area available for public recreation use, which is a smaller percentage than the national average. Caneday also found that recreation providers in Oklahoma provided more than 16,000 campsites throughout the state, but visits to many of these camping areas during peak holidays and weekends found many of these campsites unoccupied.

Like many cities across the country, Oklahoma cities and municipalities continue to struggle to appropriate the necessary resources for local parks. There is a demand for trails in Oklahoma among current trail users; the trail users wanted more diverse types of trails including separation of motorized and non-motorized traffic. Caneday found that Oklahoma was facing serious environmental issues that affected outdoor recreation. Water quality was a concern for both persons involved in outdoor recreation activities as well as those who provided the recreational experiences (Caneday, 2001).

Caneday (2001) outlined several recommendations for Oklahoma state parks for the years 2002-2006. One such recommendation was that the Oklahoma Tourism and Recreation Department should continue efforts to establish and maintain a leadership role for outdoor recreation in Oklahoma. Another recommendation was for the governmental bodies of Oklahoma to comply with federal legislation regarding access to recreation opportunities and resources. Also, park and recreation providers in Oklahoma were urged to employ the most qualified individuals for positions as they became available. This was to help bring about more quality programming and to develop and implement stronger
education regarding the parks and environment to help conserve existing outdoor recreation sites.

In 2002-2003 Caneday and Jordan conducted a State Park Visitor Survey in Oklahoma. Over 3,000 respondents were contacted at every Oklahoma state park. This survey was meant to give park managers and state officials clear ideas of how individuals perceive Oklahoma state parks, what the respondents wanted from the state parks they visited, and how they thought the parks could serve them better. The survey addressed patterns of visitation, patterns of recreation use, policies and funding, motivations for visitation, and demographic items (Caneday, \& Jordan, 2003).

The investigators divided Oklahoma state parks into four categories to assist with the analysis of differences in importance and satisfaction ratings among respondents. The park categories were: parks with basic services, parks with cabins, parks that had golf courses, and parks that had lodges. Further, the Oklahoma state parks were either classified as land oriented parks or lake oriented parks based on the presence of surface water used for recreational purposes (Caneday, \& Jordan, 2003).

The researchers interviewed 3414 individuals for the 2002-2003 Oklahoma state park visitor survey. Respondents were rarely alone and tended to be in groups; the individuals in groups tended to be from one household or related households. Day visitors of Oklahoma state parks had a mean age of 41 years, lodge guests had a mean age of 37 years, cabin guests a mean age of 43 years, and campers had a mean age of 46 years. Oklahoma state park visitors had a higher level of education than that of the general adult population of Oklahoma. Over 31\% visitors had at least a high school education, while
slightly over $27 \%$ had graduated from college, and nearly $10 \%$ had received a graduate or post graduate degree (Caneday, \& Jordan, 2003).

The investigators found that $18.1 \%$ of the respondents were first time visitors to the park at which they were being interviewed. The highest level of reported first time visitors were lodge guests; (38.6\%) day visitors had the lowest number of first time visitors (14.4\%). When asked to identify the state parks they had visited, it was noted that many visitors had difficulty identifying properties that were managed by the state of Oklahoma. Many visitors identified areas such as private properties, municipalities, and federal lands as state park areas.

When asked about recreation patterns, visitors at parks showed consistency. Hiking/walking, relaxing, and observing wildlife were reported as the most frequently participated in land based activities. Camping was reported as the second most frequent activity. Among specific types of users campers were more likely to picnic, and lodge or cabin users were the most likely type of user to drive for pleasure. Among water-based activities, swimming in the lake, fishing from the shore, power boating and fishing from a boat were the most frequently reported activities. To relax or rest, to be with friends or family, or because the park was close to home were the top three reasons participants listed as to their motivations for visiting a state park (Caneday, \& Jordan, 2003).

Over the next five years visitors of Oklahoma state parks reported a desire for the preservation of natural and historical areas and properties in Oklahoma, to serve as an example for natural resources such as land, water, plants and animals, and to see programs develop that will educate visitors on appropriate park use. These three priorities
were consistent among all visitor types except one. The top priority for lodge users was to have the state acquire more property for state parks (Caneday, \& Jordan, 2003).

Eighty-one percent of respondents thought that existing fees at the state park in which they were visiting were appropriate, while $19 \%$ of visitors stated that existing fees where too high and no respondents indicated that they believed the existing fees were too low. The majority of respondents, $71 \%$, did not support the idea of park entrance fees. Those in favor of entrance fees thought that fees collected should support the development and maintenance of the park in which the fee was generated. Some respondents supported paying additional fees for such services and amenities such as boat docks and picnic shelters (Caneday, \& Jordan, 2003). Caneday and Jordan indicated that Oklahoma state park visitors were repeat visitors and were typically familiar with the park they visited. Day visitors used the state parks as "local" parks and had a sense of ownership regarding the park.

Throughout studies involving Oklahoma state park use, there has been a recurring sense that Oklahoma needs to better define travel, tourism, and recreation through the Oklahoma Tourism and Recreation Department. Education and information need to be provided to residents so that they can better identify which properties are state parks, local lands, private lands, and lands owned by federal agencies. A continuing effort needs to be made to educate and inform individuals regarding policies and attitudes while participating in outdoor recreation so that environmental issues can be addressed more effectively. The majority of respondents regarding outdoor recreation in Oklahoma state parks believed that current fees were appropriate. Some would accept paying fees for certain services and amenities within the park, but most did not favor paying entry fees
into Oklahoma state parks. Finally, the majority of visitors to Oklahoma state parks were either extremely or highly satisfied with their visits.

## CHAPTER III

# METHODOLOGY 

Introduction

This study was designed to determine the needs of citizens of Oklahoma regarding Oklahoma state parks. In addition, the researcher desired to learn about the perceptions Oklahoma residents held regarding Oklahoma state parks. This researcher used secondary data to determine these needs and perceptions using the results of the questionnaire designed by Jordan and Caneday (2004), which was administered to Oklahoma state residents via telephone. When data were accessed for this study, the original data had not yet been made public. Jordan and Caneday were still in the process of compiling information and writing findings for the Oklahoma Travel and Recreation Department.

Chapter III discusses the research methods and procedures used in this study. The subjects who participated in this study are defined; and the design and the procedures used by Jordan and Caneday (2004) to conduct the survey are presented.

## Subjects

The subjects in the data set were selected using a random nine digit phone dialing program. Subjects were randomly chosen from households in Oklahoma with phone
service. The randomization was done with stratification by utilizing metropolitan statistical areas (MSA). This type of stratification ensures that an appropriate number of individuals are chosen from areas throughout the state. For example if $30 \%$ of the statewide population lives around or near Tulsa, then $30 \%$ of the phone calls were made to that area. In addition, if two percent of the population of Oklahoma lives in the northwest part of the state, then two percent of phone interviews were conducted in that area. According to the 2002 Census Bureau, the total population of the state of Oklahoma is 3.4 million; $51 \%$ of whom are female. There are 1.3 million households in Oklahoma and the average household size is 2.52 persons with families making up $69 \%$ of the households; this number includes both married-couple families and other family structures. In 2002, $80 \%$ of residents over the age of 25 had completed high school and $21 \%$ had a bachelor's degree or higher (U.S. Census Bureau, 2002).

## Data Collection

The instrument used for data collection in the original survey was a survey developed by the initial investigators Jordan and Caneday (2004). The survey questions were developed based on several available standardized instruments as models. The instruments included those used by the National Recreation and Park Association, the National Park Service for Land and the Water Conservation Fund, and for national inventories and applications. The telephone surveys were conducted from November 2003 through February of 2004 using a randomly generated phone dialing program.

## Research Instrument

In the original study by Jordan and Caneday (2004), a 20 item questionnaire was used to collect information from respondents (Appendix A). The survey was presented to respondents in the form of a telephone interview. Computer software used for the survey ensured that questions were asked in the proper sequence and allowed for questions to be skipped based on respondent's prior answers.

The survey contained 14 questions regarding visitor satisfaction with the parks, their uses in the parks, and their feelings of parks with regards to amenities, facilities, policies, management and upkeep. Three survey questions dealt with demographic issues.

## Methods and Procedures

The Oklahoma State Park System Evaluation survey was conducted by the Bureau for Social Research (BSR). The BSR had twenty workstations for interviewing that include computer assisted telephone interviewing (CATI) stations. Using state of the art telephone survey software allowed the interviewers to ask questions in a specific sequence and skip questions based on prior responses. The software system also included a dial back system for phone lines that were busy and a feature that allowed interviewers to schedule a call back time for when a respondent had appropriate time to complete the survey. The principal investigators anticipated 2000 surveys would need to be completed; this required approximately 9536 telephone calls from the BSR. Using this sampling method assured a plus/minus $3 \%$ error with $95 \%$ confidence statewide on sample demographic parameters. Using a telephone survey allowed for the opportunity to
determine use of state park users as well as former users; it also provided an opportunity to contact non-users of Oklahoma state parks (Jordan, \& Caneday 2004).

## Statistical Analysis and Treatment of Data

A 5\% significance level ( $95 \%$ level of confidence) was assumed for all statistical tests and analyses used in this study. The dataset was coded, transferred to a computer, and analyzed. The dataset was entered into the Statistical Package for the Social Sciences (SPSS) computer program Windows version 12.0. SPSS and was used to calculate frequencies, Chi-square tests, and crosstabulations.

## Research Questions

In developing this study, the researcher identified various questions that needed to be answered regarding the Oklahoma state park system. These questions were identified as follows:

1. Are there differences in the use rate of Oklahoma state parks by residents depending upon demographics of those residents?
2. Are there differences in the types of activities in which visitors to Oklahoma state parks participate depending upon demographics of those residents?
3. Are there differences in the levels of satisfaction with overall condition and management of Oklahoma state parks depending upon the demographics of those respondents?
4. Are there differences in attitudes pertaining to Oklahoma state parks depending upon demographics of respondents?
5. Are there differences in preferences pertaining to Oklahoma state parks depending upon demographics of respondents?

## CHAPTER IV

## RESULTS

Introduction

The data generated for this study resulted from the Oklahoma Needs Assessment Survey discussed in Chapter III. Included in the survey were questions designed to gain information from respondents including visitation patterns, use patterns, attitudes towards park maintenance, park management, lodges, and overall satisfaction with the Oklahoma state park system. Also obtained from the survey was some demographic information, which included number of individuals in the household, primary racial/ethnic background, and highest level of education completed. The survey data were analyzed using procedures including the Chi-square goodness-of-fit test and crosstabulations. Frequency data were also presented regarding visitor activities and amenity use.

## Response Rate

A total of 2013 phone surveys were completed out of a total 9536 attempts; there were 368 refusals, 4717 calls were eliminated as business or disconnected numbers, 535 calls were active, 1753 calls had six or more attempts, and 150 calls were eliminated due to language problems. The numbers of responses changed between survey questions if
respondents refused to answer or listed "don't know" as their answer to a question. The survey questions were analyzed to answer the following research questions.

1. Are there differences in the use rate of Oklahoma state parks by residents depending upon demographics of those residents?
2. Are there differences in the types of activities in which visitors to Oklahoma state parks participate depending upon demographics of those residents?
3. Are there differences in the levels of satisfaction with overall condition and management of Oklahoma state parks depending upon the demographics of those respondents?
4. Are there differences in attitudes towards Oklahoma state parks depending upon demographics of respondents?
5. Are there differences in preferences pertaining to Oklahoma state parks depending upon demographics of respondents?

## Visitor Demographics

Respondents were asked about the number of individuals, including themselves, who lived in their household. Two individuals living in a household was the most common response, while living alone, three in the household, and four in the household were similar in number. Table 3 provided the frequency table for this item.

Table 3: Number in Household

| Number in Household | Freq. | \%. |
| :---: | ---: | ---: |
| 1 | 332 | 16.5 |
| 2 | 749 | 37.2 |
| 3 | 347 | 17.2 |
| 4 | 326 | 16.2 |
| 5 or more/Don't know/ Refused to answer | 239 | 13.4 |

With regard to primary racial/ethnic affiliation, survey results indicated that primarily Caucasians responded to the survey, while Asian Americans had the fewest number of responses by respondents. Primary racial/ethnic affiliation is reported in

Table 4.
Table 4: Primary Racial/Ethnic Affiliation

| Primary Racial/Ethnic Affiliation | Freq. | \% |
| :--- | ---: | ---: |
| Caucasian/White | 1645 | 81.7 |
| American Indian/Native American | 157 | 7.9 |
| African American/ Black | 91 | 4.5 |
| Multiple Racial/Ethnic Affiliations | 40 | 2.3 |
| Other/Don/t know/Refused to answer | 34 | 1.7 |
| Hispanic/Latino/Chicano | 28 | 1.5 |
| Asian American | 12 | 0.1 |

Respondents reported a variety of education levels. When asked about the highest level of education attained by an individual in the household, holding an associate's or bachelor's degree was reported most often, while a grade school education was reported least often by respondents. Table 5 lists responses regarding highest level of education attained by a person in household.

Table 5: Highest Level of Education

| Highest Level of Education <br> Attained | Freq. | \% |
| :--- | ---: | ---: |
| Grade School | 25 | 1.2 |
| High School | 450 | 22.4 |
| Some College | 444 | 22.1 |
| Associate's or Bachelor's Degree | 745 | 37.0 |
| Graduate Degree | 207 | 10.3 |
| Professional Degree | 123 | 6.1 |
| Refused to answer | 14 | 0.7 |

## Activities and Amenities

Using multiple-choice questions, individuals were asked to identify the activities in which they or a member of their group participated during their most recent visit to an Oklahoma state park. Respondents were read the question followed by a short list of answers to which they were allowed more than one response. The top five activities are listed in Table 6.

Table 6: Most Recently Participated Activities While Visiting an Oklahoma State Park

| Activity | Freq. | $\mathbf{\%}$ |
| :--- | ---: | ---: |
| Hiking nature trails, observing wildlife, enjoy nature | 784 | 67.0 |
| Group Activities | 668 | 57.1 |
| Fishing from dock or shore | 562 | 48.1 |
| Boating or using a personal watercraft | 499 | 42.6 |
| Other (See Appendix B for complete list) | 187 | 16.0 |

Respondents were also asked about the amenities they used in the parks They were given a short list of choices to which they responded with either yes or no. The top three amenities used by respondents were picnic tables, nature trails, and playgrounds, while golf courses and other amenities were reported as the least used amenities. The top eight amenities used by Oklahoma state park users are listed in Table 7.

Table 7: Top Eight Amenities Used at Park

| Activity | Freq. | \% |
| :--- | ---: | ---: |
| Picnic Tables | 937 | 80.1 |
| Nature Trails | 668 | 57.2 |
| Playground | 597 | 51.1 |
| Boat Ramp | 453 | 38.7 |
| Courtesy Dock | 358 | 30.6 |
| Swimming Pool | 166 | 14.2 |
| Other Amenities | 143 | 12.2 |
| Golf Course | 129 | 11.0 |

Respondents were asked about visitation patterns to Oklahoma state parks. The most common response indicated that respondents had visited with the past six months; while having never visited an Oklahoma state park was the least common response by respondents (See Table 8).

Table 8: Most Recent Visit to an Oklahoma State Park

| Most Recent Visit | Freq. | \% |
| :--- | ---: | ---: |
| Visited within past 6 months | 697 | 34.6 |
| Visited within past year | 296 | 14.7 |
| Visited within past 2 years | 237 | 11.8 |
| Visited more than 2 years ago | 582 | 28.9 |
| Have never visited | 201 | 10.0 |

When asked why they had not visited within the past two years respondents gave a variety of different responses. Most commonly respondents stated that they chose not to visit the state parks, or they were not an outdoors type person; while the least common response by respondents was that they felt the state parks were in too poor condition to visit (See Table 9).

Table 9: Reasons for Not Visiting Within Past Two Years

| Reasons for Not Visiting | Freq. | \% |
| :--- | ---: | ---: |
| Some other reason | 335 | 16.6 |
| Chose not to/Not outdoors person | 241 | 12.0 |
| Disability | 76 | 3.8 |
| Parks too far away | 68 | 3.4 |
| Parks too expensive | 23 | 1.1 |
| Parks over-crowded | 15 | 0.7 |
| Parks in poor condition | 13 | 0.6 |
| Don't know/Refused to answer | 7 | 0.6 |

Survey participants were asked about the type of group with whom they visited a state park. Respondents indicated that they visited the Oklahoma state parks with a variety of different groups. Most commonly respondents reported that they visited with their immediate family. Visiting alone was the least commonly reported by respondents (See Table 10).

Table 10: Group Visited With at Oklahoma State Parks

| Visited With at Park | Freq. | \% |
| :--- | ---: | ---: |
| Immediate Family | 691 | 34.0 |
| Friends | 216 | 10.7 |
| Extended Family | 176 | 8.7 |
| Special Group | 101 | 5.0 |
| Alone | 45 | 2.2 |
| Don't Know | 1 | $<0.1$ |

How participants used the park also varied. Listed in Table 11 are they types of visits reported by survey respondents. The most common type of visit made by respondents was as a day user to the parks; the least common type of visit made to the parks by respondents was staying overnight in a group camp in the park.

Table 11: Type of Stay on Most Recent Visit to an Oklahoma State Park

| Type of Visit | Freq. | \% |
| :--- | ---: | ---: |
| As a day user (did not spent the night) | 803 | 39.9 |
| As a camper and stayed in a RV or trailer | 140 | 7.0 |
| As a camper and stayed in a tent | 112 | 5.6 |
| An overnight stay in a cabin in the park | 102 | 5.1 |
| An overnight stay in a lodge in the park | 59 | 2.9 |
| An overnight stay in a group camp in the park | 12 | 0.6 |
| Don't Know | 2 | 0.1 |

## Overall Satisfaction With Oklahoma State Parks

Survey respondents were asked a variety of questions regarding the state parks.
These questions were based on their knowledge, about the management and maintenance of Oklahoma state parks, funding, and about their overall satisfaction of Oklahoma state parks. When asked their opinion about the funding of Oklahoma state parks, respondents most commonly believed that the state parks were somewhat under-funded. The least common response regarding financial standing was that the parks were over-funded.

Table 12 provides the complete list of respondent's opinions of the park funding.

Table 12: Respondents' Opinions of State Parks Funding

| Opinion of financial standing | Freq. | \% |
| :--- | ---: | ---: |
| Parks are somewhat under-funded | 969 | 48.1 |
| Parks are severely under-funded | 329 | 16.3 |
| Parks are adequately funded as is | 376 | 18.7 |
| Parks are over-funded | 26 | 1.3 |
| Don't know (do not have information to form an <br> opinion) | 313 | 15.5 |

When asked if it were determined that additional funding were needed how they would most favor the funding being initiated, the top three choices were: entrance fee for all users, dedicating a portion of sales tax to fund the parks, and an increase in government appropriations to fund the parks (See Table 13).

Table 13: Type of Funding Most Favored

| Type of Funding Most Favored | Freq. | $\mathbf{\%}$ |
| :--- | ---: | ---: |
| Entrance fees for all users | 409 | 20.3 |
| Dedicate portion of sales tax to parks | 373 | 18.5 |
| Increase in government appropriation | 329 | 16.3 |
| Fees for specific amenities | 283 | 14.1 |
| Increase in overnight lodging and camping | 189 | 9.4 |
| Expand in park commercial services | 188 | 9.3 |
| Didn't know | 151 | 7.5 |
| Some other type of funding | 85 | 4.2 |
| Refused to answer | 6 | 0.3 |

When asked to express their opinions of the lodges at Oklahoma state parks the most common response given by respondents was that they had no opinion of the state park lodges. The second most common response given by respondents was that the lodges were an excellent vacation value. Table 14 offers a full list of responses regarding their opinion of Oklahoma state park lodges.

Table 14: Respondent Opinions of Oklahoma State Park Lodges

| Opinion of Lodges | Freq. | \% |
| :--- | ---: | ---: |
| I have no opinion of lodges in state park (don't know) | 809 | 40.2 |
| The lodges are an excellent vacation value | 486 | 24.1 |
| The Oklahoma Tourism and Recreation Department should build <br> additional lodges in more state parks | 404 | 20.1 |
| Lodges do not belong in state parks | 117 | 5.8 |
| The lodges are in such disrepair they should be closed | 102 | 5.1 |
| Repair existing lodges | 68 | 3.4 |
| Refused to answer | 16 | 0.8 |
| Lodges are an adequate vacation value | 11 | 0.5 |

Another survey question asked respondents what they believed should be the primary purpose of the Oklahoma state park system. The top three responses given by respondents for the primary purpose of the parks was to provide inexpensive outdoor recreation,
second was to protect natural resources, and third was encourage tourism and increase economic development (See Table 15).

Table 15: Primary Purpose for Oklahoma State Parks

| Primary Purpose | Freq. | \% |
| :--- | ---: | ---: |
| Provide inexpensive outdoor recreation | 888 | 44.1 |
| Protect natural resources | 511 | 25.4 |
| Encourage tourism/ economic development | 470 | 23.3 |
| Some other purpose | 104 | 5.2 |
| Don't know | 38 | 1.9 |
| Refused to answer | 2 | 0.1 |

For the question regarding the highest priority for Oklahoma state parks, survey participants responded that rectifying existing problems should be the highest priority for the state parks. Table 16 indicates the responses given regarding what respondents felt was the highest priority for the Oklahoma state park system.

Table 16: Highest Priority for Oklahoma State Parks

| Highest Priority | Freq. | \% |
| :--- | ---: | ---: |
| Rectify existing problems (such as maintenance) | 1014 | 50.4 |
| Find additional funding sources | 319 | 15.8 |
| Purchase additional lands for future park development | 185 | 9.2 |
| Build more developed areas within the parks (golf courses, airports, <br> lodges) | 178 | 8.8 |
| Close some parks an re-distribute the funding to needy parks | 134 | 6.7 |
| Don't know | 136 | 6.8 |
| Some other priority | 40 | 2.0 |
| Refused to answer | 7 | 0.3 |

Respondents were asked how satisfied they were with the maintenance and upkeep of Oklahoma state parks; $48.7 \%$ of respondents reported that they were at least somewhat satisfied. Just over four percent of respondents indicated that they were very
dissatisfied with the maintenance and upkeep of the Oklahoma state parks. Table 17 lists the responses given regarding the opinions of state park maintenance and upkeep.

Table 17: Satisfaction With Park Maintenance and Upkeep

| Satisfaction | Freq. | \% |
| :--- | ---: | ---: |
| Somewhat satisfied | 980 | 48.7 |
| Somewhat dissatisfied | 388 | 19.3 |
| Very satisfied | 282 | 14.0 |
| Don't know/ No experience | 277 | 13.8 |
| Very dissatisfied | 82 | 4.1 |

Respondents were asked how satisfied they were with the overall management of Oklahoma state parks; 42.5\% of respondents indicated they were at least somewhat satisfied with the management of parks, while $26.5 \%$ of respondents indicated that they did not know or did not have enough information to form an opinion regarding the parks management (See Table 18).

Table 18: Satisfaction With Park Management

| Satisfaction | Freq. | \%/ |
| :--- | ---: | ---: |
| Somewhat satisfied | 855 | 42.5 |
| Don't know/ Not enough information | 533 | 26.5 |
| Very satisfied | 280 | 13.9 |
| Somewhat dissatisfied | 263 | 13.1 |
| Very dissatisfied | 74 | 3.7 |

When asked about the overall letter grade they would give to the state park system $48.9 \%$ of respondents gave the park a letter grade of "B" or good, while less than one percent of respondents gave the parks an "F" or failing letter grade (See Table 19).

Table 19: Overall Letter Grade

| Letter Grade | Freq. | \% |
| :--- | ---: | ---: |
| B-good | 985 | 48.9 |
| C-fair | 676 | 33.6 |
| A-excellent | 137 | 6.8 |
| Don't know | 119 | 5.9 |
| D-poor | 73 | 3.6 |
| F-failing | 16 | 0.8 |
| Refused to answer | 2 | 0.1 |

The previous frequency data provide general information regarding specific responses. Research questions were answered by grouping survey questions into "best fit" categories; this was done by looking at each question with all other questions to see if they could be related. If they could, those questions were grouped into categories and with the research questions they best represented. The research categories were then tested using crosstabulations and the Chi-square goodness of fit test.

## Inadequate Cell Counts

Several survey questions had responses with cell counts to small perform a statistical analysis. Due to these inadequacies a collapse of variables to these questions were made. The following are the questions for which variables were collapsed. These new variables were used for all analyses utilizing those questions.

Question four asked respondents about the type of visit made on their most recent visit to an Oklahoma state park. Due to inadequate cell count the five variables were collapsed into three. Variable "day user" stayed as is, variables "overnight in a tent", "overnight in RV", and "overnight in a group camp" were collapsed and renamed
"overnight in tent/RV/group camp, and variable "overnight in lodge" and "overnight in a cabin" were collapsed and renamed "overnight in lodge/cabin".

Survey question 18, of "how many individuals live in your household including yourself?"; was reduced from 11 variables to five variables. Variables "1", "2", "3", and $" 4 "$ stayed as is, and variables " $5 ", " 6 ", " 7 ", " 8 ", " 9 ", " 10 "$, and " 13 " were collapsed and renamed "five or more".

Question 19 asked respondents about the highest level of education attained by a person in their household. Variables "grade school" and "high school" were collapsed and renamed "grade/high school", variable "some college" stayed the same, the variable "associate's or bachelor's degree" remained the same, and "graduate degree" and "professional degree (MD, DDS, JD, PhD)" were collapsed and renamed "graduate/professional degree".

In question 20 respondents were asked about their primary racial/ethnic affiliation. Variables "African American/Black" remained the same, "American Indian/Native American" stayed as is, "Caucasian/White" remained the same, and variables "Asian American", "Hispanic/Latino/Chicano", "Multiple racial/ethnic group identity", and "Other" were collapsed and renamed "Other racial/ethnic identity".

Question nine asked respondents about the type of funding they would they favor if additional funding were needed. All variables remain the same except for variables "Some other source of funding" and "don't know" which were collapsed and renamed "Some other funding/ don't know".

In survey question 10 respondents were asked their opinion of state park lodges. The seven variables were collapsed to four variables. Variables "the lodges are in such
disrepair they should be closed", "lodges do not belong in the state parks" and "repair existing lodges" were collapsed and renamed "Lodges should be closed/Don’t belong/Fix lodges". Variables "lodges are an excellent vacation value" and "lodges are an adequate vacation value" were collapsed and renamed, "Lodges are and adequate/excellent vacation value". All other variables for this question remained the same.

Question 13 asked respondents about their overall satisfaction with the maintenance and upkeep of Oklahoma state parks. The four variables for this question were collapsed into three variables. Variables "very dissatisfied" and "somewhat dissatisfied" were collapsed and renamed "very/somewhat dissatisfied" and the other variables for this question remained the same.

Respondents were asked about their satisfaction with the overall management of the state parks in survey question 15 . The four variables in question 15 were collapsed into three variables. Variables "very dissatisfied" and "somewhat dissatisfied" were collapsed and renamed "somewhat/very dissatisfied" the other variables remained the same.

Question 17 asked respondents to give the Oklahoma state park system an overall letter grade. The five variables were collapsed to four variables. Variables "D-poor" and "F-failing" were collapsed and renamed "D-poor/F-failing"; all other variables remained the same.

Question eight asked respondents their opinions regarding state park funding. The five variables for question eight were collapsed to four variables. Variables "parks are adequately funded" and "parks are over-funded" were collapsed and renamed "parks are adequately/over-funded." All other variables for question eight remained the same. The
variables "parks are adequately funded" and "parks are over-funded" were collapsed together for two reasons. The first was to reduce the problem of inadequate cell count. Secondly, those who felt the parks were adequately to over-funded may be more likely not to have opinions regarding how the parks should attain additional funding.

Research Question \#1 asked, "What is the utilization of Oklahoma state parks by its residents?"

Data from question one, "What best describes your visit to an Oklahoma state park?" and question five, "On your typical visit to an Oklahoma state park, what best describes the type of group with whom you visit?" were used in part to answer research question one.

Statistical analysis revealed that there was a difference in the responses of visitation and type of visit. The crosstabulation and chi-square test revealed that respondents were more likely than expected to have visited within the past six months overnight in a tent/RV/group camp, and those who had visited within the past two years were more likely than expected to have visited overnight in a lodge or cabin (See Table 20). Tables are reported using actual frequency (top number), which was the number of responses given by survey respondents; and expected frequency (bottom number), which was the number expected to be obtained from survey respondents.

Table 20: Most Recent Visit/Type of Visit

| Type of Visit |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{N}{n}$ |  | Day User | Overnight tent/RV/group campsite | Overnight lodge/cabin | Total |
|  |  | Freq. | Freq. | Freq. |  |
| $\frac{7}{\text { E }}$ | Past six months | $\begin{gathered} 444 \\ (455) \\ \hline \end{gathered}$ | $\begin{gathered} 169 \\ (150) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (91) \\ \hline \end{gathered}$ | 696 |
| $\begin{gathered} \text { ex } \\ \underset{\sim}{6} \end{gathered}$ | Past 12 months | $\begin{gathered} 201 \\ (193) \end{gathered}$ | $\begin{gathered} 56 \\ (63) \end{gathered}$ | $\begin{gathered} 38 \\ (39) \end{gathered}$ | 295 |
| $\sum_{i}^{0}$ | Past two years | $\begin{gathered} 158 \\ (155) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (51) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (31) \\ \hline \end{gathered}$ | 237 |
|  | Total | 803 | 264 | 161 | 1228 |

Data from question one, "What best describes your most recent visit to an Oklahoma state park?" and question five, "On your typical visit to an Oklahoma state park, what best describes the type of group with whom you visit?" were used in part to answer research question one.

A crosstabulation and chi-square test were used to discern any relationships between visitation and type of group with whom visited at Oklahoma state parks. Statistical analysis revealed that there was a difference in the responses. Respondents who had visited within the past six months were less likely to have visited with immediate family than expected, and more likely to have visited with friends than expected. Additionally, those respondents who had visited within the past 12 months were found to be more likely to have visited with extended family than expected. Also, those respondents who had visited the state parks during in the past two years were more likely to have visited with their immediate families than expected (See Table 21).

Table 21:
Most Recent Visit/Type of Group Visited With at Park

| Type of Group Visited With at Park |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \% \\ & i= \end{aligned}$ |  | Visit alone | Visit with immediate family | Visit with extended family | Visit with friends | Visit with special groups | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Past six months | $\begin{gathered} \hline 28 \\ (26) \\ \hline \end{gathered}$ | $\begin{gathered} 382 \\ (391) \\ \hline \end{gathered}$ | $\begin{gathered} 93 \\ (100) \\ \hline \end{gathered}$ | $\begin{gathered} 132 \\ (122) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 61 \\ (57) \\ \hline \end{gathered}$ | 696 |
| $\bar{v}_{n}^{0}$ | Past 12 months | $\begin{gathered} 11 \\ (11) \end{gathered}$ | $\begin{gathered} 162 \\ (166) \end{gathered}$ | $\begin{gathered} 52 \\ (42) \end{gathered}$ | $\begin{gathered} 49 \\ (52) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (24) \end{gathered}$ | 296 |
|  | Past two years | $\begin{gathered} 6 \\ \text { (9) } \\ \hline \end{gathered}$ | $\begin{gathered} 147 \\ (133) \\ \hline \end{gathered}$ | $\begin{array}{r} 31 \\ (34) \\ \hline \end{array}$ | $\begin{gathered} 35 \\ (42) \\ \hline \end{gathered}$ | $\begin{array}{r} 18 \\ (20) \\ \hline \end{array}$ | 237 |
|  | Total | 45 | 691 | 176 | 216 | 101 | 1229 |

Data from question one, "What best describes your most recent visit to an Oklahoma state park?" and question number 18, "What is the number of people including yourself living in your household?" were used in part to answer research question one

A crosstabulation and chi-square test were used to discern if any relationships between visitation and respondents overall letter grade of the Oklahoma state parks existed. Statistical analysis revealed that there was a difference in the responses. Those respondents who had one individual in the household were less likely to have visited in the past six months than expected; more likely to have visited in the past two years and more than two years ago than expected. Those with two individuals in the household were less likely to have visited in the past two years than expected and more likely for their visit to have been more than two years ago than expected (See Table 22).

Table 22:
Most Recent Visit/Total Number in Household

| Number in Household |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 or more | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Have never visited | $\begin{gathered} 34 \\ (33) \end{gathered}$ | $\begin{gathered} 68 \\ (74) \end{gathered}$ | $\begin{gathered} \hline 34 \\ (34) \end{gathered}$ | $\begin{gathered} 38 \\ (32) \end{gathered}$ | $\begin{gathered} \hline 21 \\ (23) \end{gathered}$ | 195 |
|  | Past six months | $\begin{gathered} 82 \\ (116) \end{gathered}$ | $\begin{gathered} 268 \\ (261) \end{gathered}$ | $\begin{gathered} 127 \\ (121) \end{gathered}$ | $\begin{gathered} 126 \\ (114) \end{gathered}$ | $\begin{gathered} 91 \\ (83) \\ \hline \end{gathered}$ | 694 |
|  | Past 12 months | $\begin{gathered} 34 \\ (49) \\ \hline \end{gathered}$ | $\begin{gathered} 110 \\ (110) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (51) \\ \hline \end{gathered}$ | $\begin{gathered} 50 \\ (48) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (35) \\ \hline \end{gathered}$ | 293 |
|  | Past two years | $\begin{gathered} 45 \\ (39) \\ \hline \end{gathered}$ | $\begin{gathered} 73 \\ (88) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (41) \end{gathered}$ | $\begin{gathered} 44 \\ (39) \end{gathered}$ | $\begin{gathered} 28 \\ (28) \end{gathered}$ | 235 |
|  | More than two years ago | $\begin{aligned} & 137 \\ & (96) \end{aligned}$ | $\begin{gathered} 230 \\ (216) \end{gathered}$ | $\begin{gathered} 85 \\ (100) \end{gathered}$ | $\begin{gathered} 68 \\ (94) \end{gathered}$ | $\begin{gathered} 54 \\ (68) \end{gathered}$ | 574 |
|  | Total | 332 | 749 | 347 | 326 | 237 | 1991 |

$\chi^{2}=57.22, d f=16, \mathrm{p}<.05$

Data from question one, "What best describes your most recent visit to an Oklahoma state park?" and question number 19, "What is the highest level of education attained by an individual in your household?" were used in part to answer research question one.

A crosstabulation and chi-square were used to discern if any relationships between visitation and overall letter grade of the Oklahoma state parks existed. The results revealed that respondents who had never visited an Oklahoma state park were more likely to have a grade/high school education than expected and less likely to have an associate's or bachelor's degree than expected. Those respondents who had a grade/high school education were less likely to have visited in the past six months than expected, and those with an associate's/bachelor's degree were more likely to have visited within the past six months than expected. Additionally, those with a grade/high
school education and those with some college education were more likely to have made a visit more than two years ago than expected, and those with a graduate/professional degree were less likely than expected to have made their last visit more than two years ago (See Table 23).

Table 23: Most Recent Visit/Highest Level of Education

| Highest Level of Education |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H0000000000 |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate or Professional Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Have never visited | $\begin{gathered} 63 \\ (47) \end{gathered}$ | $\begin{gathered} 39 \\ (44) \end{gathered}$ | $\begin{gathered} 61 \\ (74) \end{gathered}$ | $\begin{gathered} 34 \\ (33) \end{gathered}$ | 197 |
|  | Past six months | $\begin{gathered} 146 \\ (165) \\ \hline \end{gathered}$ | $\begin{gathered} 152 \\ (155) \\ \hline \end{gathered}$ | $\begin{gathered} 275 \\ (259) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (115) \\ \hline \end{gathered}$ | 694 |
|  | Past 12 months | $\begin{gathered} 61 \\ (70) \end{gathered}$ | $\begin{gathered} 65 \\ (65) \end{gathered}$ | $\begin{gathered} 116 \\ (110) \end{gathered}$ | $\begin{gathered} 51 \\ (49) \end{gathered}$ | 293 |
|  | Past two years | $\begin{gathered} 51 \\ (56) \\ \hline \end{gathered}$ | $\begin{array}{r} 50 \\ (52) \\ \hline \end{array}$ | $\begin{gathered} 88 \\ (88) \\ \hline \end{gathered}$ | $\begin{array}{r} 46 \\ (39) \\ \hline \end{array}$ | 235 |
|  | More than two years ago | $\begin{gathered} 154 \\ (137) \end{gathered}$ | $\begin{gathered} 138 \\ (128) \end{gathered}$ | $\begin{gathered} 205 \\ (215) \end{gathered}$ | $\begin{gathered} 78 \\ (95) \end{gathered}$ | 575 |
|  | Total | 475 | 444 | 745 | 330 | 1994 |

$\chi^{2}=21.75, d f=12, \mathrm{p}<.05$

Data from question one, "What best describes your most recent visit to an Oklahoma state park?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question one.

A crosstabulation and chi-square test were used to discern if any relationships existed between visitation and respondents education level. The results revealed that those who responded as African American/Black and other primary racial/ethnic affiliation were more likely to have never visited a state park than expected; while those who responded as Caucasian/White were less likely to have never visited a state park
than expected. Those who responded as American Indian/Native American were more likely than expected to have visited within the past six months; and those who responded as other primary racial/ethnic affiliation were less likely to have visited with the past year than expected (See Table 24).

Table 24: Most Recent Visit/Primary Racial or Ethnic Group Affiliation

|  | Primary Racial/Ethnic Group |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ <br> White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Have never visited | $\begin{aligned} & 22 \\ & (9) \end{aligned}$ | $\begin{gathered} 6 \\ (15) \end{gathered}$ | $\begin{gathered} \hline 146 \\ (160) \end{gathered}$ | $\begin{aligned} & \hline 18 \\ & (8) \end{aligned}$ | 192 |
|  | Past six months | $\begin{gathered} 25 \\ (32) \\ \hline \end{gathered}$ | $\begin{array}{r} 65 \\ (55) \\ \hline \end{array}$ | $\begin{gathered} 572 \\ (574) \\ \hline \end{gathered}$ | $\begin{gathered} 27 \\ (29) \\ \hline \end{gathered}$ | 689 |
|  | Past 12 months | $\begin{gathered} 16 \\ (13) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (23) \\ \hline \end{gathered}$ | $\begin{gathered} 248 \\ (243) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (12) \end{gathered}$ | 292 |
|  | Past two years | $\begin{gathered} 7 \\ (11) \end{gathered}$ | $\begin{gathered} 14 \\ (18) \end{gathered}$ | $\begin{gathered} 197 \\ (192) \end{gathered}$ | $\begin{gathered} 13 \\ (10) \end{gathered}$ | 231 |
|  | More than two years ago | $\begin{gathered} 21 \\ (26) \end{gathered}$ | $\begin{gathered} 48 \\ (45) \end{gathered}$ | $\begin{gathered} 482 \\ (476) \end{gathered}$ | $\begin{gathered} 21 \\ (24) \end{gathered}$ | 572 |
|  | Total | 91 | 157 | 1645 | 83 | 1976 |

Research Question \#2 asked, "In what types of activities and groups do Oklahoma residents participate at Oklahoma state parks?"

Data from question four, "During your most recent visit to an Oklahoma state park, what type of visit did you make?" and question five, "On your typical visits to Oklahoma state parks, what best describes the type of group with whom you visit?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between type of visit and type of group with which visited. The information obtained from the crosstabulation and chi-square revealed that day users were more likely than expected to have visited with immediate family, and less likely than expected to have visited with extended family and special groups. Additionally, those who stayed overnight in a lodge/cabin were less likely than expected to have visited with immediate family and more likely than expected to have visited with special groups (See Table 25).

Table 25: Type of Visit/Type of Group Visited With at Park

| Group Visited With at Park |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { No } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | Visit alone | Visit with immediate family | Visit with extended family | Visit with friends | Visit with special groups | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Day user | $\begin{gathered} \hline 33 \\ (29) \end{gathered}$ | $\begin{gathered} 467 \\ (451) \end{gathered}$ | $\begin{gathered} 107 \\ (114) \end{gathered}$ | $\begin{gathered} \hline 140 \\ (141) \end{gathered}$ | $\begin{gathered} \hline 55 \\ (66) \end{gathered}$ | 802 |
|  | Overnight in tent/RV/group camp | $\begin{gathered} 7 \\ (10) \end{gathered}$ | $\begin{gathered} 146 \\ (149) \end{gathered}$ | $\begin{gathered} 40 \\ (38) \end{gathered}$ | $\begin{gathered} 51 \\ (47) \end{gathered}$ | $\begin{gathered} 20 \\ (22) \end{gathered}$ | 264 |
|  | Overnight in lodge/cabin | $\begin{gathered} \hline 5 \\ (6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 77 \\ (91) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (23) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 25 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 26 \\ (13) \\ \hline \end{gathered}$ | 161 |
|  | Total | 45 | 690 | 175 | 216 | 101 | 1227 |

Data from question four, "During your most recent visit to an Oklahoma state park, what type of visit did you make?" and question 18, "What is the total number of people in your household?" were used in part to answer research question two. A crosstabulation and chi-square test were used to discern if any relationships existed between type of visit and number of people in household. The results revealed that those with one individual in the household were more likely than expected to be day users, and
less likely than expected to have stayed overnight in a tent, RV, or group camp. Those with two individuals in the household were less likely than expected to be day users; and more likely than expected to have stayed overnight in a lodge or cabin. Additionally, those with three individuals in their household were more likely to have been day users than expected, and less likely than expected to have stayed overnight in a lodge or cabin. Those with five or more in the household were less likely than expected to have been day users; and more likely to have stayed overnight in a tent, RV, or group camp than expected (See Table 26).

Table 26: Type of Visit/Number in Household

| Number in Household |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 or more | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Day user | $\begin{aligned} & \hline 113 \\ & (105) \end{aligned}$ | $\begin{aligned} & \hline 282 \\ & (294) \end{aligned}$ | $\begin{aligned} & 161 \\ & (149) \end{aligned}$ | $\begin{aligned} & 143 \\ & (143) \end{aligned}$ | $\begin{aligned} & 98 \\ & (106) \end{aligned}$ | 797 |
|  | Overnight in tent/ RV/group camp | $\begin{aligned} & 27 \\ & (35) \end{aligned}$ | $\begin{aligned} & 95 \\ & (97) \end{aligned}$ | $\begin{aligned} & 44 \\ & (49) \end{aligned}$ | $\begin{aligned} & 52 \\ & (47) \end{aligned}$ | $\begin{aligned} & 46 \\ & (35) \end{aligned}$ | 264 |
|  | Overnight in lodge | $\begin{aligned} & \hline 21 \\ & (21) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 73 \\ (59) \end{array}$ | $\begin{aligned} & \hline 23 \\ & (30) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 24 \\ & (29) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 18 \\ & (21) \\ & \hline \end{aligned}$ | 159 |
|  | Total | 161 | 450 | 228 | 219 | 162 | 1220 |

$\chi^{2}=15.10, d f=8, \mathrm{p}<.05$ level.

Data from question four, "During your most recent visit to an Oklahoma state park, what type of visit did you make?" and question 19, "What is highest level of education attained by an individual in your household?" were used to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between type of visit and highest level of education. Statistical analysis revealed
that there was a difference in the responses of type of visit and respondents education level. The results revealed that those with a grade/high school education were more likely to be day users than expected, and less likely to have stayed overnight in a lodge/cabin than expected. Also, those with some college education were more likely to be day users than expected and less likely to have stayed overnight in a lodge or cabin than expected. Additionally, those staying overnight in a lodge or cabin were more likely than expected to have an associate's/bachelor's degree or graduate/professional degree (See Table 27).

Table 27: Type of Visit Made/Highest Level of Education

|  | Highest Level of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Day user | $\begin{gathered} \hline 172 \\ (169) \end{gathered}$ | $\begin{gathered} 181 \\ (174) \end{gathered}$ | $\begin{gathered} 302 \\ (313) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 143 \\ (143) \end{gathered}$ | 798 |
|  | Overnight in tent/ RV/group camp | $\begin{gathered} 62 \\ (56) \end{gathered}$ | $\begin{gathered} 59 \\ (57) \end{gathered}$ | $\begin{gathered} 101 \\ (103) \end{gathered}$ | $\begin{gathered} 41 \\ (47) \end{gathered}$ | 263 |
|  | Overnight in lodge/cabin | $\begin{gathered} \hline 24 \\ (34) \end{gathered}$ | $\begin{gathered} \hline 26 \\ (35) \end{gathered}$ | $\begin{gathered} \hline 75 \\ (62) \end{gathered}$ | $\begin{gathered} \hline 34 \\ (24) \end{gathered}$ | 159 |
|  | Total | 258 | 266 | 478 | 218 | 1220 |

Data from question four, "During your most recent visit to an Oklahoma state park, what type of visit did you make?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between visitation and respondents racial or ethnic affiliation. The results revealed that those who responded as African American/Black were more likely to be day
users than expected and less likely to stay overnight in a lodge or cabin than expected (See Table 28).

Table 28: Type of Visit Made/Primary Racial or Ethnic Affiliation

|  | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Day user | $\begin{gathered} \hline 38 \\ (31) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 65 \\ (67) \\ \hline \end{gathered}$ | $\begin{gathered} 656 \\ (661) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 29 \\ (29) \\ \hline \end{gathered}$ | 788 |
|  | Overnight in tent/ RV/group camp | $\begin{gathered} 3 \\ (11) \end{gathered}$ | $\begin{gathered} 28 \\ (23) \end{gathered}$ | $\begin{gathered} 223 \\ (222) \end{gathered}$ | $\begin{gathered} 10 \\ (10) \end{gathered}$ | 264 |
|  | Overnight in lodge/ cabin | $\begin{gathered} \hline 7 \\ (6) \end{gathered}$ | $\begin{gathered} \hline 10 \\ (13) \end{gathered}$ | $\begin{gathered} 136 \\ (133) \end{gathered}$ | $\begin{gathered} \hline 5 \\ (6) \end{gathered}$ | 158 |
|  | Total | 48 | 103 | 1015 | 44 | 1210 |

$\chi^{2}=9.43, d f=6, p<.05$ level

Data from question five, "On your typical visits to Oklahoma state parks, what best describes the type of group with whom you visit?" and question nine, "If it were determined that additional funding were needed what would you most favor?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between type of group with which visited and respondents' views on additional funding. Due to the specific nature of the first variable in question five "visit the parks alone" the researcher could not collapse this variable with any other responses. This resulted in a chi-square analysis with three cells having counts less than five. For this reason a chi-square analysis of survey questions five and nine was not appropriate (See Table 29).

Table 29: Type of Group Visited With Which Visited/Type of Funding Favored


Data from question five, "On your typical visits to Oklahoma state parks, what best describes the type of group with whom you visit?" and question 18 , "What is the total number of people in your household?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between type of group visited with and number of people living in household. Due to the specific nature of the first variable in question five "visit the parks alone" the researcher could not collapse this variable with any other responses. This resulted in a
chi-square analysis with two cells having counts less than five. For this reason a chisquare analysis of survey questions five and 18 was not appropriate (See Table 30).

Table 30: Type of Group With Which Visited/Total Number in Household

| Number in Household |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 or more | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Visit alone | $\begin{gathered} 19 \\ (6) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (16) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1 \\ (8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (6) \\ \hline \end{gathered}$ | 43 |
|  | Visit with immediate family | $\begin{gathered} 63 \\ (90) \end{gathered}$ | $\begin{gathered} 244 \\ (256) \end{gathered}$ | $\begin{gathered} 136 \\ (129) \end{gathered}$ | $\begin{gathered} 138 \\ (124) \end{gathered}$ | $\begin{aligned} & 108 \\ & (91) \end{aligned}$ | 689 |
|  | Visit with extended family | $\begin{gathered} \hline 19 \\ (23) \end{gathered}$ | $\begin{gathered} \hline 69 \\ (65) \end{gathered}$ | $\begin{gathered} \hline 34 \\ (33) \end{gathered}$ | $\begin{gathered} \hline 30 \\ (32) \end{gathered}$ | $\begin{gathered} \hline 23 \\ (23) \end{gathered}$ | 175 |
|  | Visit with friends | $\begin{gathered} \hline 44 \\ (28) \end{gathered}$ | $\begin{gathered} \hline 91 \\ (80) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (40) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 27 \\ (39) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (29) \\ \hline \end{gathered}$ | 215 |
|  | Visit with special groups | $\begin{gathered} 15 \\ (13) \end{gathered}$ | $\begin{gathered} 29 \\ (37) \end{gathered}$ | $\begin{gathered} 14 \\ (19) \end{gathered}$ | $\begin{gathered} 24 \\ (18) \end{gathered}$ | $\begin{gathered} 17 \\ (13) \end{gathered}$ | 99 |
|  | Total | 160 | 451 | 228 | 220 | 162 | 1221 |

$\chi^{2}=87.26, d f=16, p>.05$

Data from question five, "On your typical visits to Oklahoma state parks, what best describes the type of group with whom you visit?" and question 19, "What is highest level of education attained by an individual in your household?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between type of group visited with and respondents' highest level of education. The results revealed that those with grade/high school educations were mores likely to visit with immediate family than expected and less likely to visit with special groups than expected (See Table 31).

Table 31: Type of Group With Which Visited/Highest Level of Education

| 気 | Highest Level of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
| $\begin{aligned} & \text { i } \\ & \text { 를 } \end{aligned}$ | Alone | $\begin{gathered} 8 \\ (9) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (10) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (17) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (8) \\ \hline \end{gathered}$ | 44 |
| $\begin{aligned} & \sum_{3}^{n} \\ & =0 \end{aligned}$ | With immediate family | $\begin{gathered} 157 \\ (145) \end{gathered}$ | $\begin{gathered} 146 \\ (150) \end{gathered}$ | $\begin{gathered} 266 \\ (270) \end{gathered}$ | $\begin{gathered} 119 \\ (123) \end{gathered}$ | 688 |
| 曾 | With Extended family | $\begin{gathered} 32 \\ (37) \end{gathered}$ | $\begin{gathered} 43 \\ (38) \end{gathered}$ | $\begin{gathered} 67 \\ (69) \end{gathered}$ | $\begin{gathered} 32 \\ (31) \end{gathered}$ | 174 |
| - | With friends | $\begin{gathered} \hline 45 \\ (45) \end{gathered}$ | $\begin{gathered} \hline 47 \\ (47) \end{gathered}$ | $\begin{gathered} 86 \\ (84) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 37 \\ (38) \end{gathered}$ | 215 |
| $\underset{\sim}{2}$ | With special groups | $\begin{gathered} 15 \\ (21) \end{gathered}$ | $\begin{gathered} 19 \\ (22) \end{gathered}$ | $\begin{gathered} 44 \\ (39) \end{gathered}$ | $\begin{gathered} 22 \\ (18) \end{gathered}$ | 100 |
|  | Total | 257 | 267 | 479 | 218 | 1221 |

$\chi^{2}=7.20, d f=12, p<.05$

Data from question five, "On your typical visits to Oklahoma state parks, what best describes the type of group with whom you visit?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question two.

A crosstabulation and chi-square test were used to discern if any relationships existed between visitation and respondents racial/ethnic affiliation. Due to the specific nature of the first variable in question five "visit the parks alone" the researcher could not collapse this variable with any other responses. This resulted in a chi-square analysis with five cells having counts less than five. For this reason a chi-square analysis of survey questions five and 20 was not appropriate (See Table 32).

Table 32: Group With Which Visited/Primary Racial or Ethnic Affiliation

| $F 入$ - | Primary Racial/Ethnic Affiliation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | African American/ Black | American Indian/Native American | Caucasian/ White | Other | Total |
|  | Freq. | Freq. | Freq. | Freq. |  |
| Alone | $\begin{gathered} 2 \\ (2) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (4) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 35 \\ (36) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (2) \\ \hline \end{gathered}$ | 43 |
| With immediate family | $\begin{gathered} 21 \\ (27) \end{gathered}$ | $\begin{gathered} 59 \\ (58) \end{gathered}$ | $\begin{gathered} 577 \\ (574) \end{gathered}$ | $\begin{gathered} 27 \\ (25) \end{gathered}$ | 684 |
| With extended family | $\begin{gathered} 8 \\ (7) \end{gathered}$ | $\begin{gathered} 18 \\ (15) \end{gathered}$ | $\begin{gathered} 145 \\ (146) \end{gathered}$ | $\begin{gathered} 3 \\ (6) \end{gathered}$ | 174 |
| With friends | $\begin{aligned} & 10 \\ & (8) \end{aligned}$ | $\begin{gathered} \hline 13 \\ (18) \end{gathered}$ | $\begin{gathered} 178 \\ (177) \end{gathered}$ | $\begin{aligned} & 10 \\ & (8) \end{aligned}$ | 211 |
| With special groups | $\begin{gathered} 7 \\ (4) \end{gathered}$ | $\begin{aligned} & 10 \\ & (8) \end{aligned}$ | $\begin{gathered} 81 \\ (83) \end{gathered}$ | $\begin{gathered} 1 \\ (4) \end{gathered}$ | 99 |
| Total | 48 | 103 | 1016 | 44 | 1211 |

$\chi^{2}=12.77, d f=12, p>.05$

Research Question \#3 asked, "Are residents satisfied with the overall condition and management of the Oklahoma state parks?"

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 13, "How satisfied are you with the maintenance and upkeep of Oklahoma state parks?" were used in part to answer research question three. A crosstabulation and chi-square tests were used to discern if any relationships existed between respondents' opinion of lodges and satisfaction with maintenance and upkeep of parks.

The results revealed that those who were somewhat to very dissatisfied with park maintenance and upkeep were more likely than expected to feel that the lodges should be closed, do not belong in parks, or should be fixed. They were also less likely than expected to respond that the lodges were an adequate to excellent vacation value, or to
not have an opinion at all. Those who were somewhat satisfied with the maintenance and upkeep of the parks were less likely than expected to believe the lodges should be closed, repaired, or did not belong in the parks. Also, they were more likely than expected to respond that they had no opinion or not enough information about the lodges to answer. Additionally, those who were very satisfied with park maintenance and upkeep were less likely than expected to respond that the lodges should be closed, repaired, or did not belong in the parks. They were more likely than expected to respond that the lodges were an adequate to excellent vacation value (See Table 33).

Table 33: Opinion of Lodges/Satisfaction
With the Maintenance and Upkeep

| Satisfaction With Park Maintenance and Upkeep |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | Somewhat to very dissatisfied | Somewhat satisfied | Very satisfied | Total |
|  |  | Freq. | Freq. | Freq. |  |
|  | Should be closed/ don't belong/fix lodges | $\begin{aligned} & 124 \\ & (71) \end{aligned}$ | $\begin{gathered} 123 \\ (150) \end{gathered}$ | $\begin{gathered} 17 \\ (43) \end{gathered}$ | 264 |
|  | Adequate to excellent vacation value | $\begin{gathered} 101 \\ (125) \end{gathered}$ | $\begin{gathered} 265 \\ (264) \end{gathered}$ | $\begin{gathered} 99 \\ (76) \end{gathered}$ | 465 |
|  | OTRD should build more lodges | $\begin{gathered} 107 \\ (103) \end{gathered}$ | $\begin{gathered} 221 \\ (217) \end{gathered}$ | $\begin{gathered} 54 \\ (62) \end{gathered}$ | 382 |
|  | No opinion/not enough information | $\begin{gathered} 130 \\ (163) \end{gathered}$ | $\begin{gathered} 367 \\ (345) \end{gathered}$ | $\begin{aligned} & 109 \\ & (99) \end{aligned}$ | 606 |
|  | $\begin{aligned} & \text { Total } \\ & =82.52, \mathrm{df}=6, \mathrm{p}<.0 \end{aligned}$ | 462 | 976 | 279 | 1717 |

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 15, "How satisfied are you with the management of the Oklahoma state parks?" were used in part to answer research question three.

A crosstabulation and chi-square test were used to discern if any relationships existed between respondents' opinion of lodges and satisfaction with management of Oklahoma state parks. The data revealed that those who responded that the lodges should be closed, repaired, or do not belong in parks were more likely than expected to be somewhat to very dissatisfied with park management, and less likely than expected to be somewhat to very satisfied with park management. Additionally, those who responded that the lodges were an adequate to excellent vacation value were less likely than expected to be somewhat to very dissatisfied with park management; and more likely than expected to be very satisfied with park management (See Table 34).

Table 34: Opinion of Lodges/Satisfaction with Management

| Satisfaction with Management |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { U0 } \\ & 0 \\ & 000 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | Somewhat to very dissatisfied | Somewhat satisfied | Very satisfied | Total |
|  |  | Freq. | Freq. | Freq. |  |
|  | Lodges should be closed/Don't belong/Fix lodges | $\begin{aligned} & 101 \\ & (52) \end{aligned}$ | $\begin{gathered} 101 \\ (133) \end{gathered}$ | $\begin{gathered} \hline 27 \\ (49) \end{gathered}$ | 229 |
|  | Lodges are excellent to adequate vacation value | $\begin{gathered} 66 \\ (93) \\ \hline \end{gathered}$ | $\begin{gathered} 238 \\ (236) \\ \hline \end{gathered}$ | $\begin{array}{r} 103 \\ (78) \\ \hline \end{array}$ | 407 |
|  | OTRD should build more lodges | $\begin{gathered} \hline 68 \\ (80) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (201) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (66) \\ \hline \end{gathered}$ | 346 |
|  | No opinion/ Don't have enough information | $\begin{gathered} 99 \\ (110) \end{gathered}$ | $\begin{gathered} 286 \\ (278) \\ \hline \end{gathered}$ | $\begin{gathered} 93 \\ (92) \end{gathered}$ | 478 |
|  | Total | 334 | 847 | 279 | 1460 |

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 17, "What overall letter grade would you give the Oklahoma state park system?" were used in part to answer research question three.

A crosstabulation and chi-square test were used to discern if any relationships existed between respondents' opinion of lodges and respondents overall letter grade of the park system. The results revealed that those who felt the lodges should be closed, repaired, or do not belong in the parks were less likely than expected to give the parks an overall letter grade or "A"-excellent or "B"-good; and were more likely than expected to give the parks an overall letter grade of "C"-fair, or "D"-poor/ "F"-failing. Additionally, those who felt the lodges were an adequate to excellent vacation value were more likely than expected to give the parks an overall letter grade of "A"-excellent or "B"-good; and less likely than expected to give the parks an overall letter grade of "C"-fair, or "D"-poor/ "F"-failing (See Table 35).

Table 35: Opinion of Lodges/Overall Letter Grade

|  | Overall Letter Grade |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AExcellent | B-Good | C-Fair | $\begin{aligned} & \hline \text { D-Poor/ } \\ & \text { F- } \\ & \text { Failing } \\ & \hline \end{aligned}$ | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Lodges should be closed/don't belong/ fix lodges | $\begin{gathered} 4 \\ (20) \end{gathered}$ | $\begin{gathered} 98 \\ (147) \end{gathered}$ | $\begin{gathered} 150 \\ (100) \end{gathered}$ | $\begin{gathered} \hline 29 \\ (13) \end{gathered}$ | 281 |
|  | Lodges are excellent to adequate vacation value | $\begin{gathered} 46 \\ (36) \end{gathered}$ | $\begin{gathered} 310 \\ (260) \end{gathered}$ | $\begin{gathered} 129 \\ (177) \end{gathered}$ | $\begin{gathered} 11 \\ (23) \end{gathered}$ | 496 |
|  | OTRD should build more lodges | $\begin{gathered} \hline 28 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 202 \\ (207) \\ \hline \end{gathered}$ | $\begin{gathered} 142 \\ (141) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 23 \\ (19) \\ \hline \end{gathered}$ | 395 |
|  | No opinion/No information | $\begin{gathered} 58 \\ (51) \\ \hline \end{gathered}$ | $\begin{gathered} 370 \\ (367) \\ \hline \end{gathered}$ | $\begin{gathered} 247 \\ (250) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (33) \\ \hline \end{gathered}$ | 700 |
|  | Total | 136 | 980 | 668 | 88 | 1872 |

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 18, "What is the total number of people in your household?" were used in part to answer research question three.

A crosstabulation and chi-square test were used to discern if any relationships existed between respondents' opinion of park lodges and number of people living in household. Results revealed that those with one individual in the household were more likely than expected to feel the lodges were an adequate to excellent vacation value, or have no opinion about the lodges. Those with two individuals in the household were more likely than expected to feel the lodges should be closed, repaired, or do not belong in the parks, and less likely than expected to feel that the OTRD should build more lodges. Those with three individuals in the household were less likely than expected not to have an opinion regarding the lodges. Also, those with four in the household were less likely than expected to believe the lodges are and excellent to adequate vacation value, and more likely than expected to believe the OTRD should build more lodges. Finally, those with five or more in their household were more likely than expected to feel the OTRD should build more lodges in parks, and less likely than expected to not have an opinion regarding the lodges (See Table 36).

Table 36: Opinion of Lodges/Number in Household

| Number in Household |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | 1 | 2 | 3 | 4 | $\begin{gathered} 5 \text { or } \\ \text { more } \end{gathered}$ | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Lodges should be closed/ Don't belong/ Fix lodges | $\begin{gathered} 45 \\ (47) \end{gathered}$ | $\begin{gathered} 116 \\ (105) \end{gathered}$ | $\begin{gathered} \hline 48 \\ (49) \end{gathered}$ | $\begin{gathered} \hline 43 \\ (46) \end{gathered}$ | $\begin{gathered} 29 \\ (34) \end{gathered}$ | 281 |
|  | Lodges are excellent to adequate vacation value | $\begin{gathered} 93 \\ (83) \end{gathered}$ | $\begin{gathered} 188 \\ (185) \end{gathered}$ | $\begin{gathered} \hline 92 \\ (86) \end{gathered}$ | $\begin{gathered} \hline 69 \\ (81) \end{gathered}$ | $\begin{gathered} \hline 52 \\ (59) \end{gathered}$ | 494 |
|  | OTRD should build more lodges | $\begin{gathered} 40 \\ (67) \end{gathered}$ | $\begin{gathered} 118 \\ (150) \end{gathered}$ | $\begin{gathered} 79 \\ (70) \end{gathered}$ | $\begin{gathered} 91 \\ (65) \end{gathered}$ | $\begin{gathered} 71 \\ (48) \end{gathered}$ | 399 |
|  | No opinion/Don't have enough information | $\begin{gathered} \hline 153 \\ (134) \end{gathered}$ | $\begin{gathered} \hline 318 \\ (300) \end{gathered}$ | $\begin{gathered} 126 \\ (140) \end{gathered}$ | $\begin{gathered} 120 \\ (131) \end{gathered}$ | $\begin{gathered} \hline 84 \\ (96) \end{gathered}$ | 801 |
|  | Total | 331 | 740 | 345 | 323 | 236 | 1975 |

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 19, "What is the highest level of education attained by an individual in your household?" were used in part to answer research question two.

A crosstabulation and a chi-square test were used to discern if any relationships existed between opinion of lodges and respondents' highest level of education. The results indicated that those with a grade or high school education were less likely than expected to feel that the lodges were an excellent to adequate vacation value, and more likely than expected to have no opinion regarding the state park lodges. Those with some college were more likely than expected to believe that the OTRD should build more lodges. Additionally, those with a graduate or professional degree were more likely than
expected to respond that lodges should be closed, repaired, or do not belong in parks, and lodges were an excellent to adequate vacation value. They were less likely than expected to feel the OTRD should build more lodges at parks, or not to have an opinion regarding lodges (See Table 37).

Table 37: Opinion of State Park Lodges/Highest Level of Education

| $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Highest Level of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Lodges should be closed/ Don't belong/ Fix lodges | $\begin{gathered} 61 \\ (68) \end{gathered}$ | $\begin{gathered} 57 \\ (63) \end{gathered}$ | $\begin{gathered} 107 \\ (105) \end{gathered}$ | $\begin{gathered} 58 \\ (47) \end{gathered}$ | 283 |
|  | Lodges are adequate to excellent vacation value | $\begin{gathered} 92 \\ (118) \end{gathered}$ | $\begin{gathered} 111 \\ (111) \end{gathered}$ | $\begin{gathered} 195 \\ (184) \end{gathered}$ | $\begin{gathered} 97 \\ (82) \end{gathered}$ | 495 |
|  | OTRD should build more lodges | $\begin{aligned} & 103 \\ & (95) \end{aligned}$ | $\begin{aligned} & 104 \\ & (89) \end{aligned}$ | $\begin{gathered} 144 \\ (149) \end{gathered}$ | $\begin{gathered} 48 \\ (66) \end{gathered}$ | 399 |
|  | No opinion/ Don't have enough information | $\begin{gathered} \hline 216 \\ (191) \end{gathered}$ | $\begin{gathered} 171 \\ (179) \end{gathered}$ | $\begin{gathered} \hline 291 \\ (299) \end{gathered}$ | $\begin{gathered} 123 \\ (132) \end{gathered}$ | 801 |
|  | Total | 472 | 443 | 737 | 326 | 1978 |

$\mathrm{x}^{2}=25.76, \mathrm{df}=9, \mathrm{p}<.05$

Data from question 10, "What is your opinion of Oklahoma state park lodges?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question three. A crosstabulation and a chi-square test were used to discern if any relationships existed between opinion of lodges and respondents racial or ethnic affiliation.

Chi-square analysis revealed that there was no difference in opinion of lodges and respondents racial or ethnic affiliation (See Table 38).

Table 38: Opinion of Lodges/Primary Racial or Ethnic Group

| 品0000000000 | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ <br> White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Lodges should be closed/ Don't belong/ Fix lodges | $\begin{gathered} \hline 13 \\ (13) \end{gathered}$ | $\begin{gathered} \hline 26 \\ (22) \end{gathered}$ | $\begin{gathered} 232 \\ (231) \end{gathered}$ | $\begin{gathered} 7 \\ (12) \end{gathered}$ | 278 |
|  | Lodges are adequate to excellent vacation value | $\begin{gathered} \hline 17 \\ (23) \end{gathered}$ | $\begin{gathered} \hline 33 \\ (39) \end{gathered}$ | $\begin{gathered} 420 \\ (408) \end{gathered}$ | $\begin{gathered} \hline 21 \\ (21) \end{gathered}$ | 491 |
|  | OTRD should build more lodges | $\begin{gathered} \hline 22 \\ (19) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (32) \end{gathered}$ | $\begin{gathered} 315 \\ (331) \end{gathered}$ | $\begin{gathered} \hline 17 \\ (17) \end{gathered}$ | 398 |
|  | No opinion/ Don't have enough information | $\begin{gathered} \hline 39 \\ (37) \end{gathered}$ | $\begin{gathered} \hline 53 \\ (63) \end{gathered}$ | $\begin{gathered} 663 \\ (660) \end{gathered}$ | $\begin{gathered} \hline 38 \\ (34) \end{gathered}$ | 793 |
|  | Total | 91 | 156 | 1630 | 83 | 1960 |

Data from question 13, "How satisfied are you with the maintenance and upkeep of Oklahoma state parks?" and question 18, "What is the total number of people living in your household?" were used in part to answer research question three. A crosstabulation and chi-square test were used to discern if any relationships existed between satisfaction with park maintenance and upkeep, and number of people living in household (See Table 39). No statistical difference was found.

Table 39: Satisfaction with Park Maintenance and Upkeep/Number in Household

|  | Number in Household |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 or more |  |
|  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | $\begin{gathered} 65 \\ (72) \end{gathered}$ | $\begin{gathered} 178 \\ (174) \end{gathered}$ | $\begin{gathered} 88 \\ (85) \end{gathered}$ | $\begin{gathered} 83 \\ (78) \end{gathered}$ | $\begin{gathered} 53 \\ (59) \end{gathered}$ | 467 |
|  | $\begin{gathered} 154 \\ (149) \\ \hline \end{gathered}$ | $\begin{array}{r} 356 \\ (361) \\ \hline \end{array}$ | $\begin{gathered} 181 \\ (177) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (162) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (122) \\ \hline \end{gathered}$ | 970 |
| V. Very satisfied | $\begin{gathered} 45 \\ (43) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (104) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (51) \end{gathered}$ | $\begin{gathered} 44 \\ (47) \\ \hline \end{gathered}$ | $\begin{gathered} 42 \\ (35) \\ \hline \end{gathered}$ | 280 |
| Total | 264 | 639 | 313 | 286 | 215 | 1717 |

Data from question 13, "How satisfied are you with the maintenance and upkeep of Oklahoma state parks?" and question 19, "What is highest level of education attained by an individual in your household?" were used in part to answer research question three.

A crosstabulation and chi-square test were used to discern if any relationships existed between satisfaction with park maintenance and upkeep and respondents' highest level of education. The chi-square analysis revealed that there was no difference in satisfaction with park maintenance and upkeep, and education level (See Table 40).

Table 40:
Satisfaction with Park Maintenance and Upkeep/Highest Level of Education


Data from question 15, "How satisfied are you with the management of the Oklahoma state parks?" and question 19, "What is the highest level of education attained by an individual in your household?" were used in part to answer survey question three. A crosstabulation and a chi-square test were used to discern if any relationships existed between satisfaction with park management, and highest level of education attained. Chisquare analysis revealed that there was no difference in the satisfaction with park management, and highest education level (See Table 41).

Table 41: Satisfaction with Park Management/Highest Level of Education

|  | Highest Level of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Somewhat to very dissatisfied | $\begin{gathered} \hline 75 \\ (78) \end{gathered}$ | $\begin{gathered} \hline 72 \\ (76) \end{gathered}$ | $\begin{gathered} 129 \\ (127) \end{gathered}$ | $\begin{gathered} 59 \\ (54) \end{gathered}$ | 335 |
|  | Somewhat satisfied | $\begin{gathered} 194 \\ (197) \end{gathered}$ | $\begin{gathered} 201 \\ (193) \end{gathered}$ | $\begin{gathered} 316 \\ (321) \end{gathered}$ | $\begin{gathered} 136 \\ (136) \end{gathered}$ | 847 |
|  | Very satisfied | $\begin{gathered} 70 \\ (65) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (64) \end{gathered}$ | $\begin{gathered} 109 \\ (106) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (45) \\ \hline \end{gathered}$ | 279 |
|  | Total | 339 | 333 | 554 | 235 | 1461 |

Data from question 15, "How satisfied are you with the management of the Oklahoma state parks?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question three. A crosstabulation and a chi-square test were used to discern if any relationships existed between satisfaction with park management and primary racial/ethnic affiliation. A chi-square analysis revealed that there was no difference in the satisfaction with park management, and primary racial or ethnic affiliation (See Table 42).

Table 42: Satisfaction with Park Management/Primary Racial or Ethnic Affiliation

|  | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | African <br> American/ <br> Black | American <br> Indian/Native <br> American | Caucasian/ <br> White | Other | Total |
|  | Freq. | Freq. | Freq. | Freq. |  |  |

Data from question 17, "What overall letter grade would you give the Oklahoma state park system?" and question 18 , "What is the total number of individuals including yourself living in your household?" were used in part to answer survey question three. A crosstabulation and chi-square test were used to discern if any relationships existed between overall letter grade given to the park system and number of people living in the household. A chi-square analysis revealed that there was no difference in the overall letter grade given to park system and, number of people living in household (See Table 43).

Table 43: Overall Letter Grade/Total Number in Household

| Number in Household |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | $\begin{gathered} 5 \text { or } \\ \text { more } \\ \hline \end{gathered}$ | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | A-Excellent | $\begin{gathered} \hline 20 \\ (22) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 48 \\ (52) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (25) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 27 \\ (23) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (17) \\ \hline \end{gathered}$ | 137 |
|  | B-Good | $\begin{gathered} 154 \\ (153) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (367) \\ \hline \end{gathered}$ | $\begin{gathered} 188 \\ (174) \\ \hline \end{gathered}$ | $\begin{gathered} 160 \\ (162) \\ \hline \end{gathered}$ | $\begin{gathered} 119 \\ (120) \\ \hline \end{gathered}$ | 976 |
|  | C-Fair | $\begin{gathered} 104 \\ (106) \\ \hline \end{gathered}$ | $\begin{gathered} 267 \\ (253) \\ \hline \end{gathered}$ | $\begin{gathered} 112 \\ (120) \\ \hline \end{gathered}$ | $\begin{gathered} 110 \\ (112) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (83) \\ \hline \end{gathered}$ | 672 |
|  | D-Poor/ FFailing | $\begin{gathered} 16 \\ (14) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (33) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (16) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (15) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (11) \\ \hline \end{gathered}$ | 89 |
|  | Total | 294 | 704 | 334 | 311 | 231 | 1874 |

Data from question 17, "What overall letter grade would you give the Oklahoma state park system?" and question 19, "What is the highest level of education attained by a person in your household?" were used in part to answer survey question three. A crosstabulation and chi-square test were used to discern if any relationships existed between overall letter grade given to the park system and highest level of education attained. A chi-square analysis revealed that there was no difference in the overall letter grade given to the park system and, number of people living in household (See Table 44).

Table 44: Overall Letter Grade/Highest Level of Education

| Highest Level of Education |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | A-Excellent | $\begin{gathered} 37 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (31) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 54 \\ (52) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (23) \\ \hline \end{gathered}$ | 137 |
|  | B-Good | $\begin{gathered} 235 \\ (232) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (219) \end{gathered}$ | $\begin{gathered} 364 \\ (369) \\ \hline \end{gathered}$ | $\begin{gathered} 149 \\ (160) \end{gathered}$ | 979 |
|  | C-Fair | $\begin{gathered} 155 \\ (159) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (150) \\ \hline \end{gathered}$ | $\begin{gathered} 250 \\ (254) \\ \hline \end{gathered}$ | $\begin{gathered} 122 \\ (110) \\ \hline \end{gathered}$ | 672 |
|  | D-Poor/ F- <br> Failing | $\begin{gathered} 17 \\ (21) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (20) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (34) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (15) \\ \hline \end{gathered}$ | 89 |
|  | Total | 444 | 419 | 708 | 306 | 1877 |

Data from question 17, "What overall letter grade would you give the Oklahoma state park system?" and question 20, "What is your primary racial/ethnic affiliation?" were used in part to answer survey question three. A crosstabulation and chi-square test were used to discern if any relationships existed between overall letter grade given to the park system and primary racial/ethnic affiliation.

Even after the collapsing variables for primary racial or ethnic affiliation and overall letter grade for the state park system two cells had counts of less than five which made a chi-square analysis inappropriate (See Table 45).

Table 45: Overall Letter Grade/Primary Racial or Ethnic Affiliation

| تِّ | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native America | Caucasian/ White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | A-Excellent | $\begin{gathered} \hline 9 \\ (6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 13 \\ (11) \\ \hline \end{gathered}$ | $\begin{gathered} 106 \\ (112) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7 \\ (6) \\ \hline \end{gathered}$ | 135 |
|  | B-Good | $\begin{gathered} 32 \\ (44) \end{gathered}$ | $\begin{gathered} 86 \\ (80) \end{gathered}$ | $\begin{gathered} 808 \\ (805) \end{gathered}$ | $\begin{gathered} 45 \\ (41) \end{gathered}$ | 971 |
|  | C-Fair | $\begin{gathered} 35 \\ (31) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (55) \\ \hline \end{gathered}$ | $\begin{gathered} 559 \\ (552) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (28) \\ \hline \end{gathered}$ | 666 |
|  | $\begin{aligned} & \hline \text { D-Poor/ F- } \\ & \text { Failing } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 7 \\ (4) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (7) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (72) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (4) \\ \hline \end{gathered}$ | 87 |
|  | Total | 85 | 154 | 1542 | 78 | 1859 |

Research Question \#4 asked, "What are the attitudes of residents pertaining to the

## funding of Oklahoma state parks?"

Data from question eight, "What best expresses you opinion of the financial standing of Oklahoma state parks?" and question nine, "If it were decided that additional funding was needed for the Oklahoma state parks what would you most favor?" were used to answer in part research question four. A crosstabulation and chi-square test were used to discern if any relationships existed between opinion of financial standing and the type of additional funding most favored.

The crosstabulation and chi-square analysis revealed that there was a difference in the opinion of the financial standing and the type of additional funding most favored. The results revealed that those who felt the parks were severely under-funded were more likely than expected to favor an increase in government appropriations, and less likely than expected to favor expanding in park commercial services or some other type of funding. Those who responded that the parks were somewhat under-funded were more
likely than expected to favor dedicating a portion of sales tax to fund parks, or use an increase in government appropriations. They were less likely than expected to favor some other type of funding. Those who responded that the parks were adequately to overfunded were more likely than expected to favor an increase in overnight lodging, dedicating a portion of sales taxes to fund parks, expand park commercial services, or some other type of funding. They were less likely than expected to favor an increase in government appropriations. Additionally, those who didn't know or had no opinion of the financial standing were more likely than expected to favor entrance fees for all users or some other type of funding. They were less likely to favor dedicating a portion of sales taxes to park funding or increasing government appropriations (See Table 46).

Table 46: Opinion of Financial Standing/Type of Additional Funding

| Type of Funding Most Favored |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 |  |  |  |  |  | - |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Severely under-funded | $\begin{gathered} 53 \\ (67) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (46) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (31) \\ \hline \end{gathered}$ | $\begin{array}{r} 77 \\ (61) \\ \hline \end{array}$ | $\begin{array}{r} 75 \\ (54) \\ \hline \end{array}$ | $\begin{gathered} 22 \\ (31) \\ \hline \end{gathered}$ | $\begin{gathered} 27 \\ (39) \\ \hline \end{gathered}$ | 327 |
|  | Somewhat under-funded | $\begin{gathered} 197 \\ (197) \end{gathered}$ | $\begin{gathered} 130 \\ (137) \end{gathered}$ | $\begin{gathered} 87 \\ (91) \end{gathered}$ | $\begin{gathered} 200 \\ (180) \end{gathered}$ | $\begin{gathered} 181 \\ (159) \end{gathered}$ | $\begin{gathered} 93 \\ (91) \end{gathered}$ | $\begin{gathered} 79 \\ (114) \end{gathered}$ | 967 |
|  | Adequately to overfunded | $\begin{gathered} 75 \\ (82) \end{gathered}$ | $\begin{gathered} 59 \\ (57) \end{gathered}$ | $\begin{gathered} 48 \\ (38) \end{gathered}$ | $\begin{gathered} 66 \\ (75) \end{gathered}$ | $\begin{gathered} 46 \\ (66) \end{gathered}$ | $\begin{gathered} 47 \\ (38) \end{gathered}$ | $\begin{gathered} 60 \\ (47) \end{gathered}$ | 401 |
|  | Don't know/no information | $\begin{gathered} \hline 84 \\ (64) \end{gathered}$ | $\begin{gathered} \hline 46 \\ (44) \end{gathered}$ | $\begin{gathered} 29 \\ (29) \end{gathered}$ | $\begin{gathered} 30 \\ (58) \end{gathered}$ | $\begin{gathered} \hline 27 \\ (51) \end{gathered}$ | $\begin{gathered} \hline 26 \\ (29) \end{gathered}$ | $\begin{gathered} \hline 70 \\ (37) \end{gathered}$ | 312 |
|  | Total | 409 | 283 | 189 | 373 | 329 | 188 | 236 | 2007 |

$\mathrm{x}^{2}=117.65, \mathrm{df}=18, \mathrm{p}<.05$

Data from question eight, "What best expresses you opinion of the financial standing of Oklahoma state parks?" and question 19, "What is highest level of education attained by an individual in your household?" were used in part to answer research question four. A crosstabulation and a chi-square test were used to discern if any relationships existed between opinion of park financial standing and highest level of education.

The results indicated that those with a grade or high school education were more likely than expected to believe that the parks were adequately to over-funded, or to have no opinion regarding the financial standing of the state parks. They were less likely than expected to feel the parks were severely under-funded or somewhat under-funded. Those with an associate's or bachelor's degree were more likely than expected to respond that the parks were somewhat under-funded; and less likely than expected to respond that they had no opinion or not enough information to form an opinion of state park financial standing. Additionally, those with a graduate or professional degree were less likely than expected to respond that the parks were adequately to over-funded (See Table 47).

Table 47: Opinion of Financial Standing/Highest Level of Education

$\mathrm{x}^{2}=32.18, \mathrm{df}=9, \mathrm{p}<.05$

Data from question eight, "What best expresses you opinion of the financial standing of Oklahoma state parks?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question four. A crosstabulation and chi-square test were used to discern if any relationships existed between opinion of state park financial standing and racial or ethnic affiliation. A chi-square analysis revealed that there was no difference in the opinions of state park financial standing and ethnic/racial affiliation (See Table 48).

Table 48: Opinion of Financial Standing/Primary Racial or Ethnic Affiliation

|  | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
| 皆 | Severely under-funded | $\begin{gathered} 12 \\ (15) \end{gathered}$ | $\begin{gathered} \hline 25 \\ (26) \end{gathered}$ | $\begin{gathered} \hline 279 \\ (270) \end{gathered}$ | $\begin{gathered} 8 \\ (14) \end{gathered}$ | 324 |
| 苞 | Somewhat under-funded | $\begin{gathered} \hline 38 \\ (44) \end{gathered}$ | $\begin{gathered} \hline 74 \\ (76) \end{gathered}$ | $\begin{gathered} 801 \\ (797) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (40) \end{gathered}$ | 957 |
| $\stackrel{\pi}{0}$ | Adequately to over- funded | $\begin{gathered} 24 \\ (18) \\ \hline \end{gathered}$ | $\begin{gathered} 42 \\ (31) \\ \hline \end{gathered}$ | $\begin{gathered} 307 \\ (326) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (17) \\ \hline \end{gathered}$ | 392 |
|  | No opinion/ not enough information | $\begin{gathered} 17 \\ (14) \end{gathered}$ | $\begin{gathered} 16 \\ (24) \end{gathered}$ | $\begin{gathered} 258 \\ (252) \end{gathered}$ | $\begin{gathered} 12 \\ (13) \end{gathered}$ | 303 |
|  | Total | 91 | 157 | 1645 | 83 | 1976 |

Data from question nine, "If it were decided that additional funding was needed for the Oklahoma state parks what would you most favor?" and question 19, "What is highest level of education attained by an individual in your household?" were used in part to answer research question four. A crosstabulation and chi-square test were used to discern if any relationships existed between the type of additional funding most favored and highest level of education.

Those who favored entrance fees for all users were less likely than expected to have some college education, and more likely than expected to have an associate's or bachelor's degree. Those who favored fees for specific amenities were more likely than expected to have a grade or high school education or some college education, and less likely than expected to have an associate's or bachelor's degree. Those who favored dedicating a portion of sales taxes to fund parks were less likely than expected to have a grade or high school education. Those who favored increasing government appropriations
were less likely than expected to have a grade or high school education, and more likely than expected to have a professional or graduate degree. Additionally, those who favored expanding in-park commercial services were less likely than expected to have a graduate or professional degree. Finally, those who favored some other type of funding or did not know what type of funding they favored were more likely than expected to have a grade or high school education, and less likely than expected to have an associate's or bachelor's degree (See Table 49).

Table 49: Type of Additional Funding Favored/Highest Level of Education

|  | Highest Level of Education |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional <br> Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Entrance fees for all users | $\begin{gathered} \hline 96 \\ (96) \end{gathered}$ | $\begin{gathered} 79 \\ (90) \\ \hline \end{gathered}$ | $\begin{gathered} 165 \\ (150) \end{gathered}$ | $\begin{gathered} \hline 62 \\ (67) \\ \hline \end{gathered}$ | 402 |
|  | Fees for amenities | $\begin{gathered} 42 \\ (66) \\ \hline \end{gathered}$ | $\begin{gathered} 51 \\ (64) \end{gathered}$ | $\begin{gathered} 121 \\ (104) \end{gathered}$ | $\begin{gathered} 63 \\ (46) \\ \hline \end{gathered}$ | 277 |
| $\begin{aligned} & \frac{1}{5} \\ & \sum_{0}^{0} \end{aligned}$ | Increase in overnight lodging | $\begin{gathered} 61 \\ (45) \end{gathered}$ | $\begin{gathered} 50 \\ (42) \end{gathered}$ | $\begin{gathered} 51 \\ (71) \end{gathered}$ | $\begin{gathered} 27 \\ (31) \end{gathered}$ | 189 |
| 菏 | Dedicate portion of sales tax | $\begin{gathered} \hline 69 \\ (89) \end{gathered}$ | $\begin{gathered} 94 \\ (83) \\ \hline \end{gathered}$ | $\begin{gathered} 149 \\ (140) \end{gathered}$ | $\begin{gathered} \hline 61 \\ (62) \\ \hline \end{gathered}$ | 373 |
|  | Increase appropriations from state government | $\begin{gathered} 64 \\ (78) \end{gathered}$ | $\begin{gathered} 74 \\ (73) \end{gathered}$ | $\begin{gathered} 125 \\ (122) \end{gathered}$ | $\begin{gathered} 64 \\ (54) \end{gathered}$ | 327 |
|  | Expand in park services | $\begin{gathered} \hline 47 \\ (45) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 43 \\ (42) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (71) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 19 \\ (31) \\ \hline \end{gathered}$ | 188 |
|  | Some other funding/Don't know | $\begin{gathered} 95 \\ (55) \end{gathered}$ | $\begin{gathered} 50 \\ (52) \end{gathered}$ | $\begin{gathered} 54 \\ (87) \end{gathered}$ | $\begin{gathered} 33 \\ (39) \end{gathered}$ | 232 |
|  | Total | 474 | 441 | 744 | 329 | 1988 |

Data from question nine, "If it were decided that additional funding was needed for the Oklahoma state parks what would you most favor?" and question 20, "What is your primary racial or ethnic affiliation?" were used to answer research question four. A crosstabulation and chi-square test were used to discern if any relationships existed between the type of additional funding most favored and, racial or ethnic affiliation.

The results revealed that Caucasians/Whites were more likely than expected to favor fees for specific amenities. Additionally, American Indian/Native Americans were more likely than expected to favor dedicating a portion of sales tax to fund parks (See Table 50).

Table 50: Type of Additional Funding Favored/Primary Racial or Ethnic Affiliation

| $\begin{aligned} & \text { Ju } \\ & 0 \\ & 0 \\ & \text { In } \end{aligned}$ | Primary Racial/Ethnic Affiliation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Entrance fees for all users | $\begin{gathered} 17 \\ (19) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 23 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 341 \\ (335) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 22 \\ (17) \\ \hline \end{gathered}$ | 403 |
|  | Fees for amenities | $\begin{gathered} 10 \\ (13) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (22) \\ \hline \end{gathered}$ | $\begin{gathered} 240 \\ (229) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (12) \\ \hline \end{gathered}$ | 275 |
| $\begin{aligned} & \underline{5} \underbrace{5}_{00} \\ & \sum_{0}^{0} \end{aligned}$ | Increase in overnight lodging | $\begin{gathered} 9 \\ (9) \end{gathered}$ | $\begin{gathered} 13 \\ (15) \end{gathered}$ | $\begin{gathered} 158 \\ (157) \end{gathered}$ | $\begin{gathered} 8 \\ (8) \end{gathered}$ | 188 |
| 曾 | Dedicate portion of sales tax | $\begin{gathered} 14 \\ (17) \end{gathered}$ | $\begin{gathered} 48 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 295 \\ (307) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (14) \end{gathered}$ | 369 |
| $\begin{aligned} & \underset{y}{x} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Increase appropriations from state government | $\begin{gathered} 19 \\ (15) \end{gathered}$ | $\begin{gathered} 18 \\ (26) \end{gathered}$ | $\begin{gathered} 275 \\ (270) \end{gathered}$ | $\begin{aligned} & 11 \\ & (9) \end{aligned}$ | 325 |
|  | Expand in park services | $\begin{gathered} 8 \\ (9) \\ \hline \end{gathered}$ | $\begin{array}{r} 19 \\ (15) \\ \hline \end{array}$ | $\begin{gathered} 149 \\ (155) \\ \hline \end{gathered}$ | $\begin{array}{r} 10 \\ (8) \\ \hline \end{array}$ | 186 |
|  | Some other funding/Don't know | $\begin{gathered} 14 \\ (10) \end{gathered}$ | $\begin{gathered} 18 \\ (18) \end{gathered}$ | $\begin{gathered} 181 \\ (186) \end{gathered}$ | $\begin{aligned} & 11 \\ & (9) \end{aligned}$ | 224 |
|  | Total | 91 | 157 | 1639 | 83 | 1970 |

$\mathrm{x}^{2}=29.13, \mathrm{df}=18, \mathrm{p}<.05$

Research question \#5 asked "What preferences do residents have for Oklahoma state parks?"

Data from question 12, "What do you believe should be the highest priority for Oklahoma state parks?" and question 18, "What is the total number of people including yourself living in your household?" were used in part to answer research question five. A crosstabulation and chi-square test were used to discern if any relationships existed between belief about the highest priority and number of people living in household.

Due to the specific nature of variable for question 12 a collapse of variables was unable to be made causing two cells to have counts of less than five and making a chisquare analysis inappropriate (See Table 51).

Table 51: Highest Priority for Oklahoma State Parks/Number in Household

|  |  | Number in Household |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 or <br> more | Total |  |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |  |

Data from question 12, "What do you believe should be the highest priority for Oklahoma state parks?" and question 19, "What is the highest level of education attained
by an individual in your household?" were used in part to answer research question five.
A crosstabulation and chi-square test were used to discern if any relationships existed between belief the highest priority for the parks, and highest level of education attained.

A chi-square analysis revealed that there was no difference in beliefs about the parks highest priority and, highest level of education attained (See Table 52).

Table 52: Highest Priority for Oklahoma State Parks/Highest Level of Education

| Highest Level of Education |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/High <br> School | Some <br> College | Associate's/ <br> Bachelor's <br> Degree | Graduate/ <br> Professional <br> Degree | Total |
|  | Freq. | Freq. | Freq. | Freq. |  |  |$|$

Data from question 12, "what do you believe should be the highest priority for Oklahoma state parks?" and question 20, "What is your primary racial or ethnic affiliation?" were used in part to answer research question five. A crosstabulation and
chi-square test were used to discern if any relationships existed between beliefs about the highest priority for state parks and racial or ethnic affiliation.

Due to the specific nature of the responses for question 12 the researcher was unable to collapse variables into "best fit" categories; therefore, three cells had a count of less than five. This resulted in a chi-square analysis being inappropriate (See Table 53).

Table 53: Highest Priority for Oklahoma State Parks/ Primary Racial or Ethnic Affiliation

| Primary Racial/Ethnic Affiliation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African <br> American/ <br> Black | American Indian/Native American | Caucasian/ <br> White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. |  |
|  | Rectify existing problems | $\begin{gathered} 42 \\ (46) \end{gathered}$ | $\begin{gathered} 77 \\ (80) \end{gathered}$ | $\begin{gathered} 839 \\ (827) \end{gathered}$ | $\begin{gathered} 36 \\ (42) \end{gathered}$ | 994 |
|  | Close some parks | $\begin{gathered} 6 \\ (6) \end{gathered}$ | $\begin{gathered} \hline 13 \\ (11) \end{gathered}$ | $\begin{gathered} 106 \\ (109) \end{gathered}$ | $\begin{gathered} \hline 6 \\ (6) \end{gathered}$ | 131 |
|  | Build <br> more developed areas | $\begin{aligned} & 20 \\ & (8) \end{aligned}$ | $\begin{gathered} 14 \\ (14) \end{gathered}$ | $\begin{gathered} 134 \\ (147) \end{gathered}$ | $\begin{gathered} 9 \\ (8) \end{gathered}$ | 177 |
|  | Find additional funding | $\begin{gathered} 9 \\ (14) \end{gathered}$ | $\begin{gathered} 26 \\ (25) \end{gathered}$ | $\begin{gathered} 269 \\ (261) \end{gathered}$ | $\begin{gathered} \hline 10 \\ (13) \end{gathered}$ | 314 |
|  | Purchase additional lands | $\begin{gathered} 4 \\ (8) \end{gathered}$ | $\begin{gathered} 14 \\ (15) \end{gathered}$ | $\begin{gathered} 151 \\ (152) \end{gathered}$ | $\begin{aligned} & 14 \\ & (8) \end{aligned}$ | 183 |
|  | Some other priority | $\begin{gathered} \hline 3 \\ (2) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (3) \end{gathered}$ | $\begin{gathered} \hline 28 \\ (31) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (2) \end{gathered}$ | 37 |
|  | Total | 84 | 147 | 1527 | 78 | 1836 |

Data from question 11, "Which do believe should be the primary purpose of the Oklahoma state park system?" and question 18, "What is the total number of people including yourself living in your household?" were used in part to answer research
question five. A crosstabulation and chi-square test were used to discern if any relationships existed between beliefs about the primary purpose for state parks and number of people living in household. A chi-square analysis revealed that there was no difference in beliefs about the highest priority for state parks and highest level of education attained (See Table 54).

Table 54: Primary Purpose for Oklahoma State Parks/Number in Household

|  | Number in Household |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $$ |  | 1 | 2 | 3 | 4 | $\begin{gathered} 5 \text { or } \\ \text { more } \\ \hline \end{gathered}$ | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |  |
|  | Protect natural resources | $\begin{gathered} 84 \\ (83) \\ \hline \end{gathered}$ | $\begin{gathered} 175 \\ (191) \\ \hline \end{gathered}$ | $\begin{array}{r} 104 \\ (90) \\ \hline \end{array}$ | $\begin{gathered} 80 \\ (84) \\ \hline \end{gathered}$ | $\begin{gathered} 66 \\ (61) \\ \hline \end{gathered}$ | 509 |
|  | Provide inexpensive outdoor recreation | $\begin{gathered} 144 \\ (143) \end{gathered}$ | $\begin{gathered} 338 \\ (329) \end{gathered}$ | $\begin{gathered} 138 \\ (154) \end{gathered}$ | $\begin{gathered} 151 \\ (144) \end{gathered}$ | $\begin{gathered} 105 \\ (105) \end{gathered}$ | 876 |
| $\begin{aligned} & \text { B } \\ & \text { In } \end{aligned}$ | Encourage tourism | $\begin{array}{r} 67 \\ (76) \\ \hline \end{array}$ | $\begin{gathered} 182 \\ (175) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (82) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (77) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (56) \\ \hline \end{gathered}$ | 466 |
| 2 | Other primary purpose | $\begin{gathered} 24 \\ (17) \end{gathered}$ | $\begin{gathered} 38 \\ (38) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (18) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (17) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (12) \end{gathered}$ | 102 |
|  | Total | 319 | 733 | 344 | 322 | 235 | 1953 |

Data from question 11, "Which do believe should be the primary purpose of the Oklahoma state park system?" and question 19, "What is highest level of education attained by an individual in your household?" were used, in part, to answer research question five. A crosstabulation and chi-square test were used to discern if any relationships existed between beliefs about the primary purpose of the state parks and the highest level of education attained. A chi-square analysis revealed that there was no difference (See Table 55).

Table 55: Primary Purpose for Oklahoma State Parks/Highest Level of Education

| Highest Level of Education |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade/ <br> High <br> School | Some College | Associate's/ Bachelor's Degree | Graduate/ <br> Professional Degree | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |
|  | Protect natural resources | $\begin{gathered} 99 \\ (119) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (113) \\ \hline \end{gathered}$ | $\begin{gathered} 197 \\ (192) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (86) \\ \hline \end{gathered}$ | 510 |
|  | Provide inexpensive outdoor recreation | $\begin{gathered} 224 \\ (205) \end{gathered}$ | $\begin{gathered} 182 \\ (194) \end{gathered}$ | $\begin{gathered} 326 \\ (331) \end{gathered}$ | $\begin{gathered} 145 \\ (148) \end{gathered}$ | 877 |
|  | Encourage tourism | $\begin{gathered} 113 \\ (109) \\ \hline \end{gathered}$ | $\begin{gathered} 99 \\ (103) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (176) \\ \hline \end{gathered}$ | $\begin{gathered} 82 \\ (78) \\ \hline \end{gathered}$ | 466 |
|  | Other primary purpose | $\begin{gathered} 20 \\ (24) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (23) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (39) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (17) \\ \hline \end{gathered}$ | 103 |
|  | Total | 456 | 433 | 738 | 329 | 1956 |

Data from question 11, "Which do believe should be the primary purpose of the Oklahoma state park system?" and question 20, "What is your primary racial/ethnic affiliation?" were used, in part, to answer research question five. A crosstabulation and chi-square test were used to discern if any relationships existed between beliefs about the primary purpose of the state parks and primary racial or ethnic affiliation.

Due to the specific nature of the responses in question 11 the variables could not be collapsed into "best fit" categories causing two cells to have counts of less than five. A chi-square analysis was inappropriate (See Table 56).

Table 56: Primary Purpose for Oklahoma State Parks/
Primary Racial or Ethnic Affiliation

| Primary Racial/Ethnic Affiliation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | African American/ Black | American Indian/Native American | Caucasian/ White | Other | Total |
|  |  | Freq. | Freq. | Freq. | Freq. | Freq. |
|  | Protect natural resources | $\begin{gathered} 10 \\ (23) \end{gathered}$ | $\begin{gathered} 49 \\ (40) \end{gathered}$ | $\begin{gathered} 418 \\ (419) \end{gathered}$ | $\begin{gathered} 26 \\ (22) \end{gathered}$ | 503 |
|  | Provide inexpensive outdoor recreation | $\begin{gathered} \hline 51 \\ (40) \end{gathered}$ | $\begin{gathered} 66 \\ (70) \end{gathered}$ | $\begin{gathered} \hline 730 \\ (728) \end{gathered}$ | $\begin{gathered} \hline 28 \\ (37) \end{gathered}$ | 875 |
|  | Encourage tourism | $\begin{gathered} 24 \\ (21) \\ \hline \end{gathered}$ | $\begin{array}{r} 36 \\ (38) \\ \hline \end{array}$ | $\begin{gathered} 379 \\ (385) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (20) \\ \hline \end{gathered}$ | 463 |
|  | Other primary purpose | $\begin{gathered} \hline 3 \\ (5) \end{gathered}$ | $\begin{gathered} 5 \\ (8) \end{gathered}$ | $\begin{gathered} 88 \\ (83) \end{gathered}$ | $\begin{gathered} 4 \\ (4) \end{gathered}$ | 100 |
|  | Total | 88 | 156 | 1615 | 82 | 1941 |

## CHAPTER V

# DISCUSSION AND RECOMMENDATIONS 

Introduction

The Oklahoma Tourism and Recreation Department (OTRD) solicited Oklahoma State University to conduct a study to discover how Oklahoma residents viewed and used the Oklahoma state park system. A 20-item survey was designed to discern the needs of Oklahoma residents by the primary researchers, Jordan and Caneday (2004). This investigator used secondary data gathered from the Jordan and Caneday (2004) study, which was not yet made public. This investigator formed research questions to work in conjunction with the survey questions to discover the needs, perceptions and usage of Oklahoma state parks by its residents. The initial data were gathered from phone surveys that were conducted from November 2003 through February 2004 by the Bureau of Social Research (BSR) at Oklahoma State University.

Data from the original surveys were compiled and analyzed using the statistical package for social sciences (SPSS) version 12.0 for Windows. The secondary data were analyzed using crosstabulations, frequencies, and Chi-square tests. This chapter will summarize the conclusions reached using the data obtained and present recommendations for the OTRD to implement into the Oklahoma state park system.

## Discussion


#### Abstract

Research Question \#1 asked, "Are there differences in the use rate of Oklahoma state parks by residents depending upon demographics of those respondents?" All five crosstabulations and chi-square analyses completed to answer research question one were significant. This leads the researcher to believe that there are differences in the use rate of Oklahoma state parks depending upon the demographics of park users. Differences were found in most recent visit with type of visit, type of group with which visited while at parks, number in household, level of education, and primary racial/ethnic affiliation.


Different sized households visit the parks at different rates. Those living alone were more likely not to have ever visited the parks or not visited the parks within the past two years. This may indicate that those living alone do not visit the state parks because they have no one with whom to share group activities. Those living alone were more likely to visit the parks with friends. Those having three or more in their household had the highest total rate of visitation. This information supports Kelly and Freysinger (2000), who found findings that many families visit state parks for family bonding, education reasons, or budget. Respondents with households of three or more may feel that the Oklahoma state parks provide their families an experience that they would not get elsewhere. Larger families may visit state parks to provide fun activities for their family members at lower costs than activities such as theme parks or the movies.

Groups who visit the parks use the parks in a variety of ways; the most common use of the park is day use. Oklahomans visit the parks with their families and enjoy activities such as using picnic tables, nature trails and playground. The majority of day
users were visiting with their immediate families. This may indicate that families visit state parks for the day to provide a low cost form of recreation for their families that provides multiple activities and amenities; and may allow the families to spend time together in ways that are not normally viable in their day to day lives due to work, school, and social commitments. The majority of the survey participants may be day users to the park on weekends or weekday evenings due to weekly work constraints.

## Research Question \#2 asked, "Are there differences in the types of activities

 in which visitors to Oklahoma state parks participate depending upon the demographics of those respondents?" Of the eight crosstabulations and chi-square analyses conducted two of the eight tests were significant, while three of the tests were not significant; the remaining three tests had cell counts of less than five and a chi-square test was not appropriate. Differences were found among type of visit made with group with which visited while at parks, number in household, and highest level of education. Differences were also found in type of group with which visited while at parks and level of education.Residents of Oklahoma go to the state parks with a variety of different groups. The majority of respondents visited with their immediate families. This could be that families may bond and become closer in parks, which is something they may not be able to achieve in their everyday environments due to constraints such as time, work and other obligations. This information is consistent with the findings of Jackson and Burton (1999) that outdoor recreation creates closeness in the family.

Another reason that people may visit the state parks with their immediate families is low cost. A family of four could drive to a state park and visit for the cost of gas and
perhaps the cost of a picnic lunch; while the same family could go to the movies and spend as much as $\$ 32$ for movie tickets and $\$ 40$ for popcorn, candy and drinks for four. Also, a family of could participate in multiple activities at a state park in one day. They could hike a few trails, have a picnic lunch, younger children could use the playgrounds, older family members may participate in wildlife or bird observation, they could bike ride on trails, or use the boat dock to boat or fish. Very few other places could offer a family such a wide variety of activities in the same place for such a low cost.

Research Question \#3 asked, "Are there differences in level of satisfaction with overall condition and management of Oklahoma state parks depending upon demographics of respondents?" Of the 13 crosstabulations and chi-square analyses conducted only four tests were significant. While seven tests were not significant, and the remaining two tests had cells counts of less than five and chi-square analyses were not appropriate. Differences were found among opinion of lodges with satisfaction with park maintenance and upkeep, satisfaction with park management, number of people in household, and highest level of education. Differences were also found among respondent satisfaction with park management and highest level of education.

Residents have different rates of satisfaction with the Oklahoma state park system. The majority of residents reported that they would give the Oklahoma state park system an overall letter grade of B or good. Such a high letter grade may indicate that the state parks and the OTRD are providing the services and amenities for residents in a manner and for a cost that they are satisfied. This rating may be supported by looking at the high numbers of park visitors within a year time frame. Nearly half of the respondents
reported that they had visited the park system within the past year. Such visitation rates could indicated that visitors are satisfied with the park system.

Oklahoma residents have a wide variety of education levels; in this study it was found that the majority of respondents who had visited the parks had an associate's or bachelor's degree or higher education level. This information supports Bowker, Donald, English \& Cordell (1999) who found that people who had been to college were more likely to participate in parks and other outdoor recreation than those with less than 12 years of school. Those with higher education levels were more likely than expected to be at least somewhat satisfied with park maintenance and management, and more likely to have opinions about the financial standing of state parks and types of funding for the parks.

Education levels may play a role in the amount of money a person has to spend. Those with lower education may have lower incomes and thus visit the state parks for a low cost form of recreation. Those with higher levels of education may have higher incomes and choose to visit a state park to stay overnight in a lodge or cabin, which may be more costly. However, this gives them the opportunity to visit the parks and stay in a setting that is less rustic than an environment such as a tent or camper. Those with higher levels of education may also have careers which gives them less time to travel; therefore, a trip to a state park that is close to where they live gives them the opportunity to recreate and does not interfere with their work schedules. Those with less education may have lower incomes. This could choose state parks to be a travel destination because they may provide recreational outlets at a lower cost than a destination such as a theme park. Also,
there are areas to stay such as campgrounds or lodges that may be more cost effective than hotels.

Residents who participated in the survey did not know much about the Oklahoma state park lodges. Many of the survey participants had no opinion or did not have enough information about the state park lodges to form an opinion regarding what should be done with the lodges, or the management, maintenance and upkeep of the lodges. Of those who had opinions of the state park lodges, the majority felt the lodges were an excellent to adequate vacation value. Of those with the opinion that the state park lodges were an excellent to adequate vacation value over half were somewhat satisfied with the management of the Oklahoma state parks.

These results suggest that a large majority of residents do not know about the state park lodges. This could indicate that the OTRD has not done enough promotion of the lodges to residents. Also, those who have used state park lodges may not share their experiences with friends and family, which could lead to other people not learning about the lodges. Most who had visited the park lodges were somewhat satisfied with them. Those with smaller households and higher education were more likely to find the lodges to be an adequate to excellent vacation value.

Those with higher education felt the lodges were a good value; few felt the lodges did not belong, or should be closed. This could indicate that those with higher education felt that the parks should spend their money on other aspects of the park such as maintenance and upkeep, environmental education of visitors or other programs. Also, some park visitors with higher education might be day users and therefore feel that there is no need for lodges.

## Research Question \#4 asked, "Are there differences in attitudes pertaining to

 Oklahoma state parks depending upon demographics of respondents?" Of the five crosstabulation and chi-square analyses conducted, four of the five tests were significant and the remaining test was not significant. Differences were found among respondents’ opinions of state park financial standing with type of additional funding most favored and highest level of education. Differences were also found among type of funding most favored by respondents with highest level of education and primary racial/ethnic affiliation.The study found there were differences between primary racial or ethnic affiliation and park visitation. It was found that Caucasians/Whites were more likely to have opinions regarding funding for the parks. Caucasians/Whites were typically more satisfied than expected with management, maintenance, and park lodges. Those who identified themselves as American Indian/Native American were more likely than expected to be dissatisfied with the parks overall.

Respondents felt that the Oklahoma state parks were at least somewhat underfunded. Education levels played a significant role in how residents felt about the financial standing of the state parks. Those with less education were more likely to feel that the parks were over-funded. This could indicate that those with lower education levels do not understand how state parks operate on a day-to-day basis, and possibly do not realize how much money parks need to operate. Those with higher education levels found the parks to be under-funded; this could indicate that those with higher levels of education could have somewhat of an understanding about the amount of money and types of funds needed to ran a state park. Those with an associate's or bachelor's degree would favor
requiring entrance fees at state parks; and those with bachelor's or associate's degree favored fees for specific amenities. Those with education levels of grade or high school thought some other type of funding should be implemented or did not know what type of funding should be implemented. This indicates that those with some college or a higher level of education not only realize that the parks may need additional funding, but they also have an understanding of from where additional funds could come and how they could be implemented to fund the state park system. Additionally, those with a grade school or high school education who had no opinion about type of funding they would most favor may not have an understanding of other sources of funds and how they could be implemented into the state parks.

Additionally, nearly a quarter of respondents did not have an opinion regarding the financial standing of the state parks; this could indicate that park visitors and Oklahoma residents are not educated about how state parks are funded and the amount of money it takes to run the parks efficiently. This could indicate that residents have somewhat of an understanding about how the parks operate and see that they are currently receiving a lot of benefits for the little to no money they pay to use the parks. Those with lower education levels such as grade to high school were most likely to feel that the parks were not under-funded. This could indicate that those with lower education levels do not understand how the financial operations of the state parks work. Similarly, the results may indicate that those with higher levels of education have a better understanding of financial issues the amount of money the parks need to run efficiently. Overall, the figures indicate that the majority of residents would be willing to pay entrance fees into the parks or would be willing to pay for certain amenities.


#### Abstract

Research question \#5 asked "Are there differences in preferences pertaining to Oklahoma state parks depending upon demographics of respondents?" Of the six crosstabulations and chi-square analyses conducted, none of the six tests were significant. These test results lead this researcher to conclude that there is no difference in preferences for Oklahoma state parks depending on visitor demographics.


## Recommendations

1. This researcher recommends that the OTRD increase promotion of state park lodges to its constituents. Increased promotion of lodges may lead to higher usage rates of lodges and more overnight stays in the state parks; which could lead to increased revenue. However, many respondents felt that the lodges were in some state of disrepair. By increasing the amount of individuals visiting state park lodges the lodges could actually become more run down if the issue is not properly addressed.
2. The researcher recommends that the OTRD implement entrance fees to all state parks and implement fees for specific areas and amenities. Fees should be implemented for boat launch, and picnic shelters; and an increase of fees should be implemented for overnight camping. These fees will ensure more monetary assets for the state parks. These fees can be used for the upkeep and maintenance of park areas such as trails, upkeep and maintenance of camping areas and boat ramps, upgrades of picnic areas and playgrounds, and for the use of educating park visitors about various topics such as wildlife and nature, ecology and environment.

Outdoor activities participated in at the Oklahoma state parks such as walking/hiking, boating, fishing, swimming, observing wildlife, and picnicking were all
rated high by participants of this assessment. By not adding and/or increasing fees to state parks, park areas may become neglected and Oklahoma state park users will not have the facilities to use while visiting state parks. They will have to look elsewhere to find places to meet those needs. Parks were used by a wide variety of people for a variety of different reasons. Much of the literature reviewed in Chapter II discusses how outdoor recreation and parks contribute to a person's well being and a community's economy. Therefore, the parks may be seen as an investment in social, psychological and economic well-being. 3. Even though the majority of respondents were at least somewhat satisfied with the maintenance and upkeep of Oklahoma state parks, respondents' highest priority for the state parks was to rectify existing problems such as maintenance issues. Therefore, the researcher recommends that a study be completed that identifies the areas that are in need of repair or replacement at the Oklahoma state parks. This study could also identify parks that have more needs to be met than others, or parks that are not taking care of the upkeep and maintenance of their areas as they should.
4. Many of the respondents did not have opinions related to park maintenance and upkeep, park management, and the financial standing of the parks. The researcher recommends that the OTRD develop informal education programs about how the state parks operate. These programs could include a section that includes an employment flow chart of Oklahoma state parks so that residents could see the number of people involved in running the state parks. The program could also incorporate a mock budget so that residents could see how much money a park needs to run, where park money comes from, and how the money parks receive is spent.
5. Over half of respondents gave the Oklahoma state park system an overall letter grade of B or higher; however, this leaves nearly $44 \%$ of residents giving the parks a letter grade of C-(fair) or lower. The researcher recommends a study to find out why those who gave grades of "C" or lower felt the way they did. This study should identify the aspects of the state parks with which residents are unhappy and why they are unhappy with those areas. The study could help determine if there is an overall dissatisfaction with the park system or if certain parks are the cause of dissatisfaction. This study could help the OTRD to identify areas within the state parks or individual state parks that are in need of support in areas such as management, and maintenance and upkeep.
6. The researcher recommends that the OTRD provide resources to promote the Oklahoma state parks. The promotion should include how the Oklahoma state parks are an inexpensive getaway, a fun way to recreate alone, with family or friends, a place where nature can be observed and appreciated; and how Oklahoma state parks benefit the residents of Oklahoma.

## REFERENCES

1962 Outdoor Recreation for America- ORRRC Report. (1962).United States Government Printing Office. Washington, D.C.

Allen, L.B., Long, P.T., \& Perdue, R.R. (1987). The role of leisure: Satisfaction in rural communities. Journal of Physical Education, Recreation and Dance. 58, 33-36.

Allen, L. (1990). Benefits of leisure attributes to community satisfaction. Journal of Leisure Research. 22, 183-196.

Anastas, J.W., \& MacDonald, M.L. (1994). Research design for social work and the human services. New York, NY: Macmillan, Inc.

Bowker, J.M, Donald, B., English, H., \& Cordell, H.K. (1999). Projections of outdoor recreation participation to 2050. In H.K. Cordell (Principal Investigator) Outdoor recreation in American life: A national assessment of demand and supply trends. Champaign, IL: Sagamore Press.

Caneday, L., \& Jordan, D. (2003). State Park Visitor Survey 2002-2003.
Caneday, L. (2001). Oklahoma Statewide Comprehensive Outdoor Recreation Plan: The Public Recreation Estate.

Civilian Conservation Corps Reforestation Relief Act. 48 Stat. 22. (1933).
Crawford, D.W., \& Godbey, G. (1987). Reconceptualizing barriers to family leisure. Leisure Sciences. 9, 119-127.

Crawford, D.W., Jackson, E.J., \& Godbey, G. (1991). A hierarchical model of leisure constraints. Journal of Leisure Research.13, 309-320.

Curtin, K.A. (2001). A Needs Assessment of the Residents of Perry (Oklahoma) An Evaluation Of The City Parks System. Unpublished master's thesis, Oklahoma State University, Stillwater.

DeGraaf, D.G.; Jordan, D.J., \& DeGraaf K.H. (1999). Programming for parks, recreation and leisure services: A servant leadership approach. State College, PA: Venture Publishing, Inc.

Dillman, D.A. (1978). Mail and telephone surveys: The total design method. New York, NY: John Wiley and Sons.

Domestic policy councils task force on outdoor recreation resources and opportunities. (1998). United States Government Printing Office. Washington, D.C.

Douglass, R.W. (1993). Forest Recreation. Prospect Heights, IL: Waveland Press.
Driver, B.L., Brown, P.J., \& Peterson, G.L. (1991). Research on leisure benefits: An introduction to this volume. In Driver, B.L., Perry, J.B., and Peterson, G.L. (Eds.) Benefits of Leisure. State College, PA: Venture Publishing, Inc.

Dustin, D. (1999). The benefits equation. Parks and Recreation. 34, 32-40.
Dustin, D., \& Goodale, T. (1997). The social cost of individual benefits._Parks and Recreation. 32, 20-23.

Harmon, D., \& Putney A. (2003). The full value of parks from economics to the intangible. Lanham, MD: Rowman and Littlefield Publisher, Inc.

Hobbs, D. (1987). Strategy for needs assessments. In D.E. Johnson, L. R. Miller, L.C. Miller and G.F. Summers (Eds.) Needs assessments: Theory and methods. Ames, IA: Iowa State University Press.

Holland, R.A. (1969). The Civilian Conservation Corps in Oklahoma, 1933-1942. Unpublished master's thesis, Oklahoma State University, Stillwater.

Hultsman, W. (1995). Recognizing patterns of leisure constraints: An extension of the exploration of dimensionality. Journal of Leisure Research. 27, 228-244.

Iso-Ahola, S., \& Park, C. (1996). Leisure-related social support and self-determination as buffers of stress-illness relationship. Journal of Leisure Research. 28, 169-189.

Jackson, E.J., \& Burton, T.L. (1999). Leisure studies: Prospects for the twenty-first century. State College, PA: Venture Publishing.

Jackson, E.J., Crawford, D.W., \& Godbey, G. (1993). Negotiation of leisure constraints. Leisure Sciences. 15, 1-11.

Jackson, E.J. (1991). Leisure constraint/constrained leisure: Special issue introduction. Journal of Leisure Research. 23, 279-285.

Kay, T., \& Jackson, G. (1991). Leisure despite constraint: The impact of leisure participation. Journal of Leisure Research. 23, 301-313.

Kelly, J.R., \& Freysinger, V.J. (2000). $21^{\text {st }}$ Century leisure: Current issues. Needham Heights, MA: Allyn and Bacon.

Kelly, J.R. (1983). Social benefits of outdoor recreation: An introduction. In S.R> Liever and D.R. Fesenmaier (Eds.) Recreation planning and management. State College, PA: Venture Publishing.

Kraus, R.G., \& Curtis, J.E. (1990). Creative management in recreation, parks, and leisure services. Boston, MA: Times Mirror/Mosby College Publishing.

Lee, J.H., Scott, D., \& Floyd, M.F. (2001). Structural inequalities in outdoor recreation participation: A multiple hierarchy stratification perspective. Journal of Leisure Research. 33, 427-449.

Maier, P., \& Percy, S.L. (1995). Parks and recreation in Milwaukee County: Public perceptions and evaluations. Research and Opinion. 9, 1-13.

Marans, R., \& Rodgers, W. (1975). Toward an understanding of community satisfaction. In: Hawley, A.; Rock, V. eds. Metropolitan American in Contemporary Perspective. New York: John Wiley and Sons. 299-352.

Mertes, J. and Hall, J. (1996). Park, recreation, open space, and greenway guidelines. Ashburn, VA: National Recreation and Park Association.

Mitra, A. (2001). Thinking of recreation needs assessments. Parks and Recreation. 36, 18-21.

More, T., \& Stevens, T., (2002). Do user fees exclude low-income people from resourcebased recreation? Journal of Leisure Research. 32, 341-357.

National Park Service Website (2001). Public use statistics. Available:
www.nps.gov/socialscience.
National Sporting Goods Association. (2003). Research and statistics. Available: www.nsga.org/public/pages/index.cfm? pageid=1

Neal, B.J. (1999). Role Conflict, Role Ambiguity and Organization-Based Self-Esteem Among Park Ranger Professionals. Unpublished master's thesis, Oklahoma State University, Stillwater.

President's Commission on Americans Outdoors. (1986). Report and recommendations to the President of the United States. United States Government Printing Office. Washington, D.C.

The Recreation Roundtable. (1999). Outdoor recreation in America. Available: www.funoutdoors.com/Rec99.

Reviere, R., Berkowitz, S., Carter, C.C., \& Graves Ferguson, C. (1996). Needs assessment: A creative and practical guide for social scientists. Washington, DC: Taylor and Francis.

Riddick, C.C., \& Russell, R.V. (1999). Evaluative research in recreation, park, and sport settings: Searching for useful information. Champaign, IL: Sagamore Publishing.

Rossman, J.R. (1995). Recreation programming: Designing leisure experiences. Champaign, IL: Sagamore Publishing.

Rossman, J.R., \& Schlatter, B.E. (2003). Using visual imaging in recreation programming. Journal of Physical Education, Recreation and Dance. 74, 44-47.

Samdahl,D., \& Jekubovick, N. (1997). A critique of leisure constraints: Comparative analyses and understandings. Journal of Leisure Research. 29, 430-453.

Sharpe, G.W., Odegaard, C.H., \& Sharpe, W. 1994. A comprehensive introduction to park management. $2^{\text {nd }}$ ed. Champaign: Sagamore Publishing.

Shaw, S.M., Bonen, A., \& McCabe, J.F. (1991). Do more constaints mean less leisure" Examining the relationship between constraints and participation. Journal of Leisure Research. 23, 286-300.

Shaw, S. (1994) Gender, leisure, and constraint: Towards a framework for the analysis of women's leisure. Journal of Leisure Research. 26, 8-22.

Shelby, B., \& Heberlein, T.A. (1986). Carrying capacity in recreation settings. Corvallis, OR: Oregon State University Press.

Soderberg, P. (1995). The benefits of parks. In California Park and Recreation Society (Ed). Phoenix Project Handbook, Leveraging the Benefits of Parks and Recreation (pp 11-31). Sacramento, CA: California Park and Recreation Society.

State Park Agencies. (2003). (On-line). Available: www.ti.org/Parkstext.html
Summers, G.F. (1987). Democratic governance. In D.E. Johnson, L. R. Miller, L.C. Miller and G.F. Summers (Eds.) Needs assessment: Theory and methods._Ames, IA: Iowa State University Press.

Super, D. E. (1990). A life-span, life space approach to career development. Journal of Vocational Behavior._16: 282-298.

Tinsley, H.E., Tinsley, D.J., \& Croskeys, C.E. (2002). Park usage, social milieu, and psychosocial benefits of park use reported by older urban park users from four ethnic groups. Leisure Sciences. 24, 199-218.

Tinsley, H., \& Eldredge, B.D. (1995). Psychological benefits of leisure participation: A taxonomy of leisure activities based on their need-gratifying properties. Journal of Counseling Psychology._42: 123-132.

Tinsley, H., \& Tinsley, D.J. (1986). A theory of the attributes, benefits and causes of leisure experience. Leisure Sciences. 8, 1-45.
U.S. Census Bureau. (2002). American Community Survey. (On-line). Available: http://www.census.gov

Wagar, J.A. (1974). Recreational carrying capacity reconsidered. Journal of Forestry. 723: 274-278.

Wellner, A.S. (1997). Americans at play. Demographics of outdoor recreation and travel._New York, New Strategist Publications, Inc.

Winter, P.L., Palucki, L.J., \& Burkhardt, R.L. (1999). Anticipated responses to a fee program: The key is trust. Journal of Leisure Research. 31, 207-226.

Witkin, B.R., \& Altschuld, J.W. (1995). Planning and conducting needs assessments: A practical guide. Thousand Oaks, CA: Sage Publications.

Wright, B., \& Goodale, T. (1991). Beyond non-participation: Validation of interest and frequency of participation categories in constrains research. Journal of Leisure Research. 23, 314-331.

## APPENDIXES

## APPENDIX A

## Survey Question

The following survey is the original survey created by Jordan and Caneday (2004). The questions containing asterisks are items used in this secondary data research project.

State Parks OTRD
Telephone Survey
Fall 2003
*1. Which best describes your visitation to an Oklahoma state park? Would you say you...
$1=$ Have never visited an Oklahoma state park.
2 = Have visited a state park within the past six months.
3 = Have visited a state park within the past twelve months.
$4=$ Have visited a state park within the past two years.
$5=$ Have visited, but not in the past two years.
$8=$ Don't know
$9=$ Refused to answer
2. What are the names of the Oklahoma state parks you have visited in the past two years?

Open-ended
*3. If you have not visited the parks within the past two years, why not? Is it because...
$1=$ You chose not to. (You are not an outdoors person.)
$2=$ The parks are in such poor condition as to be undesirable.
$3=$ The parks are over-crowded.
$4=$ The parks are all too far away.
$5=$ Going to the state parks is too expensive.
$6=$ You have a disability and cannot use the parks.
$7=$ Some other reason.
$8=$ Don't know
$9=$ Refused to answer
Why have you not visited the parks within the past two years?
Open-ended
*4. During your most recent visit to an Oklahoma state park, what type of visit did you make? Was your visit...
$1=$ As a day user (did not spend the night).
$2=$ As a camper and stayed in a tent.
3 = As a camper and stayed in your RV or trailer.
4 = An overnight stay in a cabin in the park.
$5=$ An overnight stay in a lodge in the park.
$6=$ An overnight stay in a group camp in the park.
$8=$ Don't know
$9=$ Refused to answer
*5. On your typical visits to Oklahoma state parks, what BEST describes the type of group with whom you visit? Do you...
$1=$ Visit the parks alone.
$2=$ Visit the parks with immediate family.
$3=$ Visit the parks with extended family.
$4=$ Visit the parks with friends
$5=$ Visit the parks with special groups (church, graduation party, work groups)
$8=$ Don't know
$9=$ Refused to answer
*6.1 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? I'll read a short list, and you can say 'yes' or 'no' to each. Boating or personal watercraft

$$
0=\mathrm{No}
$$

$$
1=\mathrm{Yes}
$$

*6.2 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? I'll read a short list, and you can say 'yes' or 'no' to each. Group activities

$$
\begin{aligned}
& 0=\mathrm{No} \\
& 1=\mathrm{Yes}
\end{aligned}
$$

*6.3 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? I'll read a short list, and you can say 'yes' or 'no' to each. Fishing from shore or a dock

$$
\begin{aligned}
& 0=\mathrm{No} \\
& 1=\mathrm{Yes}
\end{aligned}
$$

*6.4 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? I'll read a short list, and you can say 'yes' or 'no' to each. Hiking on nature trails, observing wildlife, enjoying nature $0=$ No
$1=\mathrm{Yes}$
*6.5 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? I'll read a short list, and you can say 'yes' or 'no' to each.

$$
\begin{aligned}
& 0=\text { No } \\
& 1=\text { Yes }
\end{aligned}
$$

*6.other Other activity specified Open-ended
*7.1 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Boat ramp

$$
\begin{aligned}
& 0=\text { No } \\
& 1=\text { Yes }
\end{aligned}
$$

*7.2 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Picnic tables
$0=$ No
$1=\mathrm{Yes}$
*7.3 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Playground
$0=$ No
$1=\mathrm{Yes}$
*7.4 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Nature trails
$0=$ No
$1=\mathrm{Yes}$
*7.5 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Courtesy dock
$0=$ No
$1=\mathrm{Yes}$
*7.6 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Swimming pool
Values: $0=$ No
$1=\mathrm{Yes}$
*7.7 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Golf course
$0=$ No
$1=\mathrm{Yes}$
*7.8 Now I'm interested in knowing what amenities you or a member of your group used on your most recent visit to an Oklahoma state park. I'll read a short list, and you can say 'yes' or 'no' to each. Other amenities
$0=\mathrm{No}$
$1=\mathrm{Yes}$
7.other Other amenity used

Open-ended
*8. Based on your knowledge of the state park SYSTEM, which of the following BEST expresses your opinion of the financial standing of the state parks SYSTEM? Would you say...

1 = Oklahoma state parks are severely under-funded.
$2=$ Oklahoma state parks are somewhat under-funded (a little under-funded).
3 = Oklahoma state parks are adequately funded as is.
4 = Oklahoma state parks are over-funded.
$8=$ Don't know (do not have enough information to form an opinion about this)
$9=$ Refused to answer
*9. If it were determined that the state park SYSTEM needed additional funding, which of the following would you MOST favor? Would you most favor...
Values: $1=$ Entrance fees for all users (overnight fees would include the entrance fee).
$2=$ Fees in all parks for use of specific amenities (such as boat ramp use or
shelter use).
$3=$ An increase in overnight lodging and camping fees to subsidize park operations.

4 = Dedicating a portion of a sales tax to go to all state parks.
$5=$ Increased appropriations from state government.
6 = Expansion of in-park commercial services (e.g., concessionaires, management contracts).
7 = Some other source of funding.
8 = Don't know
$9=$ Refused to answer
9.other What source of funding would you favor? (Please describe.)

Open-ended
*10. Which of the following BEST expresses your opinion of the LODGES in the state parks? Would you say...
$1=$ The lodges are in such disrepair, they should be closed.
$2=$ The lodges are an excellent vacation value.
$3=$ The Oklahoma Tourism and Recreation Department should build additional lodges in more state parks.
$4=$ Lodges do not belong in the state parks.
[5 $=$ I have no opinion of the lodges in the state park system/Don't know]
[6 = Repair existing lodges]
[7 = Lodges are an adequate vacation value]
$9=$ Refused to answer
*11. Which of the following do you believe should be the PRIMARY purpose of the Oklahoma state park SYSTEM? Do you believe the primary purpose of the state park system should be...
$1=$ To protect our natural resources.
$2=$ To provide inexpensive outdoor recreation opportunities to the citizens of Oklahoma.
3 = To encourage tourism and economic development.
4 = Some other primary purpose.
$8=$ Don't know
$9=$ Refused to answer
11.other What should be the primary purpose of the Oklahoma state park system?

Open-ended
*12. Which of the following do you believe should be the HIGHEST PRIORITY for Oklahoma state parks?
$1=$ Rectify the existing problems in the state parks (such as maintenance).
$2=$ Close some parks and re-distribute the funding to needy parks.
$3=$ Build more developed areas within the parks (golf courses, airports, lodges).
$4=$ Find additional funding sources for the state park system.
$5=$ Purchase additional lands for future park development.
$6=$ Some other priority.
$8=$ Don't know
$9=$ Refused to answer
12.other What should be the highest priority for the Oklahoma state parks?

Open-ended
*13. We are almost finished. In general, how satisfied are you with the MAINTENANCE AND UPKEEP in Oklahoma state parks? Are you...
$1=$ Very dissatisfied
$2=$ Somewhat dissatisfied
3 = Somewhat satisfied
$4=$ Very satisfied
8 = Don't know (no idea/no experience)
$9=$ Refused to answer
14. In one sentence, please explain why you feel this way:

Open-ended
*15. In general, how satisfied are you with the MANAGEMENT of the Oklahoma state parks? Are you...
$1=$ Very dissatisfied
$2=$ Somewhat dissatisfied
3 = Somewhat satisfied
$4=$ Very satisfied
$8=$ Don't know
$9=$ Refused to answer
16. In one sentence, please explain why you feel this way:

Open-ended
*17. What overall grade would you give the Oklahoma state park system? Would you say...
$1=\mathrm{A}-$ excellent
$2=\mathrm{B}-$ goood
$3=\mathrm{C}-$ fair
$4=\mathrm{D}-$ poor
$5=\mathrm{F}-$ failing
$8=$ Don’t know
$9=$ Refused to answer
*18. Before ending this interview I have a few background questions. What is the number of people (including yourself) living in your household?

Range 1-20
$88=$ Don't know
$99=$ Refused to answer
*19. What is the highest level of education attained by an individual in your household?
$1=$ Grade school
$2=$ High school
3 = Some college
4 = Associates or bachelor's degree
$5=$ Graduate degree
$6=$ Professional degree (MD, DDS, JD, etc.)
$8=$ Don't know
$9=$ Refused to answer
*20. What is your PRIMARY racial or ethnic group affiliation?
$1=$ African American/Black
$2=$ American Indian/Native American
3 = Asian American
4 = Caucasian/White
$5=$ Hispanic/Latino/Chicano
$6=$ Multiple racial/ethnic group identity
[7 = Other]
$8=$ Don't know
$9=$ Refused to answer

## APPENDIX B

"Other" Responses to Survey Question \#6

## Question \#6 On your most recent visit to an Oklahoma state park, in which of the following activities did you or a member of your group participate? "Other" activity specified

| Fixed choice response | 1801 | 89.5 |
| :--- | ---: | ---: |
| Archeological dig | 1 | 0.0 |
| Arts and craft shows | 1 | 0.0 |
| Ate at restaurant | 6 | 0.3 |
| ATV riding | 5 | 0.2 |
| ATV riding and motorcycle riding | 1 | 0.0 |
| Barbecuing and sitting around | 1 | 0.0 |
| Bathroom facility | 1 | 0.0 |
| Bike riding | 4 | 0.2 |
| Birthday party | 1 | 0.0 |
| Business meetings. After hours, we had a banquet | 1 | 0.0 |
| Campfires, repelling at Red Rock, and rock- | 1 | 0.0 |
| climbing |  |  |
| Camping | 8 | 0.4 |
| Caving | 2 | 0.1 |
| Choir camp | 1 | 0.0 |
| Cookout | 2 | 0.1 |
| Dancing party | 1 | 0.0 |
| Didn't do anything | 4 | 0.2 |
| Dinner at the lodge | 2 | 0.1 |
| Drinking beer at Oktoberfest at Frontier City | 1 | 0.0 |
| Driving through; went to a wedding there | 1 | 0.0 |
| Drove through site seeing | 11 | 0.5 |
| Dug for crystals at the Great Salt Plains | 1 | 0.0 |
| Enjoyed the water | 1 | 0.0 |
| Exercise | 1 | 0.0 |
| Family reunion | 2 | 0.1 |
| Feeding fish | 1 | 0.0 |
| Festival | 1 | 0.0 |
| Geocaching, playing hide and seek using GPS | 3 | 0.1 |
| tracking | 1 | 0.0 |
| Go to my cabin and read |  |  |
|  |  |  |


| Golfing | 22 | 1.1 |
| :---: | :---: | :---: |
| Golfing, flying at the airstrip | 1 | 0.0 |
| Had meetings in the lodges, horseback riding, husband plays golf | 1 | 0.0 |
| Hayride | 1 | 0.0 |
| Horseback riding | 11 | 0.5 |
| Horseback riding and bicycling | 1 | 0.0 |
| Horseback riding and golfing | 1 | 0.0 |
| Horseback riding, at the lodge activities for kids | 1 | 0.0 |
| Horseback riding, looking at rock layers, and searching rose rocks | 1 | 0.0 |
| Hunting | 4 | 0.2 |
| Jogging | 1 | 0.0 |
| Keying plants for Botany | 1 | 0.0 |
| Lodge had activities for the kids | 1 | 0.0 |
| Look at the Christmas lights | 1 | 0.0 |
| Motorcycle riding | 2 | 0.1 |
| Mountain biking | 2 | 0.1 |
| Music festival | 1 | 0.0 |
| Obtain reservations for a family reunion, site seeing | 1 | 0.0 |
| Overnight lodging | 1 | 0.0 |
| Played tennis | 1 | 0.0 |
| Rappelling | 1 | 0.0 |
| Relaxing | 2 | 0.1 |
| Rock climbing | 4 | 0.2 |
| Rock climbing, cliff diving, mountain biking, tree climbing | 1 | 0.0 |
| Run around the mile track | 1 | 0.0 |
| Service project with Boy Scouts | 1 | 0.0 |
| Sit, eat, visit with family | 1 | 0.0 |
| Site seeing | 3 | 0.1 |
| Sleeping in a hollow log | 1 | 0.0 |
| Swimming | 51 | 2.5 |
| Swimming in the pool and camping | 1 | 0.0 |
| Swimming, horseback riding | 1 | 0.0 |
| Visit with friends | 2 | 0.1 |
| Visited exhibits | 1 | 0.0 |
| Visited museum | 4 | 0.2 |
| Visited museum and exhibits | 1 | 0.0 |
| Visited nature center at Broken Bow | 1 | 0.0 |
| Visiting | 1 | 0.0 |


| Visiting, relaxation, and watching fireworks | 1 | 0.0 |
| :--- | ---: | :--- |
| Walking and fishing | 1 | 0.0 |
| Walking around the lake | 1 | 0.0 |
| Watch a wedding | 1 | 0.0 |
| Watching fireworks | 1 | 0.0 |
| Watching the OU orchestra | 1 | 0.0 |
| We stopped to dump RV holding tank | 1 | 0.0 |
| We went to a couple of the musicals and to the | 1 | 0.0 |
| $\quad$ lodge | 2 | 0.1 |
| Went to the beach | 1 | 0.0 |
| Worked, mowed and stuff | 2013 | 100.0 |

VITA
Maria N. Kluemper
Candidate for the Degree of Leisure Studies
Master of Science
Thesis: OKLAHOMA RESIDENTS' PERCEPTIONS OF STATE PARKS

Major Field: Leisure Studies
Biographical:
Education: B.S. Indiana State University, August 2001
Major: Recreation and Sports Management
Completed the Requirements for the Master of Science degree at Oklahoma State
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Experience:
Instructor Oklahoma State University Spring 2004:
Introduction to Weight Training
Teaching Assistant Oklahoma State University Spring 2004:
Beginning Rock Climbing Introduction to Backpacking

Graduate Assistant January 2002 - May 2004
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Retail Manager February 1999 - August 2001

Name: Maria N. Kluemper
Date of Degree: July 2005
Institution: Oklahoma State University
Location: Stillwater, Oklahoma
Title of Study: OKLAHOMA RESIDENTS' PERCEPTIONS OF STATE PARKS

Pages in Study: 132 Candidate for the Degree of Masters of Science
Major Field: Leisure Studies
Purpose and Method of Study: The purpose of this study was to assess the needs of the citizens of Oklahoma regarding the Oklahoma State Park system. This assessment was conducted to determine the changes needed to be made by the Oklahoma Tourism and Recreation Department to reflect the wishes of its constituents. The study identifies park use patterns and frequency, perceptions of visitors, and visitor satisfaction regarding the Oklahoma state park system.

Findings and Conclusions: Consistent with previous research, the findings of this study conclude that Oklahoma state park visitors use specific amenities while visiting parks, visit the parks with a variety of different groups, and have expressed opinions regarding the park management, funding and maintenance and upkeep.
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