

The Pennsylvania State University

The Graduate School

Recreation, Park, and Tourism Management

**PARK USE CHARACTERISTICS, CONSTRAINTS, AND DESIRED  
STRATEGIES TO REDUCE CONSTRAINTS: A COMPARISON OF SINGLE  
PARENT AND DUAL PARENT LEISURE BEHAVIOR**

A Thesis in

Recreation, Park, and Tourism Management

by

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Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of  
Master of Science

December 2009

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## ABSTRACT

The purpose of this thesis is to make comparisons between the park use of single parents and dual parents within an urban environment. Specifically, leisure behavior and perceptions between these groups will be analyzed in several areas. These areas include park use behaviors, perceived constraints preventing or decreasing park use, and preferences for agency affordance strategies that may reduce these constraints.

This thesis was part of a larger investigation of park usage in Northeast Ohio. Data were collected in conjunction with Triad Research Group, Inc. of Cleveland Ohio. Telephone surveys were administered to residents of Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit counties in the greater Cleveland metropolitan area. In total, 1200 surveys were collected with a 77% response rate. Of these data, 96 were considered single parents compared to 278 married parents. The data were then analyzed using cross-tabular tests with Chi-square analyses. To control the population for income, the data were then re-analyzed using logistic regression methods.

Findings indicated that single parents face transportation constraints more so than dual parents even when controlling for income. Park managers who wish to serve single parents should consider potential public transportation strategies in order to provide increasing accessibility and convenience. Additionally, single parents indicated that fear of crime and a desire to make parks safer were salient concerns. Finally, single parents were more likely to indicate a desire for programming involving child-care within public park offerings.

## Table of Contents

List of Tables.....	v
Chapter 1 INTRODUCTION.....	1
The Movement towards Recreational Equality.....	1
Concern for Single Parent Households and Families.....	2
Family Development Theory.....	3
Single Parent Households: What Do We Know About Them?.....	6
Research Questions.....	8
Chapter 2 LITERATURE REVIEW.....	11
Race as a Recreational Constraint.....	11
Gender as a Recreational Constraint.....	12
Income as a Recreational Constraint.....	13
Family Status as a Recreational Constraint.....	14
Correlations among Single-Parent Populations.....	15
Chapter 3 METHODS.....	20
Data Collection and Sample Description.....	20
Independent Variables.....	24
Dependent Variables.....	27
Data Analysis.....	33
Chapter 4 STUDY FINDINGS.....	36
Introduction.....	36
Demographic Analysis.....	36
Results/Findings for Research Questions.....	40
Chapter 5 Discussion and Conclusions.....	74
Conclusion.....	74
Discussion of the Statistical Analysis.....	76
Limitations of the Study.....	81
Implications for Future Research.....	83
References.....	86
Appendix: Survey Instrument.....	93

## List of Tables

<b>TABLE 1</b>	Independent Variable Recodes.....	27
<b>TABLE 2</b>	Dependent Variable Recodes.....	32
<b>TABLE 3</b>	Demographic Percentages of Single Parents vs. Dual Parents.....	37
<b>TABLE 4</b>	Reported Results of Previous Park Visitation.....	41
<b>TABLE 5</b>	Logistic Regression Predicting Park Visitation from Parental Status and Household Income.....	46
<b>TABLE 6</b>	Reported Results of Park Visitation Constraints .....	50
<b>TABLE 7</b>	Logistic Regression Showing Constraints from Parental Status and Household Income.....	54
<b>TABLE 8</b>	Reported Results for Desired Agency Affordance Strategies .....	61
<b>TABLE 9</b>	Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income .....	66

## Chapter 1

### Introduction

#### The Movement towards Recreational Equality

Park and recreation services can be viewed as a common good that assists in creating a more positive society (Burt, 1971; Driver, 1976; Sallis, 1997). However, throughout history these services have either been implicitly or explicitly denied to certain segments of society. These exclusions can exist in many ways including racially segregated pools during Jim Crow laws, inaccessible facilities to those with disabilities, or golf courses priced beyond the means of those with low incomes. During notable periods of our nation's history, movements arose which fought for equal rights for women, minorities, and the working class. Through these efforts, legislation was passed providing more rights for minority citizens. Examples of these laws include the Americans with Disabilities Act (ADA) of 1990 and *Brown. v. Board of Education* overturning the notion of "separate but equal" in 1954. These laws, while not always specifically aimed at recreation, had many repercussions including fairness in recreational access. Although the ADA legislates more than just recreation, it does require equal access for all public entities, which includes public parks and recreation. However, the Rational Recreation Movement of the latter half of the 1800s can be seen as a precursor to these other legislations. During this period of time, recreation was seen as becoming more commercialized due to a growing merchant class brought about by the Industrial Revolution. Working class leisure at this time was perceived as unhealthy, mostly occurring in taverns, music halls, and gaming houses. While this

movement may have been guided by an elitist and condescending ideology, it did provide some tangible results such as statutes that made it possible for local governments to provide public leisure such as libraries and parks. The creation of the YMCA is another example of recreational opportunities created for the working class. The large numbers of municipal parks and organizations like the YMCA which remain in our society today is a testament to the lasting impact of the Rational Recreation Movement.

### Concern for Single Parent Households and Families

Although equality has become vocally desired by government and most private agencies, the delivery of this goal remains unfulfilled at times. Although access is no longer barred by law, minority groups continue to underuse certain recreation due to social, rather than legal, discrimination (Floyd, 1993). Public parks and recreation is a governmental service that continues to struggle in providing equitable access to all marginalized populations. Within this movement towards equality, certain groups have received the bulk of attention from both the media and the academic community. Areas such as ethnic and gender diversity have garnered the most attention (Floyd, 1994; Henderson, 1996). Recently a greater emphasis has also been placed on sexual orientation (Ram, 2004). However, other types of diversity exist which do not receive as much attention as these groups. For example, relatively little work has been done examining family structure as it relates to recreational choices, patterns, and barriers. Since the 1960s, the American family has undergone numerous transformations and can no longer be described through the lens of traditional structures (e.g., married mother and father with children). The rising rate of divorce has created many families

who are split (Dornbusch, 1985). Many parents are choosing to remain single even after their children are born (Bumpass, 1989). Increases in interracial marriages have created biracial children that can potentially face discrimination from both ethnic groups (Qian, 1997). Increased rights for homosexual couples have created families with an alternative to the mother/father dynamic. Each of these non-traditional family structures has received discrimination (Nicholson, 1996; Tajfel, 2004). However, little is known about the impact of this discrimination upon recreational access of non-traditional families.

One emerging element within non-traditional family structures is the growing number of parents raising children without another parent residing within the home. Beginning in the 1960s, the number of single parents grew significantly over several decades (Bianchi, 1995). Additionally, these families have faced many difficulties that have perhaps impacted their leisure patterns and behaviors. (These difficulties will be expounded upon in later sections.) Single parent households now encompass a substantial part of the population at 5-10% (Bianchi, 1995). This may not seem large, but these numbers indicate that as many as 30.5 million people within the United States reside in a single-parent home. While all types of non-traditional families are relevant and appropriate for study, this thesis will focus on single parents and their ability to access public recreation.

### Family Development Theory

Within the study of Human Development, families are often examined through the lens of the Family Development Theory. This theory focuses on the patterns of systematic change families undergo as they move through their life trajectories



(Rodgers, 1993). Within this theory, the term family is defined as a social group containing at least one parent-child relationship. Under this definition, single-parent households fall under the term “family.” However, the research from which this theory was developed involved primarily traditional dual-parent households. This theory became widely used after World War II (Hill, 1949; Duvall, 1988). In the mid-1960s, Family Development Theory began to model the concept of human aging with life-cycle (family) stages such as marriage, children, transitioning children to their own families, and ending with the empty nest (Hill & Rodgers 1964). During these decades, the traditional family was considered proper and alternative family lifestyles frowned upon, and the focus of the research reflected these norms.

This theory is also useful in examining the developmental trajectory of single-parent households. Using this perspective, research indicates that single-parent families must accomplish most of the developmental stages which traditional families must. These stages include the birth and raising children, transitioning children to their own home, and the empty nest. However, the important difference within the family is the available personnel to accomplish these tasks (Hill, 1986). Additionally, the lack of personnel exists in the mature adult part of the family responsible for driving progress and transitional change. The remaining adults are highly taxed in both resources and expanded effort involved in maintaining the family (Dornbusch, 1985). These difficulties will often lead to several differences within the development of single-parent families. These families will experience an increased number of critical transitions between equilibrium periods, and these transitions will take increased time to occur (Hill, 1986). For families, equilibrium is defined as periods of time with residential stability and a

constant number of people within the family. In a traditional home, the birth of a child is a critical transition, which can cause upheaval and difficulties within the family. Single-parent households may go through birth of children, exit of one parent, and the potential entrance and exit of various adults as transitional events. If a single parent decides to remarry, other family members may need to negotiate (or acclimate) the addition of new adults and children concurrently. Each of these transitions will disrupt equilibrium, which has negative effects on a variety of family outcomes such as economic difficulties as well as behavior issues and lower educational attainment for children (Hetherington, 1989)

Eventually, the rigidity in which Family Development Theory examined family dynamics began to be questioned because of the assumptions of universal and invariant family stages (White 1991; Bengtson & Allen 1993). Some academics believe this invalidates Family Development Theory and think it cannot be used as a scientific theory (Aldous, 1990). However, this theory remains popular today with researchers applying the concept of family stages to alternative families. While alternative families may not experience the same stages and timing as a traditional family, different trajectories can be mapped for each of these family structures. This approach has been used with alternative families such as blended families (Baxter, Braithwaite, & Nicholson 1999), and sexual orientation (Friedman 2001). While this theory carries the same limitations as any social-science theory and will continue to be refined, it remains useful within the study of family development. Family Development Theory is a useful tool in understanding why single-parent families often follow different developmental trajectories than other households. Additionally, these different trajectories will often

have ramifications which make life situations of single-parent families very different.

Trends and demographics within this population can help to understand how recreation for single parents might differ from their dual-parent counterparts.

### Single-Parent Households: What Do We Know About Them?

As previously mentioned, the percentage of families consisting of one parent went through dramatic increases during several decades including the 1960s, 70s, and 80s (Bianchi, 1995). Beginning in the 1970s, the rate of divorces within the United States rose substantially. This increase was influenced by a variety of factors. The women's rights movement helped raise the status of females giving them the power to leave undesirable unions. The subsequent increase of women in the workplace gave them the financial freedom to leave their husbands. Additionally, the restructuring of divorce laws in the 1980s made separation more convenient (Melli, 1986). Although this increase in divorces leveled off in the 1990s, the divorce rate shows no long term indications of decreasing (Goldstein, 1999).

However, these factors are not the only means through which single-parent households are created. An increasing number of children are being born outside of marriage (Bumpass, 1989). While some of these children live with two committed but unwed parents, many others are single-parent households. In the mid 1990s, it was estimated that 5-10% of households within the United States consist of one parent (Bianchi, 1995). However, it is important to note that family situations are fluid and subject to change. While this percentage may be at 10% at one given time, some researchers think as many as 20% of children have resided in a single-parent household at some point before they turn 18 (Bumpass, 1989). At present, the single-

parent household has become a significant part of the population and will remain a part of society in the foreseeable future.

While single-parent households have risen in numbers, they have not necessarily risen in economic status. Some of the social stigmas associated with single household status have eased, but this population remains disadvantaged in several important ways. For example, on average, single parents make less money than their married counterparts (Pett, 1986). This is especially true for single mothers, which remain the majority of single parents in general. Although their presence in the workforce gave women the ability to obtain income, it did not make the majority prosperous (Macpherson, 1995). While single fathers fare somewhat better than mothers, their financial situations are still below average (Greif, 1995). In 1998, the median income for single mothers was \$18,000. For single fathers, the median income was \$30,000. Both of these figures are substantially less than the \$57, 000 earned by dual parent households in the same year (U.S. Census, 2001). Single parents also face greater time constraints (Sanik, 1986). The responsibilities of running a household will fall to one parent, effectively doubling the amount of time one parent needs to spend to retain the same level of comfort. This amount of effort is often unattainable, and the household can often suffer as a result. Children within these households score lower in school and often face economic difficulties in their own adulthood. These children also enter the juvenile penal system and are incarcerated as adults at rates higher than their dual-parent counterparts.

Although single-parent families face additional difficulties, evidence exists indicating that this structure is not intrinsically problematic for family functioning as some

scholars believe. When socio-economic status (SES) is controlled, many of the negative outcomes, including poor health and lower educational attainment, become less pronounced (Hanson, 1986). The evidence indicates that social status, not structure, is the larger influence on these outcomes. Some research indicates that many negative outcomes of children raised by single parents are mediated by educational attainment, not family structure (Krein, 1986). Single parents who have accessed higher levels of education generally are able to provide more income and security, negating many of the issues of low SES. Those single parents with higher SES continue to access higher education at higher rates and at more selective universities (McDonough, 1994). Parks and recreation can have a positive impact on the lives of single parents, therefore it is important to study additional recreation constraints faced by this population. A great deal of scholarship has already been devoted to other disadvantaged groups. However, few studies have specifically addressed the constraints that these populations face in their use of parks and whether/how these families differ from traditional dual parent families in terms of constraints, and preferences for strategies to reduce those park use constraints.

### Research Questions

Knowledge about single parent household use of parks, specific barriers or constraints to park use, and preferred efforts to overcome those constraints (through agency affordance strategies) will enhance our understanding of this populations' use of leisure services and how to best accommodate the needs of these families. Single parents may be more constrained than traditional dual parent families, making recreational access more difficult. Single parents may also show more financial

constraints. While free elements such as parks may be available, other recreational opportunities with higher costs might be beyond the reach of many single parents. Additionally, even elements of parks and recreation without user fees have costs associated with visitation. These costs could take the form of actual monetary expenditures such as transportation and equipment. They could also take the form of opportunity costs, with time at parks not being devoted to providing income or other necessities for the household. However, it must first be determined if family status itself, not just a high correlation with low income, shapes the impact of these costs upon recreational access. Recent data has found that low-income neighborhoods have little park space, and funding allocations are only continuing this discrepancy (Wolch, 2005). Due to their SES, single parents may predominately live further from available parks causing longer travel to access these parks, greater difficulty in affording/having transportation options to get to parks, and lack of time to use parks due to the balance of family care and dual work responsibilities. At this point, limited knowledge exists on how single parent household recreation patterns compare to dual parents. This leaves several questions. To what extent are the park use patterns similar or different between single and dual-parent households? What adjustments can park managers make that will aid these families in using these facilities more? To date, the literature does provide sufficient information concerning the park, recreation, and leisure patterns of single-parent family much less compare those patterns with those of a traditional dual parent household. Additionally, the impact of SES should be examined controlled when making these comparisons. Unless this step is taken, only differences in high vs. low income rather than single vs. dual parent houses may be found. To address these gaps

in the literature and to assist park and recreation managers in better serving single parent households, this thesis will answer the following questions:

1. Do single parents use leisure services (such as public parks and zoos) less than dual parents while controlling for household income?
2. Among infrequent park visitors who visit less than once a month, are single-parents more likely than dual parents to indicate that constraints prevent them from visiting parks while controlling for household income, and what park use constraints are more or less salient for these single parent?
3. Among infrequent park visitors who visit less than once a month, are single-parents more likely than dual parents to prefer specific constraint negotiation assistance from park districts for increasing their use of public parks while controlling for household income, and which negotiation assistance strategies are more or less salient for these single parents?

## Chapter 2

### Literature Review

#### Race as a Recreational Constraint

Beginning with the Civil Rights Movement of the 1960's, America has gradually become theoretically more concerned in providing equal opportunities for all citizens in many areas including, but not limited to, educational access, equal opportunity employment, and fair access to public facilities. Success in providing more equitable access to these opportunities has been the topic of considerable debate. For example, minorities continue to have high rates of poverty and less access to many essential services (DeNavas-Walt, 2006). A variety of services and disciplines have sought to reduce disparities and because of their ability to afford low-cost, accessible services, parks and recreation is particularly interested in ensuring that their services are used by these populations and that their offerings are used by a representative segment of various marginalized populations. Many studies have examined various ethnic minority groups and their ability to access public recreation space. Certain evidence shows that public park use among various minority ethnic groups is actually quite high within certain types of activities (Howard & Crompton, 1984). This indicates that these minority groups are aware of, and accessing, certain aspects of public parks and recreation. However, those within racial minority groups continue to exhibit recreation constraints in several different areas. For instance, many African-Americans limit their participation due to concerns about their personal safety (Johnson, 2001). Minorities show less participation in certain activities, such as golf or hunting and fishing, because



of their culturally white reputation (Gobster, 1998; Floyd, 1994). Additionally, user fees are shown to limit participation for those making less than \$30,000 a year (More, 2000). Another study done in the Cleveland area indicate that those with low incomes feel constrained towards park use on several fronts including costs, crime, poor health, and lack of transportation (Scott & Munson, 1994). Given the higher rates of poverty among some ethnic minorities, access to certain elements of public recreation may be limited among these populations. While some numbers might indicate that racial minorities do access public parks and recreation at high levels, other data shows that their access remains highly stratified and confined to certain types of activities.

#### Gender as a Recreational Constraint

While some encouraging data has shown minority use as higher than some perceive, other data shows minority women to still be the lowest users of parks space (Arnold, 1998). This indicates that while race is still an issue, so too is gender. Female participation and constraints actually show some similarities to minority patterns. Like minorities, females show a greater likelihood to not participate because of fears for personal safety due to crime (Whyte, 1994). Traditional patriarchal society imposes psychological constraints, with many females believing they have fewer rights to leisure experiences than men (Henderson, 1991). Women are also constrained by cultural perceptions of acceptable types of recreation. Specifically, females show lower levels of activity within areas such as hunting and fishing, typically seen as “male” activities (Culp, 1998). These cultural perceptions also constrain other types of park use, such as sports, with girls being able to participate in far fewer sports than boys (Varpalotai, 1987). Gender constraints extend beyond participation in recreation. Women working

within leisure services also remain under-represented in high positions and face greater amounts of discrimination than their male counterparts (Shinew, 1998). Additionally, women face increased financial and time difficulties in accessing recreation with less income and free time than males (Shaw, 1994).

### Income as a Recreational Constraint

Income itself will also serve as a major constraint in one's ability to access parks and recreation. Leisure has become increasingly commercialized, causing the dollars expended in accessing recreation to increase (Lippke, 2001). Although many public recreation services remain cheaper than the private sector, user fees have become standard in much of public recreation. As previously mentioned, some data indicates that these fees bar many people with low income from accessing potential recreation (More, 2000). Evidence is mixed in this area, and recreation scholars continue to debate this issue. However, user fees remain a potential visitation constraint for single parents. Even when not considering user fees, the travel expenses and opportunity costs will prevent many low-income families from accessing some form of recreation, especially those involving travel (Brown Jr., 1984). Some researchers have even begun to use the standard of living within an area as a method for determining if a family lives in poverty. In developed countries, most people are able to provide enough income for basic sustenance. However, if a family cannot access a reasonable amount of leisure activities as the rest of their peers, this constitutes poverty within the context of that society (Dawson, 1988). An income which may not be considered poverty in certain areas of Africa will be considered poverty within the context of the developed United States.

### Family Status as a Recreational Constraint

Ultimately, recreation studies continue to grapple with the idea of fair access to leisure opportunities. Researchers have examined many different areas of discrimination, and each one is important. Some evidence shows that the more factors working against an individual, the more likely they are to experience leisure constraints (Floyd, 1998; Shores, 2007). This might account for minority women having some of the lowest rates of leisure participation. However, some factors within discrimination remain overlooked. Discriminations are usually based on a traditional power structure, with groups who do not conform to the traditions underlying the power structure facing additional prejudice. Evidence for this is shown when various media outlets, including respected ones such as The New Yorker, blame the female-headed household for the erosion of inner cities (McLanahan, 1985). Within this power structure, family status itself can become a source of discrimination. Those families which do not conform to the traditional male/female dynamic have faced a great deal of latent discrimination.

However, these traditional family values have also placed additional respect on a dual-parent household, with single parents facing discrimination. Throughout the decades, this population has become more relevant due to a substantial growth in the number of single-parent families. During the 1940s and 50s, the decades most commonly associated with a traditional American power structure, the amount of single-parent households was relatively low. During these decades, the number of children living in single-parent households remained fairly constant at just under ten percent (Bianchi, 1995). This percentage should not be confused with the some estimates of 5-10% of households living in a single parent status. With multiple children in the same

family, 5-10% of household having a single parent status translates to a higher percentage of children living in a single-parent family. While approximately 1 in 10 children were in a single-parent household in 1970, this had risen to 1 in 5 by 1984 (Norton, 1986).

During the 1960s, the United States underwent substantial cultural changes with traditional notions becoming questioned by a new generation. These new perspectives had repercussions on the demographics of family composition. The 1950s exhibited a divorce rate that was low and constant through the decade. However, this rate began to climb in the 1960s and eventually reached its peak around 1980 (Goldstein, 1999). Beginning around 1970, the rise in cohabitation over marriage began to rise as well (Bumpass, 1989). Concurrent with the rise in cohabitation rates, extra-marital births also rose substantially in the 1970s (Thornton, 1989). In these manners, a greater percentage of children became part of a single-parent household, either by a divorce or birth into an unmarried union. When the numbers from the 1950s to the 1980s are summarized, the number of single-parent households rose from about 1.2 million to 5.9 million, almost quintupling in number (Bianchi, 1995). These rising trends leveled in the 1980s. However, a substantial drop in divorce, cohabitation, or children in single-parent households has not been seen (Goldstein, 1999), indicating that single-parent households will remain a significant aspect of society into the foreseeable future.

### Correlations among Single-Parent Populations

Given their apparent permanence within society, it becomes important to consider the unique needs of this population, just as other research has done for other

minority populations. To accomplish this goal, the general characteristics that make up single-parent households must be understood. Single parents are often comprised of many of the minority groups already studied in the recreation literature. Single parents often meant single mothers, with 88% of single parents being women during the 1980s (Norton, 1986). As recently as the early 1990s, single mothers remained a clear majority among single-parent families (Meyer, 1993). Since this time, the number of single fathers has grown substantially and at a larger rate than single mothers (Brown, 2000). However, for those single-parent families who are headed by a female, the recreational discrimination associated with gender stereotyping remains problematic. Single-parent families are less likely to engage in those activities seen as masculine, such as hunting and fishing (Schneider, 2005). Many boys raised in a single-mother household will not be exposed to outdoor recreational activities often taught by a father in the household. However, based on recent trends gender composition is not as substantial as it once was. During the 1980s, investigating gender would have been an appropriate matter to consider in research questions. At present, the variation still tips slightly towards single mothers; but not in a great enough percentage to warrant specific differentiation in the context of this study.

Single-parent families are also correlated with certain racial minority statuses. The largest percentage of single-parent families are African-Americans, with Blacks showing rates over three times larger than the White population (Bianchi, 1995). While the disparity is not as large, Hispanic populations also show single-parent rates almost double that of Whites. Another group with high levels of single-parent families is the American Indian (Bianchi, 1995). Native Americans show rates of single-motherhood

second only to African-Americans. Native Americans do not receive as much attention as other ethnic groups, but data shows they are underrepresented in some recreational activities such as National Park visitation (Floyd, 1993). Data also shows that family status is strongly correlated with income in the Native population, with those in single-parent households showing a far lower SES (Sandefur, 1988). While American Indians do not receive as much attention as other ethnic groups, they also receive a great deal of discrimination and are a population that should receive additional study. Along with Native Americans, other racial populations show correlation between family status and SES. The parents within these families show far less educational achievement than traditional counterparts, and their income is reflective of this disparity (Norton, 1986). More recent data shows the economic situation improving somewhat, but still far below the rest of the population (Bianchi, 1995). Single fathers show higher income and educational achievement than single mothers. However, both of these variables are still below men living in a dual-parent household (Meyer, 1993). For single-parent families, many of the constraints associated with income can also prove to be problematic.

As mentioned before, with each additional discriminatory factor, comes more constraints that will eliminate recreation participation. With many additional factors correlated with single-parent status, this population faces a high chance of decreased recreation. While there is limited knowledge of their specific parks and recreation visitation habits, several factors relating to single-parents use of time are known. Because of lower SES, single parents are more likely to need to work multiple jobs in order to supplement their incomes (Burden, 1986). This pattern causes a great deal of role strain upon single parents and a decrease in available time for recreational

activities. Employed single mothers are unable to sacrifice time spent in child care, and are unlikely to spend time in leisure following their days at work (Sanik, 1986). Seeing only a slight rise in SES for single-parent families since the 1980s, it is unlikely that these trends have changed greatly since this data was collected.

Given what is known about single-parent families, some hypotheses about their leisure and parks and recreation visitation patterns can be formed. Given their low economic situation, single parents may take advantage of public park visitation. However, given their time constraints single parents may be unable to access parks as much as dual parents. Single parents may also access local public parks because of the costly nature of travel. Some research indicates that travel costs, not user fees, are a substantial constraint in preventing visitation to parks not located near one's residence (Ostergren & Solop, 2005). Visitation to more remote locations, especially for those residing in an urban environment, may be impractical. This problem can be exacerbated by a lack of transportation. Single parents often do not have their own means of transit and are more reliant of public transportation systems (Rutherford, 1989). While park visitation might be substantial, activities within the parks could be stratified into certain types of activities over others. This could be especially true of any activity involving a large cost. While single-parent families might access the free elements of public parks, other programs with entrance fees might prevent these families from accessing everything a public parks program has to offer. These correlations with the single parent population help determine hypotheses of their recreation behavior. However, it is not yet determined whether family status itself is

responsible for additional levels of constraint. With an examination of the data, the research questions can be tested to determine the validity of these hypotheses.



## Chapter 3

### Methods

The data used in this study is part of a larger study conducted by Cleveland Metroparks in order to assess park visitation and perceived constraints to park visitation in Northeast Ohio. The goals of this larger study included generating greater rates of use among populations that are typically non-users or infrequent users of parks and achieving higher levels of satisfaction among park users. The procedures used to collect, define, and analyze the data are discussed in the following sections: Data collection and sample description, definition of variables, and data analysis.

#### Data Collection and Sample Description

The data was specifically gathered by a telephone survey administered in October of 2001 to park users and non-users of the greater Cleveland metropolitan area. This area includes seven counties consisting of Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit counties. While data was collected from each of these counties, 800 of these surveys were administered to residents of Cuyahoga County to ensure greater statistical reliability of data for the region directly within and surrounding Cleveland. The survey was administered by Triad Research, Inc. based in Cleveland, Ohio. The sample was conducted using telephone numbers purchased from Survey Sampling, Inc. Ultimately, 1,200 telephone interviews were completed with a 77% response rate. Overall, this survey had a margin of error of +/- 2.8% at the 95% confidence level.

In 2000, the population of the Cleveland Metropolitan area was around 2.95 million (U.S. Census). The administered survey differed from the census population in several aspects. Low-income families, African-Americans, and those who did not graduate from high school were all underrepresented. As mentioned in the Literature Review, single parents exist in high proportions among these groups, making it somewhat difficult to obtain a sufficient sample size of the desired population. However, the overall study sampling scheme was stratified in to obtain an equal ratio of women to men in the sample. The results also over-sampled the heavily urban Cuyahoga County. As mentioned previously, 800 of the 1,200 surveys administered were collected from the county containing Cleveland. The decision to draw a larger sample from this county was based on populations of these areas and the greater number of residents residing in Cleveland than the outer suburbs. While this may weigh the data towards an urban population, it can also help us achieve enough single parents to be statistically relevant. Single-parent households tend to occur more frequently in urban areas, so this urban park user/non-user dataset was seen as a viable candidate to study these households compared to dual parent households.

- Definition of Dependent Variables

In this particular study, it is important to precisely define what is considered a single-parent household. For this thesis, a family was considered a single-parent unit if the head of household was unmarried with a child below the age of 14 residing in the house. These determinations were primarily based upon the constraints of using secondary data. Within the original survey instrument, respondents were only asked if children under the age of 14 resided within the household. (Question #37 in the survey)

Once again, the survey was not originally designed with these research questions in mind. Therefore the dataset is restricted based upon the wording of this question. This does not necessarily make any results less valid. However, this does further limit the scope to which the results can be generalized to single-parent households with children from infancy to early adolescence.

Another important consideration in defining single-parent households is the role of cohabitation. Like the trends in single-parent households, rates of cohabitation have also risen dramatically since the 1950s. Some estimations show the number of cohabitating families rising from about 1,000,000 to almost 5,000,000 between the years 1977 and 1997 (Casper, 2000). This situation has caused debate regarding the classification of these types of households. Should parents who are cohabitating, either with the other parent or with someone else, be considered single parents? Cohabitating couples can resemble both married and single people. Justifications can be made for both sides. However, cohabitating couples tend to show greater levels of similarity to single people than to their married counterparts (Rindfuss, 1990). These similarities include financial independence, home ownership, labor force participation, and plans for future children. Even if both adults are the biological parents of the child, their unmarried status tends to make the family unit behave like a single-parent family. Additionally, cohabitating partners are shown to contribute somewhat more resources than a purely one parent household, but in far lesser amounts than those who have become married (Manning, 1996). When these factors are taken into consideration, cohabitating couples will be considered part of the single-parent population for this particular study.

Although it may seem counterintuitive, this point is additionally important because the survey does not ask about cohabitation as a family status. Without data on cohabitation, the data will not show us this family status if a respondent is cohabitating but checks “single.” If cohabitators were considered dual parents, the data would have many people in the single category that should actually be in the dual category. However, cohabitators will remain defined as single parents making the data accurately reflect household status as defined in this study. Ultimately, household status is determined by Question #36 in the survey asking, “What is your present marital status?” Respondents were given the options married, divorced, single/never married, separated, and widowed. All options other than “married” placed a respondent into the single-parent category. Respondents were ultimately considered a single parent when someone in one of these categories was combined with the question asking about children under the age of 14.

The telephone survey used in this study contained many elements not included in this particular thesis. These aspects of the survey were of interest to Cleveland Metroparks, but not relevant in this study. However, several elements of the questionnaire were relevant to the core research questions of this thesis including the respondents’ marital status, children under 14, income, use of parks and leisure services, constraints to visitation, and constraint negotiation strategies. These variables are described in subsequent sections of this chapter.

### Independent Variables

- Household Status

This study assessed the impact of being a single parent upon parks usage. The household status variable was created using other variables obtained within the survey. The first of these variables is marriage status, which were assessed in question 36 of the survey (Appendix). Respondents placed themselves into one of five categories: married, divorced, single/never married, separated, and widowed. Of these categories, all but a “married” response potentially placed the household within the single-parent household status. Although those who responded “separated” were still legally married, any children would still reside and be primarily cared for by one parent. The marriage status variable was then coupled with a question asking if there were children under the age of 14 residing within a household. This information is found in question 37 of the survey (Appendix). The use of 14 as an upper limit of children’s age is a limitation. Any results of this thesis will need to be generalized to only households with children in this age group. However, if a respondent answered “yes” and also fell under one of the appropriate marriage responses, then that respondent would be classified as a single parent household and dual parent household. Using this procedure, 8% of the sample were classified as single parent households, 23.1% were classified as dual parent households, and 68% were excluded from the analyses (primarily because of no children under 14 living in the household.) Ultimately, 96 of the surveys were determined to be from single parents. While a larger sample of single parents would be more ideal, it is large enough for statistical reliability. Given the difficulties encountered in finding this population, the sample size of 96 is acceptable, and within the estimated

population proportions of single parents. Many articles written in the family studies literature use similar sample sizes (Hanson, 1986; Gladow, 1986; McLanahan, 1981).

- Income Level

When comparing the population of single parents against their married counterparts, it is important to account for confounding variables. In this case, the most important of these is income level of the household (Norton, 1986). As mentioned in the Literature Review, single parents as a population earn less money compared to those residing in a traditional family structure. This discrepancy can lead to several difficulties in accessing park services. A single parent may have to work more hours. He/she may also not be able to afford certain types of recreation. A single parent may even live in a poorer neighborhood further removed from parks than other housing areas. All of these factors can impact the manner in which single parents access recreation. However, to accurately assess the whether it is income or household status that explains park constraint perceptions and preferences to reduce those constraints, the single-parent population must be compared to a married population while controlling simultaneously for income levels. The data for household income can be found on question 39 of the survey instrument (Appendix), which asks respondents to place themselves into a yearly income bracket. These ranges are less than \$30,000, \$30,000 to \$49,999, \$50,000 to \$69,999, and anything over \$70,000 a year.

- Independent Variable Recodes

As mentioned previously, several of our marital status categories are considered to be in the single parent household status. In our survey, marital status is split into five categories. However, in the interpretation of the data for this thesis, marital status is

reduced into two categories. This led to a recoding of this independent variable for the statistical analysis. Those categories considered to be a single parent have been recoded as a “0.” Dual parents are recoded as a “1.” Additionally, the categories for income level must be recoded as well. These categories are collapsed into two categories due to low sample size, the ordinal nature of the data, and the ease of interpretation in subsequent logistic regression. In 2001, the poverty line for a family of four was set at \$17,650 a year, with each additional member of the family raising this figure by \$3,020 (U.S. Department of Health and Human Services). Using these numbers, respondents within the “under \$30,000” category can be approximated as living under or near the poverty line. Due to this close approximation to the poverty line, this point will be used to determine the two categories of income. Those placing themselves “under \$30,000” will be placed into the “low” income category, while those making above this figure will be in the “high” income category. Based on the knowledge that single parents are more likely to be in a low income group, the coding of income level will reflect the coding of the household status. The low income group will be coded as a “0.” The high income group is coded as a “1.” Using this data, income levels within the sample can be controlled to test that any differences identified are due to family structure or due to income levels. Recodings of the independent variables are summarized in Table 1.

**TABLE 1** Independent Variable Recodes

Independent Variable	Original Coding	Recoding
<b>Marital Status</b>		
Married	1	1
Divorced	2	0
Single/Never Married	3	0
Separated	4	0
Widowed	5	0
*0=Single Parent		
1=Dual Parent		
<b>Income Level</b>		
Less than \$30,000/year	1	0
\$30,000-\$49,999/year	2	1
\$50,000-\$69,999/year	3	1
\$70,000 or more/year	4	1
*0=Low Income		
1=High Income		

### Dependent Variables

- Use of Parks and Leisure Services

The first of the dependent variables concerns amount of times a single-parent family can access public recreation compared to their married counterparts. Several items within the survey instrument can give us data regarding the first research



question: Do single parents use leisure services (such as public parks and zoos) less than dual parents while controlling for household income? To address this question, several survey questions were analyzed. The first of these is survey question #1 asking, "Have you ever visited a park in Northeast Ohio?" While this question only determines any previous park visitation, survey question #2 determines visitation frequency asking, "How often do you go to a park?" Response categories ranged from once or twice a year, less than once a month, about once a month, once a week, almost daily, and not sure. Due to sample size, these categories will be collapsed from five into three categories. The new categories will be once a week or more, about once a month, and less than once a month. Additionally, the data concerning frequency of park visitation will need to be further collapsed upon the second stage of analysis using logistic regression. While three categories work well with cross-tabular analysis, responses must be dichotomous for logistic regression.

Further information can also be gathered in regard to visitation rates of the Cleveland Metroparks Zoo, which is asked about in questions 26 and 27. Question #26 in the survey asks if respondents have ever visited the Zoo; with responses being yes, no, or not sure. Additionally, question #27 assesses frequency of zoo visitation on a five point scale. Information regarding uses of the Zoo may also assist in assessing constraints to visitation among single parents due to factors such as distance and user fees. These constraints are examined in more detail in the following section.

- Constraints to Visitation

Constraints to visiting parks are an important issue for park administrators and scholars, and may be especially problematic for single-parent households. This

possibility is examined in the second research question which asks, “Among infrequent park visitors who visit less than once a month, are single-parents more likely than dual parents to indicate that constraints prevent them from visiting parks while controlling for household income, and what park use constraints are more or less salient for these single parent?” As mentioned previously, reported constraints of single parent households may mirror those of other populations with low incomes. For example, due to user fees and other associated visitation costs, zoo visitation may be lower among low income groups as well as single parent households. What remains to be seen is whether family status or income is the primary driver of any visitation differences.

Survey question #3 provides a list of potential visitation constraints.

Respondents were asked about the relevance of these constraints with responses being categorized as not important, somewhat important, and very important. However, due to sample size and the use of logistic regression, these categories will be collapsed into two categories with “somewhat important” and “very important” becoming “important.” This strategy is additionally necessary due to the survey, which only asks this question to infrequent visitors. Infrequent visitation status is determined as anyone visiting less than once a month. This limitation further decreases the sample size of the responses for this question. The constraints asked about in this question include the lack of time, the lack of information about existing parks and park programs in Northeast Ohio, fear of crime, poor health, no one to go with to the parks, parks are too far away, I have no way to get to parks, park facilities and programs cost too much, parks are too crowded, parks are over-developed, pursue recreation in areas other than parks, don’t like to participate in nature or outdoor recreation activities, too busy with other activities, too

busy with family responsibilities, and lack of transportation. While many of these constraints are of interest to this study, some can be eliminated. These eliminations include poor health, no one to go to parks with, parks are over-developed, pursue recreation in other areas, don't like to participate in nature or outdoor recreation activities, and too busy with other activities. The decision about which to eliminate was based on information found during the literature review process. These particular constraints are not expected to vary based on household status. Statistical analyses were run on these eliminated constraints in order to "check" that they were appropriate for omission. None proved to be significant. An analysis of which constraints single parents find salient compared to their married counterparts can identify specific concerns of the target population. When the data from these questions are analyzed, a greater understanding can be achieved concerning which factors most impede single parents from accessing public recreation.

- Agency Affordance Strategies

In addition to understanding the park visitation and perceived use constraints of single-parent vs. dual parent households, it is also important to understand what strategies could be pursued by park and recreation agencies to encourage their use of parks. To achieve this goal, research question number 3 asks, "Among infrequent park visitors, are single parent households more likely than dual parent households to prefer specific constraint negotiation assistance from park districts for increasing their use of public parks, and which negotiation assistance strategies are more or less salient for these single parent households?" Question #4 in the survey instrument provides data concerning steps which could increase visitation among respondents. Respondents

were given a list of potential agency affordance strategies and asked if they would help them use parks more often. Responses were given in a dichotomous yes/no response. Once again, this question was only asked of infrequent visitors, further limiting the sample size for this question. The list of agency affordance strategies include developing parks closer to home, providing more information about existing parks and park programs, reducing travel time to parks, providing public transportation to parks, making the parks safer, providing more activities, reducing overcrowding in parks, reducing development in parks, reducing costs associated with going to parks, and providing assistance with the care of children or other family members. Many of these affordance strategies are directly linked with the constraints asked about in research question #2. Analysis can examine if these matched constraints and affordance strategies have consistent results between survey responses. Additionally, it should be noted that these questions relate to desired improvements on the part of Cleveland Metroparks, not constraint negotiations by the respondents themselves. However, they can still provide useful data in determining changes which would make public parks more appealing to single-parent populations.

- Dependent Variable Recodes

As with the independent variables, this data was recoded from the original survey for the statistical analysis of this thesis. Most dependent variable responses were recoded into dichotomous responses for the cross-tabular section of the analysis. The exceptions to this were the questions concerning frequency of park visitation in Northeast Ohio and frequency of visitation to the Metroparks Zoo. Park visitation was collapsed into three categories and zoo visitation was left in the original five categories.

Ultimately, all responses were brought down to a dichotomous response due to the use of logistic regression. Each recoding was assigned based on the hypothesized relationship to household status and income levels. Based on single parents and low-income households being coded as a “0,” infrequent visitation rates are also coded as a “0.” It is also hypothesized that these populations will be more constrained and desire more agency affordances. Therefore, these dependent variables are coded with high constraint and a desired agency affordance being a “0” as well. These recodings are summarized in Table 2.

**TABLE 2** Dependent Variable Recodes

Dependent Variable	Original Coding	Recoding
Ever Visited Park in NE Ohio		
Yes	1	1
No	2	0
Frequency of park visitation		
Once or twice/year	1	0
Less than once/month	2	0
About once/month	3	1
Once/week	4	1
Almost daily	5	1
*0=Infrequent visitor		
1=Frequent visitor		

**TABLE 2** Dependent Variable Recodes (continued)

Dependent Variable	Original Coding	Recoding
Ever Visited Metroparks Zoo		
Yes	1	1
No	2	0
Frequency of Zoo Visitation		
Less than once/year	1	0
Once or twice/year	2	0
Several times/year	3	1
About once/month	4	1
Once/week or more	5	1
*0=Infrequent visitor		
1=Frequent visitor		
Perceived Constraints		
Not important	1	1
Somewhat important	2	0
Very important	3	0
*0=Constrained		
1=Not constrained		
Desired Agency Affordance Strategies		
Yes	1	0
No	2	1

### Data Analysis

To answer the three research questions, various statistical methods were used depending on the type of data being examined in each specific question. Initially descriptive data of the sample, park use, constraints and affordance strategies is presented. Following this, the research questions were analyzed using cross-tabular tests with a chi-square analysis, followed by logistic regression which uses income and household status as independent variables. The research questions are primarily interested in how household status acts as its own constraint, not as a correlation for income. The true test of the research questions will be contained in the logistic regression. In this situation, the data has been collapsed into dichotomous responses. Within this logistic regression, two independent variables are used to determine their effects upon the dependent variable in question. The first is the marital status variable used in the previous chi-square analyses. For the logistic regression analyses, the additional independent variable is household income. The responses are recoded into two categories; those making below \$30,000 and those making above \$30,000 a year. This specific amount to divide household income is chosen due to the specific poverty line around the time the data was collected. As mentioned previously, this dollar figure is close to the census poverty line for a family of four in the year 2000, only one year removed from the data collection. Analyzing the data using \$30,000 as a divide will give an idea of how income acts upon dependent variables for those families considered in poverty vs. the rest of the population. Logistic regression is an appropriate statistical method because of the need to test the data using both household status and income

levels. Additionally, the questions have been collapsed into dichotomous responses, often because of sample size, but also to make logistic regression a viable option. The dichotomous responses from the various survey questions will be used as independent variables with household status and household income acting as independent variables.

Throughout the statistical tests, significance levels are generated in order to determine whether a relationship exists between the independent and dependent variables. These significance levels, or p-values, are compared to a pre-determined alpha value. If the significance level is lower than the alpha, a relationship is declared between the two variables. Depending on the type of research, alpha values are usually set at 0.01, 0.05, or 0.10. For this thesis, the alpha has been set at 0.10. This alpha does create a higher chance of Type I error. However, using this value does determine with 90% confidence that a relationship does exist. This level of confidence is appropriate given the limited sample size and the exploratory nature of this research, therefore the significance of the statistical analyses in this thesis will be determined based upon an alpha of 0.10. The results for these analyses are discussed in the following chapter.



## Chapter 4

### Study Findings

#### Introduction

Results in this chapter will be primarily organized based on the research questions outlined in Chapter 1. First, descriptive statistics of the sample will be provided to provide context and a comparison to the characteristics of single parents examined in the literature review. Data from the survey instrument will be compared to the dual-parent populations to test the hypotheses that recreational access of single parent households is different from dual parent households. However, as mentioned in the research questions, the effect of SES may also contribute to park use, perceived constraints, and preferences for agency affordance strategies. Thus, single-parent population must be compared to a dual-parent group while controlling for SES. These analyses will ultimately answer the research questions concerning the effects of the family/household structure on park use and constraints.

#### Demographic Analysis

Such comparisons can be made to check the representativeness of the sample. As mentioned in the Methods chapter, the sample size totaled 1,200 surveys. Of these respondents, 96 responded to one of the married categories considered single parent and indicated that there was a child under 14 residing in their home. This indicates that the sample of single parents accounted of 8% of the total study sample, and is consistent with the 5-10% estimation of single-parent households among the general population in the United States. Additionally, the single-parent population is compared

to other characteristics discussed in the literature review to ensure that the sample matches an accurate profile of the single-parent population. Demographic information for the samples of single parents and dual parents are compared in Table 3.

**TABLE 3** Demographic Percentages of Single Parents vs. Dual Parents

Variable	Married Sample		Single Sample		Total Sample	
	N	%	N	%	N	%
Gender						
Male	137	49.3	40	41.7	177	47.3
Female	141	50.7	56	58.3	197	52.7
Education Level						
Elementary/junior high	7	2.5	7	7.3	14	3.7
High school graduate	77	27.7	41	42.7	118	31.6
Some college/technical school	60	21.6	20	20.8	80	21.4
College graduate	87	31.3	23	24	110	29.4
Post graduate studies	47	16.9	5	5.2	52	13.9
Ethnicity						
White	237	85.3	52	54.2	289	77.3
African-American	21	7.6	32	33.3	53	14.2
Hispanic	3	1.1	4	4.2	7	1.9
Asian	2	0.7	0	0	2	0.5
American Indian	0	0	1	1	1	0.3
Mixed	11	4	6	6.3	17	4.5

**TABLE 3** Demographic Percentages of Single Parents vs. Dual Parents (continued)

Variable	Married Sample		Single Sample		Total Sample	
	N	%	N	%	N	%
Income						
Less than \$30,000/year	20	7.2	30	31.3	50	13.4
\$30,000-\$49,999/year	71	25.5	40	41.7	111	29.7
\$50,000-\$69,999/year	68	24.5	12	12.5	80	21.4
\$70,000 or more/year	91	32.7	6	6.3	97	25.9

- Income Levels

Income can serve as a useful characteristic for examining the single-parent households. As stated previously, single parent households typically report lower levels of income than dual parent households. Comparisons can be made between the samples of single parents to the sample of dual parents to see if this reflects itself in the population used in this study. A cross-tabular analysis with a chi-square test was run on the relationship between income levels and household status. These two variables were found to be significant at less than 0.001 p-value. Additionally, the income profiles between these two samples show marked differences. Dual-parents were represented by a relatively low number of respondents in the lowest income bracket, earning below \$30,000 a year. Here, only 7.2% of dual parents placed themselves into this income bracket. Conversely, 57.2% of dual parents placed themselves into one of the two highest categories. In fact, over half of the dual parent household respondents earned

over \$50,000 a year, with 32.7% in the highest category earning over \$70,000 a year. The single-parent households exhibited a much different pattern. Here, a higher percentage of single-parent families reported incomes near or below the approximate poverty line of \$30,000 yearly household income, with 31.3% of single parents placing themselves in the lowest income bracket. While approximately 40% of single parents place themselves in the \$30,000-\$49,999 category, the next two levels show a significant drop. Only 18.7% of single parents place themselves in the upper categories, with only 6.25% were among the wealthiest. These findings are consistent with what is already known of the single-parent households with regard to their household incomes.

However, comparisons can be made to other aspects already known of single parents. In addition to income, cross-tabular analyses were performed on the relationships between household status and characteristics such as race and gender. A relationship was found between race and household status with less than a 0.001 p-value. While relatively few Hispanics, Asians, and American Indians resided in Cleveland in 2000 (U.S. Census), disproportionate amounts of African-American's were found in the single-parent sample. This agrees with the literature concerning the single-parent population. When a cross-tabular analysis was performed between household status and gender, no significant relationship was found. Although slightly higher levels of women exist in the single-parent sample, the results were not conclusive. However, this agrees with the rising number of single fathers seen in the literature. This situation may have been different if the data had been collected in previous decades. However, this gender profile in the sample does not disagree with more recent trends.

## Results/Findings for Research Questions

### Research Question #1: Do single parents use leisure services (such as public parks and zoos) less than dual parents while controlling for household income?

Although the ultimate goal is to answer the research questions after controlling for income, data can initially be analyzed simply based on comparisons of the two populations. Although this will not specifically answer the research questions, this data will be useful for comparison purposes against the controlled data. Several questions in the survey instrument can shed light on the first research question. The first survey question reads, “Have you ever visited a park in Northeast Ohio?” The options for this question are Yes, No, and Don’t Know. In this question, no responders placed themselves into the “Don’t Know” category, leaving us with a categorical response with a dichotomous response. The second question takes a closer look at frequency of park visitation. Respondents were given five choices; once or twice a year, less than once a month, about once a month, once a week, and almost daily. These responses were collapsed into three newer categories. The new recoded categories were; less than once a month, about once a month, and once a week or more. Additionally, single-parent recreation rates of park visitation involving entrance fees were analyzed, specifically visiting the Cleveland Metroparks Zoo. Responses for this question were given in a dichotomous “yes or no” response. Additionally, frequency of zoo visitation is analyzed. This question was asked using five response categories: less than once a year, once or twice a year, several times a year, about once a month, and once a week or more. In each of these questions, only two variables are analyzed; with household

status acting as the independent variable on the dependent variable. In these cases, a cross-tabular analysis with a chi-square test is an appropriate method for analyzing the statistical association of these results. Once income is introduced as an additional independent variable, logistic regression will be needed. However, for the moment these methods are appropriate. The results from these analyses are reported in Table 4.

**TABLE 4** Reported Results of Previous Park Visitation  
Marital Status

		Married		Single		X <sup>2</sup>	p
		%	N	%	N		
Have you ever visited a park in Northeast Ohio?							
Yes		95.3	265	95.8	92	.043	.836
No		4.7	13	4.2	4		
How often do you go to a park?							
Less than once a month		31.4	83	44.6	41	6.906	.032
About once a month		37.1	98	23.9	22		
Once a week or more		31.4	83	31.5	29		
Have you ever visited the Cleveland Metroparks Zoo?							
Yes		93.5	260	85.4	82	5.996	.014
No		6.5	18	14.6	14		

**TABLE 4** Reported Results of Previous Park Visitation (continued)

		Marital Status				$X^2$	$p$
		Married		Single			
		%	N	%	N		
About how often do you visit the Cleveland Metroparks Zoo?							
Less than once a year		25.8	67	24.4	20	9.360	.096
Once or twice a year		45.8	119	54.9	45		
Several times a year		21.5	56	11	9		
About once a month		5.8	15	4.9	4		
Once a week or more		.4	1	2.4	2		

Cross-tabular analyses revealed no significant associations between household status and ever having visited a park in Northeast Ohio. However, among respondents who had visited a park, there were significant associations between park use frequency and household status. For example, most of the respondents, whether dual or single parents, have been to a public park at some point in time. However, park visitation can be examined in far greater detail, beginning with frequency of park visits. For this Question 2 in the survey was used which asks; “How often do you go to a park?” In this case, a p-value of 0.032 indicates a significant relationship exists between marital status and frequency of visitation. Upon looking at the cells and percentages, several things are apparent. First of all, 31.5% of single parents are able to access parks in the highest rate of visitation. The percentage of single parents in the highest category is almost identical to the 31.4% of dual parents in the highest visitation category. This

similarity is not necessarily a surprise. Some literature purports that park use is high among low income and minority groups within certain activities (Howard & Crompton, 1984). However, differences are seen in the other categories. Almost 45% of single parents report they are in the lowest category of visitation frequency, 12 percentage points higher than dual parents. The two groups show different patterns of visitation. Visitation for dual parents is normally distributed with the largest group of users being in the medium range of visitation. It appears that visitation for single parents follow a bi-modal distribution. The largest group of respondents place themselves into the lowest category of visitation. However, another large percentage of single parents place themselves in the highest level of visitation. Within this sample, the lowest percentage of visitation for single parents is shown in the medium level of visitation frequency. While the data has not yet been controlled for income, the data does indicate a discrepancy in frequency of visitation. Family status may not prove to be the predominantly driving variable. However, the data does indicate that many single parents visit parks less frequently than dual parents.

One interesting survey question involves the Cleveland Metroparks Zoo. While many aspects of the Metroparks system are free, visitation of the zoo involves a user fee, which some literature cites as cause for reduced visitation among disadvantaged populations. When these statistics are analyzed a different pattern is seen. First, the p-value is 0.014 indicating a relationship between marital status and whether one has been to the zoo. Additionally fewer single parents are shown to have accessed the zoo than Cleveland Metroparks as a whole. Among dual parents, 93.53% have been to the zoo, while 85.42% of single parents have been to the zoo. While a high percentage of



single parents have been to the zoo, there is a drop between dual and single parents. Furthermore, it appears that a difference also exists in the frequency of park visitation. Most responses in this category are fairly close to one another. However, a difference is seen in the categories “several times a year” and “once or twice a year.” Within these categories, single parents are more likely to place themselves in the less frequent category with 54.9% visiting “once or twice a year.” Only 11% of single parents visit in the next highest category of “several times a year.” Within these same categories, 45.8% of dual parents visit “once or twice a year” and 21.5% visit “several times a year.” This model has a significance level of 0.096, making it significant at the 0.10 alpha. While the user fee seems to create somewhat of a gap between dual and single parents, the current entrance fee for the zoo is \$10, a fee that might not be substantially detrimental to many people. The original study design did not provide good information on visitor rates of single parents when user fees were more substantial. The purpose of the survey instrument was not to assess impacts of user fees. Subsequently, no usable questions were asked about recreational opportunities involving a greater level of expenditures. Higher user fees may correlate with even higher discrepancies in visitation rates of single parents. However, this must remain conjecture at this time. Based on the results available, it appears that single parents are not necessarily constrained at a higher rate from all park activities. However, many single parents may find their rates of visitation decreased compared to their dual-parent counterparts. Single parents may also find their use of park service's involving user fees additionally constrained compared to dual parents.

When only examining marital status as an independent variable, mixed results were obtained when examining levels of park visitation. No statistically significant relationships existed in the survey question concerning any prior visitation before controlling for income. Once again, most of the respondents have been to a park facility at some point in time. However, relationships existed for frequency of park visitation and ability to access recreation with user fees, specifically the Metroparks Zoo. However, when the data is controlled for income, the picture is a bit different. The analyses were run using logistic regression, and the results are summarized in Table 5.

**Table 5** Logistic Regression Predicting Park Visitation from Parental Status and Household Income

<i>Ever Visited a Park in Northeast Ohio</i>	<i>B</i>	<i>Wald <math>\chi^2</math></i>	<i>df</i>	<i>p</i>	<i>Exp(B)</i>
Parental Status (0 = Single)	-.315	.243	1	.622	.730
Household Income (0 = Low)	.816	1.594	1	.207	2.260
Constant	2.597	18.447	1	.000	13.177
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		1.454	2	.483	
Hosmer & Lemeshow Goodness of Fit		2.175	2	.483	
Model $-2LL = 127.391$					
<i>Frequency of Park Visitation</i>	<i>B</i>	<i>Wald <math>\chi^2</math></i>	<i>df</i>	<i>p</i>	<i>Exp(B)</i>
Parental Status (0 = Single)	.490	3.705	1	.054	1.633
Household Income (0 = Low)	.073	1.637	1	.201	1.075
Constant	.525	4.929	1	.026	1.690
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		6.771	2	.034	
Hosmer & Lemeshow Goodness of Fit		5.519	2	.479	
Model $-2LL = 453.464$					

**Table 5** Logistic Regression Predicting Park Visitation from Parental Status and Household Income (Continued)

<i>Ever Visited Cleveland Metroparks Zoo</i>	B	Wald $\chi^2$	df	p	Exp(B)
Parental Status (0 = Single)	.850	4.196	1	.041	2.341
Household Income (0 = Low)	.056	.012	1	.913	1.058
Constant	1.716	14.467	1	.000	5.560
Test		$\chi^2$	df	p	
Omnibus Test of Model Coefficient		4.661	2	.097	
Hosmer & Lemeshow Goodness of Fit		.223	2	.895	
Model -2LL = 197.905					
<i>Frequency of Zoo Visitation</i>	B	Wald $\chi^2$	df	p	Exp(B)
Parental Status (0 = Single)	-.454	1.973	1	.160	1.069
Household Income (0 = Low)	.066	1.362	1	.243	.635
Constant	-.736	2.373	1	.123	.479
Test		$\chi^2$	df	p	
Omnibus Test of Model Coefficient		4.136	2	.126	
Hosmer & Lemeshow Goodness of Fit		4.562	2	.601	
Model -2LL = 381.398					

These regressions partially agree with the Chi-square analyses, but in some cases they differ as well. Once again, no relationship was found between ever having

visited a park and these independent variables. Neither level of significance comes close to the desired levels to declare a relationship. Once again it appears that the vast majority of people, regardless of marital status or income, have been to a park at some point in time. However, discrepancies in visitation frequency continue to appear in the data after controlling for income. As a reminder, the frequency of visitation data has been recoded from three categories into two in order to make logistic regression a viable option. In the present recode, anyone visiting once a month or more is considered a frequent visitor. The significance levels indicate that marital status is more salient in this analysis with a p-value of 0.054. Additionally, the value for Beta of 0.490 and the Exp(B) show a tendency for dual parents to be in a higher category of visitation. This data indicates that single parents remain additionally constrained in their frequency of visitation.

Some evidence indicates increased difficulty with user fees based on family status. When asked about previous zoo attendance, a relationship is seen with family status, not income. With a p-value of 0.041, family status is the driving variable in this model. The positive value for Beta and of Exp(B) of 2.341 shows a greater likelihood that dual parents have visited the zoo. Therefore the indication that single parents are additionally constrained by user fees is supported when the data is analyzed using household status and income levels as independent variables. However, no determination can be made regarding frequency of zoo visitation. Neither independent variable achieved a level of significance to declare a relationship with frequency of zoo visitation.

Research Question #2: Among infrequent park visitors who visit less than once a month, are single-parents more likely than dual parents to indicate that constraints prevent them from visiting parks while controlling for household income, and what park use constraints are more or less salient for these single parent?

This study examined whether single parent households were different from dual parent households in terms of their perceived constraints to park use while controlling for SES. First, bivariate relationships between household status and constraints were examined using cross-tabular analyses with Chi-square test statistics. Then, logistic regressions examining the relationships between household status and socio-economic on each park use constraint were conducted. Question number three in the survey provides good data concerning specific visitation constraints. Again, the responses are recoded with “Somewhat Important” merging with “Very Important.” This recoding obviously strips a level of richness from the responses. However, valid results can be obtained determining if a certain constraint is applicable or not. Essentially this question has become a “yes or no” type of response, making cross-tabular and chi-square analysis appropriate methods. Question 2 in the survey asks about many different constraints, but some will be eliminated from the analysis. These constraints were eliminated for two reasons. First, the survey did not analyze each of the constraints in the section on agency affordance strategies. Without other results for comparisons, these constraints were eliminated. Secondly, several constraints are not expected to differ based on family structure and income based off the literature review. These constraints were also eliminated. Exploratory statistical analyses were conducted to confirm that none were significant, and these expectations were correct. The eliminated

constraints are poor health, no one to go with, parks are overdeveloped, pursue recreation in other areas, don't like nature, and too busy with other activities. The results of remaining constraints are summarized in Table 6.

**TABLE 6** Reported Results of Park Visitation Constraints

		Marital Status				X <sup>2</sup>	p
		Married		Single			
		%	N	%	N		
The lack of time							
	Not Important	15.6	15	22.7	10	1.038	.308
	Important	84.4	81	77.3	34		
The lack of information							
	Not Important	40.6	39	50	21	1.045	.307
	Important	59.4	57	50	21		
Fear of crime							
	Not Important	71.9	69	57.8	26	2.770	.096
	Important	28.1	27	42.2	19		
Parks are too far away							
	Not Important	74.5	70	75	33	.004	.947
	Important	25.5	24	25	11		
I have no way to get to parks							
	Not Important	90.6	87	77.3	34	4.586	.033
	Important	9.4	9	22.7	10		
Parks cost too much							
	Not Important	77.7	73	77.3	34	.003	.561
	Important	22.3	21	22.7	10		

**TABLE 6** Reported Results of Park Visitation Constraints (continued)

		Marital Status					
		Married		Single			
		%	N	%	N	X <sup>2</sup>	p
Parks are too crowded							
	Not Important	73.7	70	73.3	33	.002	.965
	Important	26.3	25	26.7	12		
Too busy with family							
	Not Important	8.3	8	15.6	7	1.681	.195
	Important	91.7	88	84.4	38		
Lack of Transportation							
	Not Important	92.6	87	71.1	32	11.358	.001
	Important	7.4	7	28.9	13		

The data from this table indicate that only “I have no way to get to the parks,” and “Lack of Transportation” and “Fear of Crime” were significant. For some of these cases, the insignificant p-values are not particularly surprising. Existing literature provides no compelling evidence that a lack of information as a constraint is particularly problematic for single parent vs. dual parent households. This was confirmed with a p-value of 0.307. Secondly, “parks are over-developed” was not expected to be more important for either group. This was confirmed by a p-value of 0.352 and no discernable percentage difference between the two groups. Ultimately, no constraint which was expected to be insignificant showed otherwise.



However, several items which the literature review indicated might be significant also were not confirmed by the analyses. The most surprising of these was “parks are too far away.” Some research indicates that fewer park facilities exist in low SES neighborhoods, which are more heavily populated by single parents. However, the p-value reported in Table 3 for this constraint was very high at 0.947. Additionally, the percentages in this response are almost identical. In this case, the physical location of parks is not seen as more of a constraint by single parents than dual parent households. Another somewhat surprising result was the lack of significant differences in the constraint “parks cost too much” across single parent vs. dual parent households. In this case, the p-value was 0.561. However, this result can perhaps be explained within the specific study setting. Many facilities and programs provided by Cleveland Metroparks and surrounding public park systems were free. It is quite possible that respondents were thinking of these free elements of public parks while answering this question.

While these results may be the most surprising, several other constraints were also not proven significant, even though the literature review indicated they might be. The first of these is “the lack of time.” Single parents are forced into additional parental and work responsibilities, indicating they may have less time for recreation. However, in this case, this relationship was statistically non-significant with a p-value is 0.308. It must be concluded that, in this study context, lack of time as a park use constraint was not more salient for single parents vs. dual parent households. Additionally, associations between household status and “poor health” were shown to be insignificant. Table 6 shows a p-value of 0.215, even though people with low SES are

shown to have lower health levels. "Too busy with family" has a p-value of 0.195, making it insignificant. The literature review indicated that single parents are forced to take additional parental roles, indicating that this might be more of a constraint for single parent households as opposed to dual parent households. However, the data does not indicate that this is true.

However, several constraints were shown to have a significant relationship with household status. The first of these was "fear of crime." This relationship is significant with a p-value of 0.096. Single parents are shown to live in poorer neighborhoods with higher levels of crime. This fact is reflected in the percentages of respondents who feel this factor limits their visitation. This constraint is important for 42.2% of single parents, while only 28.1% of dual parents perceive this as important.

While the results for "fear of crime" are good, the most statistically significant results are in transportation issues. For "I have no way to get to parks," Table 6 shows a relationship with marital status with a significance of 0.033. When examining the percentages of each group, 22.7% of single parents find this to be a salient constraint. However, less than 10% of dual parents find this to be a problem. It seems that although single parents do not find parks too far away, they are having problems getting to the parks that already exist. This is supported by the results of "lack of transportation." In this case, the p-value in Table 3 is 0.001, showing a high level of significance. The percentages for this result are even more differentiated between the two groups, with 28.9% of single parents reporting a constraint compared to 7.4% of dual parents. This indicates that single parents were almost four times as likely to find transportation as a park use constraint than their dual parent counterparts.

As with the first research question, the data concerning specific constraints shifts when using both independent variables. In the initial analysis, several variables which the literature review indicated might have been salient were not. These constraints included “lack of time” and “parks cost too much.” However, other variables proved significant. When only accounting for marital status, it appeared that crime and transportation issues were of greater concern to single parents than dual parents. This was shown with low p-values for specific constraints such as “parks are too far away” and “lack of transportation.” These were the strongest results with p-values of 0.033 and 0.001 for these constraints. The results also indicate that “fear of crime” acts as a constraint. When income is included in the analysis, some different results are seen. The results of these regressions are summarized in Table 7.

**Table 7** Logistic Regression Showing Constraints from Parental Status and Household Income

<i>The Lack of Time</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	-.424	.712	1	.399	.654
Household Income (0 = Low)	-.172	.082	1	.775	.842
Constant	-1.127	4.449	1	.035	.324
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		1.019	2	.601	
Hosmer & Lemeshow Goodness of Fit		.268	2	.875	
Model $-2LL = 120.709$					

**Table 7** Logistic Regression Showing Constraints from Parental Status and Household Income (Continued)

<i>The Lack of Information</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	-.188	.211	1	.646	.828
Household Income (0 = Low)	-.145	.089	1	.765	.865
Constant	-.014	.001	1	.976	.986
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		.431	2	.806	
Hosmer & Lemeshow Goodness of Fit		.864	2	.649	
Model -2LL = 176.154					
<i>Fear of Crime</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.648	2.429	1	.119	1.912
Household Income (0 = Low)	-.136	.070	1	.791	.873
Constant	.391	.709	1	.400	1.479
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		2.464	2	.292	
Hosmer & Lemeshow Goodness of Fit		.135	2	.935	
Model -2LL = 163.363					

**Table 7** Logistic Regression Showing Constraints from Parental Status and Household Income (Continued)

<i>Parks are Too Far Away</i>	B	Wald $\chi^2$	df	p	Exp(B)
Parental Status (0 = Single)	-.036	.005	1	.942	.965
Household Income (0 = Low)	-.328	.277	1	.599	.720
Constant	1.572	7.252	1	.007	4.818
Test		$\chi^2$	df	p	
Omnibus Test of Model Coefficient		.350	2	.840	
Hosmer & Lemeshow Goodness of Fit		.552	2	.759	
Model -2LL = 134.133					
<i>I Have No Way to Get to Parks</i>	B	Wald $\chi^2$	df	p	Exp(B)
Parental Status (0 = Single)	.489	.705	1	.401	1.631
Household Income (0 = Low)	.704	1.221	1	.269	2.021
Constant	1.106	4.160	1	.041	2.021
Test		$\chi^2$	df	p	
Omnibus Test of Model Coefficient		2.709	2	.258	
Hosmer & Lemeshow Goodness of Fit		.444	2	.801	
Model -2LL = 94.274					

**Table 7** Logistic Regression Showing Constraints from Parental Status and Household Income (Continued)

Parks Cost Too Much	B	Wald $\chi^2$	df	p	Exp(B)
Parental Status (0 = Single)	-.391	.593	1	.441	.676
Household Income (0 = Low)	1.193	.108	1	.743	1.213
Constant	1.394	6.162	1	.013	4.031
Test		$\chi^2$	df	p	
Omnibus Test of Model Coefficient		.626	2	.731	
Hosmer & Lemeshow Goodness of Fit		.475	2	.789	
Model -2LL = 133.857					
<i>Parks are Too Crowded</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp(B)
Parental Status (0 = Single)	-.261	.308	1	.579	.770
Household Income (0 = Low)	.139	.064	1	.801	1.150
Constant	1.147	4.961	1	.026	3.150
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		.321	2	.852	
Hosmer & Lemeshow Goodness of Fit		.170	2	.918	
Model -2LL = 146.975					

**Table 7** Logistic Regression Showing Constraints from Parental Status and Household Income (Continued)

<i>Too Busy with Family Responsibilities</i>	<i>B</i>	<i>Wald</i>	<i>df</i>	<i>p</i>	<i>Exp(B)</i>
Parental Status (0 = Single)	1.022	2.559	1	.110	.360
Household Income (0 = Low)	.456	.287	1	.592	1.578
Constant	-2.047	7.301	1	.007	.129
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		2.498	2	.287	
Hosmer & Lemeshow Goodness of Fit		1.366	2	.505	
Model $-2LL = 77.735$					
<i>Lack of Transportation</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	<i>Exp(B)</i>
Parental Status (0 = Single)	1.082	3.624	1	.057	2.950
Household Income (0 = Low)	1.080	3.272	1	.070	2.945
Constant	.461	.879	1	.343	1.586
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		9.656	2	.008	
Hosmer & Lemeshow Goodness of Fit		.524	2	.769	
Model $-2LL = 90.903$					

Once income level is accounted for, some differences in the results are seen. However, several key results remain similar to the initial chi-squares, beginning with some constraints found to be insignificant, including “lack of information,” “parks are too crowded,” and “parks cost too much.” For each of these constraints, neither marital status nor income showed significance levels indicating a relationship. The one interesting difference concerned “too busy with family responsibilities” acting as a constraint. In this case, the initial Chi-square analysis indicated a significance level of 0.195. When income level is introduced this significance level drops to 0.110 for marital status. While this does not indicate a relationship, it is interesting that the p-value drops to a suggestive range. Further research with larger sample sizes should investigate this to see if any relationship might exist.

Similar results to the initial chi-squares were seen with “fear of crime” acting as a constraint. Initially the results showed a p-value of 0.096. This indicated a relationship between the two variables. With marital status added to the analysis, the significance loses some significance with a p-value of 0.119 for marital status. Were this data significant, the positive value of Beta and an Exp(B) of 1.912 indicate that single parents find this more constraining than dual parents. However, this value remains within a suggestive level and is far more than the p-value for income level, which is 0.791. It should be noted that at this time no relationship can be determined when the data is controlled for income.. However, future research with more optimum sample sizes should reinvestigate this particular constraint to determine any relationship.

Some similar results are seen with the transportation related constraints, but some different results are also seen. The largest difference occurs with “I have no way



to get to the parks” acting as a constraint. The initial Chi-square analysis showed that a relationship existed between the two variables. However, the p-value for marital status jumps to 0.401 when income level is introduced as another independent variable. Due to these numbers, a relationship between this constraint and marital status cannot be declared. Despite this change, the results for “lack of transportation” remain promising. The initial Chi-square analysis showed a low p-value of 0.001, indicating a strong relationship between marital status and this constraint. When income level is added to the analysis, the p-value rises to 0.057. This constraint remains significant based on the alpha level used in this thesis. The model itself is also highly significant at a 0.008 level. In addition, Table 7 indicates a positive Beta of 1.082. This indicates that single parents will find this to be an additional constraint. The Exp(B) of 2.950 indicates that single parents are almost 3 times as likely to perceive this as a constraint. It appears that transportation remains a concern even when income levels are accounted for in the analysis. However, the significance level of income is also within the desired range with a p-value of 0.07. This indicates that both independent variables are acting upon the lack of transportation.

Research Question #3: Among infrequent park visitors who visit less than once a month, are single-parents more likely than dual parents to prefer specific constraint negotiation assistance from park districts for increasing their use of public parks while controlling for household income, and which negotiation assistance strategies are more or less salient for these single parents?

Finally, the last research question is examined before controlling the data. Question #4 in the survey is useful for this question asking about steps that could be

taken by the parks to make visitation occur more often. Once again, cross-tabular analysis is used due to the dichotomous nature of the responses. The results are summarized in Table 8

**TABLE 8** Reported Results for Desired Agency Affordance Strategies

		Marital Status				X <sup>2</sup>	p
		Married		Single			
		%	N	%	N		
Developing parks closer to home							
Yes	50	48	70.5	31	5.134	.018	
No	50	48	29.5	13			
Providing more information							
Yes	79.2	76	82.2	37	.180	.428	
No	20.8	20	17.8	8			
Reducing travel time to parks							
Yes	45.8	44	68.9	31	6.541	.008	
No	54.2	52	31.1	14			
Providing public transportation							
Yes	31.3	30	53.3	24	6.323	.012	
No	68.8	66	46.7	21			
Making the parks safer							
Yes	52.1	50	72.7	32	5.299	.016	
No	47.9	46	27.3	12			
Providing more activities							
Yes	67.7	65	77.3	34	1.333	.248	
No	32.3	31	22.7	10			

**TABLE 8** Reported Results for Desired Agency Affordance Strategies (continued)

		Marital Status				$X^2$	$p$
		Married		Single			
		%	N	%	N		
Reducing overcrowding in parks							
Yes	44.1	41	44.4	20	.002	.556	
No	55.9	52	55.6	25			
Reducing development in parks							
Yes	34.4	32	42.5	17	.787	.375	
No	65.6	61	57.5	23			
Reduce costs associated with going to parks							
Yes	45.2	42	57.8	26	1.931	.113	
No	54.8	51	42.2	19			
Providing assistance with the care of children							
	35.4	34	55.6	25	5.106	.019	

Many of these agency affordance strategies mirrored issues identified in the perceived constraints questions from research question #2. Interestingly, in this case the results do not match those of the parallel question in perceived constraints. Above, the results showed that single parents are not more likely to feel that “parks are too far away.” However, a higher percentage of single parents, 70.5% opposed to 50% of dual parents, would like to have parks closer to their homes, and the statistics have a p-value low enough to consider these results valid. Again, this result is somewhat surprising considering the non-significant relationships between this constraint and household status from the last section of this thesis.

Future research should be tailored to investigate this situation. However, it may be that in the context of this question; respondents felt that closer parks would lead to less travel time. Here it is seen that much higher percentages of single parents, 68.9%, are interested in this idea as compared to the 45.8% of dual parents. With a p-value of 0.008, it is a very significant relationship. This result seems reasonable considering the reported transportation constraints from the previous section. This notion is further confirmed by asking if “Providing public transportation to parks” would assist in overcoming constraints. In this case, over half of the single-parent respondents felt this would help them access parks more often. This relationship is also shown to be significant with a p-value of 0.012. Based on all of these responses, it seems that single parents are finding themselves more constrained based on travel time and transportation issues. More parks may help, but the primary issue seems to be finding a way to get these people to existing parks in a timely fashion.

Other than transportation issues, crime and public safety seemed the next most likely constraint which single parents found more salient than dual parents. It appeared likely, though not certain, that single parents perceived crime as a larger constraint than dual parents. In the survey, respondents were asked if “Making parks safer” would encourage them to visit more. In this case, it seems everyone would like the parks to be safer. Over half of all respondents indicated that this would reduce constraints. However, almost 75% of single parents, compared with a little over half of dual parents, found that this would be a positive step. A statistical significance exists at a 0.016 level. It should be noted that this question does not specifically mention crime. Respondents may have been thinking of safety in terms of maintaining facilities or better risk

management. However, it is probable that crime was a large consideration when respondents were asked this question, making a comparison somewhat intuitive. While the specifics of park safety perceptions among single and dual parents needs to be studied further, it appears that addressing these concerns will assist single parents in accessing park recreation.

The last constraints which seemed additionally detrimental to single parents were cost related. Once again, the results of this analysis were mixed. Single parents did not identify fees as preventing them from using parks, but visited in lower numbers when an activity involved user fees. The free aspects of park usage seemed to confound these results, making additional research necessary to make definitive statements. However, when asked if “reducing costs associated with going to parks” would assist in overcoming constraints, single parents once again responded in the affirmative in greater percentages than dual parents. As usual, lower costs are popular with all groups. While the p-value is not incredibly high at 0.113, it is still not low enough to declare a relationship. However, the results from Research Question #1 indicate that single parents do access recreation with user fees at lower levels. The exact nature of these relationships remains unclear. Once again, further research is needed make the exact nature of this relationship clearer.

Next, there is a constraint negotiation assistance which was not specifically measured in the section on research question #2, but is interesting when comparing the two populations. Respondents were asked if “Providing assistance with the care of children or other family members” would help overcome visitation constraints. The results are significant at a 0.019 level. As shown in the literature review, single parents

must shoulder additional child-care responsibilities, perhaps making this an interesting question. The results indicate that single parents would receive greater assistance from these types of programs than dual parents. Over half of the single parents are interested in this, compared with only about a third of dual parents. Unfortunately, the survey questions do not investigate this idea further. However, recreation managers might consider implementing pilot programs testing the effectiveness of child care programming for bringing single parents and other disadvantaged populations into parks and recreation.

Finally, several constraint negotiation assistance strategies were not expected to be more salient for single parents. These conclusions were supported by the data. Both groups felt that “lack of information” would be useful, but no relationship was seen between this and marital status. It seems that “Providing more activities” is also popular with everyone, with no discernable difference between the two populations. When asked about “Reducing overcrowding in parks,” the percentages between the two groups are almost identical, with a little under half of each group feeling it is important. Once again, neither side is overwhelmingly in favor of “Reducing development in parks.” None of these results were expected to be much different between the two groups, and the results show this to be true. Some of these constraint negotiation assistance strategies might be useful, but this would reduce constraints for everyone, not just single parents.

In the last research question, preferences for agency affordance strategies between single parent and dual parent household respondents were analyzed to better understand if there were specific strategies that park and recreation managers could

pursue in order to better serve single parent households. The agency affordance strategies listed in this study mirrored the constraints studied in the second research questions. In that earlier analyses, a few statistical associations illustrated that some transportation issues may be salient for single parents even when controlling for household income. Analysis of desired agency affordance strategies can confirm whether addressing these constraints would actually be perceived as a way to get single parent households to visit parks more. The results of the analysis are summarized in Table 9.

**Table 9** Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income

<i>Developing Parks Closer to Home</i>	<i>B</i>	<i>Wald <math>\chi^2</math></i>	<i>df</i>	<i>p</i>	<i>Exp(B)</i>
Parental Status (0 = Single)	.686	2.604	1	.107	1.985
Household Income (0 = Low)	1.11	3.921	1	.048	3.034
Constant	-1.581	8.249	1	.004	.206
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		9.77	2	.008	
Hosmer & Lemeshow Goodness of Fit		2.438	2	.296	
Model $-2LL = 169.678$					

**Table 9** Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income (continued)

<i>Providing More Information</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.282	.299	1	.584	1.326
Household Income (0 = Low)	-.243	.169	1	.681	.784
Constant	-1.397	6.386	1	.012	.247
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		.368	2	.832	
Hosmer & Lemeshow Goodness of Fit		.847	2	.655	
Model $-2LL = 130.181$					
<i>Reducing Travel Time to Parks</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.892	4.590	1	.032	2.440
Household Income (0 = Low)	-.284	.326	1	.568	.753
Constant	-.437	.914	1	.339	.646
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		4.806	2	.090	
Hosmer & Lemeshow Goodness of Fit		.254	2	.048	
Model $-2LL = 176.729$					



**Table 9** Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income (Continued)

<i>Providing Public Transit to Parks</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.625	2.332	1	.127	1.869
Household Income (0 = Low)	.784	2.547	1	.111	2.190
Constant	-.512	1.257	1	.262	.599
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		6.896	2	.032	
Hosmer & Lemeshow Goodness of Fit		.058	2	.971	
Model $-2LL = 165.243$					
<i>Making Parks Safer</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.756	3.121	1	.077	2.129
Household Income (0 = Low)	.924	2.708	1	.100	2.159
Constant	-1.615	8.515	1	.004	.199
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		8.597	2	.014	
Hosmer & Lemeshow Goodness of Fit		.583	2	.747	
Model $-2LL = 170.242$					

**Table 9** Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income (Continued)

<i>Providing More Activities</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.258	.312	1	.577	1.294
Household Income (0 = Low)	1.125	2.805	1	.094	3.081
Constant	-2.004	9.454	1	.094	.135
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		4.658	2	.097	
Hosmer & Lemeshow Goodness of Fit		.205	2	.903	
Model $-2LL = 154.167$					
<i>Reducing Overcrowding in Parks</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.085	.044	1	.833	1.088
Household Income (0 = Low)	-.044	.008	1	.928	.957
Constant	.229	.261	1	.928	1.258
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		.045	2	.978	
Hosmer & Lemeshow Goodness of Fit		1.327	2	.504	
Model $-2LL = 175.395$					

**Table 9** Logistic Regression Showing Desired Agency Affordance Strategies from Parental Status and Household Income (Continued)

<i>Reducing Costs Associated with Parks</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.502	1.538	1	.215	1.651
Household Income (0 = Low)	.362	.541	1	.462	1.437
Constant	-.644	1.945	1	.163	.525
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		2.884	2	.236	
Hosmer & Lemeshow Goodness of Fit		4.614	2	.100	
Model $-2LL = 174.561$					
<i>Providing Assistance with Child Care</i>	<i>B</i>	Wald $\chi^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> )
Parental Status (0 = Single)	.690	2.918	1	.088	1.994
Household Income (0 = Low)	.514	1.100	1	.294	1.672
Constant	-.538	1.387	1	.239	.584
Test		$\chi^2$	<i>df</i>	<i>p</i>	
Omnibus Test of Model Coefficient		5.574	2	.062	
Hosmer & Lemeshow Goodness of Fit		.025	2	.988	
Model $-2LL = 171.971$					

When the table is examined, almost everything which proved insignificant before remains so while examining the desired agency affordance strategies. These include “reducing costs associated with going to the parks,” “reducing overcrowding in parks,” “making parks safer” and “providing more information. The one exception is “providing more activities” as a desired agency affordance strategy. This becomes significant for household income as an independent variable with a 0.094 significance level. It is possible that public parks are not providing all of the types of activities preferred by a low SES population. However at this point it appears that constraints and agency affordance strategies associated with these issues are not salient for the single-parent population.

An interesting difference between reported constraints and preferences for agency affordance strategies existed in whether respondents wanted parks developed closer to home. When distance to parks was asked as a constraint, both single parents and dual parents did not feel parks were located too far from their homes. However, when this issue was posed as an agency affordance strategy, the low-income sample wanted parks developed closer to their homes. The single-parent sample did not find this desirable at a significant level. However, Table 9 indicates that the low-income sample had a p-value of 0.048. Additionally, the Beta of 1.110 indicates that this sample was more likely to find this affordance strategy more desirable. The Exp(B) of 3.034 indicates that this sample is more than three times as likely to desire this affordance strategy. It appears that low-income populations, while not feeling that parks are too far away, would still be more likely to support efforts to make them even closer.

This model was significant at a 0.008 level. While this is not a desired strategy specific for single parents, it is an interesting result which park planners should be aware of.

In the constraints question from the second research question, the results showed that transportation issues may be additionally constraining for single parents than other populations, even while controlling for income. Respondents did not feel that they “had no way to get to the parks,” but “lack of transportation” seemed like it was an additional constraint. The results for the desired agency affordance strategy somewhat support, but responses are once again not definitive. When asked if parks should “provide public transportation,” both marital status and income level have a p-value slightly above 0.10. While the model is significant at 0.032, neither of these p-values is low enough to declare a definitive relationship. The proximity of the two p-values also indicates that public transportation is probably not more salient for single parents when income level is also accounted for. However, support for additional constraints for single parents was found in the agency affordance strategy “reducing travel time to parks.” In these results, single parents are found to be the driving variable at a 0.032 significance level. Additionally, the positive Beta of .882 indicates that the single parent sample finds this agency affordance strategy desirable. With the Exp(B) of 2.44, Table 9 indicates that single parents are almost two and a half times more likely to want their travel times reduced. The model itself is significant with a 0.09 p-value. This desired agency affordance strategy could result from several problems. Perhaps the parks do have public transportation, but it takes awhile to ride the bus to a park. Additionally, single parents may live in neighborhoods which are further from parks, making travel times longer. Throughout the constraints and agency affordance research questions,

the results for the transportation questions have been mixed after controlling for income levels. However, enough interesting results continue to occur which make this an interesting issue. While this study does not answer all these questions, it does indicate that this issue should be investigated further with larger sample sizes and more specific lines of questioning.

The desired agency affordance section ends with an interesting question. Respondents are asked if “providing assistance with child care” would help them to use parks more often. Unfortunately, similar questions were not asked in the constraints section. While no data exists regarding the perceived level of constraint caused by lack of child care, the results as a desired agency affordance are interesting. Single parents find this to be a desired assistance at a .088 level, making this a significant relationship. The model itself has a significance level of 0.062. Single parents are by far the main driving variable in this question. Unfortunately, this is the only point within the survey which deals with this issue. It seems logical that single parents would find this to be more desirable due to fewer parents available for child care. Park programs involving programming for both parents and children could be exciting for single parents either as a way to enjoy parks with their children with lower levels of stress, or as a way to enjoy a break from child care in a relaxing park setting. Unfortunately, this must remain conjecture at this time without additional data concerning the specifics of this issue. However, the results that are available indicate that this is also a good line of questioning for a study with a more robust sample size and specific lines of questioning.

## Chapter 5

### Discussion and Conclusions

#### Conclusion

The primary purpose of this thesis was to examine the role of household parental status (single parent vs. dual parent) in relationship to park use, perceived park constraints, and preference for agency affordance strategies to reduce those constraints. Ultimately, this information would be useful for park and recreation managers who seek a better understanding of the unique challenges faced by single parent households and ways to overcome those challenges. However, the influence of SES on shaping park use, constraints, and affordance preferences is also well documented (More, 2000). As such, this thesis sought to identify which of these household characteristics (parental status or income) corresponded more with park use, park constraints, and preferences for strategies to reduce those park constraints.

Prior to controlling the data for income, several findings showed that the park use profile of single parents did differ significantly from dual parents. Single parents were more likely to find themselves in a lower category of visitation frequency. This sample was also less likely to have visited the zoo, indicating a possible tendency to utilize recreation less when they involved user fees. Single parents were also more likely to report constraints to park visitation including transportation difficulties, and had a desire for agency affordance strategies such as closer parks, public transportation, and a shorter travel time to the parks. Single parents were also more likely to identify

increased safety in parks, and assistance with child care as things that park agencies could do to get them to visit or visit more often. Regardless of whether household status caused these conditions, recreation managers can be aware that this population was more likely to report these conditions and preferences. When income is taken into account, some of these issues were not primarily determined by income or household status. Clearly, there are other explanations and variables which this study did not take into account. However, in some cases, household status or income was shown to be a statistically significant determining variable. For instance, frequent vs. infrequent park visitation appears to be significantly determined by household status. Additionally, a lack of transportation also appears to be determined by household status and income level. This is also true for “making parks safer” as an agency affordance strategy. A desire for less travel time to parks appeared to be more determined by household status. Single parents also appear to want child care options at the parks. However, other variables are driven more by income than household status. An example of this is a desire for parks to be developed closer to homes. It seems that low-income urban populations desired parks to be planned and built as part of their communities. This data provides some interesting insights into constraints and desired agency affordance strategies of these two samples.

Although some strategies to increase participation in this group can be viewed as part of a larger plan to assist those with low SES, some of the results obtained appeared to speak to the needs and barriers faced by single parents beyond those with lower household incomes. Additionally, information obtained in this thesis can assist in planning programming for low-income populations regardless of marital status. As



much of the data indicates (e.g., significant associations between household status and income), any assistance to this population would conceivably help many single parents. Included in this chapter is a discussion of key findings and their implications for research and practice as well as a discussion of study limitations, and a summary.

### Discussion of the Statistical Analysis

- Park Use

Descriptive results indicated that a vast majority of respondents (single parent or not) had been to a park in Northeast Ohio at some point. However, there were significant differences in the frequency of park visitation between single and dual parent respondents. Specifically, a sizable number of single parents are among the highest level of users, a sizeable discrepancy in the bottom two categories is seen with 44.6% of single parents reporting themselves into the lowest category. The logistic regression indicates that this variable may be highly driven by marital status. Clearly many single parents are able to access public parks and recreation. However, it was also clear that many single parents find themselves more constrained than their dual parent counterparts. This is reflected in the disparity in the low and medium range categories. The results from the constraints analyses can indicate some reasons for this discrepancy.

In regard to zoo visitation, mixed results were obtained. Initial questions regarding zoo visitation show that single parent's access visited at lower rates than dual parents. Logistic regression showed that household income was the salient independent variable in the model. Additionally, single parents were more likely to have

never visited the zoo. Cross-tabular analysis showed that many single parents also visit the zoo with less frequency than dual parents. However, in the logistic regression model, neither independent variable is a significant predictor. While user fees may be an important reason for this neither single nor dual parents identified costs as an important constraint. Possible explanations include the manner in which the survey asked the questions. When asking about costs as a constraint, the survey did not ask respondents to differentiate the free aspects of park visitation. Therefore the exact nature of the impact of user fees remains undetermined. However, based on the logistic regression, it appears that single parents do not find themselves additionally constrained towards recreational elements with user fees when household income was taken into account

- Constraints and Agency Affordance Strategies

Some of the most interesting results for constraints and agency affordance strategies came in the area of transportation. Single parents consistently rated transportation as a constraining condition prior to controlling the data for household income. For other analyses, significance often disappeared or was more determined by income. However, household status was sometimes shown to be the primary driver for these concerns even when the data were controlled for income using logistic regression. These instances include a lack of transportation acting as a constraint and a preference for reduced travel time to parks as an agency affordance strategy. Somewhat conflicting responses are shown for whether this should be accomplished by more parks being installed in neighborhoods with high single-parent populations. Although respondents said that they would like parks closer to home, they do not

overwhelmingly list distance to parks as an existing reason for not visiting. However, getting single parents from their homes to existing parks might be an obstacle in creating easier access for this population.

The goal of this thesis was to provide recreation providers and managers with realistic ideas to provide inclusive programs to single parents. Based on the demographic profile of single parents, managers can accomplish much of this goal by taking steps to provide accommodations and specific programming for those with a low SES. However, other steps can also be taken to more specifically target and accommodate single parents. It appears that overcoming transportation difficulties may be the best step to overcome significant difficulties towards single-parent visitation. This does not necessarily mean putting in more parks, even though the low-income sample indicates that they would like this. Given the usual state of parks and recreation budgets, especially during the current economic situation, installing more parks is probably a viable option. Additionally, the data indicates that respondents do not perceive distance to parks to be an existing constraint. Although the low-income population would like parks closer to their neighborhood, it does not seem that current distances to parks are preventing visitation. However, steps towards more efficient public transportation might be a reasonable goal. Park managers might try working with existing transit infrastructures to add additional stops at parks and recreation facilities. Some steps might also be taken to provide transportation programs for those who qualify. These might be available for anyone with low income, but the data shows that single parents may be the group with the most positive influence from these programs. Additionally, recreation managers could try to work with city planners to create some

additional infrastructure which could aid in reaching the parks. An example of this could be bike lanes added to the street network of a city. It is possible that some people would ride their bicycles if they perceived that safer routes existed. Another example of this type of strategy could include more pedestrian overpasses for navigating across busy urban traffic arteries. For urban residents, travel is often restricted by an inability to reach a destination by foot. Also, recreation managers could try to use internet resources to arrange carpool groups to help those without transportation. These groups might even be marketed as a socialization experience specifically aimed at single parents. This population might enjoy spending time with others who understand their circumstances and life experiences.

These types of socialization programs might also be incorporated into programs which provide an element of child care, which single parents indicate an interest. Given a single-parent's need to take on multiple parental roles, providing assistance in this area seems reasonable. The survey does not specifically ask about how this type of program should be administered, but recreation managers might still use this idea to create programming. Do single parents want programs which jointly involve children and adults? In this sort of program, parents might participate in the program with their children. However, parents might be looking for programming involving time away from their children. Parents might want options in which they can just drop their children off. However, they might want programs in which they can drop off children, and then go to some separate recreation programming of their own. Perhaps the parks could offer programs with a facilitated educational component for children while parents are presented with a space to socialize with one another temporarily free from direct child

care. Once again, this population might enjoy the opportunity to socialize specifically with a group of single-parent peers.

Finally, recreation managers could attempt to do whatever is possible to make parks safer. Cross-tabular analysis indicated that single parents are interested in this park visitation affordance strategy. The data indicates that both household status and income level were significant predictors in the model. According to the questions concerning constraints, much of this safety issue might be caused by a perception of high crime within park space. Park managers might try to work with local law enforcement to reduce crime within park areas. Recreation providers could also try to involve the community by organizing parks into neighborhood watch programs. This strategy could increase a sense of ownership of public park space into communities. Also, existing facilities which may be unsafe due to a lack of maintenance could be addressed. Newer playground equipment over cushioned surfaces could be installed, updating the older model of iron bars sunk into a concrete surface. Park managers could conduct an internal review to assess where maintenance resources are being allocated. It is possible that more dollars are being put into parks in higher-income neighborhoods. If these potential discrepancies are addressed, poorer neighborhoods might feel safer about the parks in their communities, thereby increasing attendance. Additional research could show the exact nature of the perceptions of a lack of safety. However, in the meantime, it may behoove park managers to focus on parks perceived as unsafe and try to alter these perceptions. If these trends can be reversed, single parents may find themselves less constrained towards park visitation.

### Limitations of the Study

The data used in this study came from an existing data source which was collected for purposes other than an examination of single parent household park visitor constraints. Most of the limitations come from the original design of the data and a smaller sample size. Single parents are a specific population which can be difficult to sample and to study. Although their numbers have risen substantially over past decades, single parents are still a minority in the society. The survey instrument was well designed for the purpose at the time, but often provided difficulties in translating to the purposes of this study. Moreover, the constraint and agency affordance strategy questions were only asked of infrequent visitors, again lowering the sample size. While still within statistically acceptable ranges, relationships which may have been significant with a higher sample size were impossible to obtain. Additionally, questions were sometimes worded awkwardly and unclearly for the purpose of this thesis. This is especially true when asking questions about financial constraints. The questions did not differentiate between free elements of parks in Northeast Ohio and other elements involving user fees. This made the results concerning these questions unclear. The survey also did not follow lines of questioning which would have given greater detail concerning the issues salient to parental and family status in this study. For example, one piece of data indicated that single parents would like programming with a child-care element. If the survey were designed for this study, questions could have been added to further investigate this issue regarding the exact manner in which these programs could be presented. Additionally, the sample size of 96 single parents forced the data to be collapsed on several occasions. This enabled some statistically significant results,

but many layers of complexity were stripped from the data. For instance, while analyzing constraints the strength of a constraint was unable to be analyzed. “Very important” and “somewhat important” became merely “important.” Five categories of park visitation rates became only three, and then only two for the logistic regression. While some good conclusions were reached, the complexity of the data in the analysis was lacking.

Another limitation of this study occurred during the definition of who is considered a single parent. Based on the demographic questions, the survey could only identify single parents with children under the age of fourteen. Single parents with children aged fourteen to eighteen were not identified. Therefore the results can only be generalized to single parents with relatively young children. Also, it was assumed that the adult respondent with a child under 14 in the household was their father/mother, when it might have been an older sibling answering the questions. Additionally, results were only gathered in an urban area. Therefore, results can only be generalized to urban populations. While relevant results were obtained, we can only apply these results to a relatively small segment of society. The exact family situations of many single parents were also unable to be obtained. For instance, it would have been interesting to see the impact of the level of child caring involvement for the parent who does not reside in the household. For some families, one parent might be completely absent. However, for many families the non-resident parent can still contribute both time and financial resources, including recreational behaviors with the children. Non-resident parents with visitation rights might be more likely to take their kids to public parks during the time they have to spend with their children. Unfortunately, this study

had no data to determine the impact of this sort of variable. Additionally, no data exists in the sample to determine the effects of cohabitation. These families were classified as single parent households based on the literature review. However, it would be interesting to see the actual impacts of cohabitation upon recreational behaviors, access, and preferences.

### Implications for Future Research

Future research of single parent recreation behaviors should specifically target sample single parent households in order to obtain a sample size which is sufficient to address the limitations outlined in this thesis. Additionally, several of the findings warrant further testing and substantiation. For instance, the relationship between perceptions of user fees and actual impacts of user fees for low-income participants seems to be an interesting question. While it seems that user fees do indeed impact visitation levels, it appears that sometimes people do not perceive these as constraints, especially when a recreation provider provides some free elements. It seems intuitive that the low-income portion of the sample would strongly support lower costs, but this group does not perceive this as a constraint.

Similar issues involve many of the questions relating to transportation in the constraints and agency affordance strategy sections. Many of the results in this section were intriguing, but without further questioning, the exact nature of these relationships remains vague. For instance, why do some respondents not perceive parks as being too far away, but support developing more parks so strongly? Also, why do the significance levels for reducing travel time to parks remain strong for single parents after



logistic regression, but providing public transportation loses significance when also analyzing income? Future research could investigate this issue in more detail.

The survey included one question concerning programs involving child care. The responses were almost significant in a positive manner. Future research could ask about the specifics of this question. A research project specifically asking these sorts of questions can accurately identify which types of child-care programming can help bring these types of families into parks and recreation. Another area of future research concerns the exact nature of perceptions of park safety issues among single parents and low SES participants. The questions in this survey are also worded ambiguously in this area. Are safety concerns based strictly on crime, or are poor maintenance and degraded facilities causing many of the safety concerns in poorer neighborhoods? Research might not even include surveys as a means of collecting data. Recreation managers could conduct internal reviews assessing where the majority of their resources are being allocated. Potential discrepancies could be identified and different, perhaps more equitable, financial strategies could be implemented. Additionally, recreation managers could request crime reports and statistics from incidents within parks. Conferences with local law enforcement might find good strategies to reduce this. It could be as simple as installing more park lighting. However, these are questions and issues that can only be addressed with a more complete examination of the issues.

This thesis does not answer all questions regarding providing better access for single parents. However, it does show several important findings. It was determined, regardless of the specific reasons, that a sizeable group of single parents access parks

with less frequency than dual parents. Additionally, the literature review indicates that this population will remain present at constant levels in society for the foreseeable future. Therefore, this group is a sizeable minority which remains additionally constrained. The literature in this field indicates a wide array of benefits for those who can access public parks and recreation. Additionally, the field has shown a great deal of interest in extending these benefits to under-represented portions of the population. Because of these reasons, an increased level of research regarding this population and their recreational access can provide a social benefit towards those parents who do not have a partner.

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Appendix

Survey Instrument

al  
7/01  
#01-1785

# Cleveland Metroparks Community Attitude Survey October 2001

1

Have you ever visited a park in Northeast Ohio?

- 1 Yes (**Go to Q2**)
- 2 No (**Skip to Q3**)
- 9 Don't Know (**Skip to Q3**)

How often do you go to a park, once or twice a year, less than once a month, about once a month, once a week, almost daily?

- 1 Once or twice a year (**Go to Q3**)
- 2 Less than once a month (**Go to Q3**)
- 3 About once a month (**Skip to Q6a**)
- 4 Once a week (**Skip to Q6a**)
- 5 Almost daily (**Skip to Q6a**)
- 9 Not Sure (**Skip to Q6a**)

I'd like to read you some reasons why people do not visit parks or don't visit very often. Please tell me if each one is not important, somewhat important, or very important in limiting your park use. The first one is... (**Read each item, Rotate start, Repeat choices as needed**) Is that not important, somewhat important, or very important in limiting your park use?

	<u>Not Important</u>	<u>Somewhat Important</u>	<u>Very Important</u>	<u>Don't Know</u>
The lack of time	1	2	3	9
The lack of information about existing parks and park programs in Northeast Ohio	1	2	3	9
Fear of crime	1	2	3	9
Poor health	1	2	3	9
No one to go with to the parks	1	2	3	9
Parks are too far away	1	2	3	9
I have no way to get to parks	1	2	3	9
Park facilities and programs cost too much	1	2	3	9
Parks are too crowded	1	2	3	9
Parks are over-developed	1	2	3	9
Pursue recreation in areas other than parks	1	2	3	9
Don't like to participate in nature or outdoor recreation activities	1	2	3	9
Too busy with other activities	1	2	3	9
Too busy with family responsibilities	1	2	3	9
Lack of transportation	1	2	3	9

4. Now I'd like to read you some things that public parks in Northeast Ohio could do that might make people use the parks more often. For each of the following, please tell me if it would make you personally use the public parks more. The first one is... **(Read and Ask, Rotate start)** Do you think that would make you use the public parks more often?

	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
a. Developing parks closer to home	1	2	9
b. Providing more information about existing parks and park programs	1	2	9
c. Reducing travel time to parks	1	2	9
d. Providing public transportation to parks	1	2	9
e. Making the parks safer	1	2	9
f. Providing more activities	1	2	9
g. Reducing overcrowding in parks	1	2	9
h. Reducing development in parks	1	2	9
i. Reducing costs associated with going to parks	1	2	9
j. Providing assistance with the care of children or other family members	1	2	9

5. Would you say you visit parks in your area as often as you would like to?
- 1 Yes **(Skip to Q9)**  
 2 No **(Skip to Q9)**  
 9 Don't Know **(Skip to Q9)**

**Ask Questions 6a through 9 of park users (If Q2 = 3, 4, 5 or 9)**

- 6a. Would you say you visit parks in your area as often as you would like to?
- 1 Yes  
 2 No  
 9 Don't Know
- 6b. Is there any park activity that you would like to do more often?
- 1 Yes **(Go to Q7)**  
 2 No **(Skip to Q9)**  
 9 Don't Know **(Skip to Q9)**

7. (If yes) What activity would that be? **(Do Not Read List) (Accept two responses if mentioned, but do not probe)**

- |    |    |   |
|----|----|---|
| 01 | 01 | Relax   |
| 02 | 02 | Walk or Hike  |
| 03 | 03 | Picnic  |
| 04 | 04 | Visit nature center, attend program                 |
| 05 | 05 | Observe nature                                      |
| 06 | 06 | Children's activities                               |
| 07 | 07 | Swim  |
| 08 | 08 | Fish  |
| 09 | 09 | Horseback riding                                    |
| 10 | 10 | Informal sports – frisbee, softball, touch football |
| 11 | 11 | Run/jog/exercise                                    |
| 12 | 12 | Bike  |
| 13 | 13 | Walk dog  |
| 14 | 14 | Golf  |
| 15 | 15 | In-line skate (roller blade)                        |
| 16 | 16 | Spend time alone with someone                       |
| 17 | 17 | Spend time with family                              |
| 18 | 18 | Sled, toboggan                                      |
| 98 | 98 | Other (specify) _____                               |
| 99 | 99 | Don't Know /Refused                                 |



8. Thinking about the activity you just mentioned, I'd like to read you some reasons that might keep you from participating in that activity more often. For each one, please tell me if it is not important, somewhat important, or very important in limiting your participation in that park activity. The first one is... **(Read each item, Rotate start, Repeat choices as needed)** Is that not important, somewhat important, or very important in limiting your participation in the park activity you just mentioned?

	<u>Not Important</u>	<u>Somewhat Important</u>	<u>Very Important</u>	<u>Don't Know</u>
a. The lack of time	1	2	3	9
b. The lack of information about where you can do that park activity	1	2	3	9
c. It cost too much to do this park activity	1	2	3	9
d. No one to go with to do this park activity with	1	2	3	9
e. Poor health or level of fitness	1	2	3	9
f. It's too crowded to do this park activity	1	2	3	9
g. Lack of facilities or places to participate in this activity	1	2	3	9

**Now I would like to ask you a few questions about the Cleveland Metroparks.**

9. First of all, have you ever heard of the Cleveland Metroparks?
- 1 Yes (**Go to Q10**)  
2 No (**See direction**)  
9 Not Sure (**See direction**)
- (If Q9 = 1 then Go to Q10)  
(If Q9 = 2 or 9 & County Code = 39035, Skip to Q23)  
(If Q9 = 2 or 9 & County Code NE to 39035, Skip to Q26)
10. Have you ever visited any of the parks or reservations in the Cleveland Metroparks system?
- 1 Yes (**Go to Q11**)  
2 No (**See direction**)  
9 Not Sure (**See direction**)
- (If Q10 = 1 then Go to Q11)  
(If Q10 = 2 or 9 & County Code = 39035, Skip to Q23)  
(If Q10 = 2 or 9 & County Code NE to 39035, Skip to Q26)
11. About how often do you visit one of the parks or reservations in the Cleveland Metroparks system? Would you say you visit the Cleveland Metroparks once or twice a year, less than once a month, about once a month, about once a week, or almost daily?
- 1 Once or twice a year  
2 Less than once a month  
3 About once a month  
4 About once a week  
5 Almost daily  
9 Not Sure
12. What is your overall rating of the Cleveland Metroparks. Would you rate the Cleveland Metroparks as excellent, good, only fair, poor or very poor?
- 1 Excellent  
2 Good  
3 Only Fair  
4 Poor  
5 Very Poor  
9 Not Sure

13. Which park or reservation in the Cleveland Metroparks system do you visit most often?  
(If respondent says 'Cleveland Metroparks,' ask them to be more specific about parks within the Cleveland Metroparks system.)

1st  
mention

01	01	01	Bedford Reservation, includes Tinker's Creek
02	02	02	Big Creek Reservation
03	03	03	Bradley Woods Reservation
04	04	04	Brecksville Reservation
05	05	05	Brookside Reservation
06	06	06	Euclid Creek
07	07	07	Garfield Park Reservation
08	08	08	Hinckley Reservation
09	09	09	Huntington Beach
10	10	10	Mill Stream Run / Strongsville Reservation
11	11	11	North Chagrin Reservation/Squires Castle/Strawberry Lane
12	12	12	Ohio & Erie Canal Reservation
13	13	13	Rocky River Reservation
14	14	14	South Chagrin Reservation
15	15	15	Metroparks (could not be more specific)
16	16	16	Cuyahoga Valley National Park (CVNRA)
17	17	17	Edgewater State Park
18	18	18	Other (specify) _____
19	19	19	Don't Know/Refused

14. And what other Cleveland Metroparks or reservations have you been to? (Record above, accept 2 more responses)

15. How long does it take for you to get to the Cleveland Metropark you go to most often? Would you say it takes less than 15 minutes, 15 to 30 minutes, 30 to 45 minutes, 45 to 60 minutes or more than an hour to travel to the park you normally visit?

1	Less than 15 minutes
2	15-30 minutes
3	30-45 minutes
4	45-60 minutes
5	More than an hour
9	Not Sure

16. About how many hours would you say you spend in the park when you visit? Would you say you spend less than one hour, 1 to 2 hours, 2 to 3 hours, 3 to 4 hours, or more than 4 hours?

1	Less than one hour
2	1-2 hours
3	2-3 hours
4	3-4 hours
5	More than 4 hours
9	Not Sure

17. And when you go to the park, do you usually go to the park by yourself, with friends, with family, or with both family and friends?

1	Alone
2	Friends
3	Family
4	Family and Friends
9	Not Sure



18. Are you most likely to visit the Cleveland Metroparks in the morning, around noon, afternoon, evening or does it vary?
- 1 Morning  
2 Noon  
3 Afternoon  
4 Evening  
5 Varies  
9 Not Sure
19. What seasons are you most likely to visit or use one of the Cleveland Metroparks – winter, spring, summer or fall?
- 1 Winter  
2 Spring  
3 Summer  
4 Fall  
9 Not Sure
20. (If Winter is not mentioned) Have you ever visited one of the Cleveland Metroparks during the winter?
- 1 Yes  
2 No  
9 Not Sure
21. Thinking about all of the different times of the year you visit the Cleveland Metroparks, what kinds of things do you usually do when you go to the park? **(Do not read list, Probe for up to three responses)**
- |    |    |    |   |
|----|----|----|---|
| 01 | 01 | 01 | Relax   |
| 02 | 02 | 02 | Walk or Hike  |
| 03 | 03 | 03 | Picnic  |
| 04 | 04 | 04 | Visit nature center, attend program                 |
| 05 | 05 | 05 | Observe nature                                      |
| 06 | 06 | 06 | Children's activities                               |
| 07 | 07 | 07 | Swim  |
| 08 | 08 | 08 | Fish  |
| 09 | 09 | 09 | Horseback riding                                    |
| 10 | 10 | 10 | Informal sports – frisbee, softball, touch football |
| 11 | 11 | 11 | Run/jog/exercise                                    |
| 12 | 12 | 12 | Bike  |
| 13 | 13 | 13 | Walk dog  |
| 14 | 14 | 14 | Golf  |
| 15 | 15 | 15 | In-line skate (roller blade)                        |
| 16 | 16 | 16 | Spend time alone with someone                       |
| 17 | 17 | 17 | Spend time with family                              |
| 18 | 18 | 18 | Sled, toboggan                                      |
| 98 | 98 | 98 | Other (specify) _____                               |
| 99 | 99 | 99 | Don't Know /Refused                                 |
22. And how would you rate the facilities at the Cleveland Metroparks, such as the picnic areas, restrooms, nature centers and all purpose trails. Would you say the facilities at the Cleveland Metroparks are excellent, good, only fair, poor or very poor?
- 1 Excellent  
2 Good  
3 Only Fair  
4 Poor  
5 Very Poor  
9 Not Sure

**Ask Q23a-m, Q24 & Q25 of Cuyahoga County residents only, County Code = 39035**

23. The Cleveland Metroparks are supported in part by local tax money. As a resident of Cuyahoga County, I'd like to ask you about some things the Cleveland Metroparks could do to improve the quality of the parks. Please tell me if you strongly agree, agree, disagree or strongly disagree with each of the following proposals. Do you strongly agree, agree, disagree or strongly disagree with **(Read each item, Rotate start)?**

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly Disagree</u>	<u>Don't Know</u>
a. Increasing the number of hike and bike trails in the parks	1	2	3	4	9
b. Providing new parkland	1	2	3	4	9
c. Providing more opportunities for fishing	1	2	3	4	9
d. Increasing the number of picnic facilities in the parks	1	2	3	4	9
e. Providing more opportunities for programmed activities such as festivals and races	1	2	3	4	9
f. Allowing parkland to return to natural state	1	2	3	4	9
g. Increasing efforts to link parklands through trails, parkways and greenways	1	2	3	4	9
h. Increasing the sale of food and beverage in the parks	1	2	3	4	9
i. Increasing the number of ball fields in the parks	1	2	3	4	9
j. Providing more nature programs and nature centers	1	2	3	4	9
k. Increasing opportunities for viewing wildlife	1	2	3	4	9
l. Limiting development in the parks	1	2	3	4	9
m. Providing more golf courses in the parks	1	2	3	4	9

24. Thinking about the amount of existing parkland in Cuyahoga County, do you think the Cleveland Metroparks need more parkland or do you think the Cleveland Metroparks have enough parkland or do you think the Cleveland Metroparks have too much parkland?
- 1 Need More  
2 Have Enough  
3 Have Too Much  
9 Not Sure
25. What if the Cleveland Metroparks had additional parkland. If it were up to you, would you build picnic areas, playfields and trails on that new land or would you preserve that new land for wildlife, scenic views and open space?
- 1 Picnic, etc.  
2 Preserve  
3 Mixed/Both (Vol.)  
9 Not Sure

**Ask of All Respondents**

26. Have you ever visited the Cleveland Metroparks Zoo?
- 1 Yes (**Go to Q27**)  
2 No (**Skip to Q31**)  
9 Not Sure (**Skip to Q31**)



27. About how often do you visit the Cleveland Metroparks Zoo? Would you say you visit the Cleveland Metroparks Zoo less than once a year, about once or twice a year, several times a year, about once a month, or once a week or more often?
- 1 Less than once a year  
2 Once or twice a year  
3 Several times a year  
4 About once a month  
5 Once a week or more  
9 Not Sure
28. When was the last time you visited the Cleveland Metroparks Zoo? Was it within the last year, between one and four years ago or more than 4 years ago?
- 1 Within the last year  
2 1 to 4 years  
3 More than 4 years  
9 Not Sure
29. What is your overall rating of the Cleveland Metroparks Zoo? Would you rate the Cleveland Metroparks Zoo as excellent, good, only fair, poor or very poor?
- 1 Excellent  
2 Good  
3 Only Fair  
4 Poor  
5 Very Poor  
9 Not Sure
30. Are you a member of the Cleveland Zoological Society?
- 1 Yes  
2 No  
9 Not Sure
31. How do you usually find information about recreational activities? Do you usually find out from the newspaper, TV, radio, special mailings, from friends or relatives, or somewhere else? (Accept two responses)
- 1 1 Newspaper  
2 2 TV  
3 3 Radio  
4 4 Mailings  
5 5 Friends/relatives  
8 8 Other (specify) \_\_\_\_\_  
9 9 Not Sure
32. Do you use the Internet to find out about recreational activities and special events going on in your area?
- 1 Yes  
2 No  
9 Not Sure
33. Have you ever read a publication from Cleveland Metroparks called the Emerald Necklace?
- 1 Yes  
2 No  
9 Not Sure
- Now I have a few questions for classification purposes only.
34. Into which of the following age groups do you fall? Are you...(read responses 1-4)
- 1 18 to 34 years  
2 35 to 49 years  
3 50 to 64 years  
4 65 and over  
9 Refused

35. What was the last grade of school you have completed?  
Would you say you have completed... (read choices)?
- 1 Elementary or junior high
  - 2 High school graduate
  - 3 Some college or technical school
  - 4 College graduate or
  - 5 Post graduate studies
  - 9 Refused
36. What is your present marital status? Are you (read responses 1 – 5)
- 1 Married
  - 2 Divorced
  - 3 Single/Never Married
  - 4 Separated
  - 5 Widowed
  - 9 Refused
37. Do you have any children under age 14 living in your household?
- 1 Yes
  - 2 No
  - 9 Refused
38. To make sure that I've talked to a wide variety of races and nationalities, is this household **(READ LIST)**
- 1 White
  - 2 African-American
  - 3 Hispanic
  - 4 Asian or
  - 5 American Indian
  - 6 Mixed (Vol.)
  - 7 Other (specify) \_\_\_\_\_
  - 9 Refused **(DO NOT READ)**
39. This is the last question in our survey. Into which income group would you say your household falls?  
Would you say it falls into...
- 1 Less than \$30,000/year
  - 2 \$30,000 to \$49,999/year
  - 3 \$50,000 to \$69,999/year
  - 4 \$70,000 or more/year
  - 9 Refused/DK **(Do not read)**

And finally, may I have your first name? **(If asked, say so that my supervisor can ask for you if he/she needs to call you to verify my work.)**

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This is the end of our survey. Thank you very much for your time.