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Market Segmentation of  
Gull Lake View Golf Club

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**MARKET SEGMENTATION OF  
GULL LAKE VIEW GOLF CLUB**

**By**

**Tzung-Cheng Huan**

**A THESIS**

**Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of**

**MASTER OF SCIENCE**

**Department of Park and Recreation Resources**

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## ABSTRACT

### MARKET SEGMENTATION OF GULL LAKE VIEW GOLF CLUB

By

Tzung-Cheng Huan

Market segmentation is an important tool for defining markets and developing marketing strategies that fit the specifications and needs of targeted segments. When effectively applied, market segmentation permits an organization to employ its limited resources to better serve its markets and thereby realize greater return on its investments. Therefore, market segmentation is a potentially useful tool for recreation, park, and tourism organizations for application in their market planning and promotion activities.

The purposes of this study were to (1) profile Gull Lake View Golf Club (GLVGC) visitors by geographic origin and trip type, (2) develop possible useful segmentations for promotion and product development purposes, (3) evaluate the usefulness of the segments developed in marketing GLVGC.

Basic cross-tabulation analysis was applied to information derived from a sample of GLVGC visitors to create segments linked to their residence and type of accommodation used the previous night. Of the 30 possible combinations or segments produced, six were found to account for over 75% of GLVGC's customer base. Furthermore, significant differences in socio-economic characteristics,

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preferences for facilities and services, and media use variables were found across the segments. The results offer GLVGC the opportunity to target marketing efforts more effectively than would be possible using an undifferentiated marketing strategy. This study demonstrates that even relatively small commercial recreation businesses can enhance their market planning at a relatively low cost using widely accessible software on personal computers that they most likely already own but now use primarily for accounting purposes.



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## ACKNOWLEDGEMENT

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This study was assisted by the Travel, Tourism, & Recreation Resource Center. My gratitude is extended to Mr. Jon Scott and his family who own Gull Lake View Golf Club for their unique contribution and making available information about their golf club for my use in this research.

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## CHAPTER I

### INTRODUCTION

#### Golf in America and Market Segmentation

According to the National Golf Foundation's 1989 edition of its report, "Golf Participation in the U.S." (NGF, 1989<sup>a</sup>), golf was a \$20 billion industry in the U.S. in 1988 and is growing in regard to equipment, travel and resort lodging, fees and other golf operations revenues, second homes in golf developments, and tournament admissions and sponsorships. In 1988, nearly one million people teed off for the first time, and a total of 23.4 million played 487 million rounds of golf. The number of golfers has more than doubled in the past 20 years, up from 11.2 million people in 1970. Since nearly half of this growth was registered since 1985, the growth in interest in golf appears to have accelerated in recent years.

Because of the boom in golf as well as the increased amount of attention given to the promotion of golfing, it is useful to use market segmentation to study golfers' behavior, characteristics, consumption, demographics, and preferences. Such information can enhance the ability of

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planners and managers to make more efficient allocation decisions by allowing them to evaluate the potential of particular resources, facilities, or marketing strategies for providing specific types of experiences and benefits for particular types of users.

#### Gull Lake View Golf Club (GLVGC)

Gull Lake View Golf Club is located adjacent to Gull Lake, southwestern Michigan's largest lake. More precisely, the Gull Lake View Golf Club is established within Ross Township, Kalamazoo County, on North 38th Street and highway M-89 (see Appendix A). The county has a population of 223,411 (County Data Profile, 1991). The resort consists of a lodging complex (the villas) which contains 50 units, pro shops, eating and drinking facilities, and four golf courses.

Gull Lake View's four courses all contain 18 holes. The West Course is the original. Its front nine is wide open and has no water; the back nine is more rolling and has water on six holes. A blend of fields, hills, valleys, woods, creeks, and ponds are combined to produce a challenging par 71 golf course.

The East Course, rated among Michigan's top ten public golf courses in 1986, is also attractive and challenging. The par 70 East is only 5,712 yards long, and has relatively small greens, with fairways lined with trees.



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Gull Lake View's Bedford Valley Course hosted the Michigan Open for nine years. With long holes, many well-placed bunkers, woods, and big greens, it is regarded as one of the toughest courses in Southwestern Michigan.

Gull Lake View's newest course, Stonehedge, is destined to nudge its way onto the list of Michigan's top courses. The rolling, wooded terrain and the blend of length and geography make Stonehedge a very attractive golf course.

The most preferred course for all GLVGC's guests is Stonehedge; the East Course is second in popularity; the West Course is third in popularity; and Bedford Valley is the least preferred course.

The Fairway Villas, located on Gull Lake View's East Course, has 50 two-bedroom villas overlooking the finishing holes on the East Course. Gull Lake View also provides golf packages that include all-day green fees at all four courses and lodging at the Fairway Villa.

With four 18 hole golf courses, three pro shops, two driving ranges, and lodging facilities for 168 people, Gull Lake View is the only golf resort in Southwestern Michigan.

#### Problem Statement

An important aspect of the marketing process is targeting markets for the service or program the firm has to offer. Private for profit firms usually position their product offering to appeal to specific target markets

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although success varies with the expertise of and information available to management.

Traditionally, public recreation and park agencies have taken the stance that they are mandated to serve everyone in their jurisdiction, thereby they must offer programs to meet everyone's needs. In actual practice, however, they have tended to give preferential treatment to certain targeted groups - the poor, youth, teens, senior citizens, the disabled, and sports enthusiasts (Schroeder, 1987).

One part of the marketing process is to determine what potential market segments exist in the population served and to select the target markets toward which the organization will direct services. This process is usually accomplished by dividing the population into groups of people who have similar needs or interests. Service or products, pricing strategies, location of services and promotional strategies can be developed for each group, thereby maximizing the benefits to that group and the profitability of the organization.

The central purpose of the research reported herein was to develop a meaningful market segmentation of Gull Lake View Golf Club's customers in order to improve management's understanding of the market segments served and to better target and serve the segments.

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Study Objectives

Objective A. Profile GLVGC visitors by geographic origin and trip type.

The GLVGC golf market was segmented and profiled by geographic origin and trip type to: identify GLVGC's market segments, better recognize each segment's characteristics including: their socioeconomic characteristics, golfing history, and consumption patterns. Through such understanding, management can better serve the different targeted visitors and increase profits. The GLVGC golf market can be classified into three groups by trip type, golfers who stayed overnight: 1. at home. 2. at GLVGC. 3. at other accommodations.

Objective B. Develop possible useful segmentations for promotion purposes and for product development purposes.

When markets are heterogeneous, it is desirable to segment them by their customer's geographic, demographic, psychographic, and behavioristic characteristics. The GLVGC golf market was segmented by geographic origin and trip type in this research. To be meaningful, the segments identified must be

homogeneous in that they tend to respond differently to the firm's promotional activities and product offerings. When such results are achieved they help the manager to improve the product and design effective marketing stimuli.

Objective C. Analysis to evaluate usefulness of segmentation.

While promoting to a heterogeneous mass market is less effective than to homogeneous specific markets, the latter promotion strategy can not always be implemented. In some cases, information available may not be adequate to identify homogeneous market segments, and, in others, it may not prove possible to exploit clearly identifiable market segments because, for example, no differences may exist across segments in media used in promotion selection.

In this study, each segment's characteristics and the variables which are accessible to GLVGC's promotional activities (media used for advertising) and product development (courses, utilities, and services preference) are analyzed and compared across trip types and visitor origins to evaluate the usefulness of market segmentation.

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### Definitions

Golfers who stayed overnight at home (overnight at home):

GLVGC visitors who played golf during the day and stayed overnight at home during their visit.

Golfers who stayed overnight at GLVGC (overnight at GLVGC):

GLVGC visitors who played golf during the day and stayed overnight in GLVGC accommodations (i.e. the villa) during their visit.

Golfers who stayed overnight at other accommodations

(overnight at others): GLVGC visitors who played golf during the day and who did not stay overnight at their homes or in GLVGC accommodations, rather they overnighted at motels, hotels, inns, second homes, relatives' houses and so on during their visit.

### Thesis Overview

This thesis contains five chapters. In chapter one, the Introduction, an overview of the golf market in America is presented. It also serves to introduce the reader to the Gull Lake View Golf resort which was the specific focus for this study, an application of market segmentation analysis. In chapter two, the Literature Review, relevant references about the golf situation in America and market segmentation theories are reviewed which helped to put this study in perspective and served to guide its design and the analyses undertaken. It includes segmentation studies from the

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parks, recreation, and tourism literature. In chapter three, Methodology, the data sources, analyses, and the statistical tests used in this research are presented. In chapter four, Results and Discussion, survey data from sampled GLVGC visitors are presented and analyzed, and the results are discussed in the context of the study objectives. In chapter five, Conclusions, the implications of the findings are reviewed for relevance to GLVGC's marketing strategy focusing especially on their potential to enhance promotion and product development aspects of this strategy.

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## CHAPTER II

### LITERATURE REVIEW

Since Wendell Smith's pioneering article on market segmentation appeared in 1956, the segmentation concept has been a focus of a considerable amount of research. Today, market segmentation is recognized as an important marketing tool for defining markets and developing marketing strategies that fit the specifications and needs of a target segment (Menezes and Chandra, 1989). In this chapter, the golf market situation in America will be reviewed in the first section. In the second section, market segmentation theories and models will be presented which are relevant to the objectives of this study. Finally, in the third section, several market segmentation applications in parks, recreation, and tourism will be discussed to illustrate applications of the concept in situations somewhat related to those posed in this study.

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## The Golf Market Situation in America

### The Golf Market in America

Golf was a \$20 billion industry in the U.S. in 1988 and was growing. In that year, golfing equipment sales were reported to equal \$5.7 billion, travel and resort lodging equaled \$7.8 billion, fees and other golf operations revenues equaled \$2.1 billion, second home sales in golf developments reached \$3.8 billion, and tournament admissions and sponsorships equaled \$0.3 billion. In 1988, nearly one million people teed off for the first time, and a total of 23.4 million played 487 million rounds of golf; more and more women played golf, 41% of new golfers were women. Most golfers had high incomes in 1988, around half (49%) of golf clubs are bought by people with incomes of over \$50,000. The number of golfers has more than doubled in the past 20 years, up from 11.2 million people in 1970. There were only 17.5 million golfers in 1985, so growth in the population of golfers has been especially high in recent years (NGF, 1989').

Recreational enjoyment is the number one reason for people golfing. The number two reason was to socialize with family and friends. Three was exercise while four was to enjoy the outdoors. Some golfers said that business was the reason they began playing golf (Store, 1989). Currently, in the north and Pacific regions, where the game is extremely

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popular, the availability and cost of land already inhibit the development of new courses (Waldrop, 1990).

Golf Participation in the United States (highlights)

In a 1989 report (NFG, 1989<sup>a</sup>), the National Golf Foundation pointed out that between 1987 and 1988 the number of golfers increased 7.8 percent, from 21.7 million to 23.4 million, while the total number of rounds played increased from 434 million to 487 million. The National Golf Foundation (1989<sup>b</sup>) also predicted that if the net increase in golfers was just one percent per year compounded from now through the year 2000, there would be 24.7 million golfers in the year 2000. If the growth rate in golf population is two percent, by the year 2000 there will be 28.1 million golfers. A three percent growth rate would push the number of golfers up to nearly 32 million by the year 2000 with the population passing the 30 million mark in 1998.

Demographic highlights of golfers in 1988 are listed in Table 2.1 and are further highlighted below (NGF, 1989<sup>a</sup>):

**Gender:** One in every six American males plays golf, while the rate for females is less than one in 20. As a consequence, more than three-fourths of all golfers in the U.S. are males.

**Age:** Americans, including males and females, in their twenties and thirties have the highest golf participation

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Table 2.1: Demographic profile of U.S. golfers.

<u>Demographic Profile of U.S. Golfer</u>			
Population	Percent of U.S. Population (Age 5 and over)	Number of Golfers (Thousands)	Percent of all Golfers
<b>Total</b>	10.4%	23,400	100%
<b>Gender</b>			
Male	16.6	18,151	77.6
Female	4.5	5,249	22.4
<b>Age</b>			
5-14 years	2.9	983	4.2
15-19 years	8.8	1,591	6.8
20-29 years	15.0	6,200	26.5
30-39 years	12.9	5,230	22.4
40-49 years	12.2	3,561	15.2
50-59 years	11.2	2,419	10.3
60-64 years	10.4	1,123	4.8
65 years and over	7.6	2,293	9.8
<b>Household Income</b>			
Less Than \$10,000	3.9	1,048	4.5
\$10,000-19,999	5.9	2,582	11.0
\$20,000-29,999	8.5	3,736	16.0
\$30,000-39,999	12.0	4,164	17.8
\$40,000-49,999	13.8	3,687	15.8
\$50,000-74,999	15.9	5,736	24.4
\$75,000 and Over	17.6	2,447	10.5
<b>Geographic Region</b>			
New England	11.4	1,387	5.9
Middle Atlantic	9.0	3,120	13.3
East North Central	13.8	5,458	23.4
West North Central	13.5	2,240	9.6
South Atlantic	9.0	3,582	15.3
East South Central	7.6	1,052	4.5
West South Central	8.1	2,012	8.6
Mountain	12.1	1,497	6.4
Pacific	9.5	3,052	13.0
<b>Education</b>			
Non-High School Grad	4.0	1,264	5.4
High School Grad	8.2	6,107	26.1
Some College	11.0	6,692	28.6
College Grad	16.0	9,337	39.9
<b>Occupation</b>			
Prof./Mgmt./Admin.	15.3	10,572	45.1
Clerical/Sales	12.2	4,388	18.8
Blue Collar	8.5	6,475	27.7
other	7.5	1,965	8.4

source: Adapted from National Golf Foundation, *Golf Participation in the United States*, 1989 edition (Jupiter, Florida: National Golf Foundation).

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rates, 15 percent and 13 percent respectively; these two age groups combined constitute almost half of all U.S. golfers. However, senior golfers (those at least 60 years old), while only 15 percent of all golfers, accounted for 35 percent of rounds played. On the other hand, junior golfers (those under age 20) are 11 percent of all golfers and play only 6 percent of all rounds.

**Income:** The mean household income of golfers, \$45,000, is 29 percent above the national average, and golf participation rates are highly correlated with income. A fourth of all golfers come from households with \$50,000 to \$74,999 in income.

**Education:** One in every six members of households headed by a college graduate plays golf, and such golfers represented 40 percent of the total U.S. golfer population in 1988.

**Occupation:** Likewise, almost one in six Americans whose household head is a professional, manager, or administrator play golf, and these golfers comprised 45 percent of all U.S. golfers in 1988. As with income and education, golf participation rates are strongly related to the occupation of the head of household.

**Public/ Private:** In 1988, nearly four out of five golfers said they played at least half of their rounds on public golf courses, defined as either daily fee or municipal courses. However, private golfers (e.g., country

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club members) play considerably more rounds per year, 31.4 versus 17.8.

**Frequency:** Total rounds played increased 12.2 percent from 1987 to 1988, and the mean (average number per player) was also up from 19.4 to 20.8 rounds. The median number of rounds played stayed at eight, meaning half of all golfers played fewer than that number in 1988. In 1988, frequent golfers, defined as playing 25 or more rounds annually, are less than a fourth of all golfers but account for three-fourths of all rounds.

**Beginners:** Nearly 10 percent of all golfers played for the first time in 1988. These beginning golfers are 41 percent female, whereas only 23 percent of all U.S. golfers are female. The beginners are also generally younger, less affluent, and play less frequently than more experienced golfers.

#### Golf Facilities in the U.S. and Michigan

The NGF annually publishes a geographic analysis of golf facilities in the U.S. (e.g., NGF, 1989<sup>c</sup>). In these reports, a golf facility is defined as a club or complex which contains at least one nine hole course and may include different types of courses, such as regulation length and par-3 length courses. It may be a private facility which restricts its use to members, a daily fee facility which is privately owned but open to public play, or a municipal

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facility which is owned by a tax-supported agency such as a city, county, or state. A golf course is defined as a tract of land containing from nine to 18 separate holes. There are three types of golf courses: regulation-length, executive-length, and par-3. A regulation-length is full-sized with a total length of over 5,200 yards for 18 holes with a par rating of 66 or more; an executive-length golf course is a compact version of the regulation-length course with a total length of 4,000 to 5,200 yards for 18 holes and a par rating of 58 to 66; and a par-3 course is a short course comprised solely of par-3 holes with a total length under 4,000 yards for 18 holes with a par rating of not more than 54 strokes.

#### Golf Facilities in the U.S.

According to the National Golf Foundation (1990), in 1989 there were 12,658 golf facilities in the U.S. Nearly two-thirds (62%) were public (daily-fee and municipal). The remaining 38 percent were private facilities.

The great majority of facilities (88%) consisted of only regulation courses, and 9 percent were composed solely of executive or par-3 courses. A large portion of facilities, 39 percent, contained only nine holes. Over half (54%) of all facilities had exactly 18 holes, and 7 percent contain 27 or more holes.

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total facilities while Delaware, the District of Columbia, and Alaska had the fewest.

Some golf facilities had more than one course. There were a total of 13,738 golf courses, 89 percent were regulation-length and 62 percent were public (daily-fee or municipal).

Paralleling the facilities count, Florida, California, and New York led the nation in total courses and Delaware, Washington, D.C., and Alaska rank lowest.

Of the 13,738 total courses, 5,536 were nine-hole and 8,202 were 18-hole. New York, Texas, and Iowa led in nine-hole courses, while the leaders in 18-hole courses were Florida, California, and Ohio.

#### Golf Facilities in Michigan

In 1988, Michigan had a total of 10,440 golf course holes, 8,073 of which were public golf course holes and 2,367 of which were private golf course holes. Michigan ranked second in the nation behind Florida in terms of the number of public golf course holes, tenth in terms of number of private golf course holes, and sixth in terms of total number of holes (NGF, 1989<sup>c</sup>).

In 1989, Michigan had 660 golf facilities. Of these, 67% were daily fee facilities, 21% were private facilities, and 12% were municipal facilities. The majority (58%) of facilities in Michigan in 1989 were 18-hole facilities;

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about a third of all golf facilities in Michigan were 9-hole facilities; Michigan also had 55 facilities with 27 holes or more. In 1989, Michigan had a total of 727 golf courses and 10,656 golf course holes. Sixty-eight percent of the golf courses were daily fee courses, 20% were private courses, and 12% were municipal courses (NGF, 1990).

### Market Segmentation Theories and Model

#### Concept of Market Segmentation

It has long been known that markets and the customers who comprise them are heterogeneous. Early marketers tended to cater to particular groups of consumers, usually those located in a relatively compact geographic area. This was natural, given the problems of transporting goods and conducting business over wide areas (Frank, Massy, Wind, 1972). The concept of market segmentation emerged early in the evolution of the market concept. As defined by Wendell R. Smith (1956):

Segmentation is based upon developments on the demand side of the market and represents a rational and more precise adjustment of product and marketing effort to consumer or user requirements. In the language of the economist, segmentation is disaggregative in its effects and tends to bring about recognition of several demand schedules where only one was recognized before.

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### Theories of Market Segmentation

Kotler (1986) pointed out that target marketing requires three major steps. The first is market segmentation, dividing a market into distinct groups of buyers who might require separate products or marketing mixes. The company identifies different ways to segment the market and develops profiles of the resulting market segments. The second step is market targeting, evaluating each segment's attractiveness and selecting one or more of the market segments to enter. The third step is market positioning, formulating a competitive positioning for the product and a detailed marketing mix. As for market segmentation, markets consist of buyers who differ in one or more respects. They may differ in their wants, resources, geographical locations, buying attitudes, or buying practices. Any of these variables can be used to segment a market. A marketer has to try different segmentation variables, singly and in combination, hoping to find an accurate way to view the market structure.

The following criteria are useful for evaluating alternative bases for market segmentation (Frank, Massy, and Wind, 1972):

1. The variables should divide a market into homogeneous segments that tend to respond differently to the firm's promotional activities. More specifically, this requires the establishment of the following relations:

- a. Between the segmentation variable(s) and the criterion variable in the segmentation problem (for example, total consumption of a given brand, and brand loyalty).
  - b. Between the variable(s) and the performance characteristics of the various marketing inputs (such as media usage, physical distribution, and pricing).
2. The variable(s) should be measurable.
  3. The variable(s) should be accessible to the firm's promotional activities. The specific nature of the accessibility differs, however, according to the method the firm selects for targeting its marketing effort. If the firm aims at a controlled coverage of marketing effort, the variables have to be accessible through media or channels of distribution. If, on the other hand, the firm decides to rely on customer self-selection, all that is required is that the segmentation variable(s) enable the design of a marketing stimuli (message, package, and so forth) that will increase the probability of self-selection by the desired market segment.
  4. The variable(s) should lead to increased profits from segmentation.

### Model of Market Segmentation

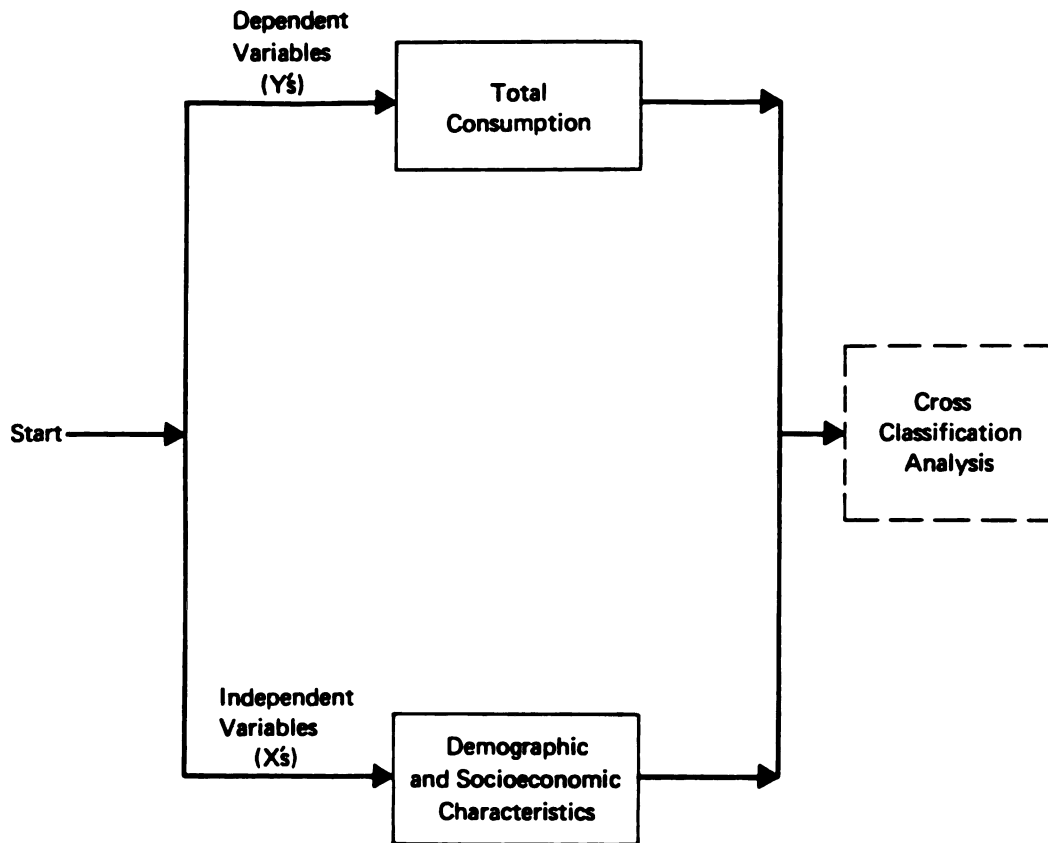
There are different models of market segmentation, varying from simple analytical procedures to those involving a series of more complex procedures. An elementary model of market segmentation is presented in this section to illustrate the content.

Frank, Massy, and Wind (1972) proposed a method to ascertain the relationship between total household consumption of a particular grocery product and selected socioeconomic and demographic variables, such as income and education of the household head. Figure 2.1 illustrates the



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**Figure 2.1: Enter Cross-Classification Analysis of market segmentation. Source: Adapted from Frank, Massy, and Wind, *Market Segmentation* (Englewood Cliff, New Jersey: Prince-hall, 1972), P. 140.**

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The dashed box represents the central issue with which we are faced at this stage, namely, the use of cross-classification analysis to estimate the parameters of one or more models involving total consumption and income and education. The flows through the boxes at the top and the bottom of the figure indicate that information on two separate sets of variables must be obtained and then brought together in the cross-tabulation analysis.

#### Market Segmentation in Parks, Recreation, and Tourism

The travel and tourism industry has already recognized the potential of market segmentation. Many researchers have also focused on the topic of segmenting of parks, recreation, and tourism markets by consumers' geographic origin, age, sex, income, education, religion, life style, benefits sought, attitude toward product, and so on. Selected studies concerning segmentation of recreation, parks, and tourism markets are discussed below.

Gitelson and Kerstetter (1990) reported an empirical test of the relationship between sociodemographic variables, benefits sought, and subsequent vacation behavior. The data were obtained using a questionnaire administered to consumers who requested the 1984 North Carolina Travel Information Packet. The findings demonstrated that a sociodemographic segmentation scheme could allow different

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promotion strategies to be developed. It is easier to measure sociodemographic variables than the more complex segmentation variables such as lifestyle preferences or other behavioral measures; thus, promotion agencies can generate more reliable and valid descriptions of their target markets if they rely on sociodemographic variables in developing market segments. In addition, the advertising media have a better handle on their audience's sociodemographic profiles than they do on their behavioral characteristics. For example, newspapers, radio stations, and TV/Cable stations can provide sociodemographic profiles of their audiences, but may not be able to indicate the particular life-style of these same individuals. The results of the Gitleson and Kerstetter study supported two notions: that a relationship does exist between some sociodemographic variables and that the benefits vacation travelers seek and the benefits sought are in turn related to certain travel behaviors.

Anderson and Langmeyer (1982) developed a questionnaire on travel which was distributed to 1,000 households in 1979, and they found that under-50 year old travelers and over-50 year old travelers differ clearly on a number of important dimensions which indicates that age can be used as a segmenting variable. Furthermore, the demographic characteristics of the over-50 year old segment suggest that this group of individuals would be an excellent target for

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the travel marketer since: 1. family obligations of this segment (time and financial) are fewer than those of the younger segment, 2. their incomes equal or exceed that of the younger segment, and 3. they have fewer required expenditures. With respect to lifestyles, the major differences appear to be that the under-50 group engages in more physical activities when on vacation more frequently than the over-50 group. The findings indicate that, for practical purposes, the over-50 travelers have certain needs and expectations for vacations which could, in turn, cause them to respond to promotions, advertising, and travel packages that would be ignored by the under-50 group. The findings also indicate that the over-50 group is an economically lucrative market, one which the authors suggest has been largely neglected and untapped by travel industry marketers.

Shoemaker (1989) segmented a senior market, consisting of 5,000 Pennsylvania residents age 55 or older, into smaller homogenous groups based upon the purpose of seniors' pleasure travel. Findings suggest that the senior market is not one large homogenous group but many submarkets, each with its own needs. Three market segments were developed. One segment of the senior market he identified includes those who use pleasure travel as a way to spend time with their immediate families. Programs and promotions building on this reason for travel could include "family reunions,"



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where families from many areas gather in one location, whether it be on a cruise boat, motorcoach, or at a resort hotel. A second segment of the senior market identified includes those who use pleasure travel as a way to seek intellectual and spiritual enrichment, to rest, to relax, to escape the everyday routine, and to meet people and socialize. Programs and promotions building on these reasons for travel could include "learning weekends" sponsored by hotels to encourage intellectual enrichment; subjects ranging from history to gardening could be taught by local college professors. Although the study did not reveal why members of the third segment travel, it did demonstrate that they like their trips filled with activities and they like to stay in places where everything is included. Programs promoted to this segment should stress these characteristics.

Teye (1989) conducted a study that focused on perceptions of major foreign tour producers (tour operators and travel agents) of Arizona as an international tourist destination. Projections for industrialized countries show that travel expenditures will continue to increase. The United States is currently the leading destination for international visitors. However, some states, like Arizona, are only beginning to try to expand the international segment of their tourist industry. In the study, Teye found that Arizona has a number of important assets upon which to

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build a successful international tourist industry and concluded that foreign tour operators perceive Arizona as having opportunities to develop into a strong tourist industry for foreign markets if a number of perceived liabilities are eliminated.

Havitz (1989) examined the attitudes held toward the public and commercial sectors as variables relevant to classifying recreation participants. His data were collected in a controlled experimental setting. A taxonomy was developed which can be used to categorize individuals on the basis of their attitudes toward the two sectors. Discriminant analysis was used to place individual subjects into one of nine groups in the taxonomy. Using discriminant analysis, he identified statistically significant differences in the attitudes of individuals who were placed into the various groups. Further analysis revealed that the taxonomy may be simplified by collapsing the nine groups into three groups. The three groups are : (1) people who have more favorable attitudes toward the public sector than toward the commercial sector; (2) people who have more favorable attitudes toward the commercial sector than toward the public sector; and (3) people who have similar attitudes toward both sectors.

Woodside and Jacobs (1985) investigated representative samples of Canadian, mainland American, and Japanese vacation visitors to Hawaii in 1983 and discovered that the

benefits realized from product use may differ widely for different market segments. The benefits experienced from traveling to the same vacation destination by three different national samples were reported. Canadian visitors most often reported rest and relaxation as the major benefits realized from their Hawaii visit; mainland Americans reported cultural experiences; and Japanese visitors reported family togetherness. Understanding the benefits realized by a destination's visitors from major market segments may be helpful for planning unique positioning messages to appeal successfully to each segment and may be useful in adjusting advertising messages, improving physical facilities, and changing attitudes and behavior of residents towards visitors.

Gladwell (1990) studied Indiana state park inn users. The objectives of the study were to determine whether identifiable groups or types of state park inn users exist, and if so, whether differences exist between the user groups in terms of sociodemographic characteristics, behavior predispositions, vacation behaviors, and sources of vacation information. There is evidence to suggest that, on the basis of vacation life-style measures, different types of state park inn users can be identified. The inn users surveyed in the study were divided into three groups: Knowledgeable Travelers, Budget-Conscious Travelers, and Travel Planners. There is also evidence to suggest that

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these three user groups have significant differences in terms of sociodemographic characteristics, general predispositions, life-style measures, vacation behaviors, and sources of vacation information.

Mills et al. (1986) investigated the expenditures and characteristics of Texans who travel to places outside of Texas to participate in snow skiing. The Texas skier market was segmented into two groups, heavy and light spenders. These segments proved to be differentiated from one another and from other Texans in terms of socio-demographic characteristics. Ski area operators seeking to attract Texas skiers might be advised to develop different marketing strategies which take into account the sociodemographic characteristics shown to differentiate the Texas skier market in this study. The largest proportion of snow skiers came from east Texas, and they tended to spend more on skiing trips. Texas skiers also tend to have higher household incomes than other Texas households, and this is particularly true for the heavy half. The majority of all Texas skier households have children; for the heavy half the proportion with children is 70%.

Kotler and Armstrong (1987) declared that there is no single way to segment a market. A marketer has to try different segmentation variables, singly and in combination, hoping to find an accurate way to depict the market structure. As is illustrated in Table 2.2, the most

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commonly used segmentation variables can be grouped into general categories including: geographic, demographic, psychographic, and behavior segmentation variables. These four groups of variables were used to summarize the segmentation study articles in the field of recreation, parks, and tourism reviewed for this study, and results are presented in Table 2.3.

Market Segmentation and its corollary, target marketing, are increasingly being recognized and practiced as a way of improving the effectiveness and efficiency of money spent on marketing (Menezes and Chandra, 1989). Profiling a given group of consumers, to include its needs, product preferences, and purchase decision process, leads to a better understanding of the segment. It is generally easier to attract consumers who are similar to those who are being served presently; hence, studies of current customers can be effective in developing information to target new customers. Through such studies, strategies can be conceptualized for broadening visitation and determining alternative ways to better satisfy visitors. This kind of knowledge could have major implications for destination planning and promotional strategies.

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**Table 2.2: Major segmentation variables for consumer markets**

Variable	Typical Breakdowns
<b>Geographic</b>	
Region	Pacific, Mountain, West North Central, West South Central, East North Central, East South Central, South Atlantic, Middle Atlantic, New England
County size	A, B, C, D
City size	Under 5,000; 5,000-20,000; 20,000-50,000; 50,000-100,000; 100,000-250,000; 250,000-500,000; 500,000-1,000,000; 1,000,000-4,000,000; 4,000,000 or over
Density	Urban, suburban, rural
Climate	Northern, southern
<b>Demographic</b>	
Age	Under 6, 6-11, 12-19, 20-34, 35-49, 50-64, 65+
Sex	Male, female
Family size	1-2, 3-4, 5+
Family life cycle	Young, single; young, married, no children; young, married, youngest child under 6; young, married, youngest child 6 or over; older, married, with children; older, married, no children under 18; older, single; other
Income	Under \$2,500; \$2,500-\$5,000; \$5,000-\$7,500; \$7,500-\$10,000; \$10,000-\$15,000; \$15,000-\$20,000; \$20,000-\$30,000; \$30,000-\$50,000; \$50,000 and over
Occupation	Professional and technical; managers, officials, and proprietors; clerical, sales; craftsmen, foreman; operatives; farmers; retired; students; housewives; unemployed
Education	Grade school or less; some high school; high school graduate; some college; college graduate
Religion	Catholic, Protestant, Jewish, other
Race	White, black, oriental, Hispanic
Nationality	American, British, French, German, Scandinavian, Italian, Latin American, Middle Eastern, Japanese
<b>Psychographic</b>	
Social class	Lower lowers, upper lowers, lower middles, upper middles, lower uppers, upper uppers
Life style	Belongers, achievers, integrations
Personality	Compulsive, gregarious, authoritarian, ambitious
<b>Behavioristic</b>	
Purchase occasion	Regular occasion, special occasion
Benefits sought	Quality, service, economy
User status	Nonuser, ex-user, potential user, first-time user, regular user
Usage rate	Light user, medium user, heavy user
Loyalty status	None, medium, strong, absolute
Readiness stage	Unaware, aware, informed, interested, desirous, intending to buy
Attitude toward product	Enthusiastic, positive, indifferent, negative, hostile

Source: Adapted from Philip Kotler, *Principle of Marketing* (Englewood Cliffs, New Jersey: Prentice-hall, 1986), P. 265.

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Table 2.3: Selected researchers who have studied park, recreation, and tourism markets, and the research variables they used in market segmentation studies.

Researchers:	Variables:			
	Behavioristic	demo-graphic	Geo-graphic	Psycho-graphic
Anderson and Langmeyer (1982)		Age		
Backman et al. (1986)	Benefit sought			
Blazey (1987)	participant	Age		
Blazy (1988)			State	
Calantone and Johar (1984)	Benefit/Seasons <sup>1</sup>			
Crompton (1979)				Motives
Darden and Perreault (1975)	Media user			
Davis and Sternquist (1987)	Attitude			
Gitelson and Kerster (1990)	Benefit sought	Demo- <sup>2</sup>		
Gitelson and Crompton (1984)	Repeat user			
Gladwell (1990)		Demo- <sup>2</sup>		Psycho- <sup>3</sup>
Goodrich (1977)	Benefit sought			
Graham and Wall (1978)	Attitude			
Haahti and Yavas (1983)	Perception			
Jacobs et al. (1986)	Seasons <sup>4</sup>			
Jarvis and Mayo (1986)	Users status			
Kale and Weir (1986)	Perception			
Kaynak et al. (1986)	Usage rate			
Kaynak and Yavas (1981)	Trip purpose			
Mark (1989)	Attitude			
McQueen and Miller (1985)	User stage			
Menezes and Chandra (1989)			Distance	
Mills et al. (1986)	<u>Expenditure</u>			
Ronkainen and Woodside (1980)	User status			
Schewe and Calantone (1978)				Psycho- <sup>3</sup>
Schul and Crompton (1983)		Demo- <sup>2</sup>		lifestyle
Scott et al. (1978)	Attitude			
Shoemaker (1989)		Senior		
Shih (1986)				Psycho- <sup>3</sup>
Snepenger (1987)	Novelty-seeking			
Thanopopoulos and Walle (1988)		Ethnicity		
Teye (1989)		Nationality		
Uzzell (1984)				Psycho- <sup>3</sup>
Usal and McDonald (1989)	Length of stay			
Woodside and Pitts (1976)				Lifestyle
Woodside et al. (1980)	Benefit sought			
Woodside and Jacobs (1985)	Benefit sought			
Woodside et al. (1987)	Usage rate			

<sup>1</sup> In this research, Calantone and Johar segmented the travel market by showing how different factors influenced choice in different seasons. In fact, the tourists' seasonal needs is their situational needs for benefit sought.

<sup>2</sup> Demo- denotes Demographic variable.

<sup>3</sup> Psycho- denote Psychographic variable.

<sup>4</sup> In this Jacobs' study, seasons means tourists' purchase occasion.

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## CHAPTER III

### METHODOLOGY

In the first two chapters, the research focus of this thesis was introduced along with a set of study objectives, and relevant literature about golf in America and market segmentation in park, recreation, and tourism was summarized. The methodology used in this study is discussed in this chapter to include the type of statistical analyses employed. In the first section, how the data were collected is detailed, and, in the second, how they were analyzed is presented. The first section covers the sample scheme employed, data collection, response rate, and data preparation. The second section introduces the detailed procedures used in an attempt to develop meaningful market segments and the statistical tests used to evaluate them.

#### Data Collection

The data utilized in this study were collected by researchers in the Travel, Tourism, and Recreation Resource Center at Michigan State University for the specific purpose estimating the regional economic impacts of the GLVGC

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facility. The questionnaire used is provided in Appendix B, and its Code Book is provided in Appendix C.

#### The Sample Scheme

The sample frame utilized was provided by the Gull Lake View Golf Club. Specially, the records used were of two types:

(1) Golf cart rental slips.

Golfers who stayed overnight at home, at GLVGC, and at other accommodations were drawn from golf cart rental slips dated from May 1991 to July 1991. The overall golf cart sample frame indicates that only 11% of total rounds of golf were played by golfers who stayed overnight at GLVGC. Since this low efficiency in capturing golfers overnighiting at GLVGC was anticipated and since it was important to the goals of the overall research project that a larger pool of respondents from this segment be available for anticipated analyses, it was necessary to select more golfers who stayed overnight at GLVGC via another means, in this case villa registration cards. Note, however, that this yielded a combined group of respondents which is not reflective of the GLVGC golfing population because the sampling scheme was purposely designed to favor selecting villa users.

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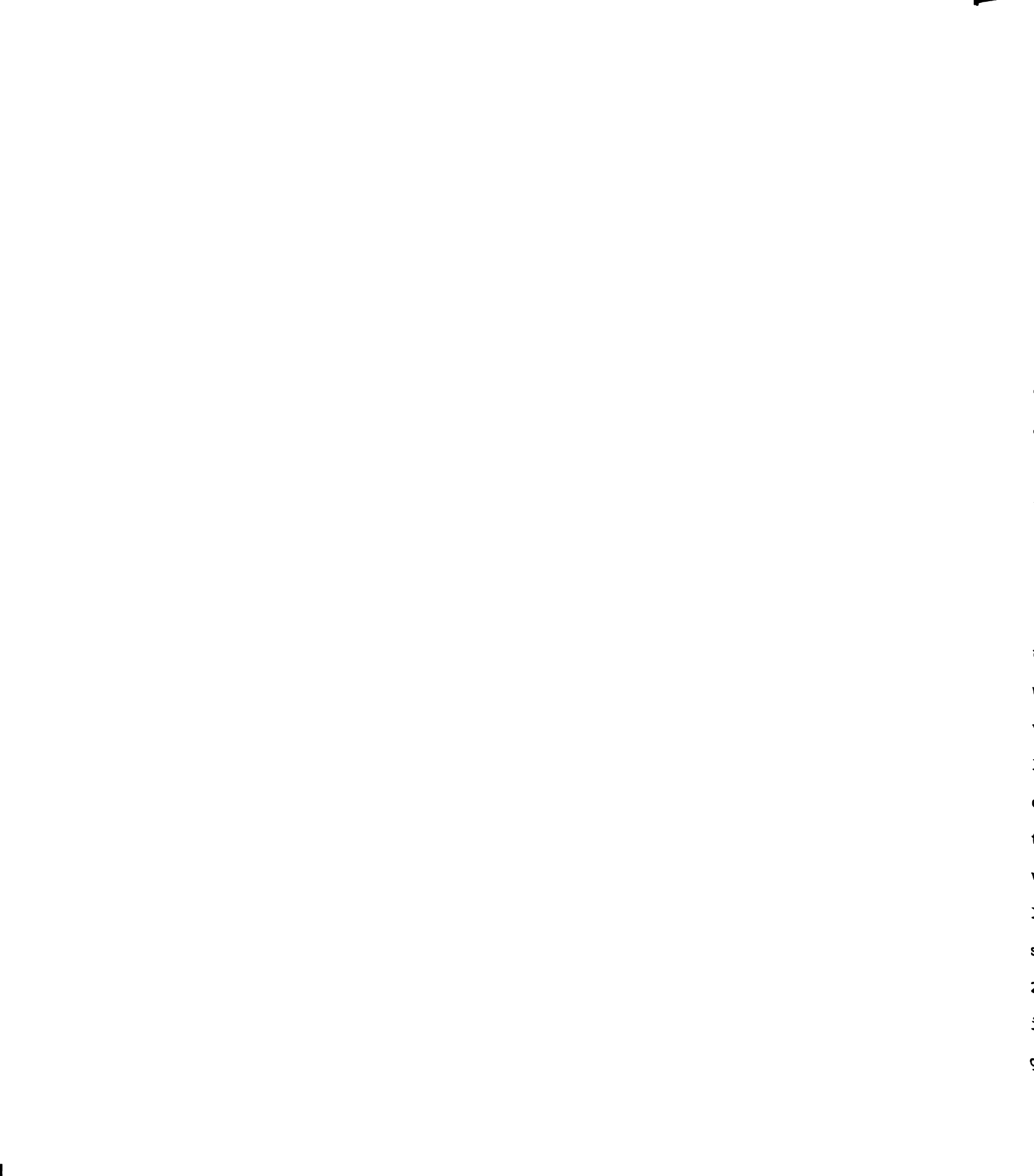
(2) Villa registration cards.

Most golfers who stayed overnight at GLVGC were drawn from villa registration cards dated from April 1990 to June 1991.

A systematic sample of 400 potential study respondents was drawn from each of the two sample frames yielding a total sample of 800 GLVGC guests. Villa registration cards were judged to represent a complete listing of villa users; however, only 15% of the cart rental slips contained a full and legible address. The degree to which this may have impacted the "randomness" of the sample of the golfers who stayed overnight at home or other accommodations is unknown.

#### Collection of Data

On July 5, 1991, a structured, self administered questionnaire was sent via certified mail to each of the selected respondents. A reminder postcard was mailed after one week to increase the response rate. An incentive was offered to encourage participation and to minimize non-response bias. Babbie (1986) and Dillman (1978) stated that the use of incentives increases the response rate and makes respondents feel a sense of responsibility for answering carefully. The incentive used in this study consisted of one free round of golf, good mid-week, for the next calendar year.



### Response Rate

A total of 800 questionnaires were mailed to the selected two groups of GLVGC visitors. Of these, 56 questionnaires were not deliverable. Of the 744 delivered, 538 completed usable returns were received for analysis. The response rate is the proportion of the eligible respondents in the sample who were successfully surveyed. This study had a response rate of 72.31%. This is quite good for a study of this type especially since the time constraint permitted only one initial mailing followed by a reminder postcard.

### Weighting the data

As noted above, the original purpose for which the data used herein were collected resulted in a sampling scheme which produced a disproportionally high representation of villa users with respect to the total GLVGC user population. It was necessary to develop a weighting scheme to adjust the existing data set for purposes of this study which reduces the possibility of bias introduced by over representation of villa users. The weighting scheme used is discussed below. In the 538 respondents, the ratio of the respondents who stayed overnight at GLVGC to overall GLVGC respondents is 287 : 538. However, the overall golf cart sample frame indicates that 11% of total rounds of golf are played by golfers who stay overnight at GLVGC. Respondents who stayed

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overnight at home and at other accommodations should be given greater weight to offset overweighting of villa users in the total respondents. The weighting factor, **W1**, can be calculated using the following formula:

$$\frac{287}{287 + (538-287)*W1} = \frac{11}{100}$$

**W1** is 9.3 (near 9). In this study, the respondents who stayed overnight at home and at other accommodations will be weighted ~~nine~~ times more heavily than villa users.

#### Data Preparation

To achieve the objectives of this study, the data regarding Gull Lake View Golf Club respondents were classified into: golfer golfing history (experience in golfing, first or repeat GLVGC visitor, rounds played last year), demographic variables (education, employment, marital status, etc.), consumption variables (total expenditures, meal preparation in GLVGC accommodations, etc.), environmental preferences (services, facilities, and courses), marketing variables (media use, information sources, etc.), and consumer response variables (satisfaction level, future participation, recall GLVGC advertisement, etc.).

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### Data Analysis

The data were first coded in the format shown in Appendix C. The GLVGC golf market was then segmented by trip type and visitor's geographic origin. The data about golfers' socioeconomic backgrounds, golfing history, consumption capacity, facilities preferences, media subscriptions, and the rest were recoded again (Appendix E and Appendix F) for purposes of statistical testing. The crosstab (Chi-square) and Mean Value Analysis were used to assess the usefulness of the above mention market segments and to profile GLVGC visitors.

### Market Segmentation

Respondents were classified into: a. three groups by trip type: golfers who stayed overnight (1) at home, (2) at GLVGC, and (3) at other accommodations, and b. ten groups by geographic origin (see Appendix D). The Arbitron ADI (Area of Dominant Influence) Market Atlas was used to classify respondents by their geographic origin.

The Area of Dominant Influence (ADI) is a geographic market classification scheme for describing television markets based on measured viewing patterns. Each market's ADI consists of all the counties in which the home market stations received a preponderance of viewing. Every county in the continental U.S. is allocated exclusively to one ADI--there is no overlap. The total within all ADI's represents

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(Broadcasting & Cable Market Place, 1992).

The ADI is a standard market definition. As a television buying tool, it is a geographical and demographic means for improving advertising efficiency. As a station tool, it has applications for sales, programming and promotion planning.

#### Why ADI ?

The reason for using ADI for geographic segmentation in this research is that cable television is the second most popular media subscribed to by the GLVGC golfers. Cable television was subscribed to by almost 59.9% of GLVGC golfers, second only to local newspaper subscriptions (76.3%). Furthermore, cable television markets are already well segmented and each channel's geographical reach is properly profiled in Broadcasting & Cable Market Place, 1992 edition. Utilizing ADI as a segmentation variable for the GLVGC market was considered to be potentially useful, because, if it proved to be a meaningful vehicle for segmenting GLVGC patrons, GLVGC management could better allocate television promotions among television stations in its market.

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### Statistical tests

Two statistical tests, Chi-square and Mean value analysis, were utilized in this research. They were used mainly to evaluate the usefulness of the market segments developed and to profile similarities and differences among GLVGC golfers. A brief overview of theories and procedures relevant to these statistics follows.

#### Chi-square (Crosstab)

The Chi-square test was used to segment the GLVGC market into three different overnight groups and to test the Null hypothesis. The Null hypothesis states that there are no differences among the three overnight or ten geographic groups established to study in terms of their socioeconomic background, golfing history, satisfaction levels, and so on. The significance level selected to reject the Null hypothesis is 0.05. If the Null hypothesis is rejected, there are statistically significant differences among the three overnight and ten geographic groups. From the results, marketers can evaluate the usefulness of market segmentation and possibly exploit revealed variations in each segment's characteristics. GLVGC's 30 geographic-trip type markets can also be studied by crosstabulating them with selected variables such as media used, frequency of play, etc. Only the six largest segments, comparing over 75% of GLVGC's client base, will be detailed in this thesis.

Procedure

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**Procedure 1: Recode variables as explained in Appendix E.**

**This involves recoding:**

- a. respondents' geographic origin by 10 media defined geographic areas.
- b. respondents' trip type by 3 different overnight groups.
- c. every interval, ordinal, or nominal variable relative to respondents' socioeconomic background, golfing history, satisfaction levels, and so on.

**Procedure 2: Run Crosstab to test the hypotheses.**

- a. Crosstab CITY (geographic origin) by NITEGL (trip type).
- b. Crosstab all variables by NITEGL (trip type)  
NITEGL was recoded into three groups:
  - stayed overnight at home.
  - stayed overnight at GLVGC.
  - stayed overnight at other accommodations.

**Procedure 3: Crosstab all variables by respondents' geographic origin to reveal GLVGC's ten geographic markets.**

**Procedure 4: Crosstab all variables by both respondents' trip type and geographic origin to reveal GLVGC's thirty market segments.**

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### Mean Value Analysis

Mean value analysis was used in this research only to obtain the mean values of every study variable for the three types of overnight groups within the ten different geographic origin groups. By using Mean value analysis, GLVGC golfers' socioeconomic background, golfing history, satisfaction levels, and so on can be profiled.

**Procedure 1: Recode variables as indicated in Appendix F.**

- a. Recode nominal or ordinal variables into interval variables.
- b. Recode nominal or ordinal variables into 0 or 1. The mean value can denote the percentage of "1" in the study variable.

**Procedure 2: Run Mean value for every study variable by ten geographic segments and by the three overnight groups.**

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## CHAPTER IV

### RESULTS AND DISCUSSION

Results from market segmentation and respondent characteristics analyses for each market segment are listed, compared, discussed, and profiled in this chapter. This chapter contains six sections. The first section reveals relationships between GLVGC visitor's trip types and geographic origins. In the second section, the socioeconomic background, golfing history, and consumption capacity of the different trip type segments are profiled. In the third section, profiles of GLVGC visitors by their geographic origins are presented. Total expenditures, projected increases in participation in golfing, market share captured by GLVGC, and so forth are displayed. The fourth section contains GLVGC visitor's preferences for and utilization of GLVGC's courses, facilities, and services, and their satisfaction levels by trip type. Such information can be used to improve GLVGC's management and services. In the fifth section, the media to which the different trip type segments subscribe, recalled GLVGC ad, or received information about GLVGC are discussed. Finally,

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in the last section, GLVGC's six largest geographic-trip type market segments are discussed. These six of a possible thirty such segments account for over 75% of GLVGC's total customer base and therefore are most likely to offer information relevant to its market planning efforts.

#### GLVGC Respondents' Trip Type and Geographic Origin

The geographic distribution of respondents by trip type is presented in Table 4.1. The Arbitron ADI system was used to classify respondents by geographic origin. It is important to note that GLVGC golfers were not randomly sampled across all visitors, rather 50% were selected from those who used GLVGC's overnight facilities and another 50% from day users using cart rental registrations as the sampling frame. In fact, the golf cart sample frame indicates that 11% of total rounds of golf are played by villa users. Thus, day user respondents were weighted by nine to simulate the real GLVGC market. Accordingly, the weighted trip type distribution in Table 4.1 can be assumed to represent the total GLVGC user population. As can be seen in Table 4.1, most GLVGC visitors (47.6%) are from the Grand Rapids-Kalamazoo-Battle Creek, MI. ADI. Most Grand Rapids-Kalamazoo-Battle Creek visitors (90.9%) stayed overnight at home; only 1.9% stayed overnight in GLVGC accommodations, and 7.1% stayed overnight in other accommodations. The second largest number of GLVGC visitors

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Table 4.1: GLVGC respondents' geographic origin by their trip type.

ORIGI ***	Count % of customer base Row% Column%	Respondents stayed overnight at			All GLVGC Respondents**
		home*	GLVGC	other*	
1. GRAND RAPIDS- KALAMAZOO- BATTLE CREEK, MICH.	1035 43.3% 90.9% 77.2%	22 0.9% 1.9% 7.7%	81 3.4% 7.1% 10.6%	Count= 1138 Total= 47.6%	
2. FLINT- SAGINAW- BAY CITY, MICH.		3 0.1% 7.7% 1.0%	36 1.5% 92.3% 4.7%	39 1.6%	
3. DETROIT, MICH.	135 5.6% 21.5% 10.1%	197 8.2% 31.3% 68.6%	297 12.4% 47.2% 38.8%	629 26.3%	
4. CHICAGO- LA SALLE, ILL.	18 0.8% 11.4% 1.3%	23 1.0% 14.6% 8.0%	117 4.9% 74.1% 15.3%	158 6.6%	
5. LANSING- ANN ARBOR, MICH.	117 4.9% 72.7% 8.7%	8 0.3% 5.0% 2.8%	36 1.5% 22.4% 4.7%	161 6.7%	
6. SOUTH BEND- ELKHART, IND.	27 1.1% 46.6% 2.0%	4 0.2% 6.9% 1.4%	27 1.1% 46.6% 3.5%	58 2.4%	
7. INDIANAPOLIS- MARION, IND.		7 0.3% 100.0% 2.4%		7 .3%	
8. FORT WAYNE- ANGOLA, IND.		7 0.3% 16.3% 2.4%	36 1.5% 83.7% 4.7%	43 1.8%	
9. TOLEDO, OHIO	9 0.4% 12.3% .7%	10 0.4% 13.7% 3.5%	54 2.3% 74.0% 7.1%	73 3.1%	
10. OTHERS		6 0.3% 6.9% 2.1%	81 3.4% 93.1% 10.6%	87 3.6%	
All GLVGC Respondents	Count= Total=	1341 56.0%	287 12.0%	765 32.0%	2393 100.0%

\* The sample was weighted by nine.

\*\* The samples were summed after being weighted.

\*\*\* The Arbitron ADI market atlas was used to establish geographic boundaries for each origin. The largest city(ies) in each ADI is (are) used to label each ADI. However, all respondents do not live in these central cities.

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(26.3%) are from the Detroit, MI. ADI. Around 30% (31.3%) of Detroit respondents stayed overnight in GLVGC accommodations. As for the other Detroit respondents, 47.2% stayed overnight in other accommodations and only 21.5% stayed overnight at home. The third largest number of GLVGC visitors (6.7%) are from the Lansing-Ann Arbor, MI. ADI. Only 5% of the Lansing-Ann Arbor respondents stayed overnight at GLVGC. Another 22.4% of the Lansing-Ann Arbor respondents stayed overnight in other accommodations. More than 70.0% (72.7%) of the Lansing-Ann Arbor respondents stayed overnight at home. The fourth largest number of the GLVGC respondents (6.6%) are from the Chicago-LaSalle, IL. ADI. Nearly 15% (14.6%) of the Chicago-LaSalle respondents stayed overnight at GLVGC, but another 74.1% of the Chicago-LaSalle respondents stayed overnight in other accommodations while only 11.4% of the Chicago-LaSalle respondents stayed overnight at home.

Twelve percent of all visitors stayed overnight in GLVGC accommodations, 32.0% stayed overnight in other accommodation, and 56.0 % stayed overnight at home. Around 70% (68.6%) of respondents who stayed overnight in GLVGC accommodations are from Detroit. As for the respondents who stayed overnight in other accommodations, many of them (38.8%) are also from Detroit. Almost 80.0% (77.2%) of the respondents who stayed overnight at home are from Grand Rapids-Kalamazoo-Battle Creek ADI.

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## GLVGC Respondents' Characteristics by Trip Type

### GLVGC Respondents' Golfing History by Trip Type

Except for the total rounds played in 1990, there are significant differences in golfing histories across the three overnight categories as can be seen in Table 4.2. On average, 72.8% of respondents played 25 rounds or more in 1990; only 27.2% played less than 25 rounds. Compared with all American golfers, the percentage (72.8%) of respondents who played 25 rounds or more in 1990 is almost the same as that (73.0%) of overall U.S. golfers in 1987 (NGF, 1989').

As for golf experience, 31.0% of respondents have been golfing more than 25 years, 42.9% from 11 to 25 years, and 26.2% less than 11 years. Respondents who stayed overnight in GLVGC accommodations had a higher percentage (40.0%) of longer golfing experience (over 25 years) than the respondents who stayed overnight at home (30.4%) and those who stayed overnight in other accommodations (28.6%).

Across all respondents, most (41.6%) had visited GLVGC for more than 5 years, 35.2% from 2 to 5 years, and only 23.2% for one year. Most of the latter are first time visitors as confirmed by the distribution of first time visitors (20.3%) and repeat visitors (79.7%). Most respondents who stayed overnight at home (80.6%) and respondents who stayed overnight in GLVGC accommodations (80.1%) were found to have been visiting GLVGC for more than

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Table 4.2: Respondent's golfing history by trip type.

GLVGC RESPONDENTS' GOLFING HISTORY	SEGMENT			TOTAL RESPONDENTS	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT HOME	GLVGC	OTHER			
N =	1341 <sup>c</sup>	287	765 <sup>c</sup>	2393 <sup>d</sup>		
% of customer base =	56.0%	12.0%	32.0%	100.0%		
<b>Golfing Experience</b>						
0-10 YEARS	25.0%	15.9%	32.1%	26.2%		
11-25 YEARS	44.6%	44.1%	39.3%	42.9%		
26+ YEARS	30.4%	40.0%	28.6%	31.0%	35.29	.00 <sup>*</sup>
<b>Years Visited GLVGC</b>						
1st YEAR	19.4%	19.9%	31.0%	23.2%		
2-5 YEARS	30.6%	38.8%	41.7%	35.2%		
5+ YEARS	50.0%	41.3%	27.4%	41.6%	105.46	.00 <sup>*</sup>
<b>1st time VS repeat visitor</b>						
1st time GLVGC visitor	13.5%	22.8%	31.3%	20.3%		
Repeat GLVGC visitor	86.5%	77.2%	68.7%	79.7%	95.26	.00 <sup>*</sup>
<b>Times visited GLVGC in the past year</b>						
0 or 1 time	18.7%	57.4%	43.5%	31.3%		
2 or more times	81.3%	42.6%	56.5%	68.7%	245.70	.00
<b>Favor 9- OR 18- HOLES</b>						
More favor 9-	27.2%	13.2%	9.8%	20.0%		
More favor 18-	46.3%	64.2%	59.8%	52.7%		
No preference	26.5%	22.6%	30.5%	27.3%	109.81	.00 <sup>*</sup>
<b>Overnight at home VS Overnight away from home</b>						
Overnight away from home	5.3%	100.0%	96.5%	46.0%		
Overnight at home	94.7%		3.5%	54.0%	2036.78	.00 <sup>*</sup>
<b>Rounds played (in 1990)</b>						
0 - 24 ROUNDS	26.8%	26.2%	28.2%	27.2%		
25+ ROUNDS	73.2%	73.8%	71.8%	72.8%	.64	.72

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant differences among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted

<sup>\*</sup> Mark means the variable tested is significantly different among the three different trip type GLVGC visitors.

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one year. About one third of respondents who stayed overnight in other accommodations were found to have visited GLVGC for one year or less or were first time visitors, thus those staying overnight in other accommodations are considerably more likely to be new GLVGC customers.

Most respondents (52.7%) preferred 18 hole rounds to 9 hole rounds; 27.3% expressed no preference between 9- and 18- hole rounds; and only 20.0% preferred 9 hole over 18 hole rounds. Most respondents who stayed overnight in GLVGC accommodations (64.2%) and respondents who stayed overnight in other accommodations (59.8%) preferred 18 hole rounds to 9 hole rounds. Individuals who spent the night at home were far more likely to favor playing 9 holes probably because they are more likely to have less leisure time available due to more work, family, and other responsibilities.

The data in the section of Table 4.2 concerning overnight at home versus away from home confirm that the majority of respondents appear to have correctly responded to the question concerning where they spent the night. Finally, approximately 75% of respondents in all three groups played over 25 rounds of golf in 1990 indicating that most GLVGC visitors are frequent golfers.

#### GLVGC Respondents' Socioeconomic Status by Trip Type

The data in Table 4.3 reveal the existence of significant differences between the three groups of golfers

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with respect to age, employment situation, marital status, income, education, family size, and gender. These will be highlighted in this section along with differences between GLVGC golfers and all U.S. and Michigan golfers where comparisons are possible with information reported in Table 2.1.

The overall GLVGC respondents' average age was found to be 45.9 years old, older than Michigan golfers (36.7), and U.S. golfers (38.1) (NGF,1989<sup>a</sup>). Those overnighing at home average age is 47.9, older than the respondents who stayed overnight in other accommodations (44.9) and respondents who stayed overnight in GLVGC accommodations (39.2).

Nationally, 25% of golfers are older than 50 years old, and in Michigan 24% are older than 50; however, nearly 45% of GLVGC golfers are over 50 although the over 50 percentage of those staying in GLVGC's villa (25.2%) is about equal to the national and statewide norms. Clearly GLVGC's current market comprises a higher percentage of older golfers than either the overall Michigan or U.S. markets.

Nearly 83% of respondents reported working full time and almost 11% are retired. Almost 90.0% of respondents who stayed overnight at home worked full time. Around 80% of the respondents who stayed overnight in other accommodation worked full time. Only 65.4% of respondents who stayed overnight in GLVGC accommodations worked full time. Twenty-eight percent of respondents who stayed overnight in GLVGC

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Table 4.3: GLVGC respondents' socioeconomic status by trip type.

GLVGC RESPONDENTS' SOCIOECONOMIC STATUS	SEGMENT			TOTAL RESPONDENTS	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT HOME	GLVGC	OTHER			
	N = 1341 <sup>c</sup>	287	765 <sup>c</sup>	2393 <sup>d</sup>		
% of customer base =	56.0%	12.0%	32.0%	100.0%		
<b>Age</b>						
29 OR YOUNGER	11.0%	27.7%	12.8%	13.6%		
30 - 39	9.0%	24.2%	24.4%	15.9%		
40 - 49	28.3%	22.8%	23.3%	26.0%		
50 - 59	34.5%	19.6%	29.1%	30.9%		
60 or older	17.2%	5.6%	10.5%	13.6%		
mean =	48.2	40.0	45.3	43.2	191.28	.00 <sup>e</sup>
<b>Employment</b>						
WORK FULL TIME	89.2%	65.4%	78.6%	82.9%		
RETIRED	6.1%	28.0%	14.3%	11.4%		
OTHER	4.7%	6.6%	7.1%	5.7%		
					113.12	.00 <sup>e</sup>
<b>Marital situation</b>						
MARRIED	73.6%	89.0%	84.5%	79.0%		
OTHER	26.4%	11.0%	15.5%	21.0%		
					54.21	.00 <sup>e</sup>
<b>Household income in 1990</b>						
\$ 0- 25000	4.9%	3.0%	3.8%	4.3%		
\$25000- 50000	33.8%	23.2%	28.8%	30.9%		
\$50000-105000	47.2%	56.1%	46.3%	48.0%		
\$105,000+	14.1%	17.7%	21.3%	16.8%		
					31.07	.00 <sup>e</sup>
<b>Education</b>						
HIGH SCHOOL	16.4%	16.5%	9.5%	14.2%		
COLLEGE	59.6%	56.8%	58.3%	58.9%		
GRADUATE SCHOOL	24.0%	26.7%	32.1%	26.9%		
mean =	15.6	15.4	16.2	15.8	29.56	.00 <sup>e</sup>
<b>Family size (#person)</b>						
2 OR LESS	48.3%	53.6%	53.6%	50.6%		
3 OR MORE	51.7%	46.4%	46.4%	49.4%		
mean =	2.9	2.8	2.8	2.9	6.52	.04 <sup>e</sup>

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant differences among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>e</sup> Mark means the variable tested is significantly different among the three different trip type GLVGC visitors.

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accommodations were retired, while only 14.3% of respondents who stayed overnight in other accommodations and 6.1% of the respondents who stayed overnight at home were retired.

Seventy-nine percent of GLVGC respondents were married; 89.0% of respondents who stayed overnight in GLVGC accommodations were married; 84.5% of respondents who stayed overnight in other accommodations were married; and 73.6% of the respondents who stayed overnight at home were married.

Approximately 65% of respondents earned more than \$50,000 while only 35% of all U.S. golfers earn at least \$50,000. Furthermore, 16.8% of respondents have incomes of more than \$105,000 which is also higher than the 10.5% of all U.S. golfers who reached the somewhat lower \$100,000 benchmark reported in Table 2.1.

The average length of education for all GLVGC respondents is 15.8 years: 58.9% of respondents have an undergraduate education, 26.9% a graduate education, and only 14.2% a high school education. Data in Table 2.1 suggest that GLVGC respondents have a higher education level than most U.S. golfers. Only 28.6% of all U.S. golfers have an undergraduate education, 39.9% a graduate education, and over 31.5% only a high school education or less.

Respondents reported their average family size to be 2.9 persons. Slightly more than 50% reported families with 2 or fewer persons; slightly fewer than half reported having larger families.

GLVGC Respondents' Consumption Patterns by Trip Type

There are significant differences across respondent groups by consumption items such as: total expenditures in 1989, expectations of participation in golf next year, ever or never using professional golf instruction, and the frequency of combining golfing and vacation (Table 4.4).

The percentage (51.2%) of GLVGC respondents who reported always combining golfing with vacations is similar to the percentage (48.8%) who seldom combine golfing with vacations. But respondents who stayed overnight in other accommodations combine more golfing and vacations (66.3%) than the respondents who stayed overnight at home (42.6%).

Their total expenditures last year at GLVGC are distributed across income categories as follows: 33.8% spent less than \$250, 24.9% spent from \$250 to \$500, 20.5% spent from \$500 to \$1,000, and 20.8% spent more than \$1,000. The expenditures of around half (48.1%) of respondents who stayed overnight at home was less than \$250 last year, but about half of respondents who stayed overnight in GLVGC accommodations (49.5%) and respondents who stayed overnight in other accommodations (54.0%) spent more than \$500.

About 98% of respondents have never used professional golf instruction at GLVGC. Around 53.2% of respondents reported that they expected to play the same amount next year, another 45.1% expected to play more, and only 1.6% expected to play less.

Table 4.4: GLVGC respondents' consumption by trip type.

CONSUMPTION ITEM	SEGMENT				TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT			ALL RESPONDENTS		
	HOME	GLVGC	OTHER			
N =	1341 <sup>c</sup>	287	765 <sup>c</sup>	2393 <sup>d</sup>		
% of customer base =	56.0%	12.0%	32.0%	100.0%		
<b>Golfing + vacation</b>						
FEW GOLF+VACA	57.4%	47.9%	33.7%	48.8%		
MORE GOLF+VACA	42.6%	52.1%	66.3%	51.2%		
					107.67	.00 <sup>e</sup>
<b>Total expenditures in 1990 at GLVGC</b>						
\$ 0 - 250	48.1%	13.9%	16.2%	33.8%		
\$ 250 - 500	19.5%	36.6%	29.7%	24.9%		
\$ 500 - 1,000	15.8%	25.3%	27.0%	20.5%		
\$1,000-> MORE	16.5%	24.2%	27.0%	20.8%		
					254.73	.00 <sup>e</sup>
<b>Professional</b>						
<b>golf instruction</b>						
USED this GLVGC trip	0.7%	0.3%	1.2%	0.8%		
NOT USED this GLVGC trip	99.3%	99.7%	98.8%	99.2%		
					2.48	.29
<b>Professional golf instruction</b>						
EVER USED	3.3%	1.7%		2.1%		
NEVER USED	96.7%	98.3%	100.0%	97.9%		
					20.84	.00 <sup>e</sup>
<b>Play Next year</b>						
PLAY LESS	2.0%	0.7%	1.2%	1.6%		
PLAY SAME	46.6%	59.2%	63.0%	53.2%		
PLAY MORE	51.4%	40.1%	35.8%	45.1%		
					56.48	.00 <sup>e</sup>
<b>PACKAGE</b>						
BUY PACKAGE		94.7%				
NO PACKAGE		5.3%				
<b>WHICH</b>						
NO PACKAGE		8.3%				
3DAYS 2NIGHTS		56.6%				
4DAYS 3NIGHTS		35.2%				
<b>Make breakfast at GLVGC</b>						
NO		52.4%				
YES		47.6%				
<b>Make lunch at GLVGC</b>						
NO		68.6%				
YES		31.4%				
<b>Make dinner at GLVGC</b>						
NO		69.7%				
YES		30.3%				

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant differences among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>e</sup> Mark means the variable tested is significantly different among the three different trip type GLVGC visitors.

There is no significant difference among the respondents with respect to use of professional golf instruction. On the average, 99.2% of the respondents reported not using professional golf instruction at GLVGC on this trip.

Of respondents who stayed overnight at GLVGC, nearly 95% purchased a GLVGC package. About 56.6% purchased 3 days and 2 nights packages and 35.2% purchased 4 days and 3 nights packages; only 5.3% did not purchase any package. Half of GLVGC villa users (47.6%) prepared their breakfasts in their own rooms, but only around 30% of them had their lunch (31.4%) and dinner (30.3%) in their room.

#### GLVGC Respondents' Geographic Profile

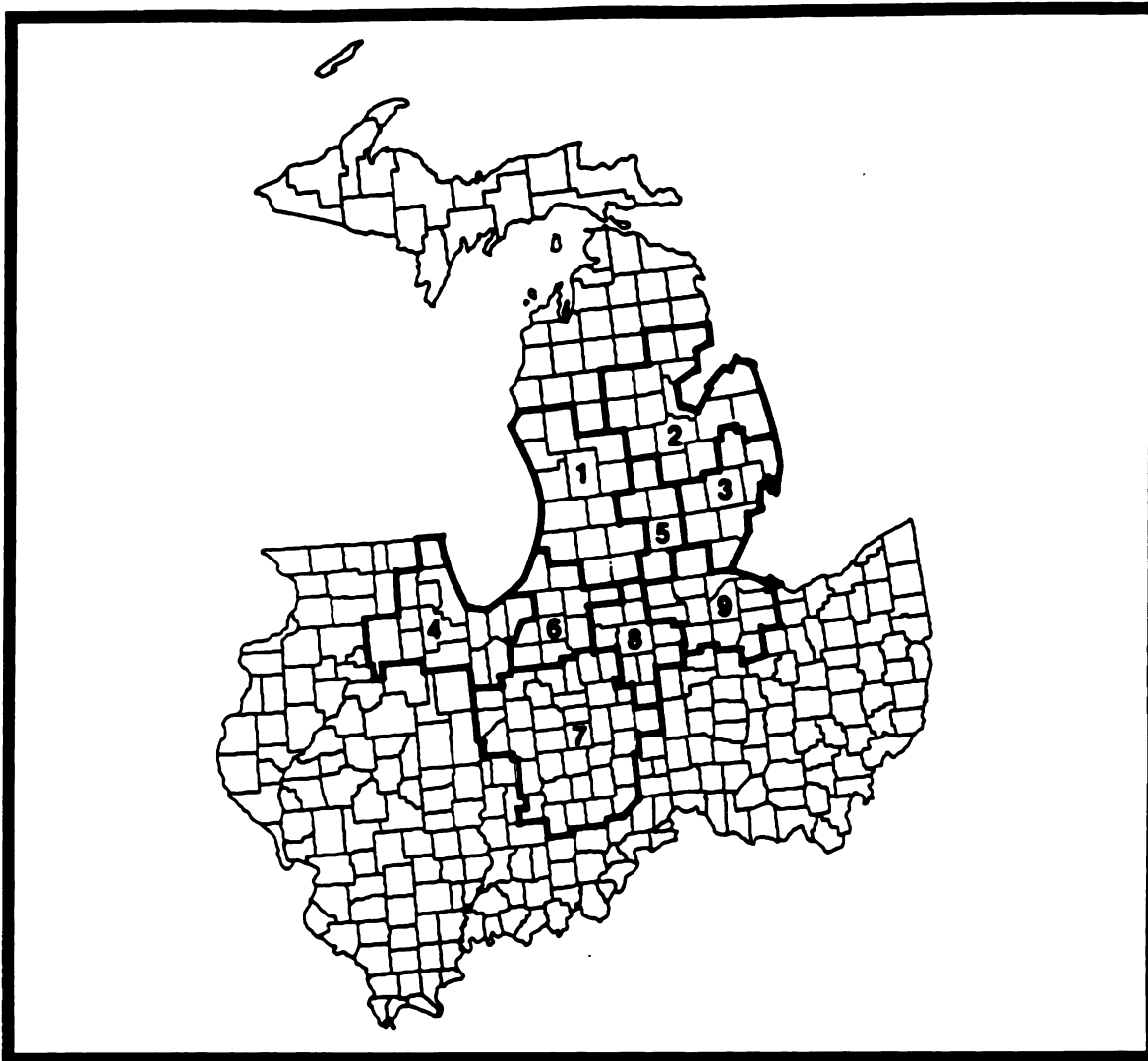
In the previous section, various characteristics of respondents were discussed after grouping them into three trip type segments linked to where they spent the night, at home, at GLVGC, or at other accommodations. In this section, respondents are examined after grouping them into 10 geographic segments in accordance with their reported residence.

Three formats are used in this section to provide insight into similarities and differences of respondents across the 10 geographic segments established for purposes of this analysis. First, the means for study variables are reported for each of the 10 geographic sectors in



Tables 4.5-4.8. These tables provide the opportunity to explore respondent characteristics across the 10 segments. No interpretation of these tables is provided herein. Given the very large number of comparisons which would be possible and the simplicity of making these comparisons, it is assumed that the reader will be able to explore comparisons which may be of interest. Second, an index is provided at the beginning of the discussion presented for each of the 10 geographic segments. The index is designed to provide the reader with a quick grasp of each segment's relative ranking across seven variables of key importance in market planning. Third, a table is presented under the discussion of each segment which permits comparisons within each segment across where respondents spent the night and selected demographic and use characteristics.

The ADI concept was used to define these ten geographic segments. These are listed below (also see Figure 4.1) along with the number of respondents from each which was available for analysis. The relatively small sample size from many of the geographic segments should be noted. One should not ascribe a high degree of confidence to the results reported for segments based upon sample sizes much below 25.



<u>GEOGRAPHIC SEGMENT</u>	<u>NUMBER OF CASES</u>
1. GRAND RAPIDS-KALAMAZOO-BATTLE CREEK, MI.	143
2. FLINT-SAGINAW-BAY CITY, MI.	7
3. DETROIT, MI.	236
4. CHICAGO-LA SALLE, IN.	36
5. LANSING-ANN ARBOR, MI.	25
6. SOUTH BEND-ELKHART, IN.	9
7. INDIANAPOLIS-MARION, IN.	7
8. FORT WAYNE-ANGOLA, IN.	11
9. TOLEDO, OH.	17
10. OTHER	14
Total (unweighted)	505

Figure 4.1: Map of the ADI markets used in segmenting respondents by residence.

Table 4.5: Respondents' golfing history by geographic segment. (Values in Table are group means)

GEOGRAPHIC SEGMENT	GLVGC VISITS <sup>a</sup>	GOLF EXPERIENCE	GOLFING AT GLVGC	ROUNDS <sup>b</sup>	1ST TIME VISITOR
1. G. Rapids	8.2	19.6	6.9	43.6	14.5%
2. Flint	1.5	17.7	10.5	44.3	2.6%
3. Detroit	2.0	22.6	4.5	47.0	25.1%
4. Chicago	2.5	23.2	3.4	34.1	27.9%
5. Lansing	2.3	22.0	8.5	42.8	11.2%
6. S. Bend	1.9	17.7	7.6	50.6	31.0%
7. Indianapolis	1.3	18.4	1.9	44.4	57.1%
8. Ft. Wayne	1.5	20.5	5.9	60.0	46.5%
9. Toledo	1.7	21.3	2.8	70.8	38.4%
10. Others	2.3	24.3	8.5	56.7	37.2%
Overall Respondents	5.0 times	21.0 years	6.1 years	45.5 rounds	20.3%

<sup>a</sup> Times visited GLVGC during the past year

<sup>b</sup> Rounds played by GLVGC respondents in 1989.

Table 4.6: Respondents' socioeconomic background and consumption by geographic segment. (Values in Table are group means)

GEOGRAPHIC SEGMENT	AGE	FAMILY SIZE	OVERNIGHT AT GLVGC	TOTAL EXPENDITURE	GOLF PLAY INCREASE <sup>a</sup>
1. G. Rapids	49.1	2.9	1.9%	801.5	18.8%
2. Flint	46.6	2.4	7.7%	686.3	14.6%
3. Detroit	43.3	2.9	31.3%	884.4	10.7%
4. Chicago	43.2	2.5	14.6%	617.1	8.8%
5. Lansing	45.5	3.4	5.0%	419.6	19.5%
6. S. Bend	42.5	2.2	6.9%	556.4	0.0%
7. Indianapolis	42.9	3.1	100.0%	688.9	28.6%
8. Ft. Wayne	45.3	2.6	16.3%	661.1	10.9%
9. Toledo	38.8	2.0	13.7%	541.1	0.7%
10. Other	43.4	2.8	6.9%	997.1	4.7%
Overall Respondents	45.9	2.9 persons	12.0%	792.1 U.S. Dollars	14.4%

<sup>a</sup> Percentage expecting to golf more next year

**Table 4.7: Respondents' demographic backgrounds by geographic segment. (Values in Table are group means)**

GEOGRAPHIC SEGMENT	The Married		Education		Income <sup>a</sup> in 1990	
1. G. Rapids	73.2%		15.4		2.9	(\$ 47,500)
2. Flint	76.9%		15.0		2.8	(\$ 45,000)
3. Detroit	81.9%		15.8		3.4	(\$ 60,000)
4. Chicago	87.3%		17.2		3.5	(\$ 62,500)
5. Lansing	88.8%		15.7		3.7	(\$ 67,500)
6. S. Bend	81.6%		14.6		2.8	(\$ 45,000)
7. Indianapolis	100.0%		18.1		3.3	(\$ 57,500)
8. Ft. Wayne	97.7%		14.8		3.1	(\$ 52,500)
9. Toledo	74.0%		18.4		2.8	(\$ 45,000)
10. Other	88.5%		15.6		2.9	(\$ 47,500)
<b>Overall Respondents</b>	<b>78.9%</b>		<b>15.7</b>		<b>3.1</b>	<b>(\$ 52,500)</b>

<sup>a</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

**Table 4.8: Respondents' golf playing by geographic segment. (Values in Table are group means)**

GEOGRAPHIC SEGMENT	Total rounds played in 1990		Rounds played at GLVGC in 1990		% of play at GLVGC	
	18 HOLE	9 HOLE	18 HOLE	9 HOLE	18 HOLE	9 HOLE
1. G. Rapids	28.0	16.9	5.0	3.5	17.6%	20.7%
2. Flint	19.9	24.4	2.0	0.3	10.1%	1.2%
3. Detroit	35.9	11.7	5.6	0.6	15.6%	5.1%
4. Chicago	24.0	8.2	4.1	0.3	17.1%	3.7%
5. Lansing	23.5	19.4	2.9	0.1	12.3%	0.5%
6. S. Bend	46.5	4.1	5.0	0.2	10.8%	4.9%
7. Indianapolis	27.4	3.6	5.1	0.1	18.6%	2.8%
8. Ft. Wayne	50.0	10.0	2.7	0.4	5.4%	4.0%
9. Toledo	61.1	9.6	5.6	0.5	9.2%	5.2%
10. other	46.0	10.1	3.2	0.1	7.0%	1.0%
<b>Overall Respondents</b>	<b>31.8</b>	<b>14.3</b>	<b>4.8</b>	<b>1.9</b>	<b>15.1%</b>	<b>13.3%</b>

Overall GLVGC Respondents

GLVGC customers in every 10,000 households	18.4
Percentage of respondents first time visited GLVGC	20.3%
Times the respondents visited GLVGC in past year	5.0
Percentage of respondents stayed overnight in GLVGC	12.0%
The respondents' total spending at GLVGC in 1990	\$792.1
Percentage expecting to golf more next year	14.4%
Projected percentage of total GLVGC customers	100.0%

Respondents were from Michigan, Indiana, Massachusetts, Pennsylvania, Illinois, Ohio, Kentucky, Virginia, Texas, and Florida. According to Table 4.1, 56.0% of overall respondents stayed overnight at home, 12.0% stayed overnight in GLVGC accommodations, and 32.0% stayed overnight in other accommodations.

From Table 4.9, it can be seen that 20.3% of overall respondents are first time visitors. Their average reported age is 45.9 years; most completed college (15.8 years of education), and they earned relatively high incomes (\$52,500/year). About 80% are married with family sizes averaging 2.9 persons. They have been golfing for 21.0 years; 6.1 years at GLVGC. About 80% of them are GLVGC repeat visitors. They averaged 5.0 visits to GLVGC in 1990. Their average total expenditures at GLVGC in 1990 was \$792.1. Respondents will potentially increase their golf playing by 14.4 percent next year at GLVGC.

Table 4.9: Profile of overall GLVGC respondents. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	Mean for overall respondents who stayed overnight				
		at home	at GLVGC	at others	all Respondents
	N =	1341 <sup>1</sup>	287	765 <sup>1</sup>	2393 <sup>2</sup>
% of customer base =		56.0%	12.0%	32.0%	100.0%
Age		47.9	39.2	44.9	45.9
% of the married		73.7%	89.0%	84.7%	79.0%
Education (years)		15.6	15.4	16.2	15.8
Income <sup>3</sup> in 1990		3.0 (\$50,000)	3.3 \$57,500	3.2 \$55,000	3.1 \$52,500)
Family size		2.9	2.8	2.8	2.9
Golf experience (years)		20.8	24.7	19.8	21.0
GLVGC golf experience (years)		7.2	5.7	4.6	6.1
Times visited GLVGC in 1990		7.1	2.0	2.3	5.0
% first time visitor		13.5%	22.7%	32.1%	20.3%
Rounds played in 1990		43.4	49.4	47.5	45.4
Total expenditures in 1990 at GLVGC (\$'s)		677.4	1054.3	1335.7	930.8
Expected % golfing increased next year at GLVGC		18.6%	12.1%	8.0%	14.4%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Grand Rapids-Kalamazoo-Battle Creek, MI. ADI\*

		Rank	Means
GLVGC customers in every 10,000 households	111.4	*****	18.4
Percentage of respondents on first visit to GLVGC	14.5%	**	20.3
Times the respondents visited GLVGC in past year	8.2	*****	5.0
Percentage of respondents stayed overnight at GLVGC	1.9%	*	12.0%
Respondents' annual incomes in 1990	\$47,500	**	\$52,500
The respondents' total spending at GLVGC in 1990	\$801.5	****	\$792.1
Percentage expecting to golf more next year	18.8%	****	14.4%
Projected percentage of total GLVGC customers	47.6%	*****	
Reliability due to (sample size): high (143)			

According to the index above, there are around 111.4 GLVGC customers for every 10,000 households in the Grand Rapids-Kalamazoo-Battle, MI. ADI, which is the highest market density registered across the 10 ADIs. This segment ranks very high on the frequency of visitation and percentage of GLVGC's customer base (47.6%), a little low on percentage of first time customers, and very low on use of GLVGC's overnight accommodations. According to Table 4.1, 90.9% of the respondents in this area are golfers who stayed overnight at home, only 1.9% stayed overnight in GLVGC accommodations, and 7.1% stayed overnight in other accommodations. This is the largest of the 10 geographic markets; it is very important to GLVGC's profitability.

Table 4.10 provides further information concerning this geographic segment. Surprisingly, 14.5% of respondents from this area are first time GLVGC visitors. Respondents from

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\* The code for interpreting index values is:

- \* bottom 20%
- \*\* next to bottom 20%
- \*\*\* middle 20%
- \*\*\*\* 2nd from top 20%
- \*\*\*\*\* top 20%

this area visited GLVGC 8.2 times in 1990. Their incomes averaged about \$47,500 per year in 1990, and their average total expenditures at GLVGC in that year equalled \$801.5; with respect to the latter, it ranks third highest among the 10 geographic segments. These respondents will potentially golf more by 18.8 percent next year at GLVGC.

Table 4.10: Geographic segment 1, Grand Rapids-Kalamazoo-Battle Creek, MI ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Means for</u> <u>Grand Rapids-Kalamazoo-Battle Creek, ADI</u> <u>respondents who stayed overnight</u>			
	<u>at</u> <u>home</u> N = 1035 <sup>1</sup> % of customer base = 90.9%	<u>at</u> <u>GLVGC</u> 22 1.9%	<u>at</u> <u>others</u> 81 <sup>1</sup> 7.1%	<u>all</u> <u>Respondents</u> 1138 <sup>2</sup> 100.0%
Age	49.3	39.0	49.1	49.1
% of the married	71.7%	85.7%	88.9%	73.2%
Education (years)	15.4	15.2	15.4	15.4
Income <sup>3</sup> in 1990	2.9 (\$47,500)	3.1 \$52,500	2.8 \$45,000	2.9 \$47,500)
Family size	2.9	3.0	3.0	2.9
Golf experience (years)	19.8	25.0	16.2	19.6
GLVGC golf experience (years)	7.1	6.1	4.6	6.9
Times visited GLVGC in 1990	8.4	2.6	5.3	8.2
% first time visitor	14.0%	9.0%	22.2%	14.5%
Rounds played in 1990	43.8	42.6	41.4	43.6
Total expenditures in 1990 at GLVGC (\$'s)	752.1	2132.7	1069.9	801.5
% expecting to golf more next year at GLVGC	20.0%	12.9%	5.6%	18.8%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.



Flint-Saginaw-Bay City, MI. ADI

		Rank	Means
GLVGC customers in every 10,000 households	5.2	**	18.4
Percentage of respondents first time visited GLVGC	2.6%	*	20.3
Times the respondents visited GLVGC in past year	1.5	*	5.0
Percentage of respondents stayed overnight in GLVGC	7.7%	***	12.0%
Respondents' annual incomes in 1990	\$45,000	*	\$52,500
The respondents' total spending at GLVGC in 1990	\$686.3	***	\$792.1
Percentage expecting to golf more next year	14.6%	****	14.4%
Projected percentage of total GLVGC customers	1.6%	*	
Reliability due to (sample size): very low (7)			

According to the index above, there are only about 5.2 GLVGC customers for every 10,000 households in the Flint-Saginaw-Bay City, MI. ADI, which is one of the lower market densities registered across the 10 ADIs. This segment ranks very low on frequency of visitation, percentage of GLVGC's customer base, and percentage of first time customers, and middle on use of GLVGC's overnight accommodations. According to Table 4.1, none of the respondents from this area are golfers who stayed overnight at home, but only 7.7% of them stayed overnight in GLVGC accommodations. The remaining 92.3% of the respondents stayed overnight in other accommodations which suggests the primary reason for visiting the Battle Creek-Kalamazoo area was for business or other reasons. Their projected percentage of total GLVGC customers is only 1.6 percent which ranks this segment very low among all geographic segments. This is not currently a good market for the GLVGC golf club, probably because golfers from there are closer to other comparable facilities.

From referring to Table 4.11, it can be seen that 2.6%

of respondents from this area are first time visitors. Respondents from this area visited GLVGC only 1.5 times, and most of them are repeat visitors. Their incomes averaged almost \$45,000 per year in 1990, and their total expenditures at GLVGC totaled \$686.3, which was in the middle of all geographic segments. These respondents will potentially golf more by 14.6 percent next year at GLVGC.

Table 4.11: Geographic segment 2, Flint-Saginaw-Bay City, MI. ADI area. Selected variable means by where respondents stayed overnight.

Study variable	N =	Means for Flint-Saginaw-Bay City ADI respondents who stayed overnight			all Respondents
		at home	at GLVGC	at other	
% of customer base =	0	0.0%	7.7%	36 <sup>1</sup>	39 <sup>2</sup> 100.0%
Age	-		50.7	46.3	46.6
% of the married	-		100.0%	75.0%	76.9%
Education (years)	-		15.3	15.0	15.0
Income <sup>3</sup> in 1990	-		3.0 (\$50,000)	2.8 \$45,000	2.8 \$45,000)
Family size	-		4.0	2.3	2.4
Golf experience (years)	-		20.7	17.5	17.7
GLVGC golf experience (years)-			5.0	11.0	10.5
Times visited GLVGC in 1990	-		1.3	1.5	1.5
% first time visitor	-		33.3%	0.0%	2.6%
Rounds played in 1990	-		36.0	45.0	44.3
Total expenditures in 1990 at GLVGC (\$'s)	-		570.0	692.8	686.3
% expecting to golf more next year at GLVGC	-		10.0%	15.0%	14.6%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Detroit, MI. ADI

		Rank	Means
GLVGC customers in every 10,000 households	22.0	****	18.4
Percent of respondents first time visited GLVGC	25.1%	**	20.3
Times the respondents visited GLVGC in past year	2.0	***	5.0
Percent of respondents stayed overnight in GLVGC	31.3%	*****	12.0%
Respondents' annual incomes in 1990	\$60,000	****	\$52,500
The respondents' total spending at GLVGC in 1990	\$884.4	*****	\$792.1
Percentage expecting to golf more next year	10.7%	***	14.4%
Projected percentage of total GLVGC customers	26.3%	*****	
Reliability due to (sample size): high (236)			

According to the index above, there are around 20 GLVGC customers for every 10,000 households in the Detroit, MI. ADI, which is a high relative to other ADIs. This segment ranks very high as a percentage of GLVGC's customer base and on use of GLVGC's overnight accommodations, lower with respect to frequency of visitation, and in the middle with respect to frequency of visitation. According to Table 4.1, 21.5% of respondents from this area are golfers who stayed overnight at home; 31.3% of them stayed overnight in GLVGC accommodations; and 47.2% stayed overnight in other accommodations. This ADI represents a very good market given the size of its population and a relatively high market penetration.

From Table 4.12 it can be seen that 25.1% of respondents from this area are first time visitors. Respondents visited GLVGC 2.0 times in 1990 which is in the middle in comparison to golfers from most other regions. Customers in this segment have golf experience of about 22 years but have only golfed 4.5 years at GLVGC. They reported relatively high incomes and expenditures at GLVGC

in 1990. Their incomes averaged about \$60,000 per year in 1990, and their total expenditures at GLVGC were \$884.4 which ranks them second highest among the 10 segments. These respondents will potentially golf more by 10.7 percent next year at GLVGC.

Table 4.12: Geographic segment 3, Detroit, MI. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Means for Detroit, MI. ADI respondents who stayed overnight</u>			
	<u>at home</u>	<u>at GLVGC</u>	<u>at other</u>	<u>all Respondents</u>
N =	135 <sup>1</sup>	197	297 <sup>1</sup>	629 <sup>2</sup>
% of customer base =	21.5%	31.3%	47.2%	100.0%
Age	42.3	39.3	44.2	42.3
% of the married	73.3%	87.8%	81.8%	81.9%
Education (years)	16.4	15.1	15.8	15.8
Income <sup>3</sup> in 1990	3.5 (\$62,500)	3.2 \$55,000	3.5 \$62,500	3.4 \$60,000)
Family size	2.9	2.7	3.0	2.9
Golf experience (years)	24.0	23.9	21.2	22.6
GLVGC golf experience (years)	4.5	5.6	3.8	4.5
Times visited GLVGC in 1990	2.3	2.0	1.9	2.0
% first time visitor	21.4%	23.0%	28.1%	25.1%
Rounds played in 1990	39.7	49.1	48.6	47.0
Total expenditures in 1990 at GLVGC (\$'s)	613.9	938.5	979.7	884.4
% expecting golf more next year at GLVGC	11.7%	13.2%	8.5%	10.7%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Chicago-LaSalle, IL. ADI

		Rank	Means
GLVGC customers in every 10,000 households	3.2	*	18.4
Percentage of respondents first time visited GLVGC	27.9%	***	20.3%
Times the respondents visited GLVGC in past year	2.5	*****	5.0
Percentage of respondents stayed overnight in GLVGC	14.6%	****	12.0%
Respondents' annual incomes in 1990	\$62,500	*****	\$52,500
The respondents' total spending at GLVGC in 1990	\$617.1	**	\$792.1
Percentage expecting to golf more next year	8.8%	**	14.4%
Projected percentage of total GLVGC customers	6.6%	****	
Reliability due to (sample size): moderate lower (36)			

According to the index above, there are around 3.0 GLVGC customers for every 10,000 households in the Chicago-LaSalle, IL. ADI, which is one of the lowest market densities registered across the 10 ADIs. This segment ranks highest on frequency of visitation, relatively high on the percentage of GLVGC's customer base and on the use of GLVGC's overnight accommodations, and in the middle with respect to percentage of first time customers. According to Table 4.1, 11.4% of respondents from this area are golfers who stayed overnight at home; 14.6% of the respondents stayed overnight in GLVGC accommodations; and 74.1% of the respondents stayed overnight in other accommodations. The projected percentage of total GLVGC customers is 6.6 percent, ranking a little high among the 10 geographic segments.

From Table 4.13, it can be seen that only 27.9% of respondents from this area were first time visitors, thus most are repeat visitors. They visited GLVGC 2.5 times in 1990 which is relatively very high among the 10 segments. They have been golfing for 23.2 years but only 3.4 years at

GLVGC. They reported very high incomes, but their spending at GLVGC was a little lower than for most ADIs. Their incomes averaged about \$62,500 per year in 1990, and their total expenditures at GLVGC were only \$617.1. These respondents will potentially golf more by 8.8% percent next year at GLVGC.

Table 4.13: Geographic segment 4, Chicago-La Salle, IL. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Means for Chicago-La Salle, IL ADI respondents who stayed overnight</u>			<u>all Respondents</u>
	<u>at home</u>	<u>at GLVGC</u>	<u>at other</u>	
	N = 18 <sup>1</sup>	23	117 <sup>1</sup>	158 <sup>2</sup>
% of customer base =	11.4%	14.6%	74.1%	100.0%
Age	43.5	40.7	43.6	43.2
% of the married	50.0%	91.3%	92.3%	87.3%
Education (years)	18.5	16.3	17.2	17.2
Income <sup>3</sup> in 1990	3.0 (\$50,000)	4.0 \$75,000	3.5 \$62,500	3.5 \$62,500)
Family size	2.0	3.1	2.5	2.5
Golf experience (years)	30.0	29.3	20.9	23.2
GLVGC golf experience (years)	3.0	4.1	3.2	3.4
Times visited GLVGC in 1990	3.5	1.7	2.5	2.5
% first time visitor	0.0%	34.8%	30.8%	27.9%
Rounds played in 1990	50.0	36.3	31.2	34.1
Total expenditures in 1990 at GLVGC (\$'s)	554.5	1033.6	523.0	617.1
% expecting to golf more next year at GLVGC	30.0%	6.3%	5.8%	8.8%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Lansing-Ann Arbor, MI ADI

		Rank	Means
GLVGC customers in every 10,000 households	42.7	****	18.4
Percentage of respondents first time visited GLVGC	11.2%	*	20.3%
Times the respondents visited GLVGC in past year	2.3	****	5.0
Percentage of respondents stayed overnight in GLVGC	5.0%	*	12.0%
Respondents' annual incomes in 1990	\$67,500	*****	\$52,500
The respondents' total spending at GLVGC in 1990	\$617.1	*	\$792.1
Percentage expecting to play more next year	19.5%	*****	14.4%
Projected percentage of total GLVGC customers	6.7%	****	
Reliability due to (sample size): moderate middle (25)			

According to the index above, there are around 42.7 GLVGC customers for every 10,000 households in the Lansing-Ann Arbor, MI. ADI, which is among the higher market densities registered across the 10 ADIs. This segment ranks very low on the percentage of first time customers and on use of GLVGC's overnight accommodations, and ranks a little high on the frequency of visitation and percentage of GLVGC's customer base. According to Table 4.1, 72.7% of the respondents in this area are the golfers who stayed overnight at home, only 5.0% stayed overnight in GLVGC accommodations, and 22.4% of the respondents stayed overnight in other accommodations. Their projected percentage of total GLVGC customers is 6.7 percent, ranking third among all geographic segments.

From Table 4.14, it can be seen that a very low 11.2% of respondents from this area are first time visitors, thus most are repeat visitors. They have been golfing on average for 22 years and have golfed for 8.5 years at GLVGC. Respondents from this area visited GLVGC 2.3 times in 1990 which is relatively high. They reported the highest incomes

but spent the least across the 10 ADIs. Their reported average income was almost \$67,500 per year in 1990, but their total expenditures at GLVGC was only \$419.6. These respondents will potentially golf more by 19.5 percent next year at GLVGC.

Table 4.14: Geographic segment 5, Lansing-Ann Arbor, MI. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	Mean for Lansing-Ann Arbor ADI <u>respondents who stayed overnight</u>				
	N =	at home	at GLVGC	at other	all Respondents
% of customer base =		72.7%	5.0%	22.4%	100.0%
Age		46.4	43.5	43.0	45.4
% of the married		92.3%	100.0%	75.0%	88.8%
Education (years)		15.2	16.5	17.0	15.7
Income <sup>3</sup> in 1990		3.9 (\$72,500)	3.1 \$52,500	3.3 \$57,500	3.7 \$67,500)
Family size		3.5	2.9	3.3	3.4
Golf experience (years)		21.7	22.3	22.5	22.0
GLVGC golf experience (years)		9.5	8.6	5.3	8.5
Times visited GLVGC in 1990		2.3	1.8	2.5	2.3
% first time visitor		7.7%	0.0%	25.0%	11.2%
Rounds played in 1990		36.6	94.9	51.3	42.8
Total expenditures in 1990 at GLVGC (\$'s)		256.2	681.4	941.0	419.6
% expecting to golf more next year at GLVGC		17.5%	2.9%	30.0%	19.5%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.



South Bend-Elkhart, IN. ADI

		Rank	Means
GLVGC customers in every 10,000 households	11.8	***	18.4
Percentage of respondents first time visited GLVGC	31.0%	***	20.3%
Times the respondents visited GLVGC in past year	1.9	***	5.0
Percentage of respondents stayed overnight in GLVGC	6.9%	**	12.0%
Respondents' annual incomes in 1990	\$45,000	*	\$52,500
The respondents' total spending at GLVGC in 1990	\$556.4	**	\$792.1
Percentage expecting to golf more next year	0.0%	*	14.4%
Projected percentage of total GLVGC customers	2.4%	**	
Reliability due to (sample size): very lower (9)			

According to the index above, there are around 11.8 GLVGC respondents for every 10,000 households in the South Bend-Elkhart, IN. ADI, which is in the middle of the market densities registered across the 10 ADIs. This segment also ranks in the middle on percentage of first time customers and on frequency of visitation, and ranks a little low with respect to percentage of GLVGC's customer base and on use of GLVGC's overnight accommodations. According to Table 4.1, 46.6% of the respondents in this area are golfers who stayed overnight at home; 6.9% stayed overnight in GLVGC accommodations; and 46.6% stayed overnight in other accommodations. Their projected percentage of total GLVGC customers is 2.4 percent, ranking very low among all geographic segments. This is not a significant market for the GLVGC.

From Table 4.15, it can be seen that about 31.0% of respondents from this area are first time visitors, thus 70% are repeat visitors. They have been golfing for 17.7 years and for 7.6 years at GLVGC. Respondents from this area visited GLVGC 1.9 times in 1990 which ranks medium among the

10 segments. They reported neither high incomes or high spending at GLVGC. Their incomes averaged almost \$45,000 per year in 1990 and their total expenditures at GLVGC were only \$556.4. These respondents do not expect to change their golf playing rate next year at GLVGC.

Table 4.15: Geographic segment 6, South Bend-Elkhart, IN. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	Mean for South Bend-Elkhart, IN. ADI <u>respondents who stayed overnight</u>			all <u>Respondents</u>
	at <u>home</u>	at <u>GLVGC</u>	at <u>other</u>	
	N = 27 <sup>1</sup>	4	27 <sup>1</sup>	58 <sup>2</sup>
% of customer base =	46.4%	6.9%	46.6%	100.0%
Age	41.7	28.5	45.3	42.5
% of the married	66.7%	100.0%	100.0%	81.6%
Education (years)	14.0	14.9	15.5	14.5
Income <sup>3</sup> in 1990	2.0 (\$25,000)	3.5 \$62,500	3.5 \$62,500	2.8 \$45,000)
Family size	2.0	2.5	2.5	2.2
Golf experience (years)	22.3	41.0	5.5	17.7
GLVGC golf experience (years)	11.7	9.5	3.3	7.6
Times visited GLVGC in 1990	2.7	3.5	1.0	1.9
% first time visitor	0.0%	0.0%	66.7%	31.0%
Rounds played in 1990	53.3	61.3	44.0	50.6
Total expenditures in 1990 at GLVGC (\$'s)	185.0	3505.5	360.0	556.4
% expecting to golf more next year at GLVGC	0.0%	0.0%	0.0%	0.0%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Indianapolis-Marion, IN ADI

		Rank	Means
GLVGC customers in every 10,000 households	0.5	*	18.4
Percentage of respondents first time visited GLVGC	57.1%	*****	20.3
Times the respondents visited GLVGC in past year	1.3	*	5.0
Percent of respondents stayed overnight in GLVGC	100.0%	*****	12.0%
Respondents' annual incomes in 1990	\$57,500	****	\$52,500
The respondents' total spending at GLVGC in 1990	\$688.9	****	\$792.1
Percentage expecting to golf more next year	28.6%	*****	14.4%
Projected percentage of total GLVGC customers	0.3%	*	
Reliability due to (sample size): very low (7)			

According to the index above, there are only 0.5 GLVGC respondents for every 10,000 households in the Indianapolis-Marion, IN ADI, which is the lowest market density registered across the 10 ADIs. This segment ranks highest on percentage of first time customers (57.1%) and on use of GLVGC's overnight accommodations, and ranks lowest on frequency of visitation and on percentage of GLVGC's customer base. According to Table 4.1, none of the respondents in this ADI area are golfers who stayed overnight at home or in other accommodations. All respondents stayed overnight in GLVGC accommodations. Their projected percentage of total GLVGC customers is only 0.3 percent, ranking lowest among all geographic segments. This is not currently a significant market for the GLVGC golf club, but the high first time visitor rate may indicate some initial penetration of this market.

From Table 4.16, it can be seen that respondents reported 18.4 years of total golfing experience but have been golfing at GLVGC for only 1.9 years. They visited GLVGC only 1.3 times in 1990, less frequently than all other

segments. They were all married, and their family size is 3.1 persons, the highest of all 10 segments. Their reported average incomes of almost \$57,500 in 1990 and expenditures at GLVGC of \$688.9 are somewhat higher than that recorded by other geographic segments. The percentage expecting to golf more at GLVGC will potentially increase by 28.6 percent next year.

Table 4.16: Geographic segment 7, Indianapolis-Marion, IN ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Mean for Indianapolis-Marion, IN. ADI respondents who stayed overnight</u>			<u>all Respondents</u>
	<u>at home</u>	<u>at GLVGC</u>	<u>at other</u>	
	N = 0	7	0	7
% of customer base =	0%	100.0%	0%	100.0%
Age	-	42.9	-	42.9
% of the married	-	100.0%	-	100.0%
Education (years)	-	18.1	-	18.1
Income <sup>1</sup> in 1990	-	3.3 (\$57,500)	-	3.3 \$57,500)
Family size	-	3.1	-	3.1
Golf experience (years)	-	18.4	-	18.4
GLVGC golf experience (years)	-	1.9	-	1.9
Times visited GLVGC in 1990	-	1.3	-	1.3
% first time visitor	-	57.1%	-	57.1%
Rounds played in 1990	-	44.4	-	44.4
Total expenditures in 1990 at GLVGC (\$'s)	-	688.9	-	688.9
% expecting to golf more next year at GLVGC	-	28.6%	-	28.6%

<sup>1</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Fort Wayne-Angola, IN. ADI

		Rank	Means
GLVGC customers in every 10,000 households	11.1	***	18.4
Percentage of respondents first time visited GLVGC	46.5%	*****	20.3%
Times the respondents visited GLVGC in past year	1.5	*	5.0
Percentage of respondents stayed overnight in GLVGC	16.3%	****	12.0%
Respondents' annual incomes in 1990	\$52,500	***	\$52,500
The respondents' total spending at GLVGC in 1990	\$661.1	***	\$792.1
Percentage expecting to golf more next year	10.9%	***	14.4%
Projected percentage of total GLVGC customers	1.8%	**	
Reliability due to (sample size): low (11)			

There are around 11 GLVGC customers for every 10,000 households in the Fort Wayne-Angola, IN. ADI, which is medium market density among the 10 ADIs. This segment ranks very high on percentage of first time customers, higher on use of GLVGC's overnight accommodations, very low on frequency of visitation, and somewhat low on percentage of GLVGC's customer base. According to Table 4.1, none of the respondents in this area are golfers who stayed overnight at home; 16.3% stayed overnight in GLVGC accommodations; and 83.7% stayed overnight in other accommodations. Their projected percentage of total GLVGC customers is only 1.8 percent, ranking very low in comparison to the other geographic segments. This currently is not a significant market for the GLVGC, but the high first time visitor rate indicates some early penetration of this market.

From Table 4.17, it can be seen that 46.5% of respondents from this area are first time visitors. They have been golfing for 20.5 years but only 5.9 years at GLVGC. Respondents visited GLVGC a relatively low 1.5 times in 1990. Their reported incomes and spending at GLVGC were

about equal to those for most GLVGC customers. These respondents will potentially increase their golf playing at GLVGC by 10.9 percent next year.

Table 4.17: Geographic segment 8, Fort Wayne-Angola, IN. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Mean for Fort Wayne-Angola, IN. ADI respondents who stayed overnight</u>			
	<u>at home</u>	<u>at GLVGC</u>	<u>at other</u>	<u>all Respondents</u>
	N = 0	7	36 <sup>1</sup>	43 <sup>2</sup>
% of customer base =	0%	16.3%	83.7%	100.0%
Age	-	44.1	45.5	45.3
% of the married	-	85.7%	100.0%	97.7%
Education (years)	-	15.1	14.8	14.8
Income <sup>3</sup>	-	3.3 (\$57,500)	3.0 \$50,000	3.1 \$52,500)
Family size	-	4.4	2.3	2.6
Golf experience (years)	-	25.6	19.5	20.5
GLVGC golf experience (years)	-	8.1	5.5	5.9
Times visited GLVGC in 1990	-	1.6	1.5	1.5
% first time visitor	-	28.6%	50.0%	46.5%
Rounds played in 1990	-	37.9	64.3	60.0
Total expenditures in 1990 at GLVGC (\$'s)	-	511.4	690.3	661.1
% expecting to golf more next year at GLVGC	-	9.3%	11.3%	10.9%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Toledo, OH. ADI

		Rank	Means
GLVGC customers in every 10,000 households	10.9	**	18.4
Percentage of respondents first time visited GLVGC	38.4%	****	20.3
Times the respondents visited GLVGC in past year	1.7	**	5.0
Percentage of respondents stayed overnight in GLVGC	13.7%	***	12.0%
Respondents' annual incomes in 1990	\$45,000	*	\$52,500
The respondents' total spending at GLVGC in 1990	\$541.1	*	\$792.1
Percentage expecting to golf more next year	0.7%	*	14.4%
Projected percentage of total GLVGC customers	3.1%	***	
Reliability due to (sample size): low (17)			

There are around 10 GLVGC customers for every 10,000 households in the Toledo, OH. ADI, which is a comparatively low market density in comparison to the other ADIs. This segment ranks relatively high on the percentage of first time customers, in the middle on use of GLVGC's overnight accommodations and on percentage of GLVGC's customer base, and relatively low on frequency of visitation. According to Table 4.1, 12.3% of the respondents from this area are golfers who stayed overnight at home, 13.7% stayed overnight in GLVGC accommodations, and a relatively high 74.0% stayed overnight in GLVGC accommodations. Their projected percentage of total GLVGC customers is 3.1 percent, very low in comparison to all geographic segments. This is also not currently a good market for the GLVGC.

From Table 4.18, it can be seen that 38.4% of respondents from this area are first time visitors. Respondents have been golfing for 21.3 years but only 2.8 years at GLVGC. They visited GLVGC only 1.7 times in 1990. They reported low incomes and low spending at GLVGC. Their reported average income was about \$45,000, and their total

expenditure at GLVGC in 1990 was only \$541.1. These respondents will potentially increase their golf playing at GLVGC by an insignificant 0.7 percent next year.

Table 4.18: Geographic Segment 9, Toledo, OH. ADI area. Selected variable means by where respondents stayed overnight.

<u>Study variable</u>	<u>Mean for Toledo, OH. ADI respondents who stayed overnight</u>			<u>all Respondents</u>
	<u>at home</u>	<u>at GLVGC</u>	<u>at other</u>	
	N = 9 <sup>1</sup>	10	54 <sup>1</sup>	73 <sup>2</sup>
% of customer base =	12.3%	13.7%	74.0%	100.0%
Age	17.0	31.5	43.8	38.8
% of the married	100.0%	90.0%	66.7%	74.0%
Education (years)	23.0	15.5	18.2	18.4
Income <sup>3</sup>	-	2.8 (\$45,000)	2.8 \$45,000	2.8 \$45,000)
Family size	2.0	2.3	2.0	2.0
Golf experience (years)	50.0	31.1	14.7	21.3
GLVGC golf experience (years)	5.0	6.9	1.7	2.8
Times visited GLVGC in 1990	2.0	2.5	1.5	1.7
% first time visitor	0.0%	10.0%	50.0%	38.4%
Rounds played in 1990	100.0	91.5	62.1	70.8
Total expenditures in 1990 at GLVGC (\$'s)	-	1265.3	380.2	541.1
% expecting to golf more next year at GLVGC	0.0%	5.0%	0.0%	0.7%

<sup>1</sup> The sample is weighted by nine.

<sup>2</sup> The samples are summed after being weighted.

<sup>3</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.



Others

		Rank	Means
GLVGC customers in every 10,000 households	-	-	-
Percent of respondents first time visited GLVGC	37.2%	****	20.3%
Times the respondents visited GLVGC in past year	2.3	****	5.0
Percent of respondents stayed overnight in GLVGC	6.9%	**	12.0%
Respondents' annual incomes in 1990	\$47,500	**	\$52,500
The respondents' total spending at GLVGC in 1990	\$997.1	*****	\$792.1
Percentage expecting to golf more next year	4.7%	**	14.4%
Projected percentage of total GLVGC customers	3.6%	***	
Reliability due to (sample size): low (14)			

The remaining GLVGC respondents were from other states (i.e. Florida, Massachusetts, Kentucky, Virginia, Texas, Pennsylvania), and some areas outside the 10 ADIs covered in Michigan, Illinois, Indiana, and Ohio. This segment ranks relatively high on percentage of first time customers and frequency of visitation, low on use of GLVGC's overnight accommodations, and in the middle with respect to percentage of GLVGC's customer base. According to Table 4.1, no respondents from these areas stayed overnight at home; only 6.9% stayed overnight in GLVGC accommodations; and 93.1% stayed overnight in other accommodations. The cost of promoting GLVGC in these markets would be prohibitively expensive; however, a marketing strategy directed at general visitors to the Grand Rapids-Kalamazoo-Battle Creek area could be effective in reaching more visitors outside GLVGC's prime market area.

From Table 4.19, it can be seen that a relatively high 37.2% of respondents from these areas are first time visitors. Respondents have been playing golf longer than most other respondents (24.3 years) and have played for longer at GLVGC (8.5 years). They visited GLVGC 2.3 times

in 1990, ranking a little high on this statistic. Their total expenditures at GLVGC in 1990 was \$ 997.1, the highest among all geographic segments. However, the reliability of this estimate is questionable especially given the small sample of respondents upon which it is based. These respondents will likely increase their golf playing at GLVGC by 4.7 percent next year.

Table 4.19: Geographic segment 10, Others. Selected variable means by where respondents stayed overnight.

Study variable	Mean for Other <sup>1</sup> respondents stayed overnight			all Respondents 87 <sup>3</sup>
	at home N = 0	at GLVGC 6	at others 81 <sup>2</sup>	
% of customer base =	0%	6.9%	93.1%	100.0%
Age	-	35.3	44.0	43.4
% of the married	-	83.3%	88.9%	88.5%
Education (years)	-	16.8	15.6	15.6
Income <sup>4</sup>	-	3.7 (\$67,500)	2.9 \$47,500	2.9 \$47,500)
Family size	-	2.5	2.8	2.8
Golf experience (years)	-	29.8	23.9	24.3
GLVGC golf experience (years)	-	5.3	8.8	8.5
Times visited GLVGC in 1990	-	1.3	2.3	2.3
% first time visitor	-	33.3%	37.5%	37.2%
Rounds played in 1990	-	43.0	57.7	56.7
Total expenditures in 1990 at GLVGC (\$'s)	-	926.0	1002.4	997.1
Expected % golfing increased next year at GLVGC	-	8.3%	4.4%	4.7%

<sup>1</sup> Other includes all respondents from outside the nine ADIs discussed separately.

<sup>2</sup> The sample is weighted by nine.

<sup>3</sup> The samples are summed after being weighted.

<sup>4</sup> Income ranges from 1 to 5, 1 denotes income under \$25,000, 2 \$25,000-\$49,999, 3 \$50,000-\$74,999, 4, \$75,000-\$104,999, 5 \$105,000 or more.

Summary - The Grand Rapids-Kalamazoo-Battle Creek ADI (47.6%), the Detroit ADI (26.3%), and the Lansing-Ann Arbor (6.7%) ADI in Michigan and the Chicago-LaSalle ADI (6.6%) in Illinois and Indiana are in order the four largest generators of GLVGC customers. Marketing beyond these four areas is not likely to be cost-effective; however, on-site and local area marketing may stimulate some demand from markets outside these four ADIs. Finally, names and addresses of all customers should be obtained to permit direct marketing to them via, for example, the mail.

GLVGC Golfers' Satisfaction Levels, Preferences and  
Utilization on Courses, Utilities, and Services

Courses Played Rank By Trip Type Segment

According to Table 4.20, there are significant differences in use of GLVGC's four golf courses across respondents segmented by where they spent the night. The overall percentages of the golfers who played each course are as follows: nearly 85% (84.2%) of all respondents played golf on the Stonehedge Course (rank 1), 49.0% on the East Course (rank 2), 46.6% on the West Course (rank 3) and 25.8% on the Bedford Valley Course (rank 4). Stonehedge is the most popular course, and Bedford Valley is the least popular course. However, a higher percentage of respondents overnighiting at GLVGC played the East Course (95.5%, rank 1) than Stonehedge (93.7%, rank 2). Among respondents who

stayed overnight in other accommodations, a higher percentage played the West Course (54.2%, rank 2) than Stonehedge (53.0%, rank 3).

However, considerable variation among courses played was found to exist across the three segments. Over 95% of respondents who stayed overnight in GLVGC accommodations played the East Course (95.5%, ranked 1); 93.7% played the Stonehedge Course (ranked 2); 92.7% played the West Course (ranked 3); and only 47.9% (ranked 4) played the Bedford Valley Course. Compared to the other two segments, those staying in GLVGC accommodations played all of the four GLVGC courses more often.

Table 4.20: Course played percentage and rank by trip type.

COURSE PLAYED	SEGMENT								TEST STT <sup>b</sup>	SIG. <sup>c</sup> LEVEL
	RESPONDENTS WHO STAYED OVERNIGHT AT						ALL RESPONDENTS	R <sup>e</sup>		
	HOME	R <sub>1</sub>	GLVGC	R <sup>e</sup>	OTHER	R <sup>e</sup>				
N =	1341 <sup>d</sup>		287		765 <sup>d</sup>		2393 <sup>e</sup>			
% of all =	56.0%		12.0%		32.0%		100.0%			
STONEHEDGE	80.6%	1	93.7%	2	86.7%	1	84.2%	1	35.92	.00 <sup>f</sup>
EAST	36.4%	2	95.5%	1	53.0%	3	49.0%	2	335.08	.00 <sup>f</sup>
WEST	31.7%	3	92.7%	3	54.2%	2	46.6%	3	377.67	.00 <sup>f</sup>
BEDFORD VALLEY	15.5%	4	47.9%	4	34.9%	4	25.8%	4	177.06	.00 <sup>f</sup>

<sup>a</sup> R = Rank by course most played.

<sup>b</sup> Statistical test used is chi square ( $\chi^2$ ).

<sup>c</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type segments.

<sup>d</sup> The sample is weighted by nine.

<sup>e</sup> The samples are summed up after being weighted.

<sup>f</sup> The variable tested is significantly different across the three different segments.

Most of the respondents who stayed overnight in other accommodations played Stonehedge (86.7%, rank 1). The percentage of them who had played the West Course (54.2%, rank 2) is a little higher than those who had played the East Course (53.0%, rank 3). About 35% (34.9%, rank 4) of them played the Bedford Course.

As for the respondents who stayed overnight at home, a relatively low percentage of them played the East Course (36.4%, rank 2), the West Course (31.7%, rank 3), or the Bedford Course (15.5%, rank 4). However, a high percentage (80.6%, rank 1) of them played Stonehedge. Nonetheless, this is still lower than the rate of play by the other two segments.

The primary reason for the above differences probably is that the respondents who stayed overnight at home had natural time restrictions because their GLVGC trip is one day or a portion of a day. So, they had less time to golf than the other two segments, and they used their limited time to play their favorite course, Stonehedge. The other two segments were on trips commonly of more than one day. With more time at their disposal, they introduced variety in their experience by playing multiple courses. The somewhat lower play across all courses by those staying in other overnight accommodations in comparison to those staying at GLVGC likely results from the other segment containing individuals whose primary purpose for travel to the area was

not to golf at GLVGC.

The sums of the percentages indicates the mean number of rounds of golf played by segment by trip to GLVGC. For example, the sum for respondents who stayed overnight at home equals 164% (80.6% played Stonehedge + 36.4% played the East Course + 31.7% played the West Course + 15.5% played Bedford) which means that they played on average 1.6 courses during their GLVGC trip. For respondents who stayed overnight in GLVGC accommodations, the average number of courses played/trip was 3.3 (93.7% + 95.5% + 92.7% + 47.9%). Finally, for the respondents who stayed overnight in other accommodations, the average number of courses played per trip was 2.3 (86.7% + 53.0% + 54.2% + 34.9%). Overall visitors on average, played 2.7 (88.9% + 72.1% + 69.6% + 36.8%) courses during their GLVGC trip.

#### Course Preference by Trip Type

According to Table 4.21, among the three different segments there are no significant differences on their most preferred course (Stonehedge) and their second most preferred course (East). But, there are significant differences on their third most preferred course (West) and their least preferred course (Bedford Valley). Unlike the other two segments, more respondents who stayed overnight at home ranked Bedford Valley (13.9%) as their third choice. However, overall respondents' preference rate for the West

Course and the Bedford Valley are very low. The reasons why Bedford Valley is less popular are: 1. more open, less rolling, 2. longer, more difficult for older population, 3. farther away from other golf courses, and 4. roads are not in good shape. Overall course preference rates for respondents are as follows: about 50% (47.5%) of all respondents ranked Stonehedge as their first choice; 30.8% prefer the East Course, 11.7% prefer the West Course; and 10.0% prefer Bedford Valley.

Table 4.21: Course preference by trip type.

COURSE	SEGMENT							TEST STT <sup>b</sup>	SIG. <sup>c</sup> LEVEL	
	RESPONDENTS WHO STAYED OVERNIGHT AT						ALL RESPONDENTS R <sup>a</sup>			
	HOME	R <sup>a</sup>	GLVGC	R <sup>a</sup>	OTHERS	R <sup>a</sup>				
N =	1341 <sup>d</sup>		287		765 <sup>d</sup>		2393 <sup>e</sup>			
% of all =	56.0%		12.0%		32.0%		100.0%			
STONEHEDGE	47.6%	1	50.5%	1	50.5%	1	47.5%	1	4.58	.10
EAST	29.5%	2	35.8%	2	24.8%	2	30.8%	2	8.64	.13
WEST	9.0%	4	9.6%	3	18.4%	3	11.7%	3	45.92	.03 <sup>e</sup>
BEDFORD VALLEY	13.9%	3	4.1%	4	6.3%	4	10.0%	4	37.30	.00 <sup>e</sup>
TOTAL=	100.0%		100.0%		100.0%		100.0%			

<sup>a</sup> R = Rank value of the course most preferred.

<sup>b</sup> Statistical test used is chi square ( $X^2$ ).

<sup>c</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>d</sup> The sample is weighted by nine.

<sup>e</sup> The samples are summed up after being weighted.

<sup>f</sup> The variable tested is significantly different across the three different segments.

Utilities Utilization by Trip Type

Utilities utilization is presented in Table 4.22. The three trip type segments exhibited significant differences in use of the toll free 800 number, the lounge, and banquet facilities. A relatively high percentage (66.3%) of all respondents reported that they would use a toll free 800 number if provided and had used GLVGC's lounge (56.9%). Only 3.5% of respondents reported using the banquet room.

More respondents who stayed overnight in GLVGC accommodations (74.8%) and overnight in other accommodations (84.3%) would use a free 800 number than those who stayed overnight at home (54.4%). However, more respondents who stayed overnight at home (61.6%) used GLVGC's lounge than respondents who stayed overnight in GLVGC accommodations (49.8%) and respondents who stayed overnight in other accommodations (51.2%). Finally, for the population sampled, the overall utilization of GLVGC's meeting room and banquet room is very low. In fact, both the banquet and meeting rooms are frequently used for weddings, receptions, or business meetings at GLVGC which suggests that the population sampled is not the population most likely to use these facilities.



Table 4.22: Utilities utilization by trip type.

UTILITIES VARIABLE	SEGMENT				ALL RESPONDENTS	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT			HOME			
	HOME	GLVGC	OTHER				
N =	1341 <sup>c</sup>	287	765 <sup>c</sup>	2393 <sup>d</sup>			
% of all =	56.0%	12.0%	32.0%	100.0%			
% WHO FOUND							
800 call useful	54.4%	74.8%	84.3%	66.3%	203.66	.00 <sup>e</sup>	
% WHO USE							
LOUNGE	61.6%	49.8%	51.2%	56.9%	27.59	.00 <sup>e</sup>	
% WHO USE							
MEETING ROOM	2.2%	1.8%	1.3%	1.9%	1.89	.39	
% WHO USE							
BANQUET ROOM	2.9%	1.5%	5.2%	3.5%	10.42	.01 <sup>e</sup>	

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>e</sup> The variable tested is significantly different across the three different segments.

Proposed Services or Facilities that Will  
Make GLVGC Better by Trip Type

Overall GLVGC golfers' first choices for proposed new services or facilities that would make GLVGC better are presented in Table 4.23. A swimming pool was the first choice for 39.4% of all respondents. Other choices in order of relative popularity follow: lighting for nighttime golf (22.1%), a health club (17.2%), golf club repair services (12.3%), tennis courts (6.1%), picnic areas (2.9%).

Statistically significant differences in preferences were found across the three trip type segments regarding a swimming pool, lighting for nighttime golf, and golf repair

service. More respondents who stayed overnight in GLVGC accommodations (52.9%) and who stayed overnight in other accommodations (52.2%) think that a swimming pool would make GLVGC better than did respondents who stayed overnight at home (28.5%). This may be because most day users come to GLVGC only for golfing while the other two segments are on vacation and seek a range of activities to occupy their time. But, all three segments ranked a swimming pool as their most preferred addition to the GLVGC.

Table 4.23: Percentage of number one ranking by respondents' trip type for selected new facility or service offerings at GLVGC.

VARIABLE	SEGMENT			ALL RESPONDENTS	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS WHO STAYED OVERNIGHT AT					
	HOME N = 1341 <sup>c</sup> % of all = 56.0%	GLVGC 287 12.0%	OTHER 765 <sup>c</sup> 32.0%			
POOL	28.5%	52.9%	52.2%	39.4%	168.93	.00 <sup>*</sup>
LIGHTING	21.8%	20.7%	23.9%	22.1%	3.43	.18
HEALTH CLUB	23.5%	11.0%	8.6%	17.2%	68.86	.00 <sup>*</sup>
GOLF REPAIR	16.3%	5.9%	7.9%	12.3%	34.28	.00 <sup>*</sup>
TENNIS COURT	6.5%	5.3%	5.9%	6.1%	0.58	.75
PICNIC AREA	3.4%	4.2%	1.5%	2.9%	5.55	.06
TOTAL=	100.0%	100.0%	100.0%	100.0%		

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>\*</sup> the variable tested is significantly different across the three different segments.

More respondents who stayed overnight at home (23.5%) than those who stayed overnight in GLVGC accommodations (11.0%) or who stayed overnight in other accommodations (8.6%) selected adding a health club as their first choice for a GLVGC addition. Lighting for nighttime golf was the second most frequently number one ranked addition by the other two segments. There was agreement across all three segments in the first place choice & rankings for the other three possible additions.

Adding a swimming pool would clearly be a popular addition to GLVGC's facilities. An indoor or indoor/outdoor type pool would add to the activity mix available at GLVGC possibly extending the operating season.

#### Satisfaction Levels by Trip Type

Most respondents (93.4%) are satisfied with what GLVGC offers customers overall; 86.7% are satisfied with the services provided by GLVGC employees, and 88.4% are satisfied with the facilities provided at GLVGC (Table 4.24).

Statistically significant differences in satisfaction levels exist across the three trip type segments. Probably the most managerially significant differences are those involving the other accommodations segment. It consistently reported lower levels of satisfaction with GLVGC than the other two segments although the differences were slight.

Data was not collected which could be used to assess sources of dissatisfaction associated with the approximately 20% who apparently aren't satisfied with GLVGC facilities or services. It would, however, be advisable to investigate this further because this group represents a prime potential market for GLVGC's accommodations if its needs can be more fully addressed.

Table 4.24: Satisfaction levels by trip type.

VARIABLE	SEGMENT				ALL RESPONDENTS	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS WHO STAYED OVERNIGHT AT			OTHER			
	HOME	GLVGC	OTHER				
N =	1341 <sup>c</sup>	287	765 <sup>c</sup>	2393 <sup>d</sup>			
% of all =	56.0%	12.0%	32.0%	100.0%			
% SATISFIED WITH SERVICES	87.8%	93.1%	82.4%	86.7%	24.49	.00 <sup>e</sup>	
% SATISFIED WITH FACILITIES	89.9%	94.2%	83.5%	88.4%	30.14	.00 <sup>e</sup>	
% SATISFIED WITH OVERALL GLVGC	94.6%	95.2%	90.6%	93.4%	14.64	.00 <sup>e</sup>	

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>e</sup> The variable tested is significantly different across the three different segments.

Media that GLVGC Golfers Subscribed to,  
Received GLVGC Information from  
or Recalled Seeing GLVGC Advertising in

Media Subscribed to by Trip Type

There are significant differences among the segments in subscribing to a local newspaper, cable television, Golf Digest, Michigan Living, Golf Magazine, Golfer Journal, and Michigan Golfer as can be seen in Table 4.25. A higher percentage of the respondents who stayed overnight at home (80.5%) subscribed to a local newspaper than those who stayed overnight in other accommodations (71.8%) or who stayed overnight at GLVGC (75.5%). Overall 77.1% of GLVGC respondents subscribed to a local newspaper.

As for the other media, an average of 55.8% of respondents subscribed to cable television, 42.5% to Golf Digest, 32.8% to Michigan Living (AAA), 26.3% to Golf Magazine, 6.5% to Golf Journal, and 11.8% to Michigan Golfer; 23.6% of all GLVGC golfers also subscribe to the other media. The high use of cable television supports use of the Arbitron ADI (Area of Dominant Influence) Market Atlas as a basis for the geographic segmentation selected for this study.

Table 4.25: Percentage of respondents who subscribed to selected media by trip type.

VARIABLE	SEGMENT			ALL RESPONDENTS 2393 <sup>d</sup>	TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT					
	HOME N = 1341 <sup>c</sup> % of all = 56.0%	GLVGC 287 12.0%	OTHERS 765 <sup>c</sup> 32.0%			
A LOCAL NEWSPAPER	80.5%	75.5%	71.8%	77.1%	21.73	.00 <sup>*</sup>
CABLE TELEVISION	56.4%	64.1%	51.8%	55.8%	13.41	.00 <sup>*</sup>
GOLF DIGEST	37.6%	40.5%	51.8%	42.5%	40.62	.00 <sup>*</sup>
MICHIGAN LIVING (AAA)	35.6%	34.5%	27.4%	32.8%	15.10	.00 <sup>*</sup>
GOLF MAGAZINE	20.8%	31.0%	34.1%	26.3%	48.37	.00 <sup>*</sup>
GOLF JOURNAL	8.1%	3.8%	4.7%	6.5%	13.23	.00 <sup>*</sup>
MICHIGAN GOLFER	10.7%	7.6%	15.3%	11.8%	15.36	.00 <sup>*</sup>
OTHER MEDIA	24.8%	18.3%	23.5%	23.6%	5.69	.06

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significantly difference among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>\*</sup> The variable tested is significantly different across the three different segments.

Media that Provided Respondents Information  
on GLVGC by Trip Type

Among the three different trip type segments, there are similarities and some significant differences in the media used to obtain information on GLVGC. Word of mouth/friends was used by the highest percentage (82.0%) of all respondents; GLVGC's brochure was second and serves 28.3% of all respondents; newspapers ranked third serving 13.5%; and Michigan Living (AAA) ranked fourth serving 11.2%. Word of

mouth/friend, as can be seen in Table 4.26, is the most important source of information for all three segments. Michigan Living (AAA) and GLVGC's brochure are used more often by the two segments overnighiting away from home, and a local newspaper is relatively more often used by those who spent the night at home. Less than 10% of GLVGC respondents obtained information about GLVGC from television, radio, Resident Golf Shop, Golf Show (Detroit), Golf Show (Fort Wayne), Golf Show (West Michigan), and Golf Show (Chicago). In interpreting these data, it is important to consider the

Table 4.26: Percentage of respondents receiving information about GLVGC by trip type.

VARIABLE <sup>a</sup>	SEGMENT				TEST STT <sup>b</sup>	SIG. <sup>c</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT			ALL RESPONDENTS		
	HOME	GLVGC	OTHERS			
	N = 1341 <sup>d</sup>	287	765 <sup>d</sup>	2393 <sup>e</sup>		
	% of all = 56.0%	12.0%	32.0%	100.0%		
WORD OF MOUTH/FRIEND	83.6%	83.7%	78.6%	82.0%	8.78	.01 <sup>*</sup>
GLVGC BROCHURE	13.7%	34.8%	31.3%	28.3%	21.77	.00 <sup>*</sup>
NEWSPAPER	21.4%	3.8%	3.6%	13.5%	156.56	.00 <sup>*</sup>
MICHIGAN LIVING	9.6%	13.8%	13.1%	11.2%	8.16	.02 <sup>*</sup>

<sup>a</sup> The MEDIA VARIABLES: T.V., RADIO, RESIDENT GOLF SHOP, GOLF SHOW (DETROIT; WAYNE; west MICHIGAN; CHICAGO) provide less than 10% of respondents with information about GLVGC.

<sup>b</sup> Statistical test used is chi square ( $X^2$ ).

<sup>c</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>d</sup> The sample is weighted by nine.

<sup>e</sup> The samples are summed up after being weighted.

<sup>\*</sup> The variable tested is significantly different across the three different segments.

relative availability of information across these selected media. Those ranking low may not carry GLVGC advertising as frequently as those ranking high.

### Media that Golfers Recalled Seeing GLVGC

#### Advertising in by Trip Type

The three different trip type segments exhibit no significant differences in recalling a GLVGC advertisement in Michigan Living (AAA) as can be seen in Table 4.27. Over 20% of all respondents and respondents in each of the three segments recalled seeing advertisements on GLVGC in Michigan Living. However, there are statistically significant differences in the percentage of respondents who recalled seeing or hearing advertisements about GLVGC in the remaining media. Most of these differences can be explained by the residence of the respondent. Local residents are exposed more to advertising in local media such as the two area newspapers, radio, and local cable TV. As noted in the previous section, the results here must be considered in conjunction with relative frequency of placement of GLVGC advertising by media in assessing relative effectiveness. Finally, the relative low frequency of recall for travel agents promotions may indicate an opportunity for expanding marketing to travel agents. To be effective, such an effort would have to be linked to a plan to pay commissions to cooperating travel agents.



Table 4.27: Percentage of respondents who recalled GLVGC advertising in selected media by trip type.

VARIABLE	SEGMENT				TEST STT <sup>a</sup>	SIG. <sup>b</sup> LEVEL
	RESPONDENTS STAYED OVERNIGHT AT			ALL RESPONDENTS		
	HOME N = 1341 <sup>c</sup> % of all = 56.0%	GLVGC 287 12.0%	OTHER 765 <sup>c</sup> 32.0%			
MICHIGAN LIVING (AAA)	23.2%	25.4%	21.6%	23.0%	1.60	.45
GOLF SHOW BOOTHS	15.1%	11.5%	22.1%	16.9%	21.40	.00 <sup>*</sup>
KALAMAZOO GAZETTE	29.5%	1.2%	2.8%	17.8%	260.54	.00 <sup>*</sup>
BATTLE CREEK ENQUIRER	19.2%	0.4%	0.0%	11.0%	187.97	.00 <sup>*</sup>
RADIO	10.3%	3.9%	2.8%	7.1%	39.90	.00 <sup>*</sup>
TRAVEL AGENT PROMOTION	9.7%	4.7%	6.9%	8.2%	8.94	.01 <sup>*</sup>
T.V. (WESTMARK CABLE)	9.8%	0.4%	1.4%	5.9%	66.83	.00 <sup>*</sup>

<sup>a</sup> Statistical test used is chi square ( $X^2$ ).

<sup>b</sup> The significance level to reject the null hypothesis is 0.05. The Null hypothesis is that there is no significant difference among the three different trip type GLVGC visitors.

<sup>c</sup> The sample is weighted by nine.

<sup>d</sup> The samples are summed up after being weighted.

<sup>\*</sup> The variable tested is significantly different across the three different segments.

#### Summary of GLVGC'S Six Largest Market Segments

Up to this point, single variable based segmentation results have been presented using either geographic origin or trip type as the basis for segmentation. In this section, respondents are segmented simultaneously by their trip type and geographic origin. Analyses is provided for only six of the thirty possible dual variable segments since these six account for well over 75% of GLVGC's total customer base.

In Table 4.28, it can be seen that GLVGC's largest market segment is golfers who overnight at home and reside in the Grand Rapids-Kalamazoo-Battle Creek ADI. They account for over 43% of GLVGC's customer base. They are on average 49.3 years old, golfed at GLVGC for 7.1 years and visited GLVGC 8.4 times in 1990. They are generally older and have golfed longer at GLVGC. They use GLVGC often, perhaps because they live near.

Respondents from Lansing-Ann Arbor ADI who stayed overnight at home constitute about 5% of GLVGC's customer base. They reported the highest average household income, \$72,500 in 1990, and the longest GLVGC golfing experience, 9.5 years. But, their total expending at GLVGC is only \$256.2, much lower than for the other five market segments. This may be because GLVGC is too near for them to stay overnight but too far for them to golf often. They golfed only 2.3 time at GLVGC in 1990.

Respondents from the Detroit ADI who stayed overnight at GLVGC or other accommodations constitute over 20% of GLVGC's customer base. They played about 50 rounds of golf in 1990, and their average total expending at GLVGC was around \$ 950, higher than the other segments. Most of them combined golfing and vacation which accounts for their tendency to overnight away from home.

Most respondents across GLVGC's six largest market segments suggested that a swimming pool, lighting for

Table 4.28: Summary of GLVGC's six largest dual variable market segments.

Respondents' geographic origin	Grand Rapids-Kalamazoo-Battle Creek Michigan		Detroit Michigan		Chicago-La Salle Illinois	Lansing-Ann Arbor Michigan
	home	home	GLVGC	other	other	home
Respondents stayed overnight at	n = 1035	135	197	297	117	117
% of customer base	43.3%	5.6%	8.2%	12.4%	4.9%	4.9%
<b>Respondents' Golfing History</b>						
First time vs. repeat time visitor*						
First time visitor	14.0%	21.4%	23.0%	28.1%	30.8%	7.7%
Repeat visitor	86.0%	78.6%	77.0%	71.9%	69.2%	92.3%
means (times)=	8.4	2.3	2.0	1.9	2.5	2.3
Golfing experience						
0 - 10 years	27.4%	20.0%	16.8%	21.2%	38.5%	15.4%
10 - 25 years	46.9%	33.3%	46.9%	51.5%	23.1%	46.2%
More than 25	25.7%	46.7%	36.2%	27.3%	38.5%	38.5%
means (years)=	19.8	24.0	23.9	21.2	20.9	21.7
Years visited GLVGC*						
1st year	20.9%	26.7%	20.4%	27.3%	38.5%	7.7%
2-5 years	30.9%	40.0%	38.8%	48.5%	46.2%	15.4%
5+ years	48.2%	33.3%	40.8%	24.2%	15.4%	76.9%
means (years)=	7.1	4.5	5.6	3.8	3.2	9.5
Round played (in 1990)*						
0 - 24 rounds	27.8%	28.6%	27.2%	24.2%	46.2%	30.8%
25+ rounds	72.2%	71.4%	72.8%	75.8%	53.8%	69.2%
means (rounds)=	43.8	39.7	49.1	48.6	31.2	36.6
<b>Respondents' Socioeconomic Status</b>						
Age*						
29 or younger	8.1%	21.4%	27.3%	6.1%	15.4%	7.7%
30 - 39	7.2%	14.3%	25.3%	36.4%	23.1%	15.4%
40 - 49	28.8%	28.6%	22.2%	21.2%	30.8%	38.5%
50 - 59	36.0%	28.6%	18.0%	30.3%	15.4%	38.5%
60 or older	19.8%	7.1%	7.2%	6.1%	15.4%	-
means (years)=	49.3	42.3	39.3	44.2	43.6	46.4
Marital status*						
Married	71.7%	73.3%	87.8%	81.8%	92.3%	92.3%
Education						
High school	17.0%	20.0%	18.8%	15.2%	7.7%	8.3%
College	60.7%	53.3%	57.1%	54.5%	23.1%	75.0%
Graduate school	22.3%	26.7%	24.1%	30.3%	69.2%	16.7%
means (years)=	15.4	16.4	15.1	15.8	17.2	15.2
Income in 1990*						
\$ 0 - 25,000	6.4%	-	2.7%	3.2%	7.7%	-
\$ 25,000 - 50,000	34.9%	33.3%	24.7%	19.4%	15.4%	15.4%
\$ 50,000 - 105,000	49.5%	40.0%	55.5%	51.6%	38.5%	46.2%
\$ 105,000 or more	9.2%	26.7%	17.0%	25.8%	38.5%	38.5%
means (dollars)=	\$ 47500	47500	42500	50000	62500	72500
Family size (#person)						
2 or less	50.9%	40.0%	54.8%	42.4%	69.2%	30.8%
3 or more	49.1%	60.0%	45.2%	57.6%	30.8%	69.2%
means (#person)=	2.9	2.9	2.7	3.0	2.5	3.5
<b>Respondents' Consumption Patterns</b>						
Total expenditure at GLVGC in 1990*						
\$ 0 - 250	48.5%	33.3%	14.1%	9.7%	22.2%	81.8%
\$ 250 - 500	19.8%	13.3%	36.4%	25.8%	33.3%	9.1%
\$ 500 - 1000	13.9%	33.3%	28.8%	38.7%	33.3%	-
\$ 1000 - more	17.8%	20.0%	20.7%	25.8%	11.1%	9.1%
means (dollars)=	\$ 752.1	613.9	938.5	979.7	523.0	256.2

\* denotes that variable is managerially different and useful for GLVGC's marketing, product development, or management improvement purposes.

Table 4.28: (cont'd) Summary of GLVGC's six largest dual variable market segments.

Respondents' geographic origin	Grand Rapids-Kalamazoo-Battle Creek Michigan	Detroit Michigan	Chicago-La Salle Illinois	Lansing-Ann Arbor Michigan		
Respondents stayed overnight at	home	home	GLVGC	other	other	home
n =	1035	135	197	297	117	117
% of customer base	43.3%	5.6%	8.2%	12.4%	4.9%	4.9%
<b>Course Played Percentage</b>						
Stonehedge	78.9%	100.0%	94.8%	97.0%	75.0%	61.5%
East	28.7%	53.3%	95.3%	54.5%	66.7%	76.9%
West	26.9%	50.0%	92.2%	51.5%	58.3%	38.5%
Bedford Valley	13.9%	28.6%	47.7%	45.5%	16.7%	15.4%
<b>Course favorite percentage</b>						
Stonehedge	48.5%	68.8%	51.5%	61.7%	31.8%	21.3%
East	32.3%	7.3%	35.7%	31.9%	34.8%	28.3%
West	8.3%	-	8.6%	6.4%	23.9%	21.3%
Bedford Valley	10.9%	23.9%	4.2%	-	9.5%	29.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Utilities Utilization Rate</b>						
800 call*	47.4%	66.7%	77.0%	90.9%	83.3%	84.6%
Lounge	64.0%	53.3%	47.9%	59.4%	33.3%	61.5%
Meeting room	1.9%	-	1.6%	-	-	7.7%
Banquet room	1.9%	-	1.6%	6.7%	-	15.4%
<b>% of Number One Rankings for Selected New Facilities or Services at GLVGC</b>						
Swimming pool*	24.3%	43.7%	51.6%	57.0%	52.9%	34.3%
Lighting	22.1%	19.9%	20.7%	24.2%	16.8%	14.3%
Health club*	24.3%	18.2%	9.5%	7.3%	22.0%	34.3%
Golf repair service	18.1%	9.1%	6.8%	-	-	17.1%
Tennis court	7.1%	9.1%	5.3%	11.5%	8.3%	-
Picnic area	4.1%	-	6.1%	-	-	-
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Respondents' Satisfaction Levels with</b>						
Services*	87.7%	93.3%	97.5%	81.8%	76.9%	83.3%
Facilities	91.2%	86.7%	95.4%	84.8%	84.6%	76.9%
Overall GLVGC	93.9%	100.0%	97.0%	93.9%	84.6%	92.3%
<b>Percentage of Respondents Who Subscribed to Selected Media</b>						
Local Newspaper	82.5%	73.3%	75.6%	72.7%	69.2%	76.9%
Cable Television*	55.3%	46.7%	64.5%	54.5%	30.8%	69.2%
Golf Digest*	33.3%	53.3%	35.7%	48.5%	53.8%	53.8%
Michigan Living (AAA)	35.1%	46.7%	44.7%	51.5%	8.3%	38.5%
Golf Magazine	14.9%	26.7%	31.0%	33.3%	30.8%	53.8%
Golf Journal	6.2%	26.7%	2.0%	12.1%	-	-
Michigan Golfer	7.9%	26.7%	9.6%	24.2%	7.7%	15.4%
Other Media	22.8%	33.3%	14.2%	21.2%	38.5%	30.8%
<b>Percentage of Respondents Receiving Information about GLVGC</b>						
Word of mouth/friend	85.7%	73.3%	84.3%	78.1%	61.5%	83.3%
GLVGC brochure*	12.5%	26.7%	34.7%	35.5%	38.5%	-
Newspaper*	26.8%	7.1%	3.6%	-	-	-
Michigan Living	8.0%	13.3%	18.3%	28.1%	7.7%	25.0%
<b>Percentage of Respondents Who Recalled GLVGC Advertising in Selected Media</b>						
Michigan Living (AAA)*	23.7%	21.4%	31.7%	44.8%	-	25.0%
Golf Show Booths*	15.1%	33.3%	10.1%	26.7%	25.0%	-
Kalamazoo Gazette*	37.0%	7.1%	-	-	-	-
Battle Creek Enquirer	24.5%	7.1%	-	-	-	-
Radio	10.8%	13.3%	5.2%	3.7%	-	-
Travel Agent Promotion	12.0%	7.1%	4.0%	3.6%	9.1%	-
T.V. (Westmark Cable)	11.0%	7.1%	0.6%	-	9.1%	-

nighttime golf, and a health club would make GLVGC a better resort. Golfers who are from the Detroit ADI and the Chicago-La Salle ADI especially preferred a swimming pool. Word of mouth/friends affords information about GLVGC to most GLVGC's golfers in its six largest market segments. It is already a good marketing tool for GLVGC and strategies for exploiting it could extend GLVGC's customer base. Local newspapers, cable television, Golf Digest, and Michigan Living (AAA) are the four major media most often subscribed to by respondents across GLVGC's six largest market segments. One of the best ways to extend GLVGC's market is to advertise and promote GLVGC in these media. More than seventy percent of these respondents subscribed to local newspapers but only a relatively low percentage of them received information about GLVGC. This means that GLVGC can do more to promote its market by newspaper in these four ADIs.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary of the Study

In this study, secondary data provided by the Travel, Tourism, and Recreation Resource Center at Michigan State University were used to create a profile of the customers using Gull Lake View Golf Club. The data were further analyzed to create geographic origin and trip type segments. These segments were then studied to determine their similarities and differences with the objective of evaluating each segmentation's potential to enhance GLVGC's overall marketing and planning strategies.

Chi-square analysis was the dominant statistical tool used in this study. A sample was selected from GLVGC's golf cart rental slips and villa registration cards. A mailed questionnaire was used to obtain information from respondents. It was necessary to weight responses to simulate GLVGC's overall customer base. Three objectives were established for this study. The first objective was to profile GLVGC visitors by geographic origin and trip type. Respondents were grouped into three trip type segments based

upon where they spent the previous night: 1. at home, 2. at GLVGC, or 3. at other accommodations. Ten geographic segments were developed employing the Arbitron ADI Market Atlas to establish boundaries between segments. The Grand Rapids-Kalamazoo-Battle Creek Michigan ADI and Detroit ADI were found to be GLVGC's two largest geographic market segments. The Lansing-Ann Arbor ADI and the Chicago-LaSalle ADI, GLVGC's third and fourth biggest markets, merit significant marketing attention by Gull Lake View Golf Club's management. The remaining six geographic segments together were found to account for only 12.8% of GLVGC's customer base.

The second objective was to develop possible useful segmentations for promotion and product development purposes. Both geographic origin and trip type segmentation may be useful for GLVGC's promotion and product development purposes since segmentation did produce groups of GLVGC customers which vary dramatically in size. Most GLVGC golfers are from either the Grand Rapids-Kalamazoo-Battle Creek Michigan ADI and stayed overnight at home or from the Detroit ADI and stayed overnight in the Battle Creek/Kalamazoo area but not at GLVGC. These two segments alone account for more than 50% of GLVGC's overall customer base. Furthermore, segments were found to have differing preferences, used different information sources and media, and demonstrated different patterns of use. Given the

latter differences and the very different segment sizes, segmentation does appear to be a potentially useful tool for target marketing to specific segments and for aligning product offering with preference within each target segment.

The third objective was to ascertain the usefulness of segmentation. The statistical tests applied revealed significant differences among segments across potentially marketing relevant variables such as: socioeconomic characteristics, golfing history, consumption patterns, satisfaction levels, course preference, and media use. In other words, GLVGC's market is heterogeneous and can be segmented into different geographic origin and trip type markets. For these segments to be useful, they must be exploitable for marketing and/or product development purposes. Information in Table 4.28 shows that there are managerially significant differences across the six dual variable segments (i.e. age, marital status, household income, years visited GLVGC, total spending at GLVGC, and rounds played in 1990). Such information serves to demonstrate the usefulness of the segmentation developed in this study and also highlights what are probably the most managerially important results from this study.

### Conclusions

The concept of market segmentation was first generated by Wendell Smith (1956). Today, market segmentation has



become an important marketing tool to define markets and develop marketing strategies that fit the specifications and needs of a target segment (Menezes and Chandra, 1989). Kotler and Armstrong (1987) declared that there is no single way to segment a market and grouped the most commonly used segmentation variables into four general categories including: geographic, demographic, psychographic, and behavioristic segmentation variables. A simple geographic variable, residence, and a simple behavioristic variable, where the previous night was spent, were the segmentation variables used in this study. Results suggested that these two variables singly or in combination produced groupings of respondents which vary dramatically in size and which exhibited differences which could be targeted and exploited for marketing purposes.

The results of the cross-tabulations in this study coincide with the findings of Frank, Massy, and Wind (1972). Cross-tabulation analysis can ascertain the relationship between two variables, such as income and education of the household head. In this study, respondents' socioeconomic status, golfing history, consumption patterns, satisfaction levels, courses preference and played are related to their trip type and geographic origin. Cross-tabulation is simple in concept and has been made readily accessible to managers via inexpensive personal computers and user friendly software packages.

However, it is important to: 1. collect data using several scientific principles, 2. process important data with care to minimize entry and coding errors, and 3. to interpret results recognizing the impact of limitations and bias in methods and data employed. The findings of this study are specific to Gull Lake View Golf Club, Kalamazoo, Michigan. However, the methods employed appear to be generalizable across most small to medium sized public or private golf facilities as well as many other types of recreation or tourism businesses.

#### Implications for GLVGC Market Planning and Management

In order to better serve more golfers and to maximize Gull Lake View Golf Club's profits, it is important for its managers to employ the best possible market planning tools available. Market segmentation has been demonstrated in this study to be a tool with considerable promise for enhancing the effectiveness of GLVGC's marketing and product development efforts.

To promote GLVGC effectively, it is important to know its major geographic market segments. A total of 47.6% of all respondents are from Grand Rapids-Kalamazoo-Battle Creek ADI and 26.5% from Detroit ADI. Although Lansing-Ann Arbor ADI represents only 6.7% of GLVGC's customer base, it is also a very good potential market segment because of its high density of GLVGC customers (42.7 in every 10,000

households), second only to the Grand Rapids-Kalamazoo-Battle Creek ADI area (111.4/10,000). In these three geographic market segments, local newspapers and cable television are important media for GLVGC to use in its advertising. Additionally, 82% of the respondents received information about GLVGC from word of mouth/friend. This is a powerful tool which can be employed to extend GLVGC's market. Strategies which might be explored to exploit this tool include: distributing discount coupons for small group golf outings, providing free bumper stickers and selling discount priced GLVGC merchandise such as clothing with the club logo attached. The basic goal, of course, is to enlist customers in selling GLVGC to their friends and relatives.

Trip type segmentation revealed that: 44.0% of GLVGC golfers stayed overnight at GLVGC or at other accommodations and that most in these two segments are not from Grand Rapids-Kalamazoo-Battle Creek ADI and come to Kalamazoo or Battle Creek for vacation or visiting. The majority within these segments are likely on vacation or on week-end outings, so they are likely to have time on their hands. Promotions to them on site may be effective in stimulating one or more return visits during their trip to the area. Putting GLVGC bill boards along local highways and distributing brochures at highway visitor centers may be also helpful to attract more golfers to GLVGC who are passing through the area in route to other destinations.

The segment which stayed overnight at GLVGC most often purchase a multiple night package including unlimited golf at GLVGC. Only 4.7% of them recalled travel agent sponsored GLVGC advertising. This may indicate an opportunity for marketing through travel agents which could prove to be a cost-effective strategy for tapping more distant markets. Volume discounts or off-peak pricing could prove useful in attracting a greater volume of business from the local area. Price sensitive retirees with flexible schedules would likely be most responsive to such a pricing strategy.

Dual variable segmentation indicated that most respondents (43.3%) are from the Grand Rapids-Kalamazoo-Battle Creek ADI and stayed overnight at home. Compared with the other five largest dual variable market segments, members of this segment are older and more likely to be repeat customers. They have golfed at GLVGC for an average of 7.1 years. Word of mouth/friend is the most powerful marketing tool to this local market segment. Possibly GLVGC might sponsor youth tournaments or golf lessons for youngsters to attract more new and younger golfers from the Grand Rapids-Kalamazoo-Battle Creek ADI. About 12.4% of GLVGC golfers are from the Detroit ADI and stayed overnight at other accommodations; most of them are high spending and frequent customers. About half of them subscribed and recalled GLVGC advertising in Michigan Living. GLVGC might promote more often in this AAA magazine if it wishes to

expand its share of this market segment. Constructing a new swimming pool may also stimulate their interest in GLVGC.

To improve GLVGC's management and services, a swimming pool, lighting for nighttime golf, a health club, golf club repair services, tennis courts, and picnic areas were in order of importance new facilities that respondents in the largest segments suggested that would make GLVGC more attractive. GLVGC's meeting and banquet rooms are rarely used and might be remodelled into a health club or other recreation facilities to better satisfy or attract more GLVGC golfers. However, golfers may not be the target for these facilities, and their lack of interest in them may not be indicative of these facilities' potential market. The Bedford Valley Course clearly is in low demand. About 25.0% of respondents played Bedford Valley, and only 10.0% of them ranked it as their favorite course. The data collected does not indicate reasons for low demand for this course but its existence does suggest that management may want to assess how it might be improved to better serve its customers.

#### Limitations of this Study & Needed Future Research

The objective of this study was to effectively segment GLVGC's market into different homogeneous market segments to enhance marketing effectiveness and product development. However, despite care in designing and implementing the study, the following proved to be noteworthy limitations.

1. Prejudice in sample selection. The sample frame for selecting half of the respondents was golf cart rental slips. Unfortunately, only 15% of slips were found to contain an address or were legible. While no bias was obvious in this situation, the potential for a serious bias problem is inherent when 85% of potential respondents are excluded from the sampling frame. If slips are to be used as the sampling frame in future studies, management should encourage that they be completed by all customers. This would provide management with a more accurate listing of GLVGC's customers which it might effectively use in direct mail advertising.

2. Potential error introduced by weighting the data. Because respondents using GLVGC's villa were sampled more heavily, it was necessary to weight responses to obtain a more accurate picture of GLVGC's total customer base. The weighting factor was derived from the sample of cart rental slips which, as noted above, has the potential to have produced a biased sample. Given more time to develop the sampling frame than was available in this case, other superior sampling frames might be available.

3. Insufficient sample size across segments. Although about 800 respondents were selected in this case, the number of respondents captured in some segments was far too small for meaningful analysis. This was not a major limitation for this study since the objective was to identify dominant

current GLVGC market segments. However, should GLVGC wish to target selected smaller segments, an alternative sampling procedure and/or a much larger random sample would be necessary.

4. Limited information collected. Collecting marketing relevant data was a secondary objective for the data drawn upon in this study. Thus, it would be possible to design a questionnaire which is both shorter and richer in marketing relevant information. For example, more information concerning respondents' likes and dislikes would help to assess what management might do to improve the Bedford Valley Course.

Despite these limitations, the objectives of this study were generally achieved. The simple segmentations employed were surprisingly effective in identifying large groupings of respondents which possess differences which are exploitable in market strategies and for selecting product offerings. The overall conclusion from this study is that market segmentation is a tool which is accessible for even small recreation and tourism organizations, and its application can materially assist management to enhance the effectiveness and efficiency of its marketing efforts and investments.

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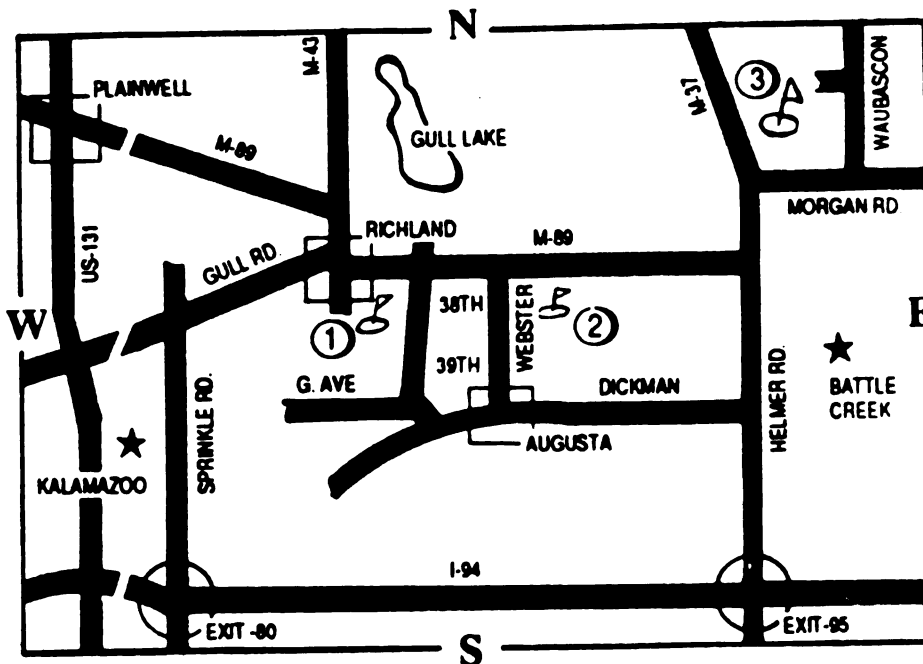
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**APPENDIX A**

**MAPS OF GLVGC'S LOCATION AND ITS FOUR COURSES**



1. GULL LAKE VIEW  
EAST, WEST, FAIRWAY VILLA
2. STONEHEDGE
3. BEDFORD VALLEY

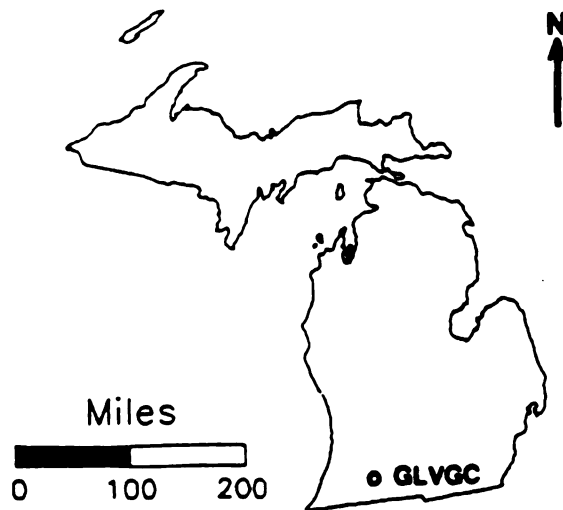
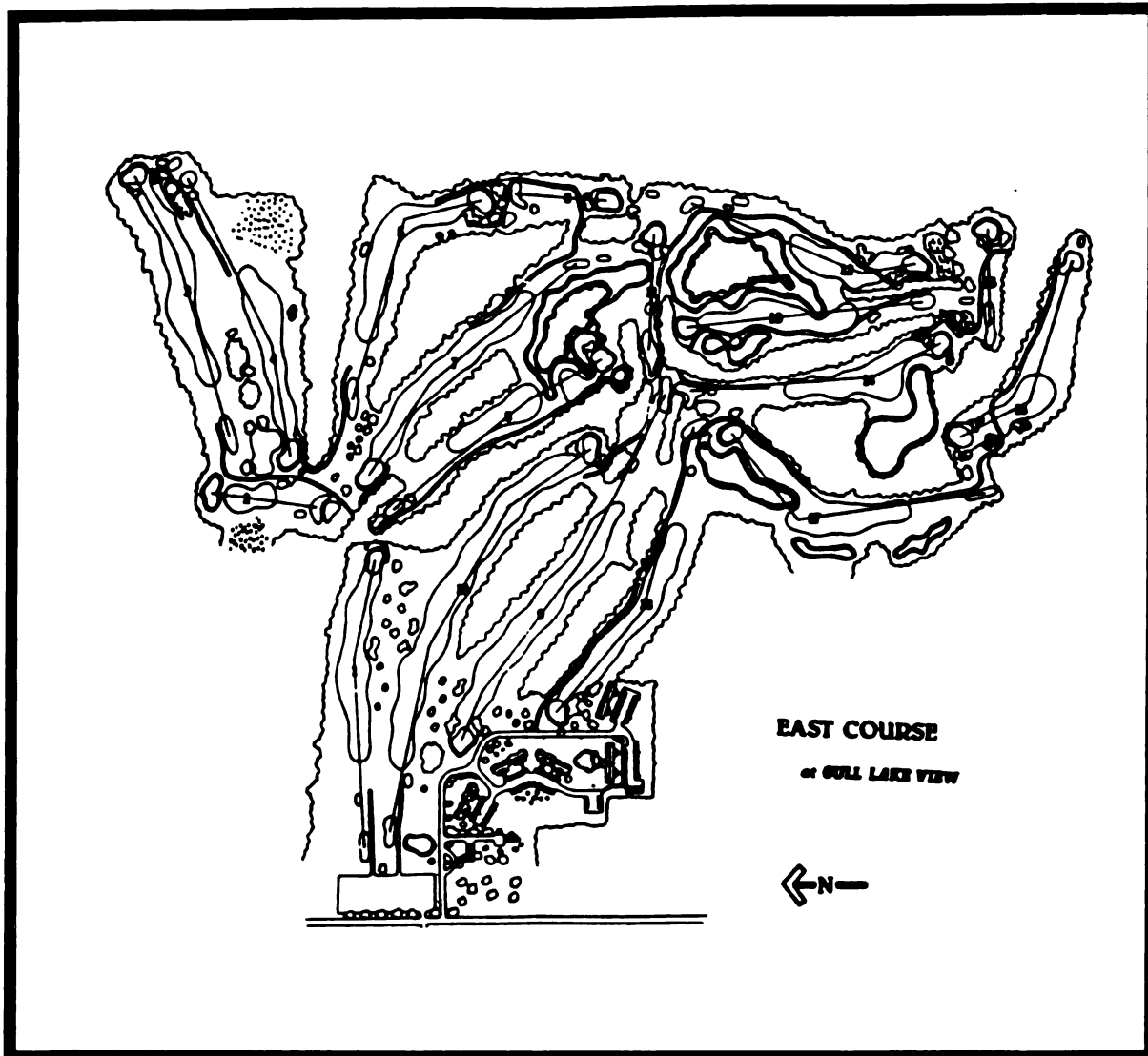


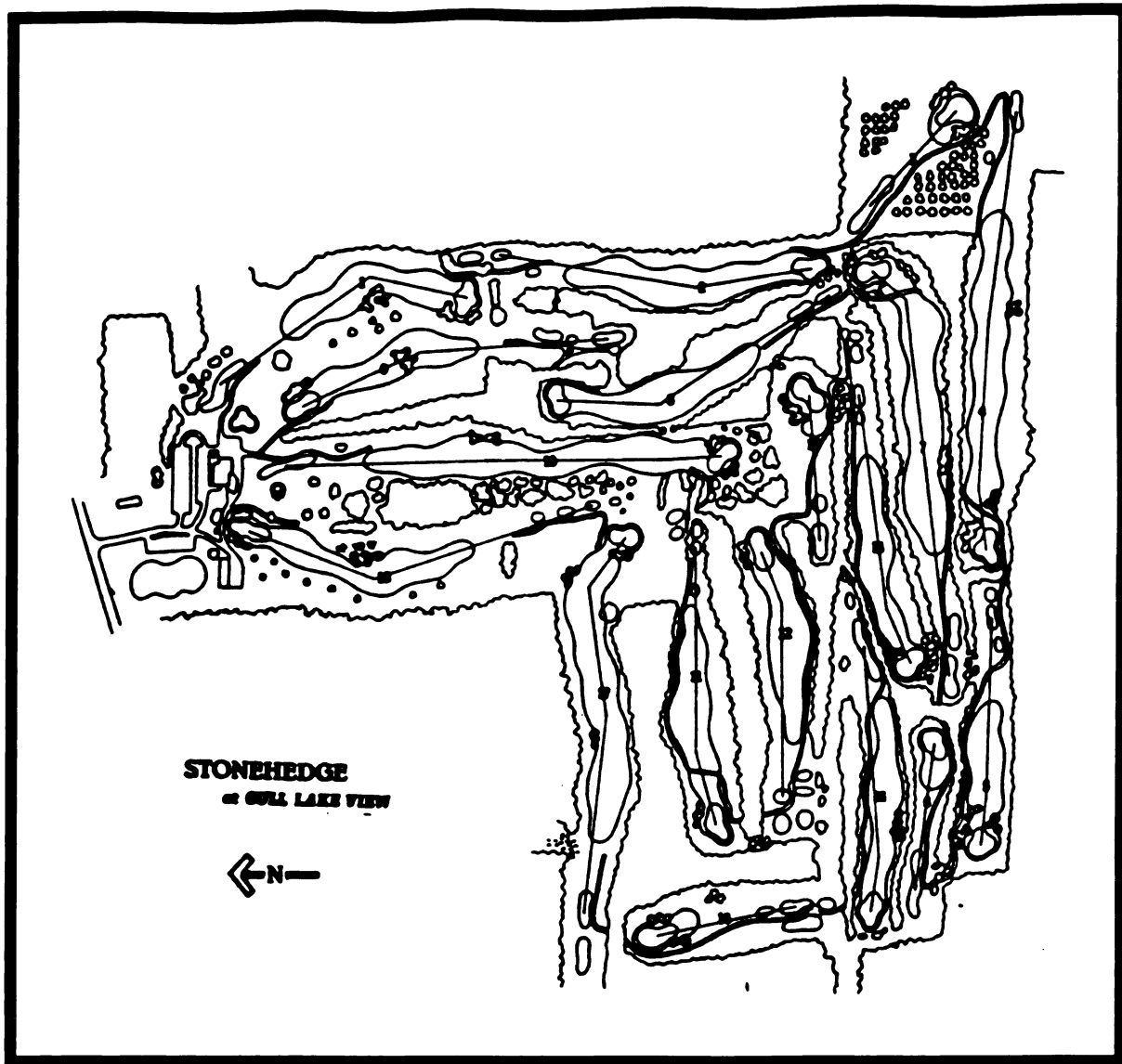
Figure A.1: Location of Gull Lake View Golf Club. Number 1 denote the West Course and the East Course, 2 the Stonehedge course, 3 the Bedford Course.



EAST COURSE	Back tees	Middle tees	Front tees
Course ratings	69.4	67.3	68.5
Slope ratings	124	120	118

HOLE #	1	2	3	4	5	6	7	8	9	OUT	10	11	12	13	14	15	16	17	18	IN	TOT
MAN PAR	4	3	4	4	4	3	4	4	5	35	5	3	4	4	4	3	4	4	4	35	70
LADIES PAR	4	3	4	4	4	3	4	4	5	35	5	3	4	4	4	3	4	4	4	35	70

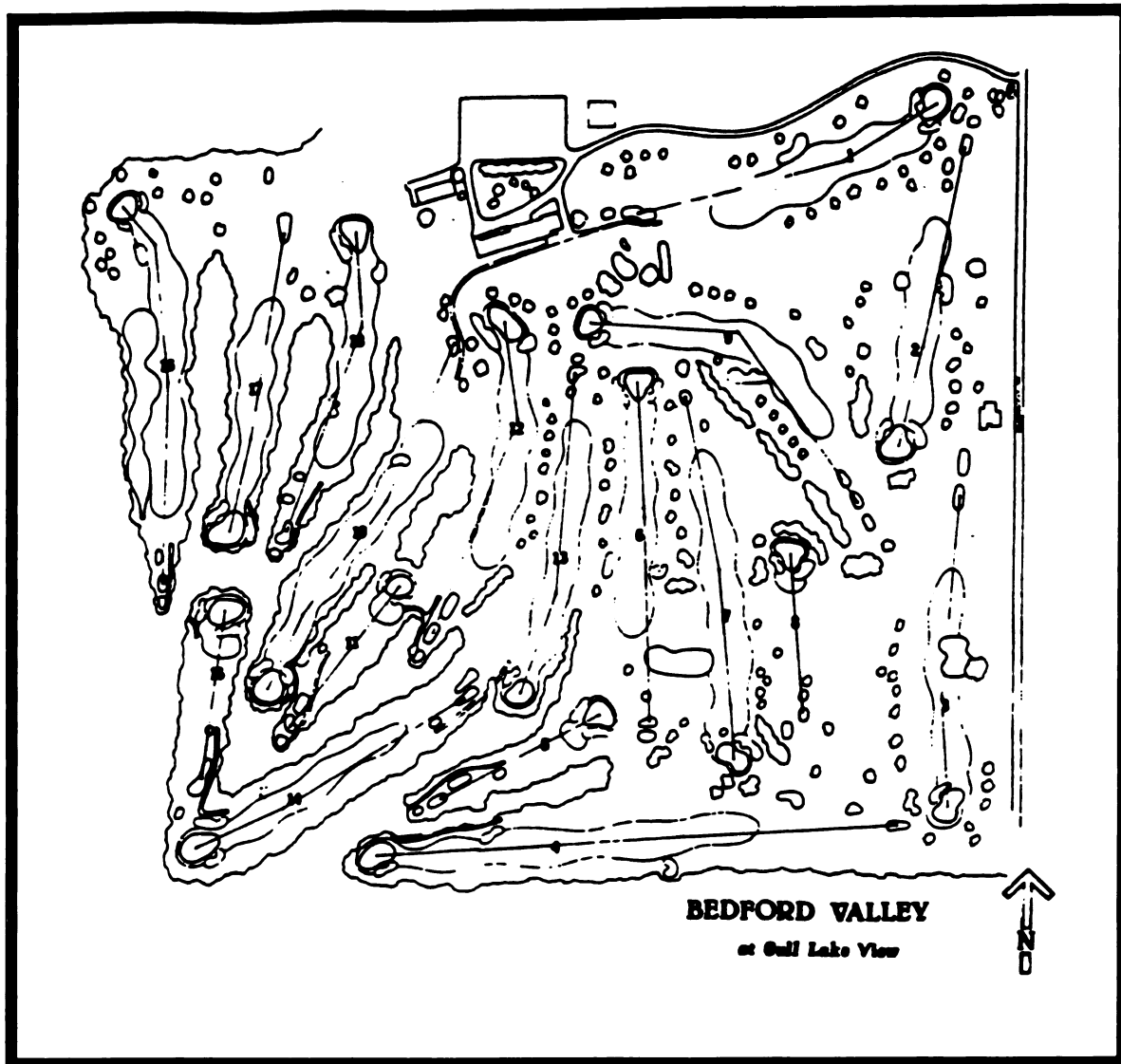
Figure A.3: Map of GLVGC's East Course



STONEHEDGE COURSE		Black tees	Green tees	White tees	Orange tees
Course ratings		72.4	70.8	68.4	70.3
Slope ratings		133	130	124	120
HOLE #	1 2 3 4 5 6 7 8 9	OUT	10 11 12 13 14 15 16 17 18	IN	TOT
MAN PAR	4 4 3 5 4 3 5 4 4	36	5 4 4 3 4 4 3 5 4	36	72
LADIES PAR	4 4 3 5 4 3 5 4 4	36	5 4 4 3 4 4 3 5 4	36	72

Figure A.4: Map of GLVGC's Stonehedge Course.





BEDFORD VALLEY	Black tees	Green tees	White tees	Orange tees
Course ratings	73.8	72.4	70.1	70.0
Slope ratings	135	132	127	119

HOLE #	1	2	3	4	5	6	7	8	9	OUT	10	11	12	13	14	15	16	17	18	IN	TOT	
MAN PAR	4	4	4	5	3	5	5/4	3	4	36/35	5	3	4	4	4	3	5	4	4	4	36	72/71
LADIES PAR	4	4	4	5	3	4	5	3	4	36	5	3	4	4	4	3	5	4	4	4	36	72

Figure A.5: Map of GLVGC's Bedford Valley Course.

**APPENDIX B**

**QUESTIONNAIRE**

# **Gull Lake View Golf Club**

## **Visitor Survey**



Travel, Tourism, and Recreation  
Resource Center

Michigan State University

Please answer each of the following questions in the space provided.

Please indicate today's date \_\_\_\_\_

1. In what city and state is your permanent residence? City \_\_\_\_\_ State \_\_\_\_\_
2. In the past year, how many times have you visited the Gull Lake View Golf Club (GLVGC)? \_\_\_\_\_
3. How many years have you been visiting GLVGC? \_\_\_\_\_

Currently, a solid waste landfill is being planned for Kalamazoo County. The number of potential sites has been reduced to five, with one located adjacent to GLVGC's "Stonehedge" golf course. This site is ranked very high among the five remaining sites under consideration.

According to the development plan, this landfill would be completely visible from the 4th tee. Substantial additional traffic and traffic noise would be expected from vehicles using the landfill. Equipment noise, odors, and dust will be apparent to golfers using the "Stonehedge" course, although wind direction and other weather conditions will influence the degree to which these factors are discernible. For planning purposes, it is very important to know whether your use of GLVGC facilities would change if this landfill is developed.

4. Please indicate how you feel your golf play at "Stonehedge" would most likely be affected if this landfill is built.

- I would play the "Stonehedge" course as frequently as I do now.
- I would stop using "Stonehedge" but use another GLVGC course about as often as I have been playing "Stonehedge."
- I would stop using all GLVGC courses.
- I would reduce play at "Stonehedge" by \_\_\_\_\_ percent.



4a. Please indicate in percentages how your play would be affected.  
(Please be sure your responses total 100%)

I would decrease play by \_\_\_\_\_ % total rounds per year.

I would increase play by \_\_\_\_\_ % at other GLVGC courses.

I would increase play by \_\_\_\_\_ % at other Battle Creek/Kalamazoo area courses.  
(See map on back cover)

I would increase play by \_\_\_\_\_ % at courses outside the Battle Creek/Kalamazoo area.  
100%

- 5. How many rounds of golf did you play last year, both at GLVGC and at other golf facilities? \_\_\_\_\_ rounds
- 6. How many of these annual rounds were 9 hole rounds, and how many were 18 hole rounds?  
9 hole rounds \_\_\_\_\_ 18 hole rounds \_\_\_\_\_
- 7. How many of these annual rounds were played at GLVGC?  
9 hole rounds \_\_\_\_\_ 18 hole rounds \_\_\_\_\_
- 8. How many of these annual rounds were played at GLVGC's "Stonehedge" golf course?  
9 hole rounds \_\_\_\_\_ 18 hole rounds \_\_\_\_\_

Please answer questions 9 through 16 with regard to YOUR VISIT TO GULL LAKE VIEW GOLF CLUB (GLVGC) on..... \_\_\_\_\_

- 9. Was this your first visit to GLVGC?     YES     NO
- 10. Did you spend one or more nights away from home on this trip?     YES     NO → SKIP TO QUESTION 11.

↓

10a. If, yes how many nights did you spend away from home? \_\_\_\_\_

10b. Did you spend any nights in the GLVGC villa?     YES     NO    → SKIP TO QUESTION 10g.

↓

10c. If yes, how many nights did you spend in the GLVGC villa? \_\_\_\_\_

10d. How many meals did you prepare in your room during your stay? .  
No. breakfasts \_\_\_\_\_ No. lunches \_\_\_\_\_ No. dinners \_\_\_\_\_

10e. Did you purchase a GLVGC package?  
 YES     NO    → SKIP TO QUESTION 10g.

└─┬─>

10f. If yes, which one?  
 3 days, 2 nights  
 4 day, 3 nights

GO TO QUESTION 10g.

10g. Did you spend any nights at other lodging establishments and/or commercial campgrounds in the Battle Creek/Kalamazoo area?    (see map on back cover)  
 YES     NO    → SKIP TO QUESTION 11

└─┬─>

10h. If yes, how many nights did you spend at such places? \_\_\_\_\_

GO TO QUESTION 11.

- 11. Was GLVGC your primary destination on this trip?     YES     NO

15. How many rounds of golf did you play during this visit to GLVGC at each of the four GLVGC courses?

West \_\_\_\_\_ East \_\_\_\_\_  
Bedford Valley \_\_\_\_\_ Stonehedge \_\_\_\_\_

16. Did you utilize the professional golf instruction at GLVGC on this trip?

YES  NO →

16a. If no, have you ever utilized the professional golf instruction at GLVGC?  
 YES  NO

17. How often do you combine golfing and vacationing? (circle one number)

VERY INFREQUENTLY 1 2 3 4 5 6 7 VERY OFTEN

18. How helpful do you think an 800 number for obtaining reservations at and/or information on GLVGC would be? (circle only one number)

NOT HELPFUL AT ALL 1 2 3 4 5 6 7 VERY HELPFUL

19. Do you anticipate playing more or less golf next year compared to this year?

LESS than last year

SAME as last year

MORE than last year



GO TO QUESTION 20



19a. If less, what percentage less do you plan to play?  
\_\_\_\_\_ percent  
19b. Why? (check all that apply)  
 Less time  
 Less money  
 Less interest  
 Health  
 Other \_\_\_\_\_  
GO TO QUESTION 20

19c. If more, what percentage more do you plan to play?  
\_\_\_\_\_ percent  
19d. Why? (check all that apply)  
 More time  
 More money  
 More interest  
 Health  
 Other \_\_\_\_\_  
GO TO QUESTION 20

20. Please rank the following GLVGC golf courses in terms of your playing preference. (1=first choice, 4=last choice)

West \_\_\_\_\_ East \_\_\_\_\_  
Bedford Valley \_\_\_\_\_ Stonehedge \_\_\_\_\_

12. We would also like to know how much you spent on this trip in the GLVGC area, i.e., in Kalamazoo and Calhoun Counties. (See map on back cover).

In this study, a "spending unit" is an individual who purchases things for himself or herself, or a group that purchases things as a group. An individual who pays his or her own expenses is one spending unit whether he or she is traveling alone or with others. Two married couples traveling together are two spending units if they purchase things separately, although they may split some expenses.

Following is a list of things people pay for when they go on trips. Please estimate how much (if anything) your SPENDING UNIT spent for these items in the GLVGC area (i.e., Kalamazoo and Calhoun Counties) while on this trip.

Please do not leave any spaces blank; write "0" to indicate no expenditures; include only expenditures made in the GLVGC area. (see map on back cover)

<u>Item</u>	
Groceries	\$ _____
Liquor	\$ _____
Meals at restaurants and fast food establishments	\$ _____
Lodging/villa/camping fees	\$ _____
Vehicle-related (gas, oil, repairs)	\$ _____
Golf cart rental	\$ _____
Golf equipment rental	\$ _____
Golf supplies (balls, tees, clothing, etc.)	\$ _____
Recreation activities (bowling, dancing, etc.)	\$ _____
Other	\$ _____

13. How would you rate the accuracy of the estimates you provided in response to the above question?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
↑		↑		↑
Completely Accurate		" In the Ballpark"		Only Guesses

14. While you were at GLVGC, did anyone in your party use any of the following facilities?

Lounge	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Meeting rooms	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Banquet rooms	<input type="checkbox"/> YES	<input type="checkbox"/> NO

21. To which of the following media do you subscribe? (Please check all that apply)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Golf Journal  | <input type="checkbox"/> Cable television | <input type="checkbox"/> Michigan Living (AAA) |
| <input type="checkbox"/> Golf Digest   | <input type="checkbox"/> Michigan Golfer  | <input type="checkbox"/> None                  |
| <input type="checkbox"/> Golf Magazine | <input type="checkbox"/> Local newspaper  | <input type="checkbox"/> Other _____           |

22. Please circle the ONE information source in the above list that you most often use for information when selecting a golf course at which to play.

23. Which of the following provided you with information on GLVGC during the past year? (Please check all that apply).

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> T.V.               | <input type="checkbox"/> Golf Show (Detroit)       | <input type="checkbox"/> Word of mouth/friends |
| <input type="checkbox"/> Newspapers         | <input type="checkbox"/> Golf Show (Fort Wayne)    | <input type="checkbox"/> Michigan Living (AAA) |
| <input type="checkbox"/> Radio              | <input type="checkbox"/> Golf Show (west Michigan) | <input type="checkbox"/> GLVGC brochure        |
| <input type="checkbox"/> Resident Golf Shop | <input type="checkbox"/> Golf Show (Chicago)       |  |

24. Do you recall seeing or hearing advertisements on GLVGC in any of the following media during the past year?

	YES	NO
Kalamazoo Gazette .....	<input type="checkbox"/>	<input type="checkbox"/>
Battle Creek Enquirer .....	<input type="checkbox"/>	<input type="checkbox"/>
Travel agent promotion .....	<input type="checkbox"/>	<input type="checkbox"/>
Radio .....	<input type="checkbox"/>	<input type="checkbox"/>
Michigan Living (AAA) .....	<input type="checkbox"/>	<input type="checkbox"/>
T.V. ( Westmark cable ) .....	<input type="checkbox"/>	<input type="checkbox"/>
Golf Show booths .....	<input type="checkbox"/>	<input type="checkbox"/>

25. Which of the following services or facilities do you think would make GLVGC a better resort?  
(rank choices in priority, 1=highest, 6=lowest)

- |                       |                                 |                                   |
|-----------------------|---------------------------------|-----------------------------------|
| _____ a swimming pool | _____ tennis courts             | _____ picnic areas                |
| _____ a health club   | _____ golf club repair services | _____ lighting for nighttime golf |

26. How satisfied are you with the services provided by GLVGC employees? (circle only one number)

VERY DISSATISFIED 1 2 3 4 5 6 7 VERY SATISFIED

27. How satisfied are you with the facilities provided at GLVGC? (circle only one number)

VERY DISSATISFIED 1 2 3 4 5 6 7 VERY SATISFIED

28. Overall, how satisfied are you with GLVGC? (circle only one number)

VERY DISSATISFIED 1 2 3 4 5 6 7 VERY SATISFIED



Now please answer a few questions for classification purposes.

29. What is your gender?  Male  Female

30. What year were you born? \_\_\_\_\_

31. How many years have you been a golfer? \_\_\_\_\_

32. How many people are in your household (including yourself)? \_\_\_\_\_

33. How many people in your household are golfers (including yourself)? \_\_\_\_\_

34. Please circle the highest year of formal schooling you have completed.

1	2	3	4	5	6	7	8	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7+
Grade School								High School				Undergraduate education				Graduate education						

35. What is your present employment situation?

<input type="checkbox"/> Working full time	<input type="checkbox"/> Homemaker
<input type="checkbox"/> Working part time	<input type="checkbox"/> Retired
<input type="checkbox"/> Temporarily unemployed	<input type="checkbox"/> Student

36. What is your marital status?

<input type="checkbox"/> Never married	<input type="checkbox"/> Married
<input type="checkbox"/> Divorced/separated	<input type="checkbox"/> Widowed

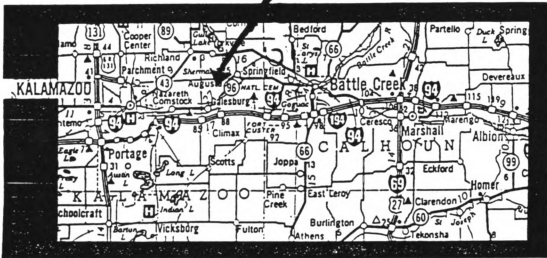
37. What was your 1990 total household income before taxes?

<input type="checkbox"/> under \$15,000	<input type="checkbox"/> \$35,000-\$49,999	<input type="checkbox"/> \$120,000-\$134,999
<input type="checkbox"/> \$15,000-\$19,999	<input type="checkbox"/> \$50,000-\$74,999	<input type="checkbox"/> \$135,000-\$149,999
<input type="checkbox"/> \$20,000-\$24,999	<input type="checkbox"/> \$75,000-\$104,999	<input type="checkbox"/> \$150,000-\$299,999
<input type="checkbox"/> \$25,000-\$34,999	<input type="checkbox"/> \$105,000-\$119,999	<input type="checkbox"/> \$300,000 or more

Thank you very much for your assistance. Please return completed questionnaire in the self-addressed reply envelope provided. If you misplaced this envelope, please send the completed questionnaire to:

Dr. Donald F. Holecek, Director  
 Travel, Tourism, and Recreation Resource Center  
 172 Natural Resources Building  
 Michigan State University  
 East Lansing, MI 48824-1222

Gull Lake View Golf Club



Battle Creek and Kalamazoo area map



**APPENDIX C**

**CODE BOOK FOR GLVGC VISITOR SURVEY**

Variable Name	Question	Length	Instruction
CODE#		3	continuous
TODAY		4	
CITY	1a	2	continuous
STATE	1b	2	string
VISIT	2	2	continuous
YEARS	3	2	
LANDFILL	4	1	1= play at Stonehedge as
PERCENT	4	3	frequency as now.
DECREASE	4a1	3	2= stop using S but use other
OTHERg	4a2	3	GLVGC course.
OTHERa	4a3	3	3= stop using all GLVGC course.
OUTSIDE	4a4	3	4= reduce play at S.
ROUNDS	5	3	continuous
AN9	6a	3	
AN18	6b	3	
GL9	7a	3	
GL18	7b	3	
STONE9	8a	3	
STONE18	8b	3	
DATE		6	numeral
FIRST	9	1	1=yes
NIGHT	10	1	2=no
NIGHT#	10a	3	continuous
NITRq1	10b	1	1=yes; 2=no
NITE#g1	10c	2	continuous
BREAK	10d1	2	continuous
LUNCH	10d2	2	
DINNER	10d3	2	
PACKAGE	10e	1	1=yes; 2=no
WHICH	10f	1	1=3 days, 2 nights 2=4 days, 3 nights

\* Missing = Blank (.)

\* 0= the value for the rest of questions if the response is checked on the answer which requires to skip the remaining questions in a series of chain questions.

Variable Name	Question	Length	Instruction
LODGING	10g	1	1=yes; 2=no
LODGING#	10h	2	continuous
PRIMARY	11	1	1=yes; 2=no
GROCERY	12a	3	continuous
LIQUOR	12b		
MEALS	12c		
VILLA	12d		
VEHICLE	12e		
CART	12f		
EQUIP	12g		
SUPPLY	12h		
REC	12i		
OTHER	12j		
ACCURACY	13	1	1= completely accurate 3= in the ballpark 5= only guesses value= 1 to 5
LOUNGE	14a	1	1=yes; 2=no
MEETING	14b		
BANQUET	14c		
WEST	15a	2	continuous
BEFORD	15b		
EAST	15c		
STONEHED	15d		
USE	16	1	1=yes; 2=no
EVERUSE	16a		
OFTEN	17	1	1= very infrequently 7= very often value= 1 to 7
HELPFUL	18	1	1= not helpful at all 7= very helpful value= 1 to 7

Variable Name	Question	length	Instruction
LESS	19a	3	continuous
LWHY	19b	3	1= less time; 2= less money 3= less interest; 4= health 5= other * it can be multiple choices
MORE	19c	3	continuous
MWHY	19d	3	1= less time; 2= less money 3= less interest; 4= health 5= other * it can be multiple choices
W	20a	1	1= first choice; 4= last choice * If it is partially answered, then put "0" on blank answer, otherwise leave the whole question blank.
B	20b		
E	20c		
S	20d		
JOURNAL	21a	1	1= response; 0=no response * If check none of these answers, then leave the whole question blank.
DIGEST	21b		
MAGAZINE	21c		
CABLE	21d		
MICHIGAN	21e		
PAPER	21f		
AAA	21g		
NONE	21h		
OTHER	21i		
INFO	22	2	string
TV	23a	1	0=no response; 1= response * If none of these items is checked, then leave the whole question blank.
NEWS	23b		
RADIO	23c		
SHOP	23d		
DETROIT	23e		
WAYNE	23f		
WMI	23g		

Variable Name	Question	Length	Instruction
CHICAGO	23h	1	
WORD	23i		
LIVING	23j		
BROCHURE	23k		
KG	24a	1	1=yes; 2=no missing=blank
BCE	24b		
TRAVEL	24c		
R	24d		
MLAAA	24e		
WCABLE	24f		
BOOTHs	24g		
POOL	25a	1	rank= 1 to 6 * If 1 digit is assigned to more than one item, just do it like the responser did.
CLUB	25b		
COURTS	25c		
SERVICE	25d		
PICNIC	25e		
LIGHTING	25f		
SATISFY	26	1	1= very dissatisfied 7= very satisfied value= 1 to 7
FACILITY	27		
OVERALL	28		
SEX	29	1	M=male; F=female
AGE	30	2	continuous
EXPERIEN	31	2	continuous
HOUSE	32	2	continuous
GOLFER	33	2	continuous
ED	34	2	First digit: group: 1=grade school 2=high school 3=undergraduate education 4=graduate education Second digit: the number is been checked within the group

Variable Name	Question	Length	Instruction
EMPLOY	35	1	1= working full time 2= working part time 3= temporarily unemployed 4= homemaker 5= retired 6= student
MARITAL	36	1	1=never married 2=divorced/separated 3=married 4=widowed
INCOME	37	2	1= under \$15,000 2= \$15,000- \$19,999 3= \$20,000- \$24,999 4= \$25,000- \$34,999 5= \$35,000- \$49,999 6= \$50,000- \$74,999 7= \$75,000- \$104,999 8= \$105,000- \$119,999 9= \$120,000- \$134,999 10= \$135,000- \$149,999 11= \$150,000- \$299,999 12= \$300,000 or more
ID#		3	numeral
RDATE		3	numeral



## City Codes of GLVGC's Respondents

## 1. GLVGC golfers' geographic origin, GRAND RAPID-KALAMAZOO-BATTLE CREEK, (MUSKEGON) MICHIGAN ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
89	ALLEGAN	88	ADA
02	BATTLE CREEK	04	EAST GRAND RAPIDS
03	GRAND RAPIDS	65	HOLAND
93	HUDSONVILLE	48	JENISON
11	KALAMAZOO	69	KENTWOOD
13	LAWTON	49	LAWTON
17	MARSHALL	26	PLAINWELL
22	PORTAGE	47	BEDFORD
14	RICHLAND	107	DELTON
50	RICHMOND	131	CLIMAX
08	SHELBYVILLE	140	GRAND HAVEN
21	SHELBY	141	AUGUSTA
94	SPRINGFILED	143	HART
01	STURGIS	159	LACOTA
97	ZEELAND	169	OTSEGO

## 2. GLVGC golfers' geographic origin, FLINT-SAGINAW-BAY CITY MICHIGAN ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
64	CASS CITY	158	BROWNSTOWN
66	DAVISON	117	BAY CITY
39	BROWN CITY	154	ELWELL
91	FENTON		

## 3. GLVGC golfers' geographic origin, DETROIT ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
23	ALMONT	33	ANN ARBOR
52	BELLVILLE	35	BLOOMFIELD HILLS
20	BLOOMFIELD HILLS	37	BRIGHTON
09	CARLETON	28	GROOSE POINTE WOODS
38	DEARBORN HEIGHTS	44	DETROIT
24	DEXTER	96	EAST DETROIT
06	FARMINGTON HILLS	05	GROOSE POINTE WOODS
30	GROOSE POINTE FARMS	76	LINCOLN PARK
10	LIVONIA	40	MILFORD
27	MOUNT CLEMENS	15	NORTHVILLE
16	NOVI	29	PLOYMOUTH
58	ROCHESTER HILLS	92	ROMEO
46	ROYAL OAK	82	ROYAL OAK
18	SOUTHFIELD	61	ST. CLAIR SHORES
36	STERLING HEIGHT	25	TROY

## 3. (con't) GLVGC golfers' geographic origin, DETROIT ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
63	UTICA	72	W. BLOOMFIELD
12	WARREN	31	WARREN
57	WATERFORD	99	WESTLAND
98	WHITMORE LAKE	45	YPSILANTI
139	LAPEER	142	HUNTINGTON WOODS
100	BIRMINGHAM	145	NEW BALTIMORE
101	SALINE	146	MARYSVILLE
102	BINGHAM FARMS	148	ROSEVILLE
103	FRASER	157	TRENTON
106	GROOSE POINTE	161	BERKELEY
108	ORCHARD LAKE	163	LAKE ORION
110	ALGONAC	165	METAMORA
119	CLARKSTON	166	GROOSE POINTE SHORES
128	SOUTH LYON	167	ALLEN PARK
137	RIVERVIEW	152	UNION LAKE
138	GARDEN CITY	153	WASHINGTON
144	ERIE		

## 4. GLVGC golfers' geographic origin, CHICAGO-LA SALLE ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
78	CHICAGO (IL)	104	LANSING (IL)
79	LA PORTE (IN)	109	OAK PARK (IL)
59	CLARENOON HILL (IL)	111	SCHAUMBURG (IL)
85	GRIFFITH (IN)	116	PARK RIRIDGE (IL)
83	JOLIET (IL)	118	MUNSTER (IN)
87	LAKE FOREST (IL)	121	DEERFIELD (IL)
80	McHewny (IL)	122	LOCKPORT (IL)
67	MICHIGAN CITY (IN)	130	LIBERTYVILLE (IL)
71	NAPERVILLE (IL)	134	CRYSTAL LAKE (IL)
86	VALPARAISO (IN)	160	TINLEY PARK (IL)
41	WHEATON (IL)		

## 5. GLVGC golfers' geographic origin, LANSING-ANN ARBOR

## MICHIGAN ADI

<u>Code#</u>	<u>City</u>	<u>Code#</u>	<u>City</u>
68	EAST LANSING	19	LANSING
34	HOLT	54	OKEMOS
95	ST. JOHNS	81	WILLIAMSTON
51	JACKSON	113	MASON
42	CHARLOTTE	127	GRAND LEDGE

6. GLVGC golfers' geographic origin, SOUTH BEND-ELKHART  
INDIANA ADI

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
75	EDWARDSBURG	(MI)	114	ELKHART	(IN)
07	NILES	(MI)	120	WARSAW	(IN)
74	GOSHEN	(IN)	124	OSCEOLA	(IN)
73	PIERCETON	(IN)			

7. GLVGC golfers' geographic origin, INDIANAPOLIS-MARION  
INDIANA ADI

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
70	INDIANAPOLIS		53	(W.) LAFFAYTTE	
90	NOBLESVILLE		125	PERU	

8. GLVGC golfers' geographic origin, FORT WAYNE-ANGOLA  
INDIANA ADI

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
43	FORT WAYNE		105	KENDALLVILLE	
77	ANGOLA		164	GENEVA	

9. GLVGC golfers' geographic origin, TOLEDO  
OHIO ADI

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
55	TOLEDO		123	PERRYSBURG	
135	SWANTON		156	ELMORE	
162	MEDINA				

10. GLVGC golfers' geographic origin, OTHERS

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
56	ALPENA	(MI)	60	DUBLIN	(OH)
112	PALM HARBOR	(FL)	115	CORFLAND	(NY)
126	HOLLISTON	(MA)	129	VERMILION	(OH)
132	DELATURE	(FL)	133	LEXINGTON	(KY)
136	BROOKSVILLE	(FL)	147	FRANKLIN	(VA)
149	ORLAND PARK	(IL)	150	BANDOLA	(TX)
151	TUNKHANNOCK	(PA)	155	LAKE WOOD	(OH)
168	LUDINGTON	(MI)			

\* GLVGC golfers' geographic origins unknown

<u>Code#</u>	<u>City</u>		<u>Code#</u>	<u>City</u>	
62	FLOSSMOOR	(IL)	84	WOODRIDGE	(IL)
32	WHITE LAKE	(MI)			

**APPENDIX D**

**ADI COUNTIES & HOUSEHOLDS OF GLVGC'S GEOGRAPHIC SEGMENTS**

## ADI COUNTY AND HOUSEHOLDS OF GLVGC'S GEOGRAPHIC MARKETS

1. Counties in GRAND RAPID-KALAMAZOO-BATTLE CREEK,  
(MUSKEGON) MICHIGAN ADI

ADI TV Households: 612,700

ADI Counties:

Van Buren,	Barry,	Branch,	Calhoun,	Ionia,
Kalamazoo,	Kent,	Montcalm,	Newaygo,	
St Joseph,	Oceana,	Muskegon,	Allegan,	

## 2. Counties in FLINT-SAGINAW-BAY CITY MICHIGAN ADI

ADI TV Households: 451,500

ADI Counties:

Shiawassee,	Sanilac,	Bay,	Clare,	Genesee,
Gladwin,	Gratiot,	Huron,	Iosco,	Isabella,
Midland,	Saginaw,	Arenac,	Ogemaw,	Tuscola,

## 3. Counties in DETROIT ADI

ADI TV Households: 1,719,100

ADI Counties:

Livingston,	Oakland,	Macomb,	Monroe,
Washtenaw,	St. Clair,	Lapeer,	Wayne,

## 4. Counties in CHICAGO-LA SALLE ADI

ADI TV Households: 612,700

ADI Counties:

## A. Illinois

Kankakee,	Kendall,	Dupage,	Lake,	Will,
La Salle,	McHenry,	Dekalb,	Grundy,	Cook,
Kane,				

## B. Indiana

La Porte,	Newton,	Jasper,	Porter,	Lake,
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## 5. Counties in LANSING-ANN ARBOR MICHIGAN ADI

ADI TV Households: 226,300

ADI Counties:

Clinton,	Eaton,	Hillsdale,	Ingham,	Jackson,
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## 6. Counties in SOUTH BEND-ELKHART INDIANA ADI

ADI TV Households: 295,000

ADI Counties:

Kosciusko,	Elkhart,	Lagrange,	Fulton,	Starke,
St. Joseph,	Pulaski,	Marshall,	Berrien,	Cass,

## 7. Counties in INDIANAPOLIS-MARION INDIANA ADI

ADI TV Households: 853,200

## ADI Counties:

Bartholomew,	Randolph,	Benton,	Boone,	Brown,
Blackford,	Delaware,	Morgan,	Warren,	Cass,
Hendricks,	Hamilton,	Monroe,	Grant,	Rush,
Montgomery,	Fountain,	Tipton,	Henry,	Miami,
Johnson,	Madison,	Howard,	Marion,	White,
Corroil,	Clinton,	Putnam,	Shelby,	Owen,
Decatur,	Hancock,			

## 8. Counties in FORT WAYNE-ANGOLA INDIANA ADI

ADI TV Households: 231,500

## ADI Counties:

Huntington,	De Kalb,	Adams,	Allen,	Jay,
Van Wert,	Steuben,	Noble,	Wabash,	Wells,
Paulding,	Whitley,			

## 9. Counties in TOLEDO OHIO ADI

ADI TV Households: 401,300

## ADI Counties:

## A. Michigan

Lenawee,

## B. Ohio

Defiance,

Wyandot,

Fulton,

Ottawa,

Lucas,

Sandusky,

Hancock,

Seneca,

Henry,

Wood,

Williams,

Putnam,

**APPENDIX E**

**RECODE FORMULA FOR CROSSTAB**

## RECODE FORMULA FOR CROSSTAB

GET /FILE 'TC\GOLF538.SYS'.

## RECODE CITY

(89,88,2,4,3,65,93,48,11,69,13,49,17,26,22,47,14,50,8, 21, 94,  
1,97,107,131,140,141,143,159,169=1) (64,66,91,39,158,117,154=2)  
(23,33,52,35,20,37,9,28,38,44,24,96,6,5,30,76,10,40,27,15,16,  
29,58,92,46,82,18,61,36,25,63,72,12,31,57,99,98,45,100,101,  
102,103,106,108,110,119,128,137,138,139,142,144,145,146,148,  
157,161,163,165,166,167,152,153=3) (78,79,59,85,83,87,80,67,7  
1,86,41,104,109,111,116,118,121,122,130,134,160=4) (68,19,34,  
54,95,81,51,42,113,127=5) (75,7,74,73,114,120,124=6) (70,53,  
90,125=7) (43,77,105,164=8) (55,123,135,156,162=9) (56,60,112,  
115,126,129,132,133,136,147,149,150,151,155,168=10)  
(ELSE= SYSMIS).

VALUE LABELS CITY 1 'GRAND RAPIDS-KALAMAZOO-BATTLE CREEK'  
2 'FLINT-SAGINAW-BAY CITY'  
3 'DETROIT'  
4 'CHICAGO (LA SALLE)'  
5 'LANSING (ANN ARBOR), MICH'  
6 'SOUTH BEND-ELKHART, IND'  
7 'INDIANAPOLIS (MARION)'  
8 'FORT WAYNE (ANGOLA), IND'  
9 'TOLEDO, OHIO'  
10 'OTHERS'

RECODE VISITS (0,1=1) (2 THRU HIGHEST = 2) (ELSE=SYSMIS).  
VALUE LABELS VISITS 1 '0 OR 1 TIME VISITOR' 2 'USUAL VISITOR'.

RECODE EXPERIEN (LOWEST THRU 10=1) (10 THRU 25=2)  
(25 THRU HIGHEST=3) (ELSE=SYSMIS).  
VALUE LABELS EXPERIEN 1 '0 -- 10 YEARS' 2 '10 -- 25 YEARS'  
3 'MORE THAN 25.'

RECODE YEARS (1=1) (2 THRU 5=2) (6 THRU HIGHEST=3)  
(ELSE=SYSMIS).  
VALUE LABELS YEARS 1 '1ST YEAR VISITOR' 2 '2 -- 5 YEAR GOLFER'  
3 '5 OR LONGER GOLFER'.

COMPUTE HOLE = (AN9\*9 + AN18\*18) / (AN9 + AN18).  
RECODE HOLES (9 THRU 12 = 1) (12 THRU 15 = 2) (15 THRU 18 = 3)  
(ELSE=SYSMIS).  
VALUE LABELS HOLES 1 'MORE AN9 THAN AN18'  
2 'AN9 IS ABOUT AN18' 3 'MORE AN18 THAN AN9'.

RECODE FIRST (1=1) (2=2) (ELSE=SYSMIS).  
VALUE LABELS FIRST 1 '1ST TIME IN GLVGC'  
2 'HAD BEEN IN GLVGC'.



RECODE NITE (1=1) (2=2) (ELSE=SYSMIS).  
 VALUE LABELS NITE 1 'TRAVEL OVERNITE' 2 'TRAVEL DAYTIME'.

RECODE NITEGL (0=0) (1=1) (2=2) (ELSE=SYSMIS).  
 VALUE LABELS NITEGL 0 'DAYTIME GOLFER' 1 'OVERNITE IN GLVGC'  
 2 'OVERNITE OUT GLVGC'.

RECODE ROUNDS (LOWEST THRU 30 = 1) (30 THRU HIGHEST = 2)  
 (ELSE=SYSMIS).  
 VALUE LABELS ROUNDS 1 'LESS THAN 30' 2 'MORE THAN 30'.

RECODE AGE (LOWEST THRU 30 = 1) (30 THRU 45 = 2)  
 (45 THRU 60 = 3) (60 THRU HIGHEST = 4) (ELSE=SYSMIS).  
 VALUE LABELS AGE 1 'YOUNGER THAN 30' 2 '30 -- 45' 3 '45 -- 60'  
 4 'OLDER THAN 60'.

RECODE EMPLOY (1=1) (5=2) (2,3,4,6=3) (ELSE=SYSMIS).  
 VALUE LABELS EMPLOY 1 'WORK FULL TIME' 2 'RETIRED' 3 'OTHER'.

RECODE MARITAL (3=1) (1,2,4=2) (ELSE=SYSMIS).  
 VALUE LABELS MARITAL 1 'MARRIED' 2 'OTHER'.

RECODE INCOME (1,2,3=1) (4,5=2) (6,7=3) (8,9,10,11,12=4)  
 (ELSE=SYSMIS).  
 VALUE LABELS INCOME 1 '\$ 0 -- 25,000' 2 '\$ 25,000 -- 50,000'  
 3 '\$ 50,000 -- 105,000' 4 '\$ 105,000 OR MORE'.

RECODE ED (21 THRU 29 = 1) (31 THRU 39 = 2) (41 THRU 49 = 3)  
 (ELSE=SYSMIS).  
 VALUE LABELS ED 1 'HIGH SCHOOL' 2 'COLLEGE'  
 3 'GRADUATE SCHOOL'.

RECODE HOUSE (0,1,2=0) (2 THRU HIGHEST = 1) (ELSE=SYSMIS).  
 VALUE LABELS HOUSE 0 '2 OR LESS PERSONS' 1 '3 OR MORE  
 PERSONS'.

COMPUTE SEXN = 0.  
 DE. (DATA ENTRY --> MALE = 0; FEMALE = 1).  
 VALUE LABELS SEXN 0 'MALE' 1 'FEMALE'.

RECODE BREAK LUNCH DINNER (0=0) (1 THRU HIGHEST = 1)  
 (ELSE=SYSMIS).  
 VALUE LABELS BREAK 0 'NO BREAKFAST IN GLVGC'  
 1 'HAD BREAKFAST IN GLVGC'.  
 VALUE LABELS LUNCH 0 'NO LUNCH IN GLVGC'  
 1 'HAD LUNCH IN GLVGC'.  
 VALUE LABELS DINNER 0 'NO DINNER IN GLVGC'  
 1 'HAD DINNER IN GLVGC'.

RECODE OFTEN (1,2,3,4=0) (5,6,7=1) (ELSE=SYSMIS).  
 VALUE LABELS OFTEN 0 'FEW GOLF + VACATION'  
 1 'MORE GOLF + VACATION'.

COMPUTE TOTAL = (GROCERY + LIQUOR + MEALS + VILLA + VEHICLE +  
 CART + EQUIP + SUPPLY + REC + OTHER) \* VISITS.  
 RECODE TOTAL (LOWEST THRU 250 = 1) (250 THRU 500 = 2)  
 (500 THRU 1000 = 3) (1000 THRU HIGHEST = 4) (ELSE=SYSMIS).  
 VALUE LEVELS TOTAL 1 '\$ 0 -- 250' 2 '\$ 250 -- 500'  
 3 '\$ 500 -- 1000' 4 '\$ 1000 OR MORE'.

RECODE PACKAGE (1=1) (2=2) (ELSE=SYSMIS).  
 VALUE LABELS PACKAGE 1 'BUY PACKAGE' 2 'NO PACKAGE'.

RECODE WHICH (0=0) (1=1) (2,3=2) (ELSE=SYSMIS).  
 VALUE LABELS WHICH 0 'NO PACKAGE' 1 '3DAYS 2NIGHTS'  
 2 '4DAYS 3NIGHTS'.

RECODE USE EVERUSE (1=1) (2=2) (ELSE=SYSMIS).  
 VALUE LABELS USE 1 'PROF INSTRUCTION' 2 'NO PROF INSTRUCTION'.  
 VALUE LABELS EVERUSE 1 'EVER USE P INSTRUCTION'  
 2 'NEVER USE P INSTRUCTION'.

RECODE NEXTYEAR (1=1) (2=2) (3=3) (ELSE=SYSMIS).  
 VALUE LABELS NEXTYEAR 1 'PLAY LESS' 2 'PLAY SAME'  
 3 'PLAY MORE'.

RECODE STONEHED EAST WEST BEDFORD (0=0) (1 THRU HIGHEST = 1)  
 (ELSE=SYSMIS).  
 VALUE LABELS STONEHED 0 'NO PLAY IN STONEHED'  
 1 'PLAY IN STONEHED'.  
 VALUE LABELS EAST 0 'NO PLAY IN EAST' 1 'PLAY IN EAST'  
 VALUE LABELS WEST 0 'NO PLAY IN WEST' 1 'PLAY IN WEST'  
 VALUE LABELS BEDFORD 0 'NO PLAY IN BEDFORD' 1 'PLAY IN  
 BEDFORD'.

RECODE W B E S (1=1) (2,3,4=2) (ELSE=SYSMIS).  
 VALUE LABELS W B E S 1 'RANK 1' 2 'RANK 2 OR WORSE'.

RECODE HELPFUL (1,2,3,4=1) (5,6,7=2) (ELSE=SYSMIS).  
 VALUE LABELS HELPFUL 1 '800 CALL HELPLESS'  
 2 '800 CALL HELPFUL'.

RECODE LOUNGE MEETING BANQUET (1=1) (2=2) (ELSE=SYSMIS).  
 VALUE LABELS LOUNGE 1 'USE LOUNGE' 2 'NO USE LOUNGE'.  
 VALUE LABELS MEETING 1 'USE MEETING ROOM'  
 2 'NO USE MEETING ROOM'.  
 VALUE LABELS BANQUET 1 'USE BANQUET ROOM'  
 2 'NO USE BANQUET ROOM'.

RECODE POOL CLUB COURT SERVICE PICNIC LIGHTING (1=1)  
 (2,3,4,5,6=2) (ELSE=SYSMIS).  
 VALUE LABELS POOL CLUB COURT SERVICE PICNIC LIGHTING  
 1 'RANK 1' 2 'RANK 2 OR WORSE'.

RECODE SATISFY FACILITY OVERALL (1,2,3,4=0) (5,6,7=1)  
(ELSE=SYSMIS).  
VALUE LABELS SATISFY 0 'NOT SATISFIED BY SERVICE'  
1 'SATISFIED BY SERVICE'.  
VALUE LABELS FACILITY 0 'NOT SATISFIED BY FACILITY'  
1 'SATISFIED BY FACILITY'.  
VALUE LABELS OVERALL 0 'NOT SATISFY ALL' 1 'SATISFY ALL'

RECODE MAGAZINE PAPER CABLE DIGEST AAA JOURNAL MICHIGAN  
OTHERMED BROCHURE WORD LIVING TV NEWS RADIO SHOP DETROIT  
WAYNE WMI CHICAGO (0=0) (1=1) (ELSE=SYSMIS).  
VALUE LABELS MAGAZINE PAPER CABLE DIGEST AAA JOURNAL MICHIGAN  
OTHERMED 0 'NO SUBSCRIBE' 1 'SUBSCRIBE'.  
VALUE LABELS BROCHURE WORD LIVING TV NEWS RADIO SHOP DETROIT  
WAYNE WMI CHICAGO 0 'NO INFORMATION' 1 'GIVE INFORMATION'.

RECODE MLAAA BOOTHS KG BCE TRAVEL R WCABLE (1=1) (2=2)  
(ELSE=SYSMIS).  
VALUE LABELS MLAAA BOOTHS KG BCE TRAVEL R WCABLE 1 'RECALLED'  
2 'NOT RECALLED'.

**APPENDIX F**

**RECODE FORMULA FOR MEAN VALUE**

## DATA RECODE FOR MEAN VALUE

## A. NITEGL groups

```

GET /FILE 'TC\GOLF538.SYS'.
COMPUTE HOLES = (AN9*9 + AN18*18) / (AN9+AN18).
RECODE FIRST NITE PACKAGE USE EVERUSE (1=1) (0,2=0)
(ELSE=SYSMIS).
RECODE EMPLOY (1=1) (2,3,4,5,6=0) (ELSE=SYSMIS).
RECODE MARITAL (3=1) (1,2,4=0) (ELSE=SYSMIS).
RECODE ED
(1=1) (2=2) (3=3) (4=4) (5=5) (6=6) (7=7) (8=8) (21=9) (22=10) (23=11)
(24=12) (31=13) (32=14) (33=15) (34=16) (41=17) (42=18) (43=19)
(44=20) (45=21) (46=22) (47=23) (ELSE=SYSMIS).
COMPURE SEXN = 0.
DE. (DATA ENTRY --> MALE = 0; FEMALE = 1)
RECODE BREAK LUNCH DINNER (0=0) (1 THRU HIGHEST = 1)
(ELSE=SYSMIS).
COMPUTE TOTAL = (GROCERY + LIQUOR + MEALS + VILLA + VEHICLE +
CART + EQUIP + SUPPLY + REC + OTHER) * VISITS.
COMPUTE INCREASE = (MORE - LESS).
SAVE OUTPUT 'PRR899'.

```

## B. CITY groups

```

GET FILE 'PRR899'.
RECODE CITY
(89,88,2,4,3,65,93,48,11,69,13,49,17,26,22,47,14,50,8,21,94,
1,97,107,131,140,141,143,159,169=1) (64,66,91,39,158,117,154
=2) (23,33,52,35,20,37,9,28,38,44,24,96,6,5,30,76,10,40,27,
15,16,29,58,92,46,82,18,61,36,25,63,72,12,31,57,99,98,45,100,
101,102,103,106,108,110,119,128,137,138,139,142,144,145,146,
148,157,161,163,165,166,167,152,153=3) (78,79,59,85,83,87,80,
67,71,86,41,104,109,111,116,118,121,122,130,134,160=4) (68,
19,34,54,95,81,51,42,113,127=5) (75,7,74,73,114,120,124=6)
(70,53,90,125=7) (43,77,105,164=8) (55,123,135,156,162=9)
(56,60,112,115,126,129,132,133,136,147,149,150,151,155,168=10)
(ELSE=SYSMIS).

```

```

VALUE LABELS CITY 1 'GRAND RAPIDS-KALAMAZOO-BATTLE CREEK'
2 'FLINT-SAGINAW-BAY CITY, MICH'
3 'DETROIT'
4 'CHICAGO (LA SALLE)'
5 'LANSING (ANN ARBOR), MICH'
6 'SOUTH BEND-ELKHART, IND'
7 'INDIANAPOLIS (MARION)'
8 'FORT WAYNE (ANGOLA), IND'
9 'TOLEDO, OHIO'
10 'OTHERS'.

```

```

RECODE NITEGL (1=1) (0,2=0) (ELSE=SYSMIS).

```

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