# A METHODOLOGY FOR ASSESSING THE DEMAND FACTORS FOR RECREATIONAL SECOND HOME COMMUNITIES IN THE UNITED STATES

by

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## ABSTRACT

This thesis defines various demand factors which should be investigated at the inception of a second home community with recreational amenities. From the developer's perspective the demand for the housing and the amenity need to to be first analyzed individually, and the results of this analysis used to select from the various combinations of housing and recreational amenity packages. Proceeding in this manner the development program will be proscriptive and targeted to meet defined demand.

The primary sources for assessing second home demand are identified, and considerations are outlined in working with these concepts. The recommended procedure commences with a "macro" analysis, and proceeds to regional trend analysis with the objective of defining the best fit between housing types and amenities to meet the existent and anticipated demand. Three suburban metropolitan analysis are included to demonstrate specific applications, and four major recreational amenities are discussed. In conclusion, recommendations are made as to suggested areas of further study.

Thesis Supervisor: Marc Andrew Louargand
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# I. INTRODUCTION

## A. **Objective and Scope of Study**

This thesis develops a factual and analytical framework to investigate the feasibility of future large scale recreational based second home communities in various regions of the United States. Specifically, it defines the basic demand factors which should be identified prior to entering the development process for secondary residential projects, as well as the demand factors relative to the recreational amenity or amenities of such projects.

The main factors considered include household and family income, and, household and family size for suburban metropolitan areas likely to be the primary market for the development, and primary housing values for these suburban areas, all of which can be used to analyze probable market acceptance of a specific recreational community within the market area. The approach is primarily non-site specific, however, the principals employed are applicable when dealing with site specific analysis.

Once housing demand factors are analyzed, a distinct but associated examination is also necessary relative to the demand for recreational amenities. In this manner demand for housing and recreation are assessed independently, prior to formulating a project program for the project which incorporates both housing types and amenities.

The methodology is devised to independently analyze the secondary housing market demand for a specific market area, as well as the

recreational amenity demand within that specific region before formulating critical initial project decisions. Presumably, this approach should enable the developer to match the housing product with the appropriate amenity package to attract the widest possible target audience.

To accomplish this the developer should select from a matrix of choices for housing product and amenities. By employing an organized analytical approach to demographic information available for housing and amenity demand, the developer's decision making process will be guided more by fact than intuition. This is not to say that in many instances, intuition cannot or should not play a role. Rather it is the purpose of this study to recommend what data should initially be compiled and studied in an organized analytical fashion before applying proven past practice or intuition.

Since developers of recreationally based communities engage the services of numerous consultants, assembling demographic information in a "top down" fashion early in the process should allow the developer to use his/her consultants more wisely. (Seldin, 1984 p. 47) Also, the ancillary recreational options may be more strategically chosen by employing such a methodology. (Phillips, 1986)

Many lessons, both positive and negative, can be learned from existing recreational communities. These experiences along with extensive and readily available demographic data should better arm the developer of future projects to make more informed judgements about what housing products successfully address the market demands, coupled with appropriate amenities to maximize the project's appeal.

In fact, the relationship between recreation and real estate is nothing new.

## B. **History of Resorts and Recreational Areas**

In 124 A.D., amenities were included at Hadrian's villa in Tivoli, Italy, including theaters, extensive gardens and the baths.

In America, although the early settlers were too engrossed in survival to consider the recreational possibilities of their surroundings, by the late 1700's, there were recreational areas. Wolfboro, New Hampshire, still advertises the fact it is this country's first resort community, incorporated in 1760. Early resorts were often based on natural settings such as hot springs or mineral waters.

The eastern seaboard in the 1800s served as the site of various vacation resort communities such as Cape May, New Jersey; Cape Cod, Massachusetts; and Mt. Desert Island, Maine. A hierarchy developed between these various resorts. By the later 1800s, the recreation--real estate connection was evident on numerous levels: from the luxurious resorts and summer colonies of Newport, Palm Beach and Long Island to the more crowded and rustic cottages of the Jersey Shore and Cape Cod. The chief amenity was the natural environment - ocean breezes in summer, or warm dry desert air in the winter and pleasant vistas year round. These resorts had few structured amenities. However, this also changed over time. (Smart, 1981)

In 1907, at Pinehurst, North Carolina, an American developer first combined the advantages of a golf course and a resort hotel. Although boating has been in existence in the United States since its founding, the term marina was coined in 1928. Later, the first major destination ski resort, developed by the Union Pacific Railroad, appeared at Sun Valley, Idaho in 1936.

## C. History of Land Sales and Recreation

The major growth in recreational-based developments occurred in the 1960s and 1970s. Large corporations entered into the land sales business, subdividing and marketing vast parcels of land in relatively remote areas with either few or no site improvements. Both the developer and the purchaser expected the housing product to be completed by the consumer. This set the stage for disaster.

By the late 1960s less than 30% of the recreational lots within the U.S. had been built on, and purchasers were complaining of fraud and misrepresentation. The federal and certain state governments imposed regulations that required large-scale developments with interstate sales programs to register and report their activities. As a result the Office of Interstate Land Sales Registration and the National Environmental Policy Act were established.

Since the mid 1970s, the recreational real estate industry has weathered two major recessions that have weeded out many marginal development firms and made the remaining firms more innovative and responsive. (Ragatz, 1974)

## D. Current Conditions

Since the 1970s developers began offering a variety of products and amenities to multiple potential markets within the the same development. Prior to 1970, projects could often be termed "primary home", "second home," "resort community" or" retirement community." Today's developments are generally larger in size and may contain numerous real estate products directed at several different types of users. Additionally, many former one or two season communities have

added new amenities and products to attempt a transition to year-round communities.

The New York Times ran a front cover article (6/28/87) noting the trend of recreationally based developments which combined leisure and home ownership. The article emphasized the increased attraction of today's typical home buyer to a "maintenance-free resort like environment ... composed of both joined and detached units grouped together in an almost campus-like formation". In the words of one Boston executive quoted in the article "Coming home is like going on vacation." (Swiacki, 1987, p. 37)

Additionally, the forms of ownership have also been expanded over the years. Depending on the real estate product, there now exist various forms of ownership from the traditional single family house owned in fee, to timeshares of varying length (i.e. quarter shares or eighth shares), to ownership of hotel rooms with management contracts and participation in rental pools.

Because of the number of possible amenity packages and the wide variety and types of owners, tension often develops between the various groups of residents within a community and the developer. This tension is manageable when a project has a reasonable balance of housing and amenity, but can be troublesome or destructive if unbalanced.

Using golf as an example, in some markets golf facilities are a prerequisite. In other markets, the golf course and clubhouse may be perceived by sales prospects as desirable, but not critical. Once prospects become owners, their former perception of an amenity's desirability may change to resentment when they are responsible for the management and maintenance charges, especially if the amenity is a

cash drain and not highly valued in the residents' opinion in the first place.

Other facilities such as swimming pools, health clubs, jogging trails and tennis courts may be heavily used by residents, but may not be perceived as that desirable by the developer from a marketing standpoint. The developer's initial focus is on market enhancing qualities. He or she wants an amenity package which gives image. However, residents want usable services, not just the image. High usage of specific facilities should indicate expansion as an alternative. But, if certain amenities cannot be expanded due to space or capital constraints, the developer and the residents may both lose. (Philiips, 1986)

## E. Summary of Objectives

The key to successful recreational community development is first, confirming that demand for recreational housing exists within the market area, secondly, that demand exceeds current and anticipated supply. This analysis need not be site specific, since it compares the market area being examined to national norms and alternative markets. If the resultant analysis is positive, the developer's task shifts to crafting an amenity package with the housing component which meets the ultimate customer demand. In this manner the developer's site choice is demand driven, and should benefit accordingly.

Demand assessment for amenities is also crucial, and can be assessed in a consistent manner. By employing this methodology the developer can provide for flexibility to respond and adapt to changes and shifts of the consuming public for recreational amenities. Responses to changes in demand can be made as the project progresses,

or enhancements to the image of the project can be made as needed. The developer is not locked into a "type-casting" of the development.

Given current conditions most developers will be working with more marginal sites in the future, must meet stricter regulatory processes, and face escalating capital costs to install amenity packages. It is imperative that they avoid ill advised decisions on proposed projects. Also, if the developer is already into a project he/she needs to operate from an informed basis. What is the market demand for this type of product in the current and expected market? (Wheaton, 1988)

It is the objective of this study to present a methodology for collecting demand data (supply factors will be mentioned but are not a focus of this study), and a means to analyze and employ this data to rationally formulate housing and amenity choices and combine them together for a successful development.

## II. METHODOLOGY OF ANALYSIS

### A. **Relationship Between Housing and Amenity**

Given the developer's goal to determine which geographic regions are the most likely markets for second home products, and in concert, determine the target market's preferences and expectations for recreational amenities associated with such housing, he or she needs to apply a procedure to make choices first on consumer demand for the housing product, and iteratively confirm that the product demand is consistent with demand for the recreational amenity (or amenities).

Recreational housing involves simultaneous market clearing mechanisms for both the real estate product and the recreational amenity(s). The demand for the product and the demand for the amenity are interdependent. The demand factors which correlate with second or recreational homes must first be ascertained. Based on demographic estimates and projections which follow, demand on a national level appears to exist over the near term. Demographic data for three metropolitan areas, Boston, San Francisco and St. Louis is analyzed and compared for demonstration purposes. The metropolitan information is restricted to suburban areas since they are more likely to contain consumers of recreationally based residential developments.

Because the suburban sections of most major metropolitan areas are home to families who may both desire a second home, as well as be able to afford one, the suburbs, not the entire metropolitan area should be the focus of the study. This does not mean that once the project program is defined, the metropolitan area as a whole cannot provide possible purchasers. Rather, at the planning stage, the

suburban market demand for recreation and second homes must be ascertained.

Examples of high growth suburban areas by indexed growth are:

| Town/State | Absolute Growth | Percent Change |
|---|---|---|
| Marietta/ Roswell GA | 51,230 | 59.9% |
| Dallas/ Richardson TX | 63,492 | 34.5 |
| Troy/ Warren MI | 47,772 | 45.3 |
| Scottsdale Sun City AZ | 35,968 | 58.0 |
| Newport Beach/ Laguna CA | 56,837 | 34.8 |
| Herndon/ Manassas VA | 43,958 | 43.8 |
| Santa Ana/ Costa Mesa CA | 87,771 | 21.5 |
| Virginia Beach/ Chesapeake VA | 44,978 | 41.0 |
| East Brunswick NJ | 58,491 | 29.4 |
| Orlando/ Kissimmee Fl | 41,338 | 40.9 |

Predicted absolute job growth times percent change (1988-1993) equals indexed growth.

Source: Cognetics, Inc. Cambridge, Massachusetts

A development team investigating potential development sites for secondary residential development would compare the suburban metropolitan information to the national estimates and predictions, and proceed to make cross comparisons between the three areas. By applying and reapplying the suggested methodology, the development team can investigate "what if" scenarios to best formulate a successful development strategy for the recreational project.

By approaching the project in this manner the development team can:

- o select the most potentially receptive market for a second home recreational development,
- o select and better fit amenities with the real estate product to compliment one another,
- o strategically time and coordinate capital commitments to both the amenity and the housing product,
- o select appropriate forms of ownership or tenure suited to the housing and amenity offered.
- o provide flexible options for future additional amenities over the course of the development cycle

In this manner the project will be driven from a prescriptive posture rather than a reactive one throughout the entire development process. (Urban Land, p. 23)

If benchmark information (nationally and regionally) is initially developed and periodically updated, it will provide a quantifiable basis by which to form and evaluate future project decisions.

## B. **Information Categories**

The information may be organized into four broad areas (there may be some overlapping) which are:

- o demographic household information
- o legal and policy context
- o physical and environmental context
- o financial conditions, feasibility and projections

and, in turn be separately applied to both

- o feasibility of the housing product
- o feasibility of the amenity package

Each of the four broad areas are critical in assessing project feasibility and recommending housing and amenity combinations for recreational second home developments. However, only demographic demand will be addressed in this study, as it relates to the two major components -- housing and amenity.

Trends in household income are axiomatic to any study of potential customers of recreational housing, since a second home is in addition to, or a major alternative to primary housing already owned by the household. If the demographic information reveals unfavorable trends in household income, it is unlikely consumers will be able to afford discretionary real estate purchases, regardless of the development's location, attraction or amenity package.

If aggregate household income for a defined region was level or declining, but there is demand for a particular amenity, developers are likely to be better rewarded by providing the recreational amenity alone on a user fee basis, and not attempt to supply the allied housing component.

## C. **Macro Trends in Demand**

Upper income cohorts of the population are projected to increase as a proportion of the population. Since these higher income households are the most likely consumers of second home products this bodes well for developers of leisure communities.

The accompanying pages Exhibit I and II, provide at least one set of projections for exurban Household Population Demographics 1980-1993 and Household Income Demographics, respectively. A review of the 1988 estimates and the 1993 projections for upper income levels reflects a definite percentage increase in these upper income cohorts over time in comparison to lower income cohorts. This same phenomenon is also true for family income levels for the projected period of time. (Urban Decision Systems, 1989)

This data must be adjusted for inflation, to assure that the income growth represents an actual increase in disposable income. Secondly, the increase in income must be meaningful in real terms. A second home is a major commitment, and requires a requisite household income level.

The top three household income levels taken jointly proceed from a combined percentage of 9.2% in 1980, to 38.0% in the 1988 estimates, to 55.6% in 1993. It should be noted that on an annualized basis the yearly growth in the latter five year period is 3.5%, slightly less than the 3.7% of the earlier eight year period.

However, presuming the projections are well founded, if more than 50% of the families will have incomes at these levels, and there is no socioeconomic factors which retard or reverse the nation's interest in health and fitness, there appears to be an increasing market at the macro level. Future family and household income projections for a designated region or metropolitan area may be equal to or greater than

national projections, and deserve further study. Other regions or metropolitan areas may be lower than the national average, and alternatives areas selected and studied.

The important factor is the direction and degree of change in the upper income cohorts. If the major metropolitan suburban area most proximate to a potential site indicates escalating numbers of households in the upper income cohorts, at least there is a rational basis to explore the market in more detail. Secondly, if there has been growth over the recent past, the developer may wish to quantify the effect this growth has had on second home sales in other developments. This should at least serve as a proxy for possible absorption rates. The amenity packages offered will also need to be cataloged and studied.

## EXHIBIT I

Household Population Demographics
1980-1993

| | 1980 Census | | 1988 Estimates | | 1993 Projections | |
|---|---|---|---|---|---|---|
| Population | 95,811 | | 122,554 | | 137,407 | |
| In Group Quarters | 801 | | 889 | | 926 | |
| Households | 31,850 | | 43,247 | | 50,145 | |
| 1 Person | 4,897 | (15.4%) | 8,124 | (18.8%) | 10,237 | (20.4%) |
| 2 Person | 9,511 | (29.9%) | 13,194 | (30.5%) | 15,415 | (30.7%) |
| 3-4 Person | 12,640 | (39.7%) | 16,738 | (38.7%) | 19,050 | (38.0%) |
| 5+ Person | 4,798 | (15.1%) | 5,190 | (12.0%) | 5,443 | (10.9%) |
| Average Household Size | 2.98 | | 2.81 | | 2.72 | |
| Families | 25,492 | | 33,375 | | 37,853 | |
| Race: White | 92,806 | (96.9%) | 116,298 | (94.9%) | 128,617 | (93.6%) |
| Black | 712 | (0.7%) | 3,221 | (2.6%) | 5,162 | (3.8%) |
| American Indian | 101 | (0.1%) | 134 | (0.1%) | 160 | (0.1%) |
| Asian/Pacific Islander | 1,871 | (2.0%) | 2,478 | (2.0%) | 2,962 | (2.2%) |
| Other* | 320 | (0.3%) | 423 | (0.3%) | 506 | (0.4%) |
| Spanish/Hispanic | 3,883 | (4.1%) | 6,361 | (5.2%) | 8,215 | (6.0%) |
| Age: 0 - 5 years | 9,671 | (10.1%) | 13,555 | (11.1%) | 15,225 | (11.1%) |
| 6 - 13 | 13,550 | (14.1%) | 15,462 | (12.6%) | 18,555 | (13.5%) |
| 14 - 17 | 7,113 | (7.4%) | 6,641 | (5.4%) | 6,604 | (4.8%) |
| 18 - 20 | 4,051 | (4.2%) | 3,717 | (3.0%) | 3,522 | (2.6%) |
| 21 - 24 | 6,982 | (7.3%) | 7,123 | (5.8%) | 6,954 | (5.1%) |
| 25 - 34 | 20,693 | (21.6%) | 27,365 | (22.3%) | 27,914 | (20.3%) |
| 35 - 44 | 14,244 | (14.9%) | 22,111 | (18.0%) | 26,906 | (19.6%) |
| 45 - 54 | 9,582 | (10.0%) | 12,629 | (10.3%) | 16,221 | (11.8%) |
| 55 - 64 | 5,861 | (6.1%) | 6,786 | (5.5%) | 6,769 | (4.9%) |
| 65 + | 4,057 | (4.2%) | 7,164 | (5.8%) | 8,738 | (6.4%) |
| Median Age | 28.2 | | 30.4 | | 31.4 | |
| Males (by Age) | 47,705 | | 60,612 | | 68,080 | |
| 0 - 20 | 17,515 | (36.7%) | 19,815 | (32.7%) | 22,088 | (32.4%) |
| 21 - 44 | 20,684 | (43.4%) | 28,231 | (46.6%) | 31,029 | (45.6%) |
| 45 - 64 | 7,948 | (16.7%) | 9,783 | (16.1%) | 11,571 | (17.0%) |
| 65 + | 1,558 | (3.3%) | 2,783 | (4.6%) | 3,392 | (5.0%) |
| Females (by Age) | 48,099 | | 61,942 | | 69,326 | |
| 0 - 20 | 16,870 | (35.1%) | 19,560 | (31.6%) | 21,819 | (31.5%) |
| 21 - 44 | 21,236 | (44.2%) | 28,368 | (45.8%) | 30,745 | (44.3%) |
| 45 - 64 | 7,494 | (15.6%) | 9,632 | (15.5%) | 11,418 | (16.5%) |
| 65 + | 2,499 | (5.2%) | 4,381 | (7.1%) | 5,345 | (7.7%) |
| Housing Units | 34,599 | | | | | |
| Owner-Occupied | 23,601 | (68.2%) | 32,175 | | 37,915 | |
| Renter-Occupied | 8,249 | (23.8%) | 11,072 | | 12,230 | |

*1980 Other race was modified to encompass the current U.S. Census Bureau definition
Source: 1980 U.S. Census, July 1, 1988, Urban Decision Systems Estimates

## EXHIBIT II

Household Income-Demographics
1980-1993

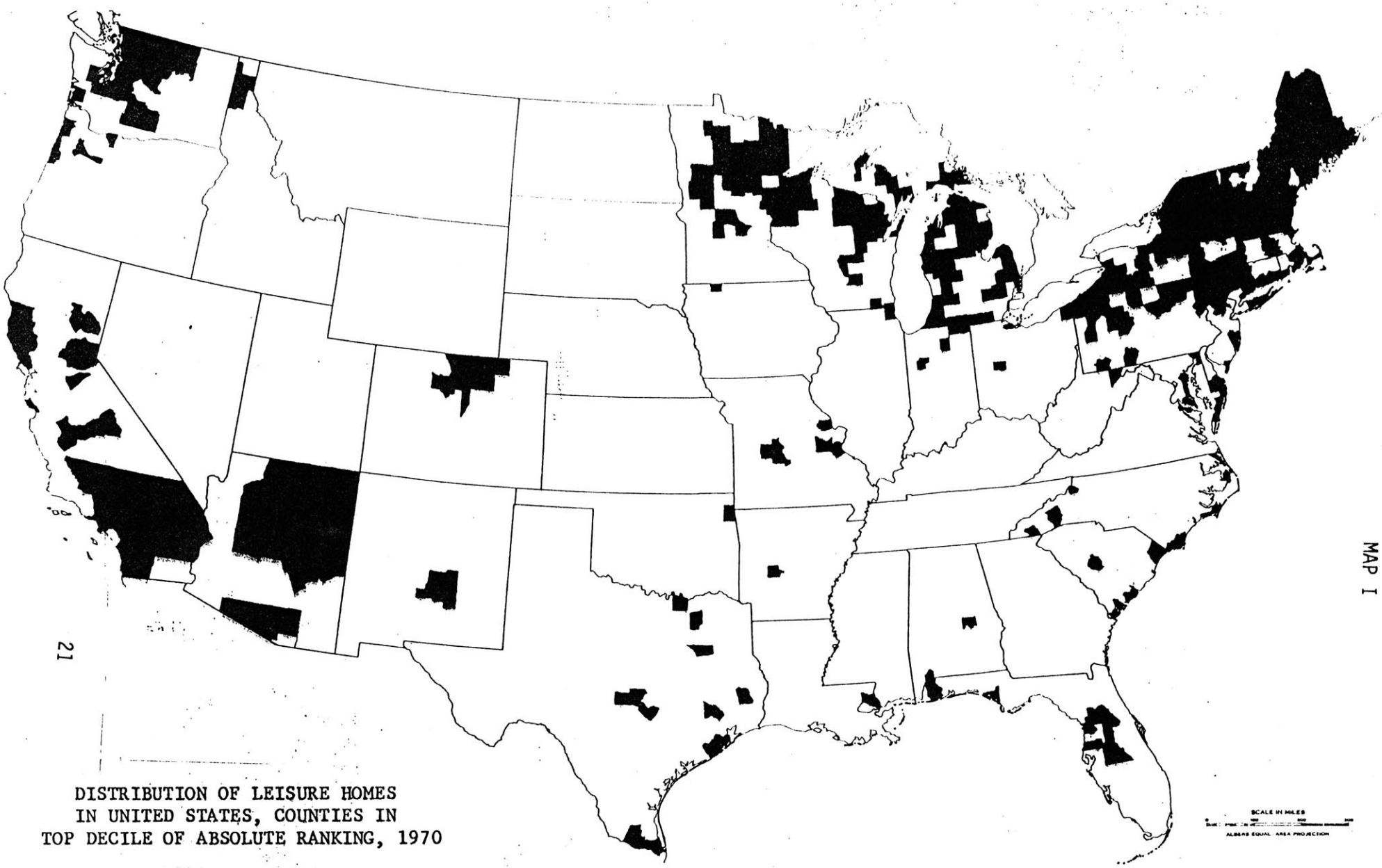
| | 1980 Census | | 1988 Estimates | | 1993 Projections | |
|---|---|---|---|---|---|---|
| Population | 95,811 | | 122,554 | | 137,407 | |
| In Group Quarters | 801 | | 889 | | 926 | |
| Per Capita Income | $10,871 | | $18,882 | | $23,585 | |
| Aggregate Income ($ Mil) | 1,041.5 | | 2,314.1 | | 3,240.8 | |
| Households (by Income) | 31,850 | | 43,247 | | 50,145 | |
| Less than $ 5,000 | 1,088 | (3.4%) | 919 | (2.1%) | 756 | (1.5%) |
| $ 5,000 - $ 9,999 | 1,485 | (4.7%) | 1,344 | (3.1%) | 1,190 | (2.4%) |
| $ 10,000 - $ 14,999 | 2,704 | (8.5%) | 1,682 | (3.7%) | 1,628 | (3.2%) |
| $ 15,000 - $ 19,999 | 3,319 | (10.4%) | 2,105 | (4.9%) | 1,632 | (3.3%) |
| $ 20,000 - $ 24,999 | 4,247 | (13.3%) | 2,595 | (6.0%) | 2,076 | (4.1%) |
| $ 25,000 - $ 29,999 | 4,270 | (13.4%) | 2,674 | (6.2%) | 2,515 | (5.0%) |
| $ 30,000 - $ 34,999 | 3,823 | (12.0%) | 3,113 | (7.2%) | 2,469 | (4.9%) |
| $ 35,000 - $ 39,999 | 2,955 | (9.3%) | 3,182 | (7.4%) | 2,707 | (5.4%) |
| $ 40,000 - $ 49,999 | 3,679 | (11.6%) | 6,392 | (14.8%) | 5,975 | (11.9%) |
| $ 50,000 - $ 59,999 | 1,740 | (5.5%) | 5,783 | (13.4%) | 6,029 | (12.0%) |
| $ 60,000 - $ 74,999 | 1,198 | (3.8%) | 5,417 | (12.5%) | 8,025 | (16.0%) |
| $ 75,000 - $ 99,999 | 751 | (2.4%) | 4,077 | (9.4%) | 7,204 | (14.4%) |
| $100,000 + | 586 | (1.8%) | 4,063 | (9.4%) | 7,940 | (15.8%) |
| Median Household Income | $28,523 | | $46,429 | | $56,842 | |
| Average Household Income | $32,552 | | $53,258 | | $64,316 | |
| Families (by Income) | 25,492 | | 33,375 | | 37,853 | |
| Less than $ 5,000 | 538 | (2.1%) | 446 | (1.3%) | 403 | (1.1%) |
| $ 5,000 - $ 9,999 | 798 | (3.1%) | 576 | (1.7%) | 486 | (1.3%) |
| $ 10,000 - $ 14,999 | 1,514 | (5.9%) | 708 | (2.1%) | 633 | (1.7%) |
| $ 15,000 - $ 19,999 | 2,098 | (8.2%) | 1,091 | (3.3%) | 741 | (2.0%) |
| $ 20,000 - $ 24,999 | 3,333 | (13.1%) | 1,410 | (4.2%) | 1,104 | (2.9%) |
| $ 25,000 - $ 29,999 | 3,620 | (14.2%) | 1,631 | (4.9%) | 1,295 | (3.4%) |
| $ 30,000 - $ 34,999 | 3,369 | (13.2%) | 2,110 | (6.3%) | 1,441 | (3.8%) |
| $ 35,000 - $ 39,999 | 2,756 | (10.8%) | 2,411 | (7.2%) | 1,627 | (4.3%) |
| $ 40,000 - $ 49,999 | 3,478 | (13.6%) | 5,250 | (15.7%) | 4,263 | (11.3%) |
| $ 50,000 - $ 59,999 | 1,624 | (6.4%) | 5,068 | (15.2%) | 4,820 | (12.7%) |
| $ 60,000 - $ 74,999 | 1,117 | (4.4%) | 5,011 | (15.0%) | 6,954 | (18.4%) |
| $ 75,000 - $ 99,999 | 700 | (2.7%) | 3,822 | (11.5%) | 6,613 | (17.5%) |
| $100,000 + | 546 | (2.1%) | 3,840 | (11.5%) | 7,471 | (19.7%) |
| Median Family Income | $31,254 | | $52,078 | | $64,554 | |
| Average Family Income | $35,609 | | $60,028 | | $74,030 | |

Source: 1980 U.S. Census, July 1, 1988, Urban Decision Systems Estimates

## D. **Demand Factors and Distribution of Recreational Developments**

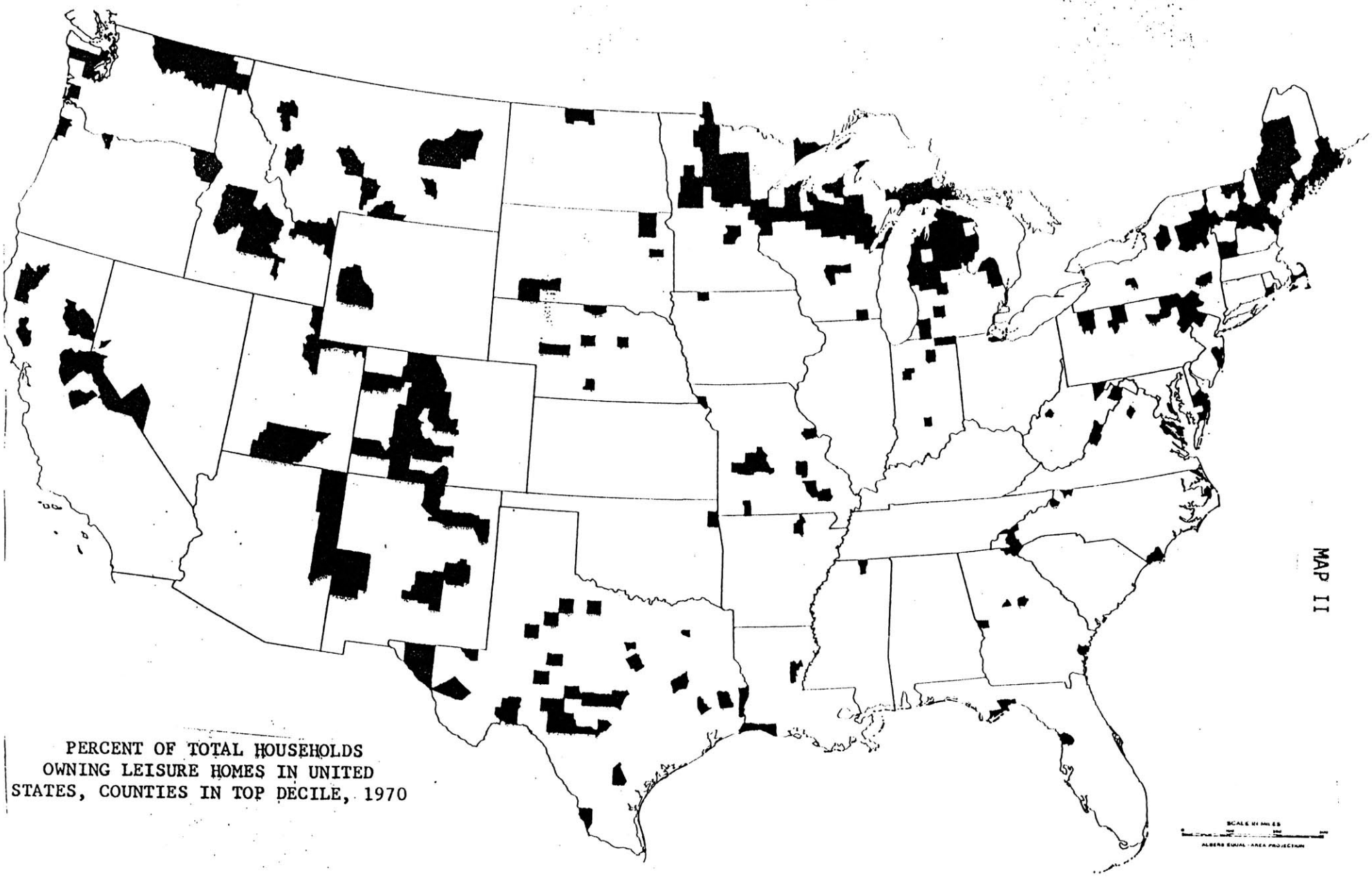
Recreational projects are not uniformly spread across the nation because they were often developed near popular travel and tourism sites. (See Map I). Unique topography, natural land or water features have invariably influenced the general settlement pattern and location of major metropolitan areas. (See Map II)(Ragatz, p. 348)

This very important factor must not be ignored. The maps indicate a much greater concentration of second home and leisure home developments on the two coasts and around the Great Lakes region. There is greater competition among projects in these regions, however, these regions also contain a higher concentration of suburban growth areas with household populations responsive to second home offerings.




DISTRIBUTION OF LEISURE HOMES
IN UNITED STATES, COUNTIES IN
TOP DECILE OF ABSOLUTE RANKING, 1970

MAP I



PERCENT OF TOTAL HOUSEHOLDS OWNING LEISURE HOMES IN UNITED STATES, COUNTIES IN TOP DECILE, 1970

MAP II

Household income remains the best indicator of the given population's recreational activity. The accompanying table Exhibit III compares major leisure recreational activities by income level. As household income increases so does recreational activity. It is also worth noting that for activities requiring special equipment such as boating or skiing, this correlation is even more pronounced. Data Resources, Inc. projects for the period 1980 through 1995 United States resident's average income will rise 27%.

Additionally, recreational activity depends on the age of the participants. The baby boom generation will continue to dominate other generations as it grows older. Households headed by persons from 25-34 years old with incomes of $10,000 to $20,000 will be overshadowed by those aged 35-44 bringing in more than $35,000

The number of households headed by 50 to 64 year olds will also grow but at a lesser rate. This segment of households will remain relatively constant in number, but will be more affluent in relative terms as they enter retirement.

There is a definable change in the makeup of the population comprising suburban and exurban growth areas. These areas tend to have larger households with both higher education levels and generally higher income levels in comparison to inter-city areas. As mentioned earlier, income level is an important and necessary quality to identify when ascertaining who can afford a second home. (Phillips, 1986)

General housing demand is increasing in the suburban and exurban areas around major metropolitan central business districts. These areas contain larger concentrations of family households, as opposed to single member households or non-related households, and many are

EXHIBIT III

PERCENTAGE PARTICIPATING IN RECREATIONAL ACTIVITIES BY INCOME

| Activity | All Incomes | Less $5,000 | $5,000-14,999 | $15,000-24,999 | $25,000-49,999 | $50,000- and up |
|---|---|---|---|---|---|---|
| Swimming | 53% | 34% | 39% | 57% | 68% | 72% |
| Bicycling | 32 | 23 | 24 | 35 | 41 | 42 |
| Boating | 28 | 16 | 20 | 27 | 39 | 43 |
| Jogging | 26 | 21 | 20 | 27 | 33 | 37 |
| Tennis | 17 | 12 | 11 | 18 | 22 | 37 |
| Golfing | 13 | 6 | 6 | 13 | 20 | 27 |
| Skiing | 9 | 5 | 5 | 7 | 13 | 21 |
| None | 11 | 28 | 18 | 6 | 4 | 3 |

Figures represent percent of respondents who participated in activity at least once in previous year. Based on 5,757 persons 12 years and older with interviews conducted from September 1982 to June 1983.

Source: Statistical Abstract of the United States, 1985.
Bureau of the Census
Phillips, 1986

experiencing rapid growth. They are generally within 20 to 40 miles of the downtown with access to new suburban office park development as well as the central business district. Suburban growth is expected to continue well into the 1990s. (Wall Street Journal, March 27, 1989)

Income level, family size and primary home ownership of suburban and exurban areas better coincide with probable second home owner markets. It is recommended that demographic data for these rings around major metropolitan areas be the focus of the study, not the central business area or the total metropolitan area.

The question still remains, will the current interest in health and fitness translate directly into a more active and recreationally oriented society? And, secondly will this translate to a demand for recreational based real estate?

## E. **Definitional Issues**

In reviewing existing data for this study, one major problem is the lack of a consistent definition as to what is recreational property. This definitional problem makes it difficult to quantify the scope and size of the recreational market due to varying definitions and lack of parallel data. One popular, but difficult to define index has been the number of recreational lots and second homes. However, definitions have changed over time. Unfortunately, no data for vacation homes were collected before the 1950 Census of Housing. Additionally, changes in definitions and categories between 1950, 1960 and 1970 censuses create problems of valid comparability of this data. (Ragatz, 1974, p. 172)

In 1974, industry analyst Richard Ragatz placed the number of lots at between 10 and 15 million. A 1979 search of the OILSR

registrations listed 21,391 subdivisions with 7.7 million lots. More recently Economics Research Associates concluded that about 4.5 million second homes presently exist in the United States, to which approximately 100,000 units are added per year. This data is only useful, as a relative index of amenity-oriented development; it does not include the thousands of primary home communities with recreational amenities.

Disposable income of upper income groups should be continuing to increase over the near term. Assuming there are no sociological or governmental changes or barriers, the demand for recreational opportunities will also increase. Given the general population's interest in health, fitness and active sports there appears to be a strong forecast for recreational based real estate projects both public and private.

## F. **Matrix of Uses**

Once general demand is established, the development team needs to focus more closely on the type of housing product and amenity which is responsive to demand. At this juncture the development team needs to be conscious of the interrelation of decisions about housing product and amenities. Additionally, land usage requirements (inverse of density) need to be assessed in conjunction and at the same scale.

MATRIX OF USES AND LAND USAGE

| HOUSING | | AMENITY | |
|---|---|---|---|
| Building Type | Land Usage | Activity Usage | Land Usage |
| Single-family | High | Golf | High |
| Cluster | Medium | Tennis | Low |
| Townhouse | Medium | Marina | Medium |
| Condominium | Low medium | Skiing | High |
| Resident Hotel | Low medium | Jogging | Low |
| Hotel/timeshare | Low medium | | |

# III. OPPORTUNITIES, INFLUENCING FACTORS AND ASSESSMENT MODEL

## A. **Recreational Development Opportunities**

### 1. Increasing Recreational Activity in U.S.

Recreational activity is on the upswing in the United States. Consumer expenditures for recreation and leisure activities increased in real terms by nearly 250% between 1960 and 1979. (Van Doren, 1984, p. 293) This increase is not restricted to the young. Twenty-five percent of those over 65 participate in some form of recreational activity. The Congressional Office of Technology Assessment cites "travel, recreation and tourism complex" as possibly the second largest segment of the American economy. (Walsh, July 1984, p. 4) However, the dollars spent on tourism and travel can be at the expense of expenditures for recreational housing. Expanding travel and tourism products compete with recreational based developments for the dollars of a finite market in terms of consumers' leisure expenditures.

How other societal changes, such as single parent and double wage earner families, will influence decision makers as to how and what they choose for recreation and travel will be a major factor. However, one cannot stray from the fact that a major determinant will be the increasing affluence of the upper income households in the United States, and that this will translate into increasing recreational activity.

2. Recreational Developments

There appears to be agreement that amenity-oriented developments will always enjoy a strong market at the higher levels; the demand and supply projection for recreational amenities at the lower, middle and upper-middle income levels is unpredictable.

A variety of ownership forms may play an increasingly important role in future developments as different ownership forms broaden the affordability of the product. The range of ownership forms should be factored into the matrix of consideration when undertaking a large recreational based real estate development.

Americans continue to demonstrate an accelerating interest in various types of leisure sports depending on income group. These same factors from a metropolitan perspective will be meaningful in defining regional differences as to leisure sport preferences.

The development team undertaking a recreational development in proceeding from the macro level to the regional analysis will need to consider the regional influences at this point. Certain regions of the country will demand recreation activity based on historical and geographical conditions. Therefore, these market biases or preferences cannot be ignored. National trends are by definition nation wide.

3. Supply Conditions

The study of the supply of recreational based housing product within a given market area is also required. The main principal in undertaking supply studies in this field is to draw the market area sufficiently large. If the development team only undertakes to investigate the county or counties surrounding a potential site, it will most likely under estimate the potential competition. (Wheaton, 1988)

Information can be gathered by county on housing starts. But since recreational developments may often be located in rural counties, it is recommended that phone interviews be employed since the staff and resources available may cause under or non-reporting to exist.

4. Population Distribution by Recreational Activity

For purposes of defining the various recreational activities and the popularity of these activities included on the following page is a recent survey of U.S. recreational preferences. Not all uses may be appropriate for a recreational development. However, due to continual changes in the consumer's preference, developer's considerations need to be updated on a regular basis.

5. Additional Demographic Factors to Investigate

Income level distribution should always be the first factor to investigate; it is surely not the exclusive factor. Broad national demographic information should also be reviewed relative to family size, tenure of primary home ownership and value of primary home where available. These factors should then be a guide when investigating regional and state data applicable to a possible site. Consistency of data, estimates and projections must be maintained. Therefore, it may

be advisable to use one of the on-line data basis available, or a service firm specializing in demographic data to insure statistical consistency.

Data should be cross checked between two or more such services. While the time and expense of retaining two services should be considered the cost of compiling the data at this stage is minuscule compared to the financial and time commitment involved in developing this type of recreational project. At a minimum information for Age of Head of Household, Family Size, Tenure of Primary Home Value of Primary House (and changes over time) should be compiled and analyzed.

Each of these factors may contain insights into demand factors which affect development decisions for second home developments. For example if the household size for the subject region is larger than the national average, may be the amount of square footage and/or number of bedrooms for the proposed development should be increased to answer the potential demand.

## B. **Consumer Motivations**

Another set of considerations which must be addressed are those of the consuming public. The development team needs to remain in touch with the motivations behind second home purchases. Despite the possibility of over-generalizing consumer motivation for acquiring recreational property (either lot or housing product) researchers cite three major reasons: Retirement, Recreational Use, and Economic Gain or Increase Net Worth (Ragatz, 1974)

1. Retirement

Prior to legislation regulating land sales, many individuals contemplating retirement would buy either a lot site unseen, or on the first visit to a land development. Purchases were based on promised future improvements, not existing conditions. Often promoted as a forced savings plan, this was a prescription for disaster.

These land sale developments were often never completed as promised; facilities for water and sewer were more expensive than projected or even impossible to provide. The success of many developments depended on all purchasers building a home. Many of these communities failed when few homes were actually built. The sites remained desolate and uninviting, thus hindering further development. (Ragatz, 1974, p. 375)

More recently, developers have begun to provide both the housing product as well as the real estate. To develop both the land, and the product, developers need to focus more on consumer preference. Because of this trend, a body of information now exists that reflects retirement buyer preferences in different areas of the country. (Builder Magazine Poll, p. 23)

2. Recreational Use

Ragatz suggests that frequent recreational use appears to be a stronger impetus than retirement when purchasing this type of property. Pre-retirement purchasers focus first on the current recreational facilities, and secondarily, on the retirement possibilities. As they reach retirement age, the emphasis shifts for this market. What used to be their secondary residence often becomes their primary residence, with even more time spent using the amenities of the development.

The spectrum of recreational properties range from open land used on an infrequent basis for hunting, camping and hiking to housing product with recreational amenities. Recreation as the motivation ranges from a low of 31% to a high of 86.9%. However, regional differences and homogeneity of the census population must be considered. Opinions and preferences relative to specific recreational uses are discussed later in this study.

### 3. Economic Gain

The prospect of financial gain from recreational real estate is interestingly often not a major motivation. When buying a time-share or quarter-share interest in a recreational property the purchaser is less likely to focus on potential economic gain as compared to someone purchasing in fee a single family home in an established second home community with recreational amenities. Time-share expenditures may be viewed as a prepaid vacation while a second home purchase is perceived as a long-term real estate investment.

Gains can be recognized in three primary ways, including:

1) Long term appreciation
2) Rental income
3) Tax shelter from interest and depreciation deductions when such units are leased directly or placed in a rental pool. (This aspect has been severely restricted by the Tax Reform Act of 1986 but still remains a consideration.)

The general public often approaches recreational real estate purchases with superficial knowledge and no investment background. Consumer knowledge and background appears to be directly correlated

with income levels, and investment motivation decreases as income level increases. In the words of Richard L. Ragatz:

"While the data is very limited, implications are that lower income families are primarily influenced to buy recreational properties due to the potential for economic gain, while more affluent families are more influenced by immediate recreational use or future retirement. Perhaps, the less wealthy also are less educated about investment practices and are more influenced by the American fantasy of "getting rich from the land". The more affluent, on the other hand, have sufficient capital to make immediate use of the lot for a leisure home or other type of recreation, or are advanced enough in years to be making plans for the retirement home. ... " (Ragatz, 1974, p. 382)

Ragatz's study demonstrates that most second home respondents are very inexperienced about investments. When asked to rate their personal investment experience (prior to purchase of their recreational lot) by type of investment, very few considered their past experiences to be above average. For instance, an average of about 41 percent stated they had no prior experience in any of the five listed investment types. Another 19 percent considered their experience "below average". Only 11 percent considered their experiences to be "above average" and only 3 percent considered themselves "very experienced". Surprisingly, the two categories that received the most responses for "no prior experience" were "income producing real estate" and "developmental real estate".

## C. Study Area Examples

For purposes of the example study it is assumed the developer is interested in locating a site for a recreational second home development which will draw from one of three metropolitan areas.

Each metropolitan area has characteristics of its own. These diverse markets require the developer to compile meaningful income and demographic information for each of the three areas and compare it to the preceding national information. The national figures should serve as a benchmark. If the metropolitan demographic trends compare favorably, the area deserves further study.

The three metropolitan areas selected for this study are Boston, San Francisco and St. Louis. The metropolitan population, per capita income, households by income group, and family by income group are included for each of the three areas. Although the absolute numbers of households and families vary among the three metropolitan suburban areas vary for the $100,000+ categories, each of the three will have significantly larger numbers in 1994 compared to 1989. Assuming 10% of this increase represents potential second home purchasers, Boston's suburban market demand for second homes will be 6,049 over the five year period, St. Louis's will be 2,298, and San Francisco's will be 2,107.

However, the results of the above indicate there has most likely been too radical an adjustment of the San Francisco suburban market, and that it is understated in this example. In using demographic data it is of vital importance to continually question and test the validity of the data being used. Because the San Francisco suburban market is understated the development team may make inappropriate assumptions or comparisons between study areas.

The demand for the product will be a function of the growth in the highest family income groups since these are the families with the greater income potential and leisure time available. The data for families with $100,000+ incomes for the three metropolitan centers of Boston, San Francisco and St. Louis demonstrate anticipated growth in each instance.

EXHIBIT IV

| City | 1980 | | 1989 | | 1994 | |
|---|---|---|---|---|---|---|
| Boston | 6165 | 1.1% | 67838 | 12.0% | 128327 | 22.9% |
| S. F. | 4624 | 2.2% | 27191 | 12.8% | 48270 | 22.9% |
| St. Louis | 4557 | 0.9% | 25256 | 4.2% | 48236 | 7.7% |

See Exhibits V through X following for the three suburban area income and demographic estimates.

To the developer considering development alternatives, Boston presents a prospective growing market with the highest absolute total number of families in the highest income group. However, the developer would need to investigate current primary housing values, and if there is sufficient disposable income available to these families given the high housing costs of the area.

Additionally, the developer needs to double check the suburban areas being compared. As pointed out above, there may be an understated area for San Francisco. If this is true upon further investigation, a second anaylsis is needed to effect a better comparison among the study areas.

INCOME: 1980-89-94
BOSTON,MA MSA
EXCLUDING BOSTON

EXHIBIT V

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 2242916 | | 2149495 | | 2105276 | |
| In Group Quarters | 66562 | | 73595 | | 76590 | |
| PER CAPITA INCOME | $ 8443 | | $ 19364 | | $ 25464 | |
| AGGREGATE INCOME ($Mil) | 18937.5 | | 41622.5 | | 53609.4 | |
| HOUSEHOLDS | 780511 | % | 806791 | % | 816918 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 75528 | 9.7 | 22996 | 2.9 | 16307 | 2.0 |
| $ 5,000 - $ 9,999 | 96439 | 12.4 | 50829 | 6.3 | 37306 | 4.6 |
| $ 10,000 - $ 14,999 | 101477 | 13.0 | 66467 | 8.2 | 65074 | 8.0 |
| $ 15,000 - $ 19,999 | 105415 | 13.5 | 52004 | 6.4 | 45852 | 5.6 |
| $ 20,000 - $ 24,999 | 103181 | 13.2 | 52157 | 6.5 | 41314 | 5.1 |
| $ 25,000 - $ 29,999 | 83568 | 10.7 | 48218 | 6.0 | 42436 | 5.2 |
| $ 30,000 - $ 34,999 | 63540 | 8.1 | 51715 | 6.4 | 38614 | 4.7 |
| $ 35,000 - $ 39,999 | 43860 | 5.6 | 47420 | 5.9 | 40227 | 4.9 |
| $ 40,000 - $ 49,999 | 51850 | 6.6 | 90332 | 11.2 | 75872 | 9.3 |
| $ 50,000 - $ 59,999 | 23558 | 3.0 | 80861 | 10.0 | 71986 | 8.8 |
| $ 60,000 - $ 74,999 | 15730 | 2.0 | 91281 | 11.3 | 99953 | 12.2 |
| $ 75,000 - $ 99,999 | 9495 | 1.2 | 79961 | 9.9 | 105564 | 12.9 |
| $100,000 + | 6863 | 0.9 | 72550 | 9.0 | 136412 | 16.7 |
| Median Household Income | $ 20501 | | $ 41283 | | $ 50758 | |
| Average Household Income | $ 23976 | | $ 51590 | | $ 65624 | |
| FAMILIES | 562624 | % | 564735 | % | 559923 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 23321 | 4.1 | 8159 | 1.4 | 5172 | 0.9 |
| $ 5,000 - $ 9,999 | 49817 | 8.9 | 16094 | 2.8 | 11249 | 2.0 |
| $ 10,000 - $ 14,999 | 62875 | 11.2 | 21690 | 3.8 | 15039 | 2.7 |
| $ 15,000 - $ 19,999 | 76272 | 13.6 | 24795 | 4.4 | 17532 | 3.1 |
| $ 20,000 - $ 24,999 | 84668 | 15.0 | 31122 | 5.5 | 19608 | 3.5 |
| $ 25,000 - $ 29,999 | 72719 | 12.9 | 29514 | 5.2 | 23539 | 4.2 |
| $ 30,000 - $ 34,999 | 56301 | 10.0 | 35280 | 6.2 | 23238 | 4.2 |
| $ 35,000 - $ 39,999 | 39607 | 7.0 | 33888 | 6.0 | 25411 | 4.5 |
| $ 40,000 - $ 49,999 | 46737 | 8.3 | 71568 | 12.7 | 52757 | 9.4 |
| $ 50,000 - $ 59,999 | 21345 | 3.8 | 70179 | 12.4 | 56658 | 10.1 |
| $ 60,000 - $ 74,999 | 14227 | 2.5 | 81219 | 14.4 | 87054 | 15.5 |
| $ 75,000 - $ 99,999 | 8569 | 1.5 | 73391 | 13.0 | 94339 | 16.8 |
| $100,000 + | 6165 | 1.1 | 67838 | 12.0 | 128327 | 22.9 |
| Median Family Income | $ 23999 | | $ 51462 | | $ 65128 | |
| Average Family Income | $ 27723 | | $ 61403 | | $ 79723 | |

Source: 1980 Census, Jan. 1,1989 UDS Estimates

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Urban Decision Systems/PO Box 25953/Los Angeles, CA

DEMOGRAPHIC TRENDS: 1980-89-94
BOSTON,MA MSA
EXCLUDING BOSTON

EXHIBIT VI

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 2242916 | | 2149495 | | 2105276 | |
| In Group Quarters | 66562 | | 73595 | | 76590 | |
| HOUSEHOLDS | 780511 | % | 806791 | % | 816918 | % |
| 1 Person | 178894 | 22.9 | 199143 | 24.7 | 207200 | 25.4 |
| 2 Person | 234159 | 30.0 | 249915 | 31.0 | 256910 | 31.4 |
| 3-4 Person | 253201 | 32.4 | 267449 | 33.1 | 272812 | 33.4 |
| 5+ Person | 114249 | 14.6 | 90284 | 11.2 | 79996 | 9.8 |
| Avg Hshld Size | 2.79 | | 2.57 | | 2.48 | |
| FAMILIES | 562624 | | 564735 | | 559923 | |
| | | % | | % | | % |
| RACE: White | 2172621 | 96.9 | 2053979 | 95.6 | 1997927 | 94.9 |
| Black | 37915 | 1.7 | 51998 | 2.4 | 55776 | 2.6 |
| Amer. Indian | 2118 | 0.1 | 2846 | 0.1 | 3373 | 0.2 |
| Asian/Pacific Islndr | 22355 | 1.0 | 30043 | 1.4 | 35604 | 1.7 |
| Other* | 7908 | 0.4 | 10627 | 0.5 | 12594 | 0.6 |
| SPANISH/HISPANIC | 31901 | 1.4 | 46268 | 2.2 | 54159 | 2.6 |
| | | % | | % | | % |
| AGE: 0 - 5 | 148105 | 6.6 | 157057 | 7.3 | 150043 | 7.1 |
| 6 - 13 | 261962 | 11.7 | 210781 | 9.8 | 204167 | 9.7 |
| 14 - 17 | 165780 | 7.4 | 117468 | 5.5 | 107635 | 5.1 |
| 18 - 20 | 128225 | 5.7 | 93410 | 4.3 | 83065 | 3.9 |
| 21 - 24 | 166587 | 7.4 | 127924 | 6.0 | 110513 | 5.2 |
| 25 - 34 | 376411 | 16.8 | 401416 | 18.7 | 360434 | 17.1 |
| 35 - 44 | 260024 | 11.6 | 333361 | 15.5 | 362276 | 17.2 |
| 45 - 54 | 240355 | 10.7 | 224822 | 10.5 | 253340 | 12.0 |
| 55 - 64 | 224339 | 10.0 | 193199 | 9.0 | 177630 | 8.4 |
| 65 + | 271100 | 12.1 | 290058 | 13.5 | 296174 | 14.1 |
| Median Age | 31.5 | | 34.2 | | 36.0 | |
| MALES | 1068481 | % | 1017611 | % | 995989 | % |
| 0 - 20 | 358173 | 33.5 | 292854 | 28.8 | 275470 | 27.7 |
| 21 - 44 | 390664 | 36.6 | 417696 | 41.0 | 403014 | 40.5 |
| 45 - 64 | 220452 | 20.6 | 198372 | 19.5 | 205197 | 20.6 |
| 65 + | 99193 | 9.3 | 108689 | 10.7 | 112307 | 11.3 |
| FEMALES | 1174406 | % | 1131884 | % | 1109288 | % |
| 0 - 20 | 345899 | 29.5 | 285861 | 25.3 | 269439 | 24.3 |
| 21 - 44 | 412358 | 35.1 | 445005 | 39.3 | 430210 | 38.8 |
| 45 - 64 | 244242 | 20.8 | 219650 | 19.4 | 225773 | 20.4 |
| 65 + | 171907 | 14.6 | 181369 | 16.0 | 183867 | 16.6 |
| HOUSING UNITS | 815488 | % | | | | |
| Owner-Occupied | 476347 | 58.4 | 472220 | | 469571 | |
| Renter-Occupied | 304164 | 37.3 | 334571 | | 347347 | |

*1980 other race modified to current Census Bureau definition

Source: 1980 Census, Jan. 1,1989 UDS Estimates

INCOME: 1980-89-94
SAN FRANCISCO,CA MSA
EXCLUDING SAN FRANCISCO

EXHIBIT VII

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 809897 | | 850901 | | 874485 | |
| In Group Quarters | 14107 | | 14367 | | 14954 | |
| PER CAPITA INCOME | $ 11129 | | $ 20719 | | $ 26058 | |
| AGGREGATE INCOME ($Mil) | 9013.0 | | 17629.8 | | 22787.5 | |
| HOUSEHOLDS | 313924 | % | 334399 | % | 342527 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 21213 | 6.8 | 13769 | 4.1 | 9973 | 2.9 |
| $ 5,000 - $ 9,999 | 30142 | 9.6 | 20301 | 6.1 | 17445 | 5.1 |
| $ 10,000 - $ 14,999 | 39010 | 12.4 | 22812 | 6.8 | 24258 | 7.1 |
| $ 15,000 - $ 19,999 | 37704 | 12.0 | 23108 | 6.9 | 18725 | 5.5 |
| $ 20,000 - $ 24,999 | 39264 | 12.5 | 23096 | 6.9 | 19376 | 5.7 |
| $ 25,000 - $ 29,999 | 33471 | 10.7 | 21573 | 6.5 | 18953 | 5.5 |
| $ 30,000 - $ 34,999 | 28384 | 9.0 | 21138 | 6.3 | 17769 | 5.2 |
| $ 35,000 - $ 39,999 | 21653 | 6.9 | 20329 | 6.1 | 16726 | 4.9 |
| $ 40,000 - $ 49,999 | 26854 | 8.6 | 37757 | 11.3 | 32027 | 9.4 |
| $ 50,000 - $ 59,999 | 14303 | 4.6 | 33115 | 9.9 | 30451 | 8.9 |
| $ 60,000 - $ 74,999 | 10065 | 3.2 | 36506 | 10.9 | 40940 | 12.0 |
| $ 75,000 - $ 99,999 | 6487 | 2.1 | 30508 | 9.1 | 42523 | 12.4 |
| $100,000 + | 5373 | 1.7 | 30387 | 9.1 | 53362 | 15.6 |
| Median Household Income | $ 23528 | | $ 40284 | | $ 48755 | |
| Average Household Income | $ 28542 | | $ 52487 | | $ 66263 | |
| FAMILIES | 209211 | % | 212558 | % | 210884 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 7668 | 3.7 | 4700 | 2.2 | 3361 | 1.6 |
| $ 5,000 - $ 9,999 | 13293 | 6.4 | 4842 | 2.3 | 3345 | 1.6 |
| $ 10,000 - $ 14,999 | 19501 | 9.3 | 7139 | 3.4 | 4777 | 2.3 |
| $ 15,000 - $ 19,999 | 22740 | 10.9 | 9871 | 4.6 | 6207 | 2.9 |
| $ 20,000 - $ 24,999 | 26149 | 12.5 | 11261 | 5.3 | 8130 | 3.9 |
| $ 25,000 - $ 29,999 | 25514 | 12.2 | 11517 | 5.4 | 8468 | 4.0 |
| $ 30,000 - $ 34,999 | 22977 | 11.0 | 12679 | 6.0 | 8756 | 4.2 |
| $ 35,000 - $ 39,999 | 18056 | 8.6 | 12343 | 5.8 | 9681 | 4.6 |
| $ 40,000 - $ 49,999 | 22727 | 10.9 | 27079 | 12.7 | 18724 | 8.9 |
| $ 50,000 - $ 59,999 | 11978 | 5.7 | 26519 | 12.5 | 21914 | 10.4 |
| $ 60,000 - $ 74,999 | 8480 | 4.1 | 30765 | 14.5 | 32985 | 15.6 |
| $ 75,000 - $ 99,999 | 5505 | 2.6 | 26651 | 12.5 | 36266 | 17.2 |
| $100,000 + | 4624 | 2.2 | 27191 | 12.8 | 48270 | 22.9 |
| Median Family Income | $ 27805 | | $ 51828 | | $ 65493 | |
| Average Family Income | $ 32951 | | $ 64010 | | $ 83350 | |

Source: 1980 Census, Jan. 1,1989 UDS Estimates

Urban Decision Systems/PO Box 25953/Los Angeles, CA

DEMOGRAPHIC TRENDS: 1980-89-94
SAN FRANCISCO,CA MSA
EXCLUDING SAN FRANCISCO

EXHIBIT VIII

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 809897 | | 850901 | | 874485 | |
| In Group Quarters | 14107 | | 14367 | | 14954 | |
| HOUSEHOLDS | 313924 | % | 334399 | % | 342527 | % |
| 1 Person | 80823 | 25.7 | 95797 | 28.6 | 101306 | 29.6 |
| 2 Person | 107733 | 34.3 | 112182 | 33.5 | 114289 | 33.4 |
| 3-4 Person | 94783 | 30.2 | 100692 | 30.1 | 103275 | 30.2 |
| 5+ Person | 30585 | 9.7 | 25729 | 7.7 | 23657 | 6.9 |
| Avg Hshld Size | 2.53 | | 2.50 | | 2.51 | |
| FAMILIES | 209211 | | 212558 | | 210884 | |
| | | % | | % | | % |
| RACE: White | 692937 | 85.6 | 690965 | 81.2 | 690448 | 79.0 |
| Black | 41606 | 5.1 | 45813 | 5.4 | 48330 | 5.5 |
| Amer. Indian | 3220 | 0.4 | 4877 | 0.6 | 5799 | 0.7 |
| Asian/Pacific Islndr | 61126 | 7.6 | 92575 | 10.9 | 110083 | 12.6 |
| Other* | 11008 | 1.4 | 16672 | 2.0 | 19825 | 2.3 |
| SPANISH/HISPANIC | 82543 | 10.2 | 94364 | 11.1 | 100035 | 11.4 |
| | | % | | % | | % |
| AGE: 0 - 5 | 54091 | 6.7 | 59598 | 7.0 | 59305 | 6.8 |
| 6 - 13 | 82164 | 10.1 | 71079 | 8.4 | 72051 | 8.2 |
| 14 - 17 | 52605 | 6.5 | 37374 | 4.4 | 35478 | 4.1 |
| 18 - 20 | 38119 | 4.7 | 31265 | 3.7 | 29181 | 3.3 |
| 21 - 24 | 54790 | 6.8 | 47025 | 5.5 | 44505 | 5.1 |
| 25 - 34 | 151425 | 18.7 | 176867 | 20.8 | 166573 | 19.0 |
| 35 - 44 | 112469 | 13.9 | 146666 | 17.2 | 161417 | 18.5 |
| 45 - 54 | 93599 | 11.6 | 98819 | 11.6 | 117401 | 13.4 |
| 55 - 64 | 87074 | 10.8 | 79333 | 9.3 | 75673 | 8.7 |
| 65 + | 83561 | 10.3 | 102877 | 12.1 | 112902 | 12.9 |
| Median Age | 33.2 | | 35.2 | | 36.9 | |
| MALES | 395091 | % | 419431 | % | 428570 | % |
| 0 - 20 | 115888 | 29.3 | 103521 | 24.7 | 101676 | 23.7 |
| 21 - 44 | 157893 | 40.0 | 185877 | 44.3 | 185880 | 43.4 |
| 45 - 64 | 87916 | 22.3 | 87090 | 20.8 | 93772 | 21.9 |
| 65 + | 33394 | 8.5 | 42942 | 10.2 | 47241 | 11.0 |
| FEMALES | 414806 | % | 431470 | % | 445915 | % |
| 0 - 20 | 111091 | 26.8 | 95794 | 22.2 | 94338 | 21.2 |
| 21 - 44 | 160791 | 38.8 | 184681 | 42.8 | 186615 | 41.8 |
| 45 - 64 | 92757 | 22.4 | 91061 | 21.1 | 99301 | 22.3 |
| 65 + | 50167 | 12.1 | 59935 | 13.9 | 65661 | 14.7 |
| HOUSING UNITS | 325849 | % | | | | |
| Owner-Occupied | 187537 | 57.6 | 198508 | | 202020 | |
| Renter-Occupied | 126387 | 38.8 | 135891 | | 140508 | |

*1980 other race modified to current Census Bureau definition

Source: 1980 Census, Jan. 1,1989 UDS Estimates

INCOME: 1980-89-94
ST LOUIS,MO-IL MSA
EXCLUDING ST LOUIS

EXHIBIT IX

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 1942213 | | 2141453 | | 2242446 | |
| In Group Quarters | 27021 | | 28708 | | 29879 | |
| PER CAPITA INCOME | $ 8050 | | $ 14156 | | $ 17522 | |
| AGGREGATE INCOME ($Mil) | 15634.7 | | 30314.3 | | 39291.4 | |
| HOUSEHOLDS | 673352 | % | 784573 | % | 839375 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 60751 | 9.0 | 34730 | 4.4 | 24645 | 2.9 |
| $ 5,000 - $ 9,999 | 82976 | 12.3 | 60097 | 7.7 | 51948 | 6.2 |
| $ 10,000 - $ 14,999 | 88290 | 13.1 | 64939 | 8.3 | 64636 | 7.7 |
| $ 15,000 - $ 19,999 | 98039 | 14.6 | 64432 | 8.2 | 55212 | 6.6 |
| $ 20,000 - $ 24,999 | 96619 | 14.3 | 63733 | 8.1 | 56192 | 6.7 |
| $ 25,000 - $ 29,999 | 78391 | 11.6 | 64100 | 8.2 | 56348 | 6.7 |
| $ 30,000 - $ 34,999 | 58434 | 8.7 | 66408 | 8.5 | 56289 | 6.7 |
| $ 35,000 - $ 39,999 | 36786 | 5.5 | 60633 | 7.7 | 56969 | 6.8 |
| $ 40,000 - $ 49,999 | 37593 | 5.6 | 105029 | 13.4 | 105323 | 12.5 |
| $ 50,000 - $ 59,999 | 14450 | 2.1 | 75438 | 9.6 | 92951 | 11.1 |
| $ 60,000 - $ 74,999 | 9941 | 1.5 | 61959 | 7.9 | 98951 | 11.8 |
| $ 75,000 - $ 99,999 | 6227 | 0.9 | 36180 | 4.6 | 68223 | 8.1 |
| $100,000 + | 4854 | 0.7 | 26896 | 3.4 | 51688 | 6.2 |
| Median Household Income | $ 20314 | | $ 33031 | | $ 39776 | |
| Average Household Income | $ 23081 | | $ 38467 | | $ 46624 | |
| FAMILIES | 522483 | % | 594417 | % | 625164 | % |
| By Income | | | | | | |
| Less than $ 5,000 | 23636 | 4.5 | 15221 | 2.6 | 11392 | 1.8 |
| $ 5,000 - $ 9,999 | 47089 | 9.0 | 24338 | 4.1 | 19461 | 3.1 |
| $ 10,000 - $ 14,999 | 61214 | 11.7 | 33391 | 5.6 | 26270 | 4.2 |
| $ 15,000 - $ 19,999 | 77903 | 14.9 | 41409 | 7.0 | 32272 | 5.2 |
| $ 20,000 - $ 24,999 | 84116 | 16.1 | 44134 | 7.4 | 36303 | 5.8 |
| $ 25,000 - $ 29,999 | 71157 | 13.6 | 49263 | 8.3 | 37507 | 6.0 |
| $ 30,000 - $ 34,999 | 54273 | 10.4 | 54448 | 9.2 | 42561 | 6.8 |
| $ 35,000 - $ 39,999 | 34622 | 6.6 | 51496 | 8.7 | 45525 | 7.3 |
| $ 40,000 - $ 49,999 | 35302 | 6.8 | 93878 | 15.8 | 88212 | 14.1 |
| $ 50,000 - $ 59,999 | 13491 | 2.6 | 69713 | 11.7 | 82828 | 13.2 |
| $ 60,000 - $ 74,999 | 9292 | 1.8 | 58030 | 9.8 | 91337 | 14.6 |
| $ 75,000 - $ 99,999 | 5830 | 1.1 | 33840 | 5.7 | 63258 | 10.1 |
| $100,000 + | 4557 | 0.9 | 25256 | 4.2 | 48236 | 7.7 |
| Median Family Income | $ 22908 | | $ 38399 | | $ 46948 | |
| Average Family Income | $ 25970 | | $ 43720 | | $ 53244 | |

Source: 1980 Census, Jan. 1,1989 UDS Estimates

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Urban Decision Systems/PO Box 25953/Los Angeles, CA

DEMOGRAPHIC TRENDS: 1980-89-94
ST LOUIS,MO-IL MSA
EXCLUDING ST LOUIS

EXHIBIT X

| | 1980 Census | | 1989 Est. | | 1994 Proj. | |
|---|---|---|---|---|---|---|
| POPULATION | 1942213 | | 2141453 | | 2242446 | |
| In Group Quarters | 27021 | | 28708 | | 29879 | |
| HOUSEHOLDS | 673352 | % | 784573 | % | 839375 | % |
| 1 Person | 131919 | 19.6 | 164570 | 21.0 | 182430 | 21.7 |
| 2 Person | 207581 | 30.8 | 249619 | 31.8 | 270504 | 32.2 |
| 3-4 Person | 239537 | 35.6 | 284656 | 36.3 | 305602 | 36.4 |
| 5+ Person | 94315 | 14.0 | 85728 | 10.9 | 80839 | 9.6 |
| Avg Hshld Size | 2.84 | | 2.69 | | 2.64 | |
| FAMILIES | 522483 | | 594417 | | 625164 | |
| | | % | | % | | % |
| RACE: White | 1723413 | 88.7 | 1859586 | 86.8 | 1926704 | 85.9 |
| Black | 201413 | 10.4 | 256014 | 12.0 | 284427 | 12.7 |
| Amer. Indian | 2709 | 0.1 | 4028 | 0.2 | 4879 | 0.2 |
| Asian/Pacific Islndr | 10996 | 0.6 | 16348 | 0.8 | 19802 | 0.9 |
| Other* | 3683 | 0.2 | 5476 | 0.3 | 6633 | 0.3 |
| SPANISH/HISPANIC | 16942 | 0.9 | 22239 | 1.0 | 25107 | 1.1 |
| | | % | | % | | % |
| AGE: 0 - 5 | 169813 | 8.7 | 191039 | 8.9 | 188556 | 8.4 |
| 6 - 13 | 249845 | 12.9 | 255002 | 11.9 | 274071 | 12.2 |
| 14 - 17 | 149063 | 7.7 | 117731 | 5.5 | 116327 | 5.2 |
| 18 - 20 | 102463 | 5.3 | 88853 | 4.1 | 83755 | 3.7 |
| 21 - 24 | 134811 | 6.9 | 115896 | 5.4 | 106811 | 4.8 |
| 25 - 34 | 311860 | 16.1 | 386055 | 18.0 | 369587 | 16.5 |
| 35 - 44 | 231155 | 11.9 | 327448 | 15.2 | 370098 | 16.5 |
| 45 - 54 | 209746 | 10.8 | 225107 | 10.5 | 270071 | 12.0 |
| 55 - 64 | 182678 | 9.4 | 184283 | 8.6 | 183602 | 8.2 |
| 65 + | 200779 | 10.3 | 253041 | 11.8 | 279568 | 12.5 |
| Median Age | 30.1 | | 32.8 | | 34.5 | |
| MALES | 938175 | % | 1036281 | % | 1086073 | % |
| 0 - 20 | 341570 | 36.4 | 332755 | 32.1 | 337838 | 31.1 |
| 21 - 44 | 328644 | 35.0 | 406198 | 39.2 | 418304 | 38.5 |
| 45 - 64 | 188879 | 20.1 | 196715 | 19.0 | 218262 | 20.1 |
| 65 + | 79082 | 8.4 | 100613 | 9.7 | 111670 | 10.3 |
| FEMALES | 1004038 | % | 1105172 | % | 1156371 | % |
| 0 - 20 | 329614 | 32.8 | 319870 | 28.9 | 324870 | 28.1 |
| 21 - 44 | 349182 | 34.8 | 420199 | 38.0 | 428192 | 37.0 |
| 45 - 64 | 203545 | 20.3 | 212675 | 19.2 | 235411 | 20.4 |
| 65 + | 121697 | 12.1 | 152428 | 13.8 | 167898 | 14.5 |
| HOUSING UNITS | 713832 | % | | | | |
| Owner-Occupied | 501975 | 70.3 | 581464 | | 619636 | |
| Renter-Occupied | 171377 | 24.0 | 203109 | | 219739 | |

*1980 other race modified to current Census Bureau definition

Source: 1980 Census, Jan. 1,1989 UDS Estimates

- Once this is confirmed the development team needs to assure there is an upward anticipated growth in the upper income cohorts

- Given growth in these cohorts, said growth should first be compared to the expected national averages, and then viewed according to if a coastal or Great Lake location versus the remaiinder of the country

The same type of data should be separately reviewed from the amenity perspective. The growth in numbers of the families and households in the upper income groups is indicative of the demand for recreational amenities such as golf, boating, tennis and skiing. The correlation may not be directly proportional, but the trend line direction should be.

- In this instance the national trends should be used as benchmark information, and comparisons made to the local acceptance or appeal of the sport

- Individual sports should be assessed for their appeal in regard to marketing and usage

## D. MODEL FOR COST BENEFIT ANALYSIS

At the project conception stage a model for recreational development can be employed to evaluate and select from the various combinations of possible housing products and amenity packages. The results of the demand investigation may be valuable in suggesting combinations of housing product and amenity packages not originally contemplated. Again "what if" scenarios of combinations or

concentrations may be investigated to develop a more focused sense of the market.

This model assumes it is possible to identify certain value ranges in developing and owning the various components of a recreationally based development. The model incorporates the associated costs of creating the housing product and recreational amenities.

If value exceeds cost, the assumptions on which value are based should be re-examined to assure sound assumptions were employed. Once the assumptions are double-checked, the development team should proceed to identify and select the most appropriate combination of housing and amenity package to serve the market demand. Once demand and project program are compiled through this process the development team will be better prepared to begin the site selection process. (Roulac, 1987, p. 45)

The model assumes excess value is a premium, and this premium exceeds the normal economic return necessary to motivate participation by developers and investors.

If a specific site has already been identified or is in-hand, the development team should use the process to test the premise of the proposed development and/or experiment with additional options suggested by this analytical approach.

Where costs exceed value of the project, there is a disincentive to proceed. Since recreational development of this type is primarily financed by private sources, the negative economic impact of such

disincentives would be borne by the developers and investors of the project.

Developers of phased projects may want to consider reinstituting a demand investigation, as well as the suggested cost/benefit model to their current projects on a recurring basis. The investigation and reassessment may point to alternative mid-course adjustments which may result in an improved project. If an investigation reveals demand for an additional housing product or amenity which was not considered earlier in the development process, a cost and benefit analysis introducing this addition may provide the developer with a fresh approach to a wider market. Naturally, there will be questions of approvals for such mid-course corrections. Time and effort to review and re-orient may be well spent, provided an enhanced project will have an updated appeal consistent with consumer demand.

The model should be continually applied throughout the life of the project. As state in Urban Land:

"Plan in pencil, not in ink. In community development circles, this point is self-evident. Whatever you plan to do today, it is certain that your plan will be different in five years. So regular review of physical and financial plans is critical to the success of the project. ....

"Smith offers some food for thought in matters of project size. Do not let size dictate use; resist the tendency of land planners to fill in a plan with dreams because they cannot leave parts of the land use map blank. Smaller projects may gain a competitive edge while larger ones make their way through more complex governmental review processes. And as a large development becomes built out, its sheer

size may deter the market -- unfortunately, right at the point when prices are at their highest and the sell is therefore the hardest." (Urban Land, Vol. 48, No. 6, p. 23)

The model's purpose is to quantify costs, and compare these to value created. Costs associated with the housing product and the amenities need to be compared to the expected value of the same. Factors for operating deficits and pre-development costs need to be included, especially in light of the lengthy build out periods for this type of project.

Symbolically, the model can be shown as:

$$(Va - Ca) + (Vhp - Chp) - (On) - (Ct) = X$$

Where:

Va = Value of completed recreational amenity

Ca = Cost of completed recreational amenity

Vhp =Value of housing product (or lots if applicable)

Chp= Cost of housing product (or services to lots)

On = Operating deficits prior to stabilized operation of the recreation amenity and/or pre-development costs

Ct= Cost of land for public purposes

X = Total project surplus (deficit)

Given current ownership options, adjustments to the value of the housing product factor should be considered since value will depend on what type of interest is being valued (i.e. a fee ownership, a time-share interest or the equivalent of a rental factor such as in certain resort destination developments with multiple product types). Multiple runs of this model may be necessary to determine the effect of different ownership forms.

Another very important consideration to evaluate is the seasonality of the marketing program. The impact of seasonality will

be more important in single season recreational developments than year round projects. The means by which to introduce this factor into the model is a area for further study. Another time value factor that must be evaluated is the estimated length of time required to bring a project from plan to maturity.

Amenity package decisions made for marketing reasons may be quantified more realistically with this formula at the project strategy formulation stage. Likewise, where certain amenities are judged necessary by the developer, or expected as traditional in the primary market area, such "loss leaders" should be examined more closely under this method, and decisions made accordingly. (ULI, Vol. 48, No. 6, June 1989)

Particular attention should be paid to the ongoing management and maintenance requirements of the recreational amenities. Issues of ownership form, "loss leader" amenities, management and maintenance are not within the scope of this study.

## IV. DESCRIPTION OF PRIMARY RECREATIONAL AMENITIES

This portion of the study describes major recreational amenities traditionally incorporated in a recreational housing development, and current trends in leisure sports. For purposes of this study, the recreational amenities discussed will be limited to golf, boat marinas, tennis and skiing.

Although references to related issues may be made, such as product design, quality control, site planning, product configuration and political and regulatory strategies, this study does not attempt to cover all aspects of planning and marketing recreational based projects.

### A. **Definition of Amenity**

First, it is necessary to define the term amenity and how it applies to residential development. In Webster's Ninth New Collegiate Dictionary, the word "amenity" is defined as "the attractiveness and value of real estate or a residential structure, or a feature conducive to such attractiveness and value".

In the lexicon of residential development, the term amenity usually connotes recreational facilities, either natural such as proximity to a beach, mountain or lake; or built amenities such as those discussed in this study including golf, tennis, skiing facilities or boating marinas. Often there is some combination of a built and a natural amenity, however, this study focuses on the built amenities.

The traditional rationale for building amenities is to enhance real estate values of the housing product. Although this principal is still operative today, the high cost of building and operating amenity packages requires the developer to have a clear understanding of all facets involved in offering various recreational uses. An appreciation for each recreational amenity offered needs to include a basic knowledge of what users of that amenity expect and/or require for allied housing.

To develop a community where the housing products and the amenities are complementary, it is imperative to study not only what the market requires in housing, but also the demand for amenities which will attract a suitable and sufficient target market for that housing. In the infancy of the industry recreational amenities were selected for marketing considerations, not to meet a defined demand. In the best of worlds these two purposes coincide. In the worst case they are in direct conflict.

Even though a recreational amenity can be structured as a distinct profit center from the profit associated with selling lots or housing products, a definitive strategy is required between the two components to:

- Match the mix, quantity and quality of amenities to the demand in the defined market area

- Establish a matrix of housing product with flexibility as to future product

- Clearly prioritize the amenities' role over the project's development cycle

- o Establish a balance between when the amenities are brought on line, their costs and the benefits derived from them

- o Ensure adequate developer control over the operation and management of the recreational amenities to ensure the facilities are an asset to the development during the entire marketing period

- o At the maturity of the project, provide a workable sharing or transfer of control (management and/or ownership) between the developer, residents and third party management teams

- o Provide flexibility to either add or change amenities in response to prevailing market conditions

## B. Evolution of Amenities as Component of Development

Initially developers did not view a recreational amenity as a business or profit center with its own income and expense components. The amenity was provided as a draw for the real estate product, and little attention was paid to the management and maintenance of the amenities.

As the costs of providing these amenities escalated, developers realized the need to quantify the operating pro-formas of the amenity packages prior to their being built. Over time they realized amenity packages could also be operated as profit centers. Acceptance and profitability of the amenity package required careful crafting of the amenity to satisfy the ultimate consumer.

This is discussed by Partrick L. Phillips in Developing with Recreational Amenities, as follows:

"This dichotomy between marketing orientation can carry important implications over the long term. The "developer's" amenity, geared to selling real estate, may prove to be an expensive-to-maintain and under-utilized facility as the project matures. At the same time, the "residents'"amenities may become overused and need expansion.

The needs of the developer may also conflict with those of the user when it comes to qualitative aspects of the amenities. In many retirement markets, a "championship-quality" golf course - frequently designed by a famous professional golfer - is perceived as a strong, essential marketing tool. In many cases, however, these long difficult courses are the last thing the typical retired person (with a handicap of 21) needs for regular play. At the same time, a world-class golf course may be able to put what might otherwise have been only a regional resort on the list of major golf destinations, which is precisely what the Harbour Town Golf Links did for the Sea Pines Plantation, according to the project's developers." (Phillips, 1986, p. 16)

The development team needs to focus on how the amenities relate to the real estate sales effort on both a short and long term basis. Naturally the need for a successful marketing effort is important to all parties. If marketing considerations are the only factors being evaluated, the long term viability of the development may be jeopardized. The process of achieving this balance is what separates successful recreational developments from unsuccessful ones.

## C. Issues Associated with Amenity Packages

If the developer does not adequately address the issues associated with the demand for a recreational amenity during the planning process, the amenity may not be built as originally

conceived, or if built, may be under-utilized. The developer also may not build enough capacity in a particular amenity to satisfy the resident demand (too small a pool, too few tennis courts, too small a club house, not deep or big enough marina).

Issues of balance between amenities need to be resolved based on the ultimate market, rather than selecting an amenity only for its marketing appeal. Simultaneous to the developer weighing all his/her options, the ultimate consumer is making his or her own multifaceted decision based on:

- is a second home desired and justified ?
- what recreational amenities are most important ?
- is there time and inclination to use the amenities ?

The developer also needs to be conscious of managing the project during the marketing and build out phase. If competing interests between developer and residents become unmanageable, the developer will not achieve the desired sales levels because of lack of referrals by existing residents. However, the familiar golf-tennis swimming amenity package is still the most common. But these are now being supplemented by a variety of health and fitness facilities, as well as uses to counterbalance seasonality.

## D. Amenity Packages

This section defines and describes the four major amenity packages of golf, boating, tennis and skiing.

### 1. Golf

As golf has increased in popularity as a sport, it has become increasingly intertwined with marketing real estate development. Since 1960, the number of active golfers has tripled while the number of golf courses has doubled. Some 21 million Americans play nearly one-half billion rounds of golf every year on more than 13 million courses. (Phillips, 1986, p. 28)

Based on the results of a long-term behavioral study conducted by the Federal Census Bureau, increasing participation in golf has been most pronounced among older and better educated people. For example, while golf participation increased only marginally over the study period, it increased by 50% among the 45-64 age group.

The primary reason to include a golf course in a development is to add value to the real estate, to enhance the project's image and to provide a desired recreational amenity. Value is added to real estate by siting the housing with views and frontage along the course's fairways. In "prestige" communities, the course should be designed by a "name" player and contain signature holes and be suitable for tournament play.

The design of a second home community's golf course is much like that of a primary home community, but, it will probably be played less by project residents. A marketing program is required to attract non-resident players in the area to generate additional fee income.

Second home community golf courses need to provide good tee to hole visibility, relatively smooth green surfaces, and fairly generous fairways to ensure an enjoyable round of golf for the infrequent player.

Golf courses are also perceived as amenities by residents of golf communities who are not golfers. They enjoy viewing the course from their house and the perceived value of having a home in a golf community.

The benefits of a golf course need to be balanced against both the development costs as well as operations (including maintenance and management). Prudent developers will control a course's front end development costs by phasing or pre-sales, while maximizing its marketing impact and cash flow by promotion and/or advertising.

The developer is also well advised to prepare an advance plan for the orderly, predictable transition of ownership of the course to the community residents. Or, if the course is to remain under the developer's control, provide for resident input. Once the course is completed the question becomes who is responsible for its operation.

Should the golf operation and the club operation be combined or segregated? Often the developer needs to retain control of one or both to assure both lenders and prospective purchasers of the project's viability and quality control.

Recently the trend is for developers to contract with a full service management firm at a certain point in the project's evolution. This allows the developer to concentrate on land development and the management company to focus on operations. Since

the developer retains less control under leased arrangements, management contracts are more likely to occur as the project becomes more mature. (Phillips, 1986)

As is evidenced by the accompanying table Exhibit VI on country club income and expenses, the margin on operations is not large. The developer may do well to balance income and expenses. Maintenance costs alone can range from $15,000 to $25,000 per hole. The developers of Gainey Ranch located in Scottsdale, Arizona, anticipate spending $1.25 million on their course per year. However, there is no choice but to maintain the course as it is marketed as a premier resort and residential community and maintenance is an integral part of its image. (Phillips, p. 76)

### 2. **Tennis**

Unlike golf, tennis does not offer a vista for siting of real estate product. To the contrary, the tennis club often must be sited so as not to decrease the value of adjoining housing sites. Tennis can provide an image factor and is a recreational amenity that is actively used. Because tennis can be built quickly and at a relatively moderate cost in comparison to the other amenities discussed in this study, it is often installed early in the development as a key attraction. (Phillips, 1986)

Tennis as a sport has not enjoyed a continuous growth curve. According to a 1979 Nielsen survey, more than 32 million Americans played tennis. According to the same research firm 20 million people currently play tennis. (United States Tennis Association, 1986) This decline in popularity does not affect all markets, and tennis is still perceived as a requirement in most planned communities. The

problem for the developer is to select the appropriate number of courts to build initially. Based on the sport's declining trend-line, it appears fewer initial courts should be built but provisions for expansion should be included in the master plan.

Tennis feasibility is subject to regional influences. Two of the best indicators are average household income and climate. Demographically, tennis is similar to golf, except that the average player tends to be younger and is more likely to be female. (Phillips, 1986) Interestingly, as income increases there is a corresponding increase in the attraction to indoor tennis, which is naturally much more expensive to provide. Developers may want to consult the guide to the community standards for tennis courts. (Source: United States Tennis Association, Tennis Courts 1986-1987 (Lynn, Mass: H.O. Zimman, Inc. 1986) p. 16)

When providing tennis as an amenity, the mix of residential products also need to be considered. Single home buyers are more likely to play golf than tennis, and multi-family dwellers are more likely to play tennis. (Phillips, 1986, p. 91) However, when there is a health club facility is located within the development, this often can draw from the tennis population.

The revenue and expense analysis by Pannell Kerr Foster is included in the Appendix to demonstrate that personnel and operating expenses leave modest returns for the capital investment on the courts and facilities. There may be a marketing benefit to a tennis facility, but advance planning may be required as to how to supplement the debt service and operation. Resorts devoted solely to tennis will need to be responsive to this very specialized market. However, it appears that most recreational developments will include tennis as one of the options for residents and prospects.

### 3. **Skiing**

Ski facilities are limited in number due to very nature of the geographic requirements necessary to site this amenity. Because of the limited number of possible sites, there is a reversal of the relationship between this amenity and real estate development. Where the previous recreational uses discussed are added by the developer to create value to the land, skiing is generally a business first, and land development is a subordinate spin off to the operation.

The popularity of skiing as a sport, however, is increasing dramatically. According to the long term behavioral study conducted by the Federal Census Bureau, skiing (all ages) more than doubled over the same period. Natural forces are a key ingredient. Although there is an increase in land developments allied with ski areas, in 1983 only 32 percent of North American ski areas engaged in land development. (Goeldner, 1983, p. 110) Interestingly, land development around ski areas is more prevalent in the East and Midwest compared to the West which often is considered the ski capital.

However, the demographic profile of the skiing population indicates a large potential population of prospects for future real estate products. Hidden Valley outside of Pittsburgh demonstrates that by revamping and marketing an existing ski area with real estate sales can be very rewarding. It has gone from a day ski area to a multi-season second home community and conference center. The single season ski business has been supplemented with a golf course and tennis facility. Repackaging of ski areas into year round facilities may become more common than the creation of new centers.

At Mt. Shasta, California, the director of operations has embarked on a summer recreation program for the facility. Guests take

the chair lifts to the mountain top during the summer tourist season to enjoy the view and employ a variety of means to get back down the mountain. These include slides, mountain bikes, hiking trails and chair lift. (Interview Marketing Director, Mt. Shasta, July 1989)

Since the ski business is highly volatile because of its dependance on weather conditions operators need to be expert at marketing.

Patrick L. Phillips notes that the Economic Analysis of North American Ski Areas is perhaps the most reliable and comprehensive review of any recreational industry and a model for other national associations. Data on skiing is extensive. (Phillips, 1986)

According to industry surveys, 70 percent of America's 20 million or so skiers are under age 30, and just over 56 percent are male. Cross country skiers tend to be slightly older with a higher median age of 32.6 years and are equally divided between male and female. The question is going to be if avid young skiers will mature into consumers of real estate products aligned with ski areas.

The correlation of income and education among skiers is similar to that of golf and tennis. In 1980 skiers were twice as likely as the average U. S. resident to report incomes of more than $25,000. One out of four had some graduate education compared to the population as a whole of 10%. The one factor which may give concern to the developer of recreational housing is the high number of singles who are skiers. Nearly one half of all skiers are single while 80 percent of the national adult population is married.

Real estate products aligned with ski areas are more likely to provide innovative and segmented ownership options, and the housing

product often includes multi-family housing. Such product is well suited to short-term accommodations as well as an investment vehicle for the owner. A large part of recreational associated housing with ski areas can be organized by the type of ski resort it accompanies. Jim Branch of Sno-engineering, Inc. has divided the field into three main components. (Phillips, p. 123)

Type I - a true international resort facility with superb natural conditions, a diversity of runs and accommodations and a real estate operation including housing , commercial and retail. The main advantage of these developments is their ability to tap a national and international market of individual and corporate investment. Vail, Aspen, Deer Valley and Sun Valley are illustrative of this group.

Type II - offer good natural conditions with a diversity of runs similar to Type I resorts. The main distinction is there is a diversity of housing, but lesser entertainment opportunities. A more regional approach is adopted to marketing. These resorts do not have high notoriety and market to groups and ski clubs. Examples are Telluride and Breckenridge in Colorado, Sugarloaf Mountain in Maine, and West Virginia's Snowshoe.

Type III - present good skiing opportunities but do not have extensive facilities and often little if any real estate development. These areas often have constrained land areas, and are often more closely located to urban areas. These areas may well offer viable opportunities if planning and judicious expansion make these areas more active on a year round basis and more real estate product can be offered.

The remainder are local surface recreational areas which provide exposure to the sport but are marginally profitable.

Developing ski areas is more difficult than the other amenities for several reasons:

- o Few undeveloped sites exist.
- o Few sites are within easy commuting distances of major metropolitan areas.
- o The cost of ski installations and aligned real estate product involve high up front capital costs which substantially add to the financing risks of development.
- o Growing environmental requirements at local, state federal agencies can lengthen or halt the development process.

### 4. **Boating**

Marinas may offer nearly every conceivable service to the boat owner (sales, service, lodging, convenience center and boat sales) or simply be a collection of slips for pleasure boats. Most often when a marina contains a real estate development, the boat service facilities are minimized. Over the past 25 years, marinas have evolved from disheveled boat yards to luxury housing communities.

The boating market over this time has been driven by an accelerating national prosperity and technological advances in polyester resins and fiberglass which reduce the maintenance required after purchase. According to A.C. Nielsen, in 1982, boating was the fifth most popular recreational activity with nearly 41 million participants. (Van Doren, 1984, p. 290) Sailing represented an additional 11 million. The National Marine Manufacturers Association places the total number of enthusiasts in excess of 67 million. (NMMA, Boating a Statistical Report, 1984)

Over the last 20 years existing marinas as well as waterfront sites have incorporated housing. There have been single family developments, multi-family developments with some incorporating office, retail, hotel and resort facilities. Environmental issues are one of the most important obstacles to be dealt with in these developments.

Because waterfront developments can incorporate many allied uses, the matrix of considerations should be utilized since the developer is attempting to meld the physical site characteristics with social and economic patterns within the constraints of environmental and other regulatory agencies. He or she is trying to support both the land and the water uses. Paramount are issues of access to "usable water", safety, convenience and security. These issues should be added as considerations at the initial stages.

Prospective developers should study information readily available on marina operations to adequately address management issues and costs of operation at the planning stage. Development decisions made in view of future operation considerations should result in a better development. (Phillips, 1986)

## V. CONCLUSIONS AND RECOMMENDED AREAS FOR FURTHER STUDY

To ensure a successful recreational based second or vacation home development, the developer needs to separately assess the demand for the secondary housing product and associated amenities without site considerations. Initially, this may cause concern and consternation. But a project conceived and designed without a rigorous assessment of the general demand factors, or which fails to meld the housing product cohesively with amenities also in demand, possesses the likelihood of success of entering any state-wide lottery.

Due to the recent increase in availability of custom demographic studies and their relatively inexpensive cost, development teams of any major recreational project would be remiss to not define the market demand, and probable future demand. In the second home industry, most of the literature is directed to reviews of resorts or developments which have gained notoriety. These notable developments usually identified and filled the market need first. This set them apart, and positioned them for success. Demographic analysis early in the project's life can improve the odds of success.

There is a wealth of information on demographics, lifestyles, and projected future income levels by household and by family for most urban areas. This information should be utilized by second home developers, and compared with available national data. Once the affordability or market segment question is answered affirmatively, the regional analysis is completed. If the regional study is also affirmative, site reviews should begin.

Demand for amenity packages can similarly be assessed with readily available trade information and data sources. But the market demand for recreational amenities are subject to rapid changes. Development plans for liesure communities ought to provide for future flexibility to respond to such changes. This does not mean central amenities such as a golf will not be appropriate for the future. Rather, available space in future phases should be set aside for new uses, even though, these uses cannot be specifically identified at the initial planning stage.

The development team needs to regularly re-examine the market demand for the project (including both housing types and amenities), and respond to changing market demand of the ultimate consumer throughout the build out phase. The cost of such updating is a wise

investment, and can pay large dividends, especially due to the large capital commitments necessary to complete recreationally based projects. The vitality of an evolving development will serve both the developer and the residents well. Risks will be reduced, and value will be added.

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