VALUES, ASPIRATIONS AND GOAL COMMITMENT OF SINGLE-FAMILY HOUSING RESIDENTS

by

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A Thesis Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Master of Science

Greensboro
1981

Approved by

Thesis Adviser

FULBRIGHT, JUDITH HUFFMAN. Values, Aspirations and Goal Commitment of Single Family Housing Residents. (1981) Directed by: Dr. Jane H. Crow. Pp. 128.

The purpose of this study was the identification of certain demographic characteristics of urban single-family housing residents to determine if relationships existed between them and the residents' perceived housing values, housing aspirations, and commitment to housing goals. The sample consisted of 112 owner-occupants of single-family detached houses residing in Greensboro, North Carolina, surveyed during the spring of 1977. Frequencies, factor analysis, and multiple regression analyses were utilized to analyze data obtained from self-administered mail questionnaires.

Descriptive results of the study revealed that as a group the respondents were primarily older, married, with at least one child, and with high educational, occupational, and income levels. Most of their homes were moderate to large in size, and valued at less than the median cost of a new house in the local area.

The respondents highly ranked the values of comfort and convenience, location, and privacy. Economy and safety appeared to be their least important housing values. Multiple regression analyses revealed statistically significant relationships for the values of economy and friends and neighbors. Sex of the respondent, family income, and housing mobility were important contributors to the value of economy, while sex and occupation were important to the value of friends and neighbors. However, none of the independent variables were involved to any great extent.

On a ten-point continuum, the respondents perceived their present housing to be on a higher level than their previous home, and anticipated their near-future housing to be at a still higher level. Multiple regression analysis of their future aspirations found a statistically significant relationship to exist between it and age of the respondent, but only to a small degree.

When questioned as to their willingness to reallocate their financial resources toward achieving a housing goal, a majority of the families supported limiting resources allocated to utilities, a larger family, food purchases, and entertainment needs. Factor analysis of the resource commitment statements identified five factor groupings: basic living and personal expenses, medical expenses, contributions and health protection expenses, educational expenses, and consumer purchase and communication expenses. As a result of multiple regression analyses, only one of the five resource commitment factor groupings, educational expenses, yielded a statistically significant relationship with age of the respondent as the primary contributor.

The major conclusion of this study was that traditional demographic variables appeared to exert little influence on the housing-related decisions of this respondent group. Other variables--economic, personal, sociological or situational--not considered in this study may play a far greater role in the process of choosing one housing type over another and merit investigation.

CHAPTER I

INTRODUCTION

The decade of the 1970's was a turbulent one for both those who build and for those who purchase houses. Builders were faced with increasing costs of land, labor, materials, and financing, and had to charge higher and higher prices for their product. Families became hard-pressed as the price of housing and the costs of ownership outstripped incomes for the first time since World War II, forcing many would-be buyers out of the market.

Such events pose serious consequences for American families and their housing. The new house market is now primarily for the affluent; even in the existing house market, costs are not far behind those of new houses, also limiting it to the more affluent. Housing, particularly new housing, may well become a luxury item if current trends continue for another ten or even five years. And yet housing is a basic necessity, one that families in this society can hardly do without, regardless of its high cost. As a nation, we are faced with the prospect that for families who cannot provide for their own housing needs, government intervention may be necessary, either in the role of stimulating the production of affordable housing or in the capacity of providing income assistance. Before we reach that point, it may be wise to give serious consideration to other kinds of alternatives to the problem of providing affordable housing for Americans. Other kinds of settlement patterns, densities, structure, and tenure types need to be compared and evaluated.

However, it should be recognized that there exists a basic constraint to the consideration of alternative measures; it is the long-standing, and overwhelming bias of American families and the American political system in favor of the owned, single-family detached house. This preference may well be the single most important aspect of American housing today (Morris & Winter, 1978). It is the ideal of rich and poor alike, supported by federal and local housing policies and popularized throughout the media. Any alternative housing patterns, forms, structure or tenure types must be evaluated in terms of that ideal. Given the increasing difficulty of obtaining affordable housing and the seeming strength of the desire for owned, single-family dwellings, will American families be able to acquire "a decent home and suitable living environment" that will fulfill their basic needs and values and gratify their aspirations?

Without doubt the future has its antecedents in the past and present. An investigation of families that are presently living in owned, single-family dwellings may yield much useful information about the particular needs and values that are satisfied by such housing, the strength of the families' commitment to acquiring single family houses, and whether their future aspirations include this type of housing. Clearly, this kind of information would be useful in the process of designing and evaluating alternatives to the owned, single-family detached dwellings.

This study is designed to explore the housing values, aspirations, and willingness to commit resources to housing-related goals of families owning a single-family dwelling in an urban area. It is

hoped that the results of this study, combined with other similar studies, will begin to provide clearer, more accurate information about American housing consumers. It may then become possible to devise and evaluate new ways to adequately meet their housing needs.

Purpose

The purpose of this study was the identification of certain demographic characteristics of urban single-family housing residents to determine if a relationship exists between those characteristics and the residents' perceived housing values, housing aspirations, and commitment to housing goals. For this study, respondents were limited to owners of single-family detached dwellings.

Objectives

1. To identify perceived housing values of owners of single-family housing units.
2. To identify their goals and aspirations for future housing.
3. To determine their willingness to commit family resources to the achievement of housing-related goals.
4. To identify the relationships between the demographic characteristics of single-family housing residents (age, sex, education, and occupation of the respondent, size and composition of the household, family income, and housing mobility), and their perceived housing values, aspirations for future housing, and willingness to commit resources to housing-related goals.

5. To compare the demographic characteristics of owners of single-family detached housing units and owners of condominium units.
6. To identify and compare any important similarities or differences in the relationships between the demographic characteristics and the perceived housing values, aspirations, and resource commitment to housing of families who own single-family dwellings and those who own a condominium unit.

Operational Definitions

The following definitions were used for the important terms or concepts used in this study:

Aspirations - Desires for some future time, and are used to guide efforts to plan and organize the future.

Commitment - Feelings of determination to achieve particular goals, resulting in limitations being placed on resources allocated toward the achievement of other goals.

Housing Goals - The objectives for family shelter as perceived by the respondent. They are achieved through actions by the family regarding the use and allocation of family resources.

Housing Mobility - The number of moves to a different location or dwelling unit that a family may make over time.

Rate of Goal Achievement (in housing) - The standard or measure of achievement which a family has identified for itself in the past and expects to reach in the future. It is measured by the amount of

difference between present and past level of achievement on a Cantril-type ladder or present and expected future level of achievement on the ladder five years hence (Paynter, 1975).

Satisfaction - The level or degree of contentment with present conditions.

Value (as viewed by Rokeach, 1969) - "A centrally held, enduring belief which guides actions and judgements across specific situations and beyond immediate goals to more ultimate end-states of existence" (p. 55).

The seven housing values identified from previous research and selected for use in this present study were:

1. Comfort and Convenience - Functional floor plan; convenience features and appliances; ease of care.
2. Location - Friendly neighborhood; proximity to other places, services, or facilities.
3. Inexpensive - Reasonable cost; economical maintenance and operation.
4. Safe - Presence of safety features.
5. Friends and Visitors - Space for entertaining; fits family needs and lifestyle.
6. Privacy - Regulation of space to allow for rest and relaxation for both individuals and family groups.
7. Aesthetic Satisfaction - Pleasant design, colors, and furnishings; opportunity for personalization.

CHAPTER II

REVIEW OF LITERATURE

A Perspective: The Current Housing Situation In the United States

In recognition of the role housing plays in the lives of the citizens of this country, Congress enacted the Housing Act of 1949, which stated:

> The Congress hereby declares that the general welfare and security of the Nation and the health and living standards of its people require housing production and related community development sufficient to remedy the serious housing shortage, through the clearance of slums and blighted areas, and the realization as soon as possible of the goal of a decent home and suitable living environment for every American family . . . . (Housing Act of 1949, Sec. 2, 63 Stat. 413)

By the late 1960's, Congress realized that the supply of housing was not increasing rapidly enough to meet such a goal, and took steps to provide a remedy. With the Housing and Urban Development Act of 1968, Congress reaffirmed the goal of a decent home, and set a ten-year production schedule of 26 million housing units with six million of that total earmarked for low- and moderate-income families.

In the decade that followed, the rate of housing production averaged slightly over two million starts annually with 1972 registering the peak of 2.9 million starts, and 1975 the low of 1.38 million units (HUD, 1978). Actual construction exceeded targeted goals in only 1971, 1972, and 1973 (HUD, 1977). It was during these

same three years that unprecedented numbers of federally subsidized units were built to replace substandard units, which created abnormally high construction levels.

Quite obviously, the production goal set by Congress by not met. Economic and political events of the decade not only prevented the attainment of the goal, but adversely affected the entire housing sector. In 1973, the Nixon Administration's placement of a moratorium on most federal housing programs, combined with tight credit policies to combat inflation, causes both subsidized and non-subsidized production to fall. The year 1974 witnessed the worst recession since World War II, and housing production slipped again. Housing costs began a meteoric rise during the decade, outstripping incomes for the first time since World War II. Continuing inflationary pressures caused many to withdraw funds from low-yielding thrift institutions and turn to more lucrative investments, thereby limiting the money available for home mortgages.

Not only have economic and political events of the last decade substantially affected the supply of housing, but in the same period, changes have occurred in the demographic patterns that shape housing demand. Several demographic factors have been identified by researchers at the Joint Center on Urban Studies as having a bearing on the number of new units needed and where they should be located. The more important source of demand for new units identified was the increase in number of households. Another source was migration, as families leave declining areas where there is no further housing demand and move to expanding areas where housing demand is intensified

by their presence. The final source of demand for new units identified was the rising cost of housing and homeownership (Frieden & Solomon, 1977).

As for the demographic changes that actually occurred during the 1970's, the number of household heads increased substantially, primarily because more people were choosing to live alone. In addition, the number of persons reaching the age of 20 swelled each year during the decade as a result of the post-war baby boom, affectively increasing the ranks of those most likely to need housing. A significant momement of the population occurred as people moved away from the declining urban centers of the North to the growing areas of the south and West (Frieden & Solomon, 1977). These general factors positively affected the demand for housing, stimulating the need for greater housing production.

However, rising housing costs negatively affected the demand for housing as total housing costs (purchase price, and costs of owning) increased more than family incomes and the cost-of-living index. The home building sector was affected by rising land, labor, and materials costs, high interest rates on both construction loans and permanent financing for homebuyers, inflationary pressures and government regulations, and the cost of delays caused by trying to meet those regulations (Seidel, 1978). As their costs increased, builders had no choice but to pass those costs along to consumers. These higher prices and soaring interest rates prevented many would-be buyers from entering the marketplace. Demand for housing dampened accordingly during the mid-1970's as families were faced with devoting an increasing proportion of their shrinking incomes to housing.

Clearly, economic and political events of the last decade, coupled with changing demographic patterns, have acted to constrain both the demand and supply of housing, creating what many view as a housing crisis. And the outlook for the future does not appear to offer much hope for improvements, even though emerging trends may tend to offset declines in demand in the future as dual-paycheck families increase and belt tightening by families in other non-housing expense areas mount (Frieden & Solomon, 1977).

Reporting in The Nation's Housing, 1975 to 1985 (1977), MIT/Harvard researchers seemed to capture best the essence of the housing crisis. They asserted that the United States is neglecting the housing needs of the American people to the point that families of average income are less able now to afford a house than ten or even five years ago.

Housing Costs

The major culprit in this state of affairs is, of course, the rising cost of housing. Demand as commonly defined by economists is based on the consumer's willingness and ability to purchase a particular good at particular prices. Yet, many are in the position of being willing but unable to pay the price. As housing prices rise as high as consumers can bear and require a larger proportion of the family's income, the ability of the family to obtain other necessities becomes more and more limited. At the same time,

> poor families are relegated by the market to the worst housing because of their inability to compete for more costly, better housing. For no other item, except perhaps medical care, are the injustices of the market economy so great and the burdens so heavy. (Stone, 1971, p. 24)

Therefore, non-effective economic demand becomes translated into the social needs for housing, needs that will not be met through the operations of the private housing market.

The dimensions of the social needs for housing, or who it is specifically that is housing-deprived, has been identified by researchers at the Joint Center for Urban Studies of MIT and Harvard. They asserted that housing deprivation takes several forms: physical inadequateness, overcrowding, inadequate neighborhood conditions, and excessive cost burdens. Measures to determine the degree to which each form of deprivation existed in American housing and estimates made of the number of low-income families experiencing each of these conditions for the years 1960, 1970, and 1973, were then developed. It was found that housing deprivation had changed from "a problem of physically inadequate shelter to a problem of excessive cost" (Frieden & Solomon, 1977, p. 87). While the actual number of households estimated to be housing-deprived dropped from 15.3 million to 12.8 million, the number of families paying an unreasonably high percentage of their income for housing nearly doubled, rising from 24 percent to 47 percent.

Low-income families, while among the hardest hit, are not the only group affected by rising housing costs. In a report on rising prices of new houses, the General Accounting Office (1978) asserted that lower- and median-income families have been increasingly priced

out of the single-family housing market since the mid-1960's. The market for new houses has become primarily the exclusive preserve of upper-income families and/or prior homeowners who are able to use the equity from their homes to purchase new houses. In 1975-1976, the proportion of new single-family houses purchased by middle-income families ($10,000 to $19,000) had declined to 38 percent from 53 percent in 1965, and for lower-income families (less than $10,000), the proportion was only four percent, down from 17 percent in 1965.

In 1972, median family income was $11,116, and the median price of a new single-family house was $27,550. By 1976, median income had risen to $14,960, but the median new house price had soared to $44,200, representing a 35 percent increase in income with a 61 percent increase in the sales price of a new home (HUD, 1977). However, according to the conventional wisdom that a family should not purchase a home with a sales price more than two-and-a-half times its annual income, the median income family could barely afford to purchase the median-priced house in 1972, while for 1976, or for that matter for most of the previous 20 years, it could not. During the last 20 years, the ratio of the median price new house to median income has remained relatively stable, usually about 2.8 (Lindamood & Hanna, 1979). An analysis of the data from the U.S. Department of Commerce's report on distribution of families by money income, suggested that while roughly 55 percent of the nation's families could have bought the median price new house for 2.5 times (or less) their incomes in 1970, only 39 percent could have done so in 1976 (HUD, 1977).

If a two-times income rule, which may be more realistic in periods of inflation, were used instead of two-and-a-half times, even fewer households could afford to pay the price for the median value new house. According to that lower criteria, the median-income family has not been able to afford the median price new home since at least 1949 (Lindamood & Hanna, 1979). But a comparison of median prices and median incomes for various years does not accurately reveal how incomes have not kept pace with rising house prices.

In a report by the Task Force on Housing Costs (HUD, 1978), trends during the 1960's and 1970's in incomes, prices, and housing costs were indexed to 1967 as a base year. The Task Force reported that between 1972 and 1976, increases in family income trailed both the Consumer Price Index and the median price of a new house. Income increased annually at an average rate of 7.05 percent, compared to 9.94 percent for the price of a new single-family house of constant quality, and 12.49 percent for the standard median-priced new house. Translated into slightly different terms, over the five-year period (1972-1976) incomes increased a total of 35.3 percent, median sales price of a new house, adjusted for quality, increased 49.7 percent, and sales price, unadjusted for quality, increased 62.4 percent. Using the cost of a house of constant quality as a measure of comparison overcomes some of the difficulties of comparing median-price houses from one year to the next, since the two are not identical, often due to some improvements in quality (U.S. Bureau of the Census, 1977a).

The market for existing houses has also been affected by increased costs, although traditionally the costs of such houses are lower than those of new houses due to their increased age and some deterioration in quality. The median price of existing houses sold in 1976 was $38,100 in comparison to the median sales price of a new house of $44,200 (Federal Reserve Board, 1978). Between 1972 and 1976, the median sales price of an existing house increased at an average annual rate of 9.3 percent, for a total of 46.5 percent, in contrast to the 60.4 percent increase in the median sales price of a new house, while incomes increased only 35.3 percent (HUD, 1978). Not surprisingly, the market for existing houses has been much more active than the new-house market; three million sold in 1976, compared to slightly over one million new houses sold (Federal Reserve Board, 1978). Such activity in the existing house market may well have occurred in response to the higher prices and limited availability of new housing. In seeking alternatives to new housing, families have sought either to improve their existing housing or to purchase older houses of marginal quality that they can then renovate (Frieden & Solomon, 1977).

The most accurate measure of the expense of housing to families, the costs of homeownership, have also escalated rapidly during the 1970's, contributing substantially to the total housing cost burden that most families must bear, not just those who purchase a new house. Total homeownership costs to a home purchaser reflect more than sales price; these costs include hazard insurance, property taxes, maintenance and repairs, heat and other utilities, as well as

loan amortization. The Task Force on Housing Costs (HUD, 1978) reported that the costs of homeownership (indexed to 1967 as a base year) increased at an average annual rate of 8.15 percent, for a total of 40.75 percent for the five-year period 1972-1976; in contrast the average yearly increase in median income was 7.05 percent, while that of the Consumer Price Index rose eight percent. The major factor, of course, in the increased cost of homeownership during the 1970's has been sales price and the attendant increase in monthly mortgage payments (Frieden & Solomon, 1977). For most Americans who own a home, nearly 64 percent are still making payments on a mortgage loan (U.S. Bureau of the Census, 1978a). Due to the recent energy crisis, rising energy costs placed a close second to mortgage costs. But for some families, energy costs have required an even greater proportion of their monthly income than the mortgage payment.

The customary rule of thumb used by mortgage lenders to determine a family's ability to afford a house has long recommended that a family spend no more than one-quarter of its monthly take-home pay on its total housing costs (mortgage payment, taxes, insurance, maintenance and repairs, and utilities). Yet, in a recent government study (General Accounting Office, 1978), it was reported that:

> Homeownership costs by 1976 had reached the point that a monthly expenditure of $476 was required to amortize the mortgage principal and pay the mortgage interest, insurance premiums, property taxes, utility costs, and repair and maintenance expenses on a median price new house which sold for about $44,300. This monthly outlay represented almost 47 percent of median family income, adjusted to exclude Federal and State income taxes and Social Security taxes for a family of four. (p. 4)

The MIT/Harvard researchers (Frieden & Solomon, 1977) asserted that in 1970, 46.6 percent of American families had an income large enough to afford the homeownership costs of a median-priced new house, while in 1976 the proportion had dropped to 27 percent. (This was based on a needed annual income figure of no more than 25 percent of gross money income devoted to the costs of homeownership.) In conclusion, they projected that if such a trend were to continue for another five years, the new single-family house would become a luxury item.

It is clear that the high cost of housing, whether new or existing and affecting both the supply and demand components of the market, is a problem of major concern for millions of American families. While families in upper-income brackets and prior homeowners who are able to use the equity from the sale of their homes to buy new houses are in a position to improve their housing without much strain, many cannot. Included are young families who want to buy their first house, low-income families, the elderly living on fixed incomes, and those with special housing needs (HUD, 1978).

The plight of these families is all the more serious, because in the view of many, the United States is a nation of homeowners and being a homeowner means owning a single-family dwelling (Morris & Winter, 1978). In 1976, approximately two-thirds of American households (65 percent) owned a home (U.S. Bureau of the Census, 1978b).

Homeownership and Single-Family Dwelling Norms

Homeownership has been a strongly held social value in this country since its inception. Many of the early settlers to America, fleeing the feudal land ownership system predominant in Europe, were attracted to the promise of owning their own piece of land in the New World. During the nineteenth century, writers popularized the ownership of a single-family detached dwelling as the "ideal setting of American domestic life" (Handlin, 1976, p. 28). At the same time, the increased awareness of the circumstances surrounding good public health, the widespread use of plentiful wood--although highly combustible--as a building material, the availability of cheap land, and the ease of buying parcels of land all promoted the emergence of the single-family detached house as an ideal housing type (Handlin, 1976).

Wallace Smith (1970) observed that in the United States great importance has been attached to the ownership of single-family homes "in the belief that this type of living arrangement will foster the kind of citizenship that corresponds to traditional American values" (pp. 76-77). Smith further asserted that it is the awareness of the socializing effects of housing and how people living in their own dwellings conduct themselves toward one another that underlies the public attitudes toward single-family dwellings. Being an owner means to have a share in the economic destiny of the community, and implies an interest and participation in the management of the community. In its turn, good community management reinforces economic

land values, thus giving everyone an interest in how everyone else cares for their property. Since local participation in community affairs is purported to be a cornerstone of our political system, home ownership is assumed to encourage such participation.

Since the 1930's, government policies, whether local, state, or federal, have encouraged and supported the firmly established commitment of American families to houses they own. At the local level, building and health codes, and zoning regulations have promoted the development of single-family dwellings. At the state level, laws have been passed to allow federal monies to be used for housing assistance programs and to create housing finance agencies (FHA's) to provide low-interest mortgage loans for sponsors of low- and moderate-income housing. At the federal level, a network of major financial institutions have been developed that have made amortized, long-term mortgages possible. And, the largest of all federal housing subsidies has been the hidden subsidy of mortgage interest and property tax deductions on federal income tax returns for homeowners. This tax break alone has been estimated to represent $7 billion annually (Main, 1972).

At the same time, the single-family house has become a consumer good and the site of a complex array of other consumer products. Manufacturers, advertisers, and salesmen, in trying to sell their own wares, have become champions of the single-family detached house, because it encourages the maximum use of utilities, mass-produced goods, and services (Handlin, 1976).

Certain advantages of ownership that accrue to the homeowner have also operated to promote homeownership as an American ideal. Financially, ownership has been both a relatively safe investment and a hedge against inflation. Generally, the actual market value of the house has appreciated or at least kept pace with the rate of inflation, except during the Depression, while the costs of the original mortgage have remained the same.

Through mortgage financing, a homeowner has a form of forced savings in the equity which is accumulated. This equity can be realized upon the sale of the house or it can be used as collateral for other loans. Owners generally benefit from greater income tax savings than renters since deductions from federal and state income taxes are allowed for interest payments and property taxes.

But for most homeowners, the major reasons for desiring homeownership are not purely economic. Rosow (1948) reported that such emotional goals as psychic security, family security, and ego satisfaction, living pattern goals, and status and prestige goals were ranked higher than financial goals by homeowners. Housing, owned or otherwise, fulfills not only shelter needs, but provides a setting for family life where security, affection, esteem, and self-actualization needs may be met.

> The dwelling is valued not only for the structural services it provides (such as shelter, warmth, and working facilities) but also for its architectural qualities, for the private and public amenities it provides or affords access to, and for the people who live in the neighborhood--in short, for the entire residential environment and, possibly, for the social status it symbolizes. (deLeeuw, Schnare, & Struyk, 1976, p. 119)

Ownership of a private, separate dwelling has offered the family the greatest opportunity to use, maintain, and improve the property as they see fit, within the limits of local building and zoning regulations. There is no landlord to set limits on behavior; often there is greater privacy; the family is free to create a unique and personal living environment. In addition, homeownership has symbolized upward social mobility as physical mobility is used to upgrade not just the family's housing, but social status as well.

For many families, ownership of a single-family dwelling is perceived as better for rearing children (Michelson, Belgue, & Stewart, 1973). The greater privacy, amount of space, flexibility, and security it offers, and the kinds of neighborhoods where such housing is usually located, are among other advantages offered to families through homeownership.

Housing Preferences and Aspirations

It is clear that for a wide variety of reasons in the United States, cultural norms have developed that prescribe ownership and single-family dwellings for most families, particularly those with children. "The almost inescapable conclusion . . . is that perhaps the single most important aspect of housing in the United States, aside from pure questions of shelter, is single-family homeownership" (Morris & Winter, 1978, p. 121). Additionally, these norms seem to be largely unaffected by influences of different lifestyle orientations, social-class designations, or geographic location (Morris & Winter, 1976; Montgomery & McCabe, 1973).

In a study of blue- and white-collar workers, Morris and Winter (1976) reported that the differences between the groups in their present housing conditions could not be attributed to different housing norms; rather, they were due to differences in original housing conditions and how that affected preferences and the action of constraints in relation to conformance to the norms. While constraints may act to inhibit compliance with the cultural norms, the pressures to comply are quite intense:

> The whole United States housing system encourages buying, not renting. Bankers, politicians, neighbors, creditors, spouses, children, pets--all argue, in their own ways, for homeownership. It has become one of those fundamental institutions, like motherhood and sound currency, that secure the republic. (Main, 1972, p. 28)

There are substantial disadvantages to owning and to single-family dwellings; costs that individuals, families, and American society must bear for supporting such cultural norms. For families, owning is not without some risks or costs; initial costs and selling costs can be quite large. The financial investment of down payment and equity may depreciate instead of appreciate if the value of the house or neighborhood slips. The money invested in owning cannot be readily withdrawn; the house must be sold for that investment to be realized. Some of the costs of homeownership, principally maintenance and repair costs, are less than predictable and can blossom enormously. Owning a home usually requires of the homeowner greater amounts of time and energy, and sometimes, even new skills to be devoted to the care and upkeep of the house.

Compared to other structural types of dwellings, the costs of land, labor and materials to build the single-family detached dwelling are much greater (National Commission on Urban Problems, 1969). Naturally, it follows that the purchase price is usually more expensive, and the costs of utilities too are normally higher than for a townhouse or apartment of a comparable size.

Finally, a recent government report (Real Estate Research Corporation, 1974) compared the costs associated with different types of housing development patterns, ranging from single-family detached to high-rise apartments. The major conclusion of the study was that for given numbers of households, the traditional detached single-family house on a suburban lot is the most expensive form of residential development in terms of economic costs, environmental costs, natural resource consumption, and many types of personal costs. The report estimated that the total capital costs for a high-density planned community were 44 percent lower than the costs of a conventional low-density sprawl development. Other cost reductions cited included: land costs (43 percent), streets (40 percent), utilities (63 percent), energy consumption (44 percent), and water consumption (35 percent).

The report denounced the construction of single-family houses as a causative factor in land sprawl, traffic congestion, and air and water pollution. As Bernard Weissbourd (1968) noted:

> The waste of human resources and money in this increased commuting, the inability of the auto and the expressways to handle the traffic, the changing character of the city largely occupied by a financial and business community and a segregated Negro population, the financing of public

> services for a migrant population in the face of disappearing industry and lost taxes, the interdependence of the financial and commercial life of the suburbs and city--these are all reasons for not allowing present trends to continue. (p. 545)

While some are expressing such grave doubts about the norm of the single-family dwelling and its costs, the nation's housing policies and the economic difficulties for families to secure and maintain such housing, an examination of the housing preferences and aspirations of Americans reveals that the norms are not changing drastically, if at all.

In spite of the criticisms and disadvantages of owning, American families want to own a single-family detached dwelling. Beginning in the year 1974, the home building trade publication, Professional Builder, has conducted an annual nationwide survey of at least 500 consumers who seriously intend to buy a house in the next six months. The results of each survey 1974 through 1980 consistently indicated that more than 90 percent of the consumers prefer to buy a detached single-family house (What 1980 Buyers Want in Housing, 1979).

As part of an effort to estimate the number of people who would live in a "designers' paradise" of high-rise apartments or central city townhouses, the Survey Research Center of the University of Michigan conducted a nationwide sample survey of 748 people living in 32 metropolitan areas, and asked them in what type of structure they wanted to live (Michelson, 1968). Eighty-five percent of those surveyed preferred single-family houses. Interestingly, only two percent of those who preferred a single-family house were willing to compromise that desire for ownership of either a cooperative or condominium unit.

Another more recent study of college students' preferences toward alternative housing environments found that the desire for single-family homeownership was widespread and not in the process of changing radically (Hinshaw & Allott, 1972). Single-family housing was the choice of the respondents regardless of their existing family income level, race or ethnic background, and their present type of housing. In the researchers' opinions, the implications of such findings indicated that:

> Society is therefore faced with the choice of either providing access to this type of housing or of mounting a massive attack on the "American Dream" that is propagated in all forms of media and reinforced by cultural norms involving measures of status and self-worth as well as by traditional antiurban attitudes. (p. 107)

Neither of these choices may be practical or even possible. For one, any attempt to remove the constraints that prevent single-family homeownership must involve increasing families' incomes or bringing prices down. Assuming that either was possible, it is not at all certain that providing every family with a "rose-covered cottage" would be in the best interests of American society as a whole, particularly in terms of environmental resource costs. Moshe Safdie (1970), while on a tour of this country and Canada, observed that it would not be possible to rehouse all the families living in the slums of Chicago in single-family housing due to the sheer numbers of people and the area of land needed to accomplish the feat.

There also appears to be little concrete evidence to support the notion that American housing norms can be changed, particularly through efforts to promote other structural types or tenure

arrangements (Morris & Winter, 1976). After all, the symbol of the single-family house has been a beneficial one to the American culture:

> To invest the house with the values once associated only with real property was to make available to a very great percentage of the population the status of property-owner, and thereby to establish a rough egalitarianism supportive of the democratic ideals of America. (Cohn, 1979, p. 243)

On a more positive note, at least one author has asserted that the single-family homeownership goals of American families may experience a change when the majority of families conclude that the rewards are not worth the necessary sacrifice (Winter & Morris, 1977). Norms, while relatively fixed, are subject to change over time. One of the factors influencing change is the existence of chronic problems or difficulties that families encounter in trying to conform to the cultural norm (Morris & Winter, 1978). The pressure of actual conditions may force families to compromise, to buy condominiums or cooperatives, and to settle for higher density housing types. It is quite likely that the structure type norm will be compromised before the one for ownership; in the past families have substituted ownership of mobile homes, condominiums, and cooperatives for ownership of the single-family detached dwelling (Morris & Winter, 1978).

A Dilemma for the Future: Some Possible Alternatives

Quite obviously, any measures proposed to solve or relieve the present predicament of high housing costs must recognize the existence of American housing norms and the role they play in the housing related behavior of families. Any alternative settlement pattern, density, structure or tenure type must be evaluated and measured against the ideal of the owned, single-family dwelling.

However, it would be a mistake to consider just housing norms in the process of developing new approaches or alternatives to America's housing problem. It has been fairly well established that the design of various components of the physical environment, whether communities or dwellings, can have severe consequences for the individual or families, leading to misused or altered environments or social and psychological stress (Brolin & Zeisel, 1973). Therefore, it is of special concern that new designs or alternatives recognize the social and psychological characteristics of those who are to inhabit the environments.

Hinshaw and Allott (1972) suggested that more consideration be given to the aspirations and values of different socioeconomic, racial, and ethnic groups as an approach to the design of alternative housing solutions. "Consumers of housing are hardly one monolithic entity, as some would have us believe" (p. 199).

C. M. Deasy (1974), an architect who has worked successfully in collaboration with behavioral scientists, was of the opinion that "human values are the primary concern of design" (p. 137). He further asserted that the values that should be considered are those that are derived directly from the participants of any planned environment. Even though such abstract factors may be difficult to measure or quantify, Deasy suggested that such a task is a vital part of the total effort needed to break through the use of stereotyped solutions to architectural problems. If users were to be asked:

> to discuss goals, objectives they have set for themselves in a given setting, and the strains they have experienced in achieving those goals, then we have opened the possibility that we can define a new kind of setting that will better assist these people to accomplish those goals. (p. 80)

Apparently then, a good first step in developing alternatives, particularly structure alternatives, to the owned, single-family dwelling may be to investigate the housing needs, values, and aspirations held by those who presently live in such housing. With this kind of information in hand about the attitudes and characteristics of various socioeconomic groups who live in single-family houses, alternative measures can be compared and evaluated against the standard of the single-family dwelling. As Catherine Bauer (1951) so clearly observed:

> The big difficulty lies in the fact that every aspect of housing and city planning policy comes down, sooner or later, to qualitative social decisions, "value judgements" about individual needs and preferences, . . . family and community functions, group relations, and the whole pattern of city life. Such judgments are difficult to make in a society as varied and as changing as ours, but they will nevertheless affect our everyday life for generations to come. (p. 6)

How much better it would be to design and build for the future with some notion of the physical, social, and psychological consequences of such actions than to do so in ignorance of them.

CHAPTER III

PROCEDURE

Restatement of Objectives

A survey of randomly selected owner-occupants of single-family detached houses was made to obtain data pertinent to the residents' attitudes about their housing. Objectives of the study were to identify among the residents: (1) their perceived housing values; (2) their aspirations for future housing; (3) their willingness to commit resources to achieve housing goals; (4) interrelationships among demographic variables (sex, age, education, and occupation of the respondent, size and composition of the household, family income, and housing mobility) and values, aspirations, and housing-related goal commitment; and (5) important relationships between the values, aspirations, and goal commitment of single-family housing residents and residents of condominiums. (Multiunit housing data were obtained from an earlier study by Glenda M. Humphries, 1976.) Information presented in this chapter includes the procedures used for obtaining the sample, instrument development, data collection procedures, and statistical analysis.

The Sample

Utilizing the property tax records for Guilford County, North Carolina, a random sample of 500 owner-occupied single-family dwellings located within the corporate city limits of Greensboro, North Carolina, was made. The Guilford County Planning Department underwrote the development of a computer program designed to select random samples from the property tax records. The program was designed not only to retrieve the names and addresses of owner-occupied single-family dwellings, but to stratify the names into specified categories according to the market value of the dwelling (1972 appraisals). A sampling interval for each category was calculated and a proportionate random sample of each was made for a total of 500 names and addresses. The county tax records were used as the basis of the sampling plan, since it provided the most accurate listing available of the addresses of all the dwellings within the county and their tax valuations.

The State of North Carolina requires that its citizens list their real and/or personal property during the month of January with the tax collector of their county of residence; or, as in the case of real estate holdings, in the county where the real property is located. All of the state's citizens are required to list their property regardless of its value.

Several means are employed by the counties to check their tax listings to ensure that all those citizens who should list their property have, in fact, done so. Although inaccurate tax listings or

failure to file may usually be detected within the first year, the discovery process is an arduous one, requiring time and effort on the part of the entire tax office staff.

Automobile licenses are issued during January and February of each year, and must be purchased within the county of residence. In April or May of each year, the Department of Motor Vehicles forwards to each county a print-out of all the automobiles registered in that county, along with the owners' names and addresses. This print-out is checked against the tax listings where the ownership of such automobiles should be recorded. In the event that the Department of Motor Vehicles' print-out indicates that an automobile license has been purchased within the county by an individual and yet the tax listing for the same individual does not record the ownership of such a vehicle, the tax collector can assess the amount of taxes due and send a bill to the individual. In some cases, the individual may no longer reside at the address indicated either by the tax listing or by the Department of Motor Vehicles. A tax collector may then be assigned to the case in order to locate the individual. The state law allows tax collectors to garnish wages, bank accounts, rents, and other debts owed to delinquents in order to receive payment of a tax bill.

The property transactions are recorded in the Register of Deeds Office, and are also used to verify the accuracy and completeness of the tax listings. As part of the tax listing process, information about property transfers is secured by the tax office, such as the names of persons who purchased or sold property, as well as a

description of the property. Copies of the deed transfers are forwarded to the tax office on a periodic basis to be checked against or added to the information that is listed on the tax records. Every deed involved in the transfer of property is traced by the tax office.

New residents to the county may be one of the few groups that is not accurately represented in the tax records. If a newcomer moved to the county after the month of January, he would not have to list his property until the following January. Thus, he would be excluded from the present year's tax record, but would be listed in subsequent years.

Renters who do not own an automobile may also be inaccurately reflected in the tax records. Although everyone who owns any kind of property is required to list for tax purposes, those individuals who do not own either real property or an automobile cannot be traced by the tax office if they choose not to list.

The possible under-representation of these two groups--newcomers and renters who do not own automobiles--was not thought to have had any serious effect on the overall sampling plan. Renters did not constitute a part of the population of interest, while most newcomers who purchased a home would probably have purchased an existing home. An existing home would be a part of the property tax listing by virture of its prior owner.

A six-part mail questionnaire, modeled after an instrument used by Humphries (1976), was sent to 400 of the names and addressed drawn in the random sample of the tax records in the spring of 1977. The

additional 100 names and addresses were held in reserve as replacements. One-hundred-and-twelve complete and usable questionnaires were returned constituting a 28 percent response rate.

The Instrument

The instrument, a self-administered mail questionnaire, was modeled after a similar instrument used to survey multiunit housing residents developed by Humphries (1976). The various components of the instrument were organized into the following sections:

1. Demographic Information. Data about the sex, age, marital status, occupation, and education of the respondent, size and composition of the household, and annual family income were ascertained in this section.
2. Housing Aspirations, Goals, and Goal Achievement. Several open-ended questions were used to reveal the respondents' intentions to make changes in their present home, their desires for a future living situation, and the constraints operating to prevent the attainment of housing goals. In addition, Cantril's (1963) self-anchoring scale was adapted to identify the respondents' past, present, and anticipated future levels of housing achievement. They were also asked to describe what they thought their future housing might be like.
3. Commitment of Resources to Housing Goals. Specific activities requiring resource allocation decisions were listed to discover the degree to which the respondents were willing

to make sacrifices in order to achieve housing-related goals. The Paynter (1975) commitment scale formed the basis for this listing of activities. Using a five-point scale ranging from strongly in favor to strongly not in favor, each respondent was asked to indicate his support or lack of support for giving up or sacrificing each of the activities in order to achieve a housing goal.

4. Housing Values. Seven housing values, derived from research by Cutler (1947) and Ayars (1973), were used in a paired-comparison test to discover the predominant housing values of the respondents.

5. Housing Satisfactions or Dissatisfactions. One open-ended question explored the respondents' sources of satisfaction with their present housing unit. In addition, statements relating to specific areas or features of the respondents' present houses were used to learn the respondents' levels of satisfaction. The respondents used a five-point scale--satisfied to dissatisfied--to rate each of 25 statements.

6. Housing Mobility. Data descriptive of both the respondents' present and immediately past housing units, reasons for mobility, and rate of mobility were sought in this section.

The instrument was administered to seven residents of High Point, North Carolina (another major city located in Guilford County) with characteristics similar to those of the population to be surveyed to test for clarity and reasonableness. Based on their

responses, several items were deleted, revised or added to the instrument to improve its organization or the understanding of its contents.

Data Collection

During early May, 1977, a mailout packet was sent to each of the previously selected 400 addresses. The packet contained: (1) an introductory letter from a sponsoring organization, the Department of Housing, Management and Family Economics, to lend legitimacy to the study; (2) a cover letter describing how the respondent was selected, the purpose of the study, an assurance of anonymity, and some general instructions; (3) an eight-page questionnaire booklet reproduced in a reduced format and printed on yellow paper; and (4) a stamped, pre-addressed return envelope (Appendix A). A commemorative stamp was used on the return envelope as an inducement to return the actual questionnaire. The return of the questionnaire was requested within two to three weeks from the mail-out date. After that date and a 27 percent return, follow-up telephone calls were initiated to stimulate the non-respondents to return the questionnaire. This effort prompted a few more to respond for a final total return of 28.5 percent. While this is a low rate of response, it is not uncommon when mail questionnaires are used. Users of such questionnaires have treated response rates well below 50 percent as acceptable (Dillman, 1978). Attempts by researchers to identify the techniques that would improve response rates for mail questionnaires have not been particularly illuminating. Kanuk and Berenson (1975) reported at the end of

a recent review of various techniques that:

> Despite the large number of research studies reporting techniques designed to improve response rates, there is no strong empirical evidence favoring any techniques other than follow-up and the use of monetary incentives. (p. 453)

Consultation with a statistician and time and cost considerations led to the decision to accept the limited number of completed questionnaires, and not to attempt any additional efforts to obtain more responses. The additional costs of another mailing, the lapse of time between the two mailings, balanced against the possible benefits of a larger number of responses was not considered worth the extra cost and effort. After deletions due to either missing data or a misunderstanding of the instructions, 112 questionnaires were deemed to be complete and usable.

Analysis of Data

Information from the questionnaires was coded and transferred to a computer for purposes of statistical analysis. The software program, Statistical Package for the Social Sciences (SPSS), was the primary source for the various analytical procedures.

First, frequencies and percentages for the demographic data, including the independent and dependent variables, were computed. Total choices for the seven housing values and rate of change among past, present, and anticipated future housing goal achievement were also calculated.

Secondly, to further explore the commitment of resources to housing goals, and to determine the existence of an underlying

structure composed of fewer variables, a factor analysis of the commitment items was conducted. A principal components analysis was performed, and the nine factors identified were rotated to a terminal solution using the Varimax rotation method. Five of the rotated factors were retained and interpreted based on minimum eigenvalue criteria (value greater than one), and reasonableness of the factor content. Variables in the factors were required to load at the 0.4 level or higher in order to be considered relevant to the determination of the factor.

Thirdly, multiple regression tests were used to examine for relationships between the dependent variables (seven housing values, rate of change in expected future housing goal achievement, and the five goal commitment factors), and the following independent variables: the respondent's age, sex, education, and occupation; family income; size of the household; composition of the household; and the housing mobility of the household. Regression analysis, by both its nature and its method, has been described as "more closely, directly, and explicitly related to one of the fundamental aims of science than most other analytic methods" (Kerlinger & Pedhazur, 1973, p. 77). That aim is to understand and explain natural phenomena. The most important uses of the technique are descriptive in nature and focus on the prediction of a dependent variable and its overall dependence on a set of independent variables. The task of multiple regression, then, is to help "explain" the variance of a dependent variable by estimating the contributions to this variance made by two or more independent variables (Kerlinger & Pedhazur, 1973). Several methods

are available that will select the optimal number of variables necessary to account for as much of the variability of the dependent variable as possible. The forward stepwise solution enters each independent variable according to how much it contributes to the explained variance of the dependent variable. In addition, at each step variables that no longer add to the explained variance of the dependent variable are removed.

In each of the regression equations performed in this study, the same set of independent variables were available for entry into the equation. The forward stepwise solution permitted the inclusion of the independent variables that best explained the variability of each of the dependent variables, thereby achieving a maximum in explanation with the minimum number of independent variables.

CHAPTER IV

RESULTS AND DISCUSSION

Results of the analytical procedures are presented in sections organized in the following manner. The first three sections present a general description of the socioeconomic and demographic characteristics of the respondents, their households and their dwelling units to provide the reader with a clear overall description of the households surveyed. These sections include the eight independent variables used for other analyses in later sections of this report. These eight independent variables include: age, sex, education, and occupation of the respondent; size and composition of the household; family income; and the housing mobility of the family.

The next three sections are devoted to each of the three dependent variables--housing values, housing goals and housing goal achievement, and willingness to commit resources to housing goals. Frequencies are reported for each as well as scores for the seven housing values and the rate of change in goal achievement. Included with the discussion of the goal commitment measure are the results of a factor analysis of the twenty-six items in the measure.

The final section describes results of multiple regression analyses used to investigate the relationship between the eight independent variables and each of the dependent variables. Although 13 separate regression analyses were performed, only the regression equations that were statistically significant are discussed in detail.

Characteristics of the Respondents

Sex, Age, and Marital Status

Of the 112 respondents, the distribution by sex was nearly equal, although somewhat more (57.8 percent) were female. It is widely assumed that single-family housing residents are primarily older families since the acquisition of such housing is usually precipitated by pressures from a growing family and made possible by the accumulation of financial resources. Two-thirds of the respondents were 36 years of age or older, well over the national median age figure of 29.4 years (U.S. Bureau of the Census, 1978 b). However the highest incidence by age was the 26-35 year old group (30.6 percent). Less than four percent of the sample population was in the youngest age category, 25 years of less.

In line with the assumption that single-family houses are primarily occupied by families of some sort, well over three-quarters (82.1 percent) of the respondents were married. Another 14 percent had been married at some point, but at the time of the survey were either widowed, separated, or divorced. Just under four percent of the respondents described themselves as single. Of those who were married, most had been married for some length of time. The average number of years married was nearly 21. While three-quarters of all the respondents had been married more than ten years, about half of them had been married longer than 20 years. All of the preceding information is presented in Table 1.

Table 1

Selected Characteristics of the Respondents

Characteristics	Percentage
Sex (n=109)*	
Female	57.8
Male	42.2
Total	100.0
Age (n=111)**	
25 Years or Less	3.6
26-35 Years	30.6
36-45 Years	18.9
46-55 Years	19.8
56-65 Years	14.5
Over Age 65	12.6
Total	100.0
Marital Status (n=112)	
Married	82.1
Single	3.6
Widowed	5.4
Divorced	2.6
Separated	6.3
Total	100.0
Years Married (n=88)***	
5 Years of Less	11.1
6-10 Years	14.4
11-15 Years	17.0
16-20 Years	9.0
21-30 Years	25.0
31 Years or More	23.5
Total	100.0
Education (n=109)*	
Less Than High School	2.8
High School Graduate	16.5
Special Training Beyond High School	11.0
Some College	23.9
College Graduate	32.0
Advanced Degree	13.8
Total	100.0

Table 1 (Continued)

Characteristic	Percentage
Occupation (n=90)****	
Professionals	3.3
Managers	11.1
Administrative/Teachers	27.8
Sales/Clerical	28.9
Skilled Laborers	11.1
Semi-Skilled Laborers	1.1
Retired/Unemployed/In School	16.7
Total	100.0

*Three--No Answers
**One--No Answer
*** 24--No Answers
****22--No Answers

Education

As a group, these single-family housing residents reported a generally high level of educational achievement. Most had at least a high school education. Over one-third (34.9 percent) had either attended college (no degree) or had obtained some special training beyond high school. Nearly half of the respondents (45.8 percent) were college graduates with some (13.8 percent) having advanced degrees. Only a very small number of the respondents, less than three percent, had not completed high school, as can be seen in Table 1.

Occupation

Occupations of the respondents were categorized according to a classification system developed by Hollingshead (1958), and modified by Godwin (1979) to include categories for the unemployed, the

retired, and the full-time student (Appendix B). Occupational positions held by the respondents reflected the high levels of education they had attained, in that over 40 percent were in what can be described as high-status occupational categories. While only a few (3.3 percent) were classified as professionals, when combined with managers and administrators/teachers, the resultant group totaled slightly less than half (42.2 percent) of the entire sample.

The category with the highest number of respondents was sales/clerical (28.9 percent), followed closely by the administrator/teacher category with 27.8 percent. These two groups when combined constituted over half of the sample population (56.7 percent). Only a small group (12.2 percent) was defined as either skilled or semi-skilled laborers. Nearly two-tenths of the respondents were either retired, unemployed, or in school. The size of this group probably reflected the fact that over half of the respondents were female, some of whom may well have been "employed" as housewives, as can be seen in Table 1.

Summary

In summarizing the personal characteristics of the respondents, as a group they represented a nearly even distribution according to sex, were primarily older (over age 36), and married (averaging nearly 21 years), with high levels of education. Employment was mostly in upper-level occupational categories. The group seemed to rather accurately reflect the commonly held image of single-family housing occupants--as primarily family groups who have been able to

acquire the capital needed, either by virtue of age or occupation, or both, to purchase and maintain such housing.

Characteristics of the Households

The following section describes in some detail some of the characteristics of the households or families that composed the sample population surveyed for this study. Characteristics include the size of the household, its composition or family life cycle stage, its total income from all family members, and its recent housing mobility. These are presented as descriptive of the entire household group, and not just of the respondents.

Size and Composition

The size of the respondent households reflected once again the primarily family nature of the sample. About 60 percent of the households were composed of three or more persons, while the average number of persons per household was 2.95, slightly above the national average of 2.86 (U.S. Bureau of the Census, 1977 c). Of the remaining households, most were composed of two persons. Only slightly more than ten percent of the entire sample was made up of single person households (Table 2).

Families were categorized by seven general stages of change that families commonly pass through over time. Appendix C describes this family composition system in more detail. As expected, most of the households were families with children. Nearly 60 percent were two-parent families with at least one child in the household; however,

Table 2

Selected Characteristics of the Households

Characteristics	Percentage
Income (n=111)*	
Less Than $5,000	2.7
$5,000 - $9,999	6.4
$10,000 - $14,999	12.6
$15,000 - $19,999	36.0
$20,000 - $24,999	18.0
$25,000 - $29,999	12.6
$30,000 or More	11.7
Total	100.0
Housing Mobility--Number of Moves In Last Five Years (n=110)**	
None	56.4
One	21.7
Two	8.2
Three	6.4
Four	6.4
Five	0.9
Total	100.0
Size (n=112)	
One Person	10.7
Two Persons	28.6
Three Persons	27.7
Four Persons	24.0
Five Persons	6.3
Six Persons	2.7
Total	100.0
Composition (n=112)	
Single	10.7
Young Couple	10.7
Expanding	21.4
Stable	13.4
Contracting	23.3
Older Couple	7.1
Single Parent	13.4
Total	100.0

Table 2 (Continued)

Characteristics	Percentage
Previous Dwelling Type (n=110)**	
Single-Family House	66.5
Apartment	24.5
Row or Townhouse	3.6
Duplex	3.6
Mobile Home	1.8
Total	100.0
Tenure of Previous Dwelling (n=110)**	
Owned	56.4
Rented	43.6
Total	100.0

*One--No Answer
**Two--No Answers

most were children over the age of six. Another 13.4 percent of the families reported the presence of a child in the household, but only one parent. Nearly 20 percent of the households were composed of just a marital pair--either a young couple who had probably not started a family or an older couple who was childless or childfree. Only a small number (10.7 percent) of the respondents were single individuals, including those who were either widowed, separated, or divorced, and who were living alone at the time of the survey.

It is hardly surprising that most of the households surveyed in this study of owned, single-family dwelling units were families with children. As Morris and Winter (1978) have asserted, "cultural norms clearly prescribe ownership of a single-family dwelling for families

with children, whether there are one or two parents present" (p. 119). The strength to the norm is of such intensity that it appears to influence families without children, too, as happened among this particular group of respondents.

Family Income

Family income has long been recognized as a major resource in determining the kind and quality of housing a family may have. Incomes of American families vary widely and are influenced by family composition, race, sex, education, and occupation of the household head, the number of earners, and the geographic location of the household, among other things. In view of some of the previously cited characteristics of the sample population, most of which were indicative of high incomes, it could reasonably be expected that high income levels would also be represented among the respondents. This expectation was indeed borne out as the figures in Table 2 indicate.

Income figures can be among the most difficult to obtain, particularly specific figures due to the sensitive nature of such information. In this study income ranges were used, thereby sacrificing specificity in order to obtain needed information. Ninety-nine percent of the sample households reported an income figure. However, the use of income ranges has its limitations--comparisons with national or regional income figures can be difficult if not impossible to make. The reported median family income for white families living in the South was $15,521 in 1977, the year this survey was conducted (U.S. Bureau of the Census, 1978b). In this particular

sample group, only 22 percent of the families reported incomes of less than $15,000 per year. Over three-quarters of the respondent households indicated an income of $15,000 or more per year, well above the median Southern family income figures cited previously. Nearly one-quarter (24.3 percent) specified incomes of $25,000 or more per year.

Housing Mobility

Mobility, or the movement of people from one place to another, has occurred at relatively high rates in the United States as families have changed their locations to meet changing family needs. The actual rate of mobility is about 20 percent per year (Lindamood & Hanna, 1979). Stated somewhat differently, the average American moves once every five years. In addition, most moves are not over long distances, but are made within the same county (Lee & Bouvier, 1973). Such movement is often referred to as residential mobility.

The population sampled in this study differed substantially from the national average in that the sample group was less mobile. Less than half (43.6 percent) had relocated their residence during the previous five-year period. However, of the families who had moved, about the same proportion had moved either only one time or more than one time (Table 2). The survey results also revealed that most (82 percent) of the moves had taken place within the confines of the city of Greensboro.

After a review of residential mobility studies, Morris and Winter (1978) stated that dissatisfaction with the dwelling unit was

a key element in the motivation to move. They reported that families who engage in residential mobility (within county moves) were likely to be those who had too little space, those who had rented, and those who did not live in a single-family house. Among the sample respondents, both movers and non-movers, slightly over one-third reported that their former home was not a single-family house (Table 2). Nearly half (43.6 percent) revealed that they had not owned, but had rented their previous dwelling unit.

Summary

In general, the respondent households could be characterized as families, small in size, with one or more children present. Families with older children appeared to be the most prevalent family type. Family income was relatively high, in all likelihood reflecting the high educational and occupational levels of the respondents. These families were reasonably stable in that many had not moved frequently, if at all, during the previous five-year period. All owned their home, and most owned a single-family house before moving to their present dwelling unit.

Characteristics of the Respondents' Dwelling Units

The tables and discussion presented in the following section describe some of the housing characteristics of the sample respondents. These characteristics include the size of the houses, encompassing the number of rooms and bedrooms, amount of square footage,

and number of persons per room, and the respondents' perception of the present market value of the house.

House Size

Not surprisingly, particularly in view of the high income levels of the respondents, most (79.6 percent) of the houses were of moderate or large size (Table 3). Exactly half of the houses had six or seven rooms, while nearly a third (29.6 percent) were larger with eight or more rooms. Only 20 percent were small in size, with five or fewer rooms.

The same general trend toward largeness held true when number of bedrooms was examined (Table 3). Slightly more than half of the houses had three bedrooms; nearly a third had four or five. Less than 20 percent (17.6 percent) contained two or fewer bedrooms.

As for the square footage of the houses, well over a third (38.8 percent) of the respondents reported their house to be larger than 1,500 square feet, but no more than 2,00 square feet, usually considered a moderately sized house (Table 3). Nearly another third (28.7 percent) lived in a larger house of more than 2,000 square feet. Slightly less than a third (32.5 percent) reported their house to be no more than 1,500 square feet, or of small to moderately small proportions. Very few of the dwellings could be described as crowded. Less than five percent had more than one person per room, a figure that has long been used by the Census Bureau to measure the presence of crowding (Table 3).

Table 3

Characteristics of Respondents' Dwelling Units

Characteristics	Percentage
Number of Rooms (n=108)*	
Four	5.6
Five	14.8
Six	25.0
Seven	25.0
Eight	16.7
Nine or More	12.9
Total	100.0
Number of Bedrooms (n=108)*	
Two or Less	17.6
Three	51.9
Four	27.8
Five	2.7
Total	100.0
Square Footage (n=80)**	
1,000 or Less	3.7
1,001 - 1,500	28.8
1,501 - 2,000	38.8
2,001 - 3,000	26.2
3,001 or More	2.5
Total	100.0
Persons Per Room (n=112)	
One or Less	95.5
1.0 - 1.5	0.9
1.5 or More	3.6
Total	100.0
Value of the House (n=108)*	
$20,000 or Less	8.3
$20,000-$29,999	21.3
$30,000-$39,999	25.0
$40,000-$44,999	11.1
$45,000-$49,999	9.3
$50,000-$59,999	11.1

Table 3 (Continued)

Characteristics	Percentage
Value of the House (Continued)	
$60,000-$74,999	6.5
$75,000 or More	7.4
Total	100.0

*Four--No Answers
**32--No Answers

Value of the House

The market value of a house has been described as perhaps the best approximation of the overall quality of a family's housing situation (Morris & Winter, 1978). The survey respondents were asked to "guesstimate" the market value of their homes, or what they thought it might bring if placed on the market. As with the family income data, this question used value ranges to represent the actual house values, thereby losing some specificity in order to gain somewhat sensitive information. Interestingly, while the majority of the families surveyed earned far more than the median income figure for their region of the country, nearly two-thirds (65.7 percent) of the respondents perceived the value of their homes to be less than the median cost of a new house in that region. At the time of this survey, the median cost of a new house in the Southern region was posted at $44,100 (U.S. Bureau of the Census, 1978b). Only a third valued their home at more than this median cost figure for a new

house. A very small proportion, less than ten percent, of the respondents valued their home at either the lower (under $20,000) or upper (above $75,000) end of the range (Table 3).

Several factors may have been at work to influence the sample population to undervalue their homes to such a degree, if indeed they did so. Since the average selling price of a new house in Greensboro was much lower, only $40,698, compared to the average house price in the South of $48,100 at the time of the study, perhaps the values of the houses as perceived by the respondents reflected that fact also (U.S. Bureau of the Census, 1979). Additionally, many of the families may have purchased an existing home rather than a new one, and existing houses are generally priced lower than new houses. The low rate of mobility among the respondents could indicate that some time may have elapsed since the home was originally purchased, and the family may not have been aware of just how greatly their home had appreciated in value during the intervening years.

Summary

In summary, nearly all the houses were moderate to large in size. Most had six rooms or more, three or more bedrooms, and totaled 1,500 square feet in size. The respondents' perceptions of their homes' market value seemed low, particularly when compared to the median cost of a new house sold in the Southern region during the survey year, probably due to low local house prices. Most of the respondents put the value of their homes at less than $45,000.

Housing Values

Housing in its function as a living environment for families enables the family to meet basic human needs for shelter, protection, privacy, and security, among other things. But it is also symbolic of the things that are valued or deemed important by the family. Each family reflects its basic values in its selection of housing, in its choice of a particular house from among many other possible choices. Moore (1972) described the values associated with a household's personal lifestyle as conditioners of housing adjustment behavior in that values undergird a family's satisfaction or lack of satisfaction with their particular housing unit.

It is for reasons such as these that this present study undertook to investigate the values of families who have chosen a single-family dwelling unit from among other available housing types. Specific values used here were adapted from those identified in other earlier studies of families' housing values (Ayars, 1974; Cutler, 1947; Montgomery, 1959). The seven values employed had the potential of being selected by each respondent from zero to six different times. Table 4 reports the total number of times each value was selected and the relative ranking of each value. The value chosen most frequently was comfort and convenience, while location was the second most frequent selection. The least important value appeared to be economy. Two other values, aesthetic satisfaction and safety, nearly tied for the second least important value. These results are nearly identical to those reported by a study of apartment and

Table 4

Frequency of Selection of Housing Values

Values	Frequency of Selection							Total Times Selected
	0	1	2	3	4	5	6	
Comfortable and Convenient	10	5	10	17	23	25	22	425
Location	13	8	8	16	32	17	18	393
Privacy	15	13	19	19	18	16	12	332
Friends and Visitors	19	11	18	17	22	19	6	317
Aesthetic Satisfaction	26	17	25	19	11	9	5	243
Safety	23	24	21	20	11	8	5	240
Not Expensive	45	16	16	14	10	7	4	189

condominium residents (Humphries, 1976). The only difference between the two studies was that the apartment residents valued location more highly than comfort and convenience, the highest ranking value for the single-family housing residents and the condominium owners. Apparently, different housing types are capable of fulfilling the same kinds of housing values, just as one feature of a housing unit may satisfy many different values held by families (Lindamood & Hanna, 1979). Also, it may be inadvisable to try to interpret a particular family's values from its housing unit alone.

Housing Goals and Housing Goal Achievement

Several open-ended questions were used to investigate what the respondents liked best about their housing situation, what things they would like to have in a future house, and what things seemed to be preventing them from obtaining the living situation they would like. Respondents were encouraged to give as many as three different answers to each of the questions and to rank the answers in order of their importance. Responses were categorized, and a total score for each category was calculated based on the number of times each category was selected and the weights (one to three) assigned to it by the respondents.

Best Liked Characteristics of Present House

Housing, while often conceived of as just a single item purchased by the consumer, has been more accurately viewed as a bundle of services. This bundle has been described as composed of: the

physical unit; the neighborhood environment; the types, amounts, and quality of the public services and utilities; location or proximity to various places; and as security or an investment (U.S. Conference of Mayors, 1978). The catetories used to classify the respondents' answers to this question seemed to fit into the framework offered by this definition of housing. Responses that referred to characteristics of the location turned out to be the highest scoring component of housing (Table 5). Two other components, aspects of the physical housing unit and characteristics of the neighboring environment, were nearly identical in rank. These results are not unlike those found for apartment and condominium residents by Humphries (1976). Both groups ranked location as the best liked characteristic, while features of the physical housing unit ranked second

Characteristics Desired in Future Home

Most answers given to the question of what the respondents would like a future home to provide for them referred to characteristics of the housing unit itself (Table 6). Convenience, comfort or maintainability of the dwelling received the highest score, followed by additional or larger rooms and more storage space. Only two of the remaining categories did not refer to some physical component or feature of the housing unit. And these two, location and characteristics of the neighboring environment, were the lowest scoring of all the categories. Once again the scores given these categories by these single-family housing residents did not differ substantially from those given by apartment and condominium dwellers in response to

Table 5

Best Liked Characteristics of Present House

Characteristics	Score
Characteristics of the Location of the House-- *Distance to schools (147), distance to work, medical facilities, shopping, community facilities, church.	199
Aspects Related to the Physical Housing Unit-- *Size of the house (33), arrangement of rooms, appearance, privacy, storage space, safety, the unit itself.	168
Characteristics of the Neighboring Environment-- *Neighbors or neighborhood (113), quiet, condition of neighboring housing, community organizations, natural amenities.	163
Investment or Security Aspects of the House-- *Ownership (24), market value, amount of payments, affordability, tax advantage.	40
Types, Amount, Quality of Public Services-- *Local schools (16), community facilities, costs of utilities.	19
Other	11
	600

*Highest scoring single item in category and its score.

Note. Up to three responses per respondent were possible. Range of scores: 0 to 672.

Table 6

Characteristics Desired in Future House

Characteristics	Score
Convenience, Comfort or Maintainability Features-- *Newer or larger house, better layout (115), one floor, smaller, better heating, city water, privacy, good appearance, lower maintenance, more energy efficient.	235
Additional or Larger Rooms-- *Living area, recreation room, den, study (38), bedrooms, kitchen, dining, bathrooms.	126
Additional Storage-- Closets, storage space, basement, garage, workshop.	83
Yard and Landscaping Features-- *Larger or smaller yard, more space between or around houses (37), more trees, fenced-in yard, play area, swimming pool.	56
Location-- Proximity to clubs, better schools, in the country, on less traveled street.	25
Neighboring Environment-- Friendly neighbors, similar in status or age.	18
Other	7
	550

*Highest scoring single item in category and its score.

Note. Up to three responses per respondent were possible
Range of scores: 0 to 672.

a similar question (Humphries, 1976). Both groups placed primary emphasis on spatial design and construction features of the physical dwelling unit. As with the single-family residents, most of the answers given seemed to relate to physical characteristics of the housing unit. It would seem that while locational aspects were highly valued in their present housing situation, physical features of the housing unit apparently figured more prominantly when the respondents thought about their future housing situation.

Constraints to Achieving Desired Housing

When asked what appeared to be some of the things preventing achievement of the living situation they would like, most respondents answered in terms of economic constraints (Table 7). Psychological constraints, such as being too old or lacking time, placed a far distant second. Other limiting factors identified included social, environmental, and physical characteristics. The naming of economic constraints as the most significant limiting factor for these respondents paralleled the findings for apartment and condominium residents identified by Humphries (1976). It should be noted that it was apparently easier for these respondents to identify those things they liked about their present housing or wanted in some future housing than it was to articulate what might be preventing them from obtaining their desired living situation. Significantly fewer respondents answered the question about limiting factors than did the questions about best liked characteristics or desired characteristics in a future home.

Table 7

Constraints to Achieving Desired Housing

Constraints	Score
Economic Constraints-- *Economics (148), lack of money, high cost of living and housing, high interest rates, job related.	206
No Constraints.	66
Psychological Constraints-- *Age (26), lack of time, limit knowledge.	49
Social Constraints-- *Friends and neighbors (10), marital status, child related.	28
Environmental Constraints-- *Unavailability of housing or land (17), proximity to facilities, or services.	22
Physical Constraints-- *Physical disability or handicap (11), poor health.	13
Other	5
	389

*Highest scoring single item in category and its score.

Note. Up to three responses per respondent were possible. Range of scores: 0 to 672.

Housing Goal Achievement

An investigation of housing goals would not be complete without ascertaining whether or to what extent they had been achieved over time. Using an achievement ladder with ten rungs or levels representing a continuum, with the bottom rung representing the worst possible type of housing and the top rung representing the best possible type of housing situation that the family could obtain, respondents were asked to rank the position they would assign their past, present, and expected future housing situations five years hence. Scores for present level of achievement ranged from 4.0 to 10.0 with a median of 7.7 and a mean of 7.5 (Table 8). Over 86 percent of the respondents perceived their present housing to be at level six or above. Very few considered their present home to be at a low level. For their past level of housing achievement, the highest frequencies occurred for levels three to five (59 percent). It was clearly apparent that the respondents perceived a significant upward shift had occurred in their level of housing between their former and present house. Scores for the respondents' expected future housing situation ranged from four to ten with a median of 8.4 and a mean of 8.1. Most of the families (83 percent) expected to acquire housing at level seven or above with the highest frequencies occurring at level eight and above. Clearly, the respondents expected decided improvements in their future housing situation to take place also.

When the difference between the level of past and present housing was examined, 71 percent of the families had perceived an

Table 8

Residents' Perceived Levels of Housing Achievement

(Percentage Distributions)

Rung on Ladder Or Level	Present (n=106)	Past (Five Years Ago) (n=92)	Future (Five Years From Now) (n=105)
1 (Lowest)	0	2.2	0
2	0	2.2	0
3	0	15.3	0
4	3.8	13.0	2.9
5	9.4	30.4	6.7
6	15.1	8.7	7.6
7	16.0	8.7	15.2
8	27.4	6.5	20.0
9	15.1	6.5	23.8
10 (Highest)	13.2	6.5	23.8
Totals	100.0	100.0	100.0
Mean	7.52	5.46	8.09
Standard Deviation	1.64	2.20	1.65
Median	7.71	5.07	8.38

improvement in their present housing situation from their previous one of from one to four levels (Table 9). Slightly more than a tenth of the families perceived that their present housing was worse than their former housing situation. The difference between the respondents' perceptions of their present and expected future levels of housing achievement represented less of a change than that experienced between their past and present housing. Eighty-seven percent expected to move up one or two levels. Over half (53.4 percent) did not perceive that a change in their housing would occur within the next five years. Very few expected either a worsening or a dramatic improvement in their near-future housing. It was recognized that the one-to-ten scale had an upper bound, therefore limiting the potential movement for the respondents into the higher levels. When the difference between past and present, and present and future housing levels was examined, only a small number (13 percent) of the subjects did not have the ability to move to a higher level since they were already at the highest one. The remaining 87 percent of the subjects could have moved at least one level if not more.

The rate of future goal achievement, the difference between the families' present and anticipated future levels of housing will be used in a later section of this report as a dependent variable. As such, it will represent what the respondents reasonably expect for their more immediate housing future, in short, their housing aspirations.

When asked to put into concrete terms what their future housing might be like, most of those responding followed mainstream America.

Table 9

Rates of Housing Goal Achievement

(Percentage Distributions)

Rate of Achievement	Past to Present (n=90)	Present to Future (n=103)
-6	1.1	0
-5	0	1.0
-4	0	1.0
-3	1.1	1.0
-2	2.2	1.0
-1	6.7	0
0	8.9	53.4
1	16.7	23.3
2	18.9	13.6
3	22.2	2.7
4	13.4	1.0
5	4.4	1.0
6	2.2	1.0
7	2.2	0

The predominant image of housing in America is represented by the single-family detached dwelling in at least a suburban if not a rural setting. Such was the dream of these survey respondents, too, for at least the near future. Very few indicated any expectation of acquiring another form of housing, either a condominium, an apartment, or a

mobile home. Even though only slightly more than half of the respondents provided an answer to this question, those who did not respond were probably just as likely to report the same vision of their future housing as those who did respond. There is also little doubt that the respondents' images of their future housing were heavily influenced by their present housing situation, indicative perhaps that for this group, single-family housing had more positive than negative aspects.

Willingness to Allocate Resources to Housing Goals

Housing is a necessary, but expensive, product, requiring a major proportion of a family's budget. As such, it is one area in which families are likely to devote considerable time, thought, and effort to planning for its acquisition and continued provision. But just what are families willing to do in order to achieve their housing goals? How much of their financial resources are they willing to commit to housing? What other goals will be compromised or abandoned if priority were given to housing goals rather than other family goals?

A portion of the survey instrument for this study dealt with such issues. The respondents were asked what were some of the things they would be willing to give up, either wholly or in part, in order to achieve their housing goals. A five-point scale indicating degree of support to various statements regarding limitations on family resources was utilized. The five-point scale was later collapsed into three categories for analytical purposes. Table 10 summarizes the responses and ranks them according to frequency of selection.

Table 10

Willingness to Reallocate Financial Resources Toward

The Achievement of Housing Goals

Resource Allocation Statements	Degree of Willingness				
	Favor (%)	Uncertain (%)	Disfavor (%)	(n)	Rank
Economize on Utilities	82.1	6.3	11.6	95	1
Limit Number of Children in Family	78.0	4.4	17.6	91	2
Grow Food at Home if Space Available	72.3	6.9	20.8	101	3
Limit Telephone Calls	67.0	5.0	28.0	100	4
Encourage All Family Members to Work and Contribute to Housing Expenses	63.4	9.7	26.9	93	5
Limit Meals Eaten Out	59.8	4.9	35.3	102	6
Spend Less on Transportation	57.8	12.7	29.5	102	7
Postpone Major Purchases (Car, Appliance, etc.)	53.0	21.0	26.0	100	8
Limit Expenses for Entertaining and Recreation at Home	52.6	12.4	35.0	97	9
Limit Expenses for Entertaining and Recreation Outside the Home	51.0	11.7	37.3	102	10
Move From Present Community	47.5	16.9	35.6	101	11
Spend Less on Clothes	45.5	16.9	37.6	101	12
Eliminate Pets	38.2	15.7	46.1	102	13
Limit Money Spent on Food Purchases	35.3	15.7	49.0	102	14
Change Jobs	33.0	17.5	49.5	97	15
Limit Gifts to Others	31.1	14.6	54.4	103	16
Limit Contributions to Charities or Religious Organizations	19.4	16.5	64.1	103	17
Limit Vacation Trips	18.6	13.7	67.7	102	18
Spend Less for Special Training or Further Education for Adults in Family	12.9	17.8	69.3	101	19
Reduce Savings	10.9	9.9	79.2	101	20
Reduce Amount of Life Insurance	8.9	5.9	85.2	101	21
Limit Regular Visits to a Dentist	6.9	5.0	88.1	101	22
Spend Less for Education for Children	5.9	5.0	89.1	101	23
Take on More Than One Job per Person	4.0	12.9	83.1	101	24
Limit Visits to a Doctor When Ill	3.9	3.9	92.2	102	25
Reduce or Cut Out Hospitalization Insurance	2.0	4.0	94.0	101	26

A majority of the respondent families were willing to accept or support limitations on family resources to achieve housing goals for only ten of the 26 items. More than three-quarters were willing to economize on utilities or limit the number of children in the family. Between a half and three-quarters of the respondents supported such activities as growing food at home, limiting telephone calls, encouraging all family members to contribute to housing expenses, and placing limits on meals eaten out, transportation costs, major purchases, and entertainment needs.

Conversely, for seven of the 26 commitment items, over three-quarters of the respondents were not at all willing to limit the expenditure of financial resources. Those activities included limiting savings, life and hospitalization insurance, visits to the doctor or dentist, the children's education, and taking on more than one job per person.

In addition to the 26 activities included on the questionnaire, the respondents were asked to cite other things they would be in favor of doing in order to achieve housing goals. Some of the activities reported included building one's own house, making one's own home repairs, sharing a house with others, increasing the energy efficiency of one's house, and seeking financial counseling assistance with preparation of a budget plan.

In a similar study of apartment and condominium residents, Humphries (1976) found similar rankings of the commitment statements to the results reported here for single-family housing residents. All three groups ranked economizing on utility expenditures as the

activity they were most in favor of curtailing. Generally speaking, the same ten top-ranking statements were reported for all three groups, but in different rank orders. The only exception was that the condominium and single-family housing residents' groups ranked encouraging all family members to work and contribute toward housing expenditures in the top ten group, while the apartment dwellers did not. All three groups were also in agreement as to those activities they would not favor limiting. Economizing on medical and dental visits and insurance, either life or hospitalization, were the areas least likely to be favored by these families. It would appear that regardless of housing type, whether apartment, condominium, or single-family, these families were likely to favor curtailing expenditures in similar areas, and unlikely to favor limiting resources budgeted for other nearly identical areas.

Factor Analysis of the Resource Commitment Items

Close scrutiny of the substantive content of the 26 activities on the commitment scale revealed that particular characteristics could be grouped according to similarities in their content. For example, food purchases and meals eaten away from home would seem to be related to basic needs or more specifically, food needs. Charitable contributions and gifts to others are both non-essential discretionary budgetary expenditures.

Since this review revealed the potential for the grouping or clustering of the various items or activities, further statistical analyses to uncover the actual structure of these groups, according

to the pattern of responses, appeared to be appropriate. Clusters of characteristics isolated could well constitute some of the principal or underlying dimensions of families' willingness to allocate more of their resources to achieving housing goals, while limiting resources allocated to other goals.

Potential relationships among the 26 activities could best be determined through the statistical technique of factor analysis. The most distinctive characteristic of factor analysis is its capability of reducing a large number of variables into a much smaller, often more manageable set of variables that may be viewed as source variables, usually referred to as factors, accounting for the interrelations among the entire set of variables. Factor analysis explains the variables by showing the basic structure of the response patterns of the subjects, their similarities, and their differences. The factors identified by factor analysis can be used as variables in multiple regression equations through the use of factor scores. It is with that end-use in mind that the factor analysis of the resource commitment items was undertaken.

As a prior step to factor analysis, the raw scores of the commitment scale items were transformed into standardized units, or z-scores. Each variable was thus assigned a mean of zero and a standard deviation not to exceed one--thus, each variable had only one unit of variability. Subjects' scores on each variable can then be expressed in terms of its deviation from the mean.

The first step in the actual factor analysis involved the computation of a correlation matrix for the 26 items or variables. The

correlations computed between each pair of variables produced a 26 x 26 matrix of correlation coefficients.

The second step in factor analysis involved the construction of a set of initial factors based on the correlations exhibited in the data. This step usually determines the minimum number of factors that can adequately account for the correlations found in the matrix. Principal component analysis was used to extract this initial set of factors. In this approach, the solution itself is the best linear combination of the variables that accounts for more of the variance in the data as a whole than any other such combination of variables. The first principal component (or factor) extracted would be the best linear combination of the original variables that would account for the greatest amount of variance in the data. The second factor would be the second best linear combination of variables, accounting for the greatest amount of variance remaining that was unaccounted for the by the first factor. Subsequent factors were extracted in a similar fashion until all the variance in the data was exhausted or when all that remained of the variance could be attributed to sampling error.

Although explaining decreasing amounts of variability in the data, the initial set of factors extracted defined only the most general patterns of relationships in the data. The final step in factor analysis involved the rotation of this initial or unrotated set of factors to a simple structure solution or terminal solution. Through this rotation, the general factors involving all the variables were shifted to group factors involving distinct sets or

clusters of variables. Conceptually, the rotated factors are simpler and more easily interpreted than unrotated factors.

In this study, the Varimax method of rotation, available with the computer program, SPSS Statistical Package for the Social Sciences, was used to rotate the initial factors. The Varimax method emphasized the simplification of the columns of the rotated factor matrix by maximizing the variance of the squared loadings (correlation coefficients) in each column. Thus, there should be little question as to whether a variable was to be included in a particular factor. When a variable is not related to a particular factor, its loading or correlation coefficient on the factor will be close to zero. But when the variable is involved in a factor, its loading will be close to 1.0. Once the rotated solution was obtained, the actual number of factors to extract and retain was determined.

Several "rules-of-thumb" are available to help in this process of separating factors of importance from so-called trivial factors. Trivial factors explain little additional amounts of variance, and may be due entirely to random error. One of the most popular rules for addressing the number of factors question is to retain factors with an eigenvalue greater than one. Since eigenvalues describe the total amount of variance explained by each of the factors extracted, each factor retained must account for an amount of variance at least as great as any one variable would supply. This criterion establishes a minimum level for the number of factors to be retained. That is, the number of factors responsible for the correlation matrix will always be equal to or greater than the number specified by this rule.

In this study, five of the nine initial factors extracted by the factor analysis procedure had an eigenvalue greater than one. The proportion of the total variability in the data explained by the five factors was 78 percent; thus, slightly more than 20 percent of the variability of all the 26 commitment items was lost in the process of recombining or reducing the 26 variables into the five factors. Stronger correlations among the 26 variables would have increased the amount of total variability retained by the extracted factors.

Each of the five factors isolated were related to each of the 26 commitment variables, but in greater or lesser degrees. The magnitude of the relationship between the variables and the factor was assessed by the loading (or correlation coefficient) of the variables on the factor. A minimum loading of 0.4 was accepted as a lower-bound since a variable with that loading on a factor (when squared and multiplied by 100) would only have 16 percent of its variability explained by the factor. (Between five and ten percent of the variability of a variable can often be explained by mere chance.) Using these criteria, Factor I was composed of eight of the 26 commitment items; Factor II, of two items; Factor III, of three items; and Factors IV and V, of two items each. The total number of items that composed the five factors equaled 17. Therefore, nine of the original 26 items were not included in the five factors.

Among the primary benefits of the factor analysis statistical technique was its capability of reducing a large set of variables into a smaller, more manageable set, ideally without much loss of

information. In this instance, the use of the technique proved to be both appropriate and fairly successful. Twenty-six variables were reduced to a smaller set of 17, while retaining nearly 80 percent of the information provided by the original larger set of variables.

The results of factor analysis in this study improved on those obtained by the author of the original goal commitment measure, M. Paynter (1975). She was able to reduce 35 scale items to five factors that retained 30 of the items. Those five factors together were able to account for only 45 percent of the total variability in the original set of variables.

The following paragraphs describe the factor content or the variables loading on the factor above the 0.4 level. Names for each of the factors are also given based on the interpretation of the factor's content and its psychological meaningfulness.

Factor I. Basic Living and Personal Expenses

Table 11 brought together eight items related to the allocation of family resources in the areas of food, clothing, entertainment, transportation, utilities, and children. The underlying theme of this factor appeared to be the willingness to limit expenditures in areas commonly thought of as basic living or personal costs for the family. Apparently, one component of families' commitment to housing goals involved their willingness to sacrifice in the areas of basic living and personal activities.

Table 11

Groupings Resulting From Factor Analysis of Resource Commitment Statements

Item/Variable	Loadings
Factor I. Basic Living and Personal Expenses	
Limit meals eaten away from home.	.821
Spend less on clothes.	.675
Limit expenses for entertaining and recreation outside the home.	.665
Spend less on transportation.	.646
Limit money spent on food purchases.	.610
Limit expenses for entertaining and recreation at home.	.599
Economize on utilities.	.590
Limit number of children in family.	.413
Factor II. Medical Expenses	
Limit regular dental visits.	.882
Limit medical visits when ill.	.810
Factor III. Contributions and Health Protection Expenses	
Limit gifts to others.	.641
Limit contributions to charities or religious organizations	.619
Reduce or cut out hospitalization insurance	.532
Factor IV. Educational Expenses	
Spend less for special training or further education for adults in family.	.792
Spend less for education for children.	.776
Factor V. Consumer Purchase and Communication Expenses	
Postpone major purchase (car, appliance, etc.).	.822
Limit telephone calls.	.469

Factor II. Medical Expenses

The two items in this factor (Table 11) represented costs of medical services for the family. The implication was that families would be willing to accept compromises in the area of medical care in order to achieve their housing goals.

Factor III. Contributions and Health Protection Expenses

This factor was composed of three items concerning gifts, charitable donations, and hospitalization insurance (Table 11). If a family were willing to make sacrifices in this area, they would apparently regard their housing goals as more important than contributions or health protection.

Factor IV. Educational Expenses

The contents of this factor included two items concerning both adults' and children's educational costs (Table 11). These items suggested that limitations on education might be acceptable to families in order for them to reach a desired housing goal.

Factor V. Consumer Purchase and Communication Expenses

The two items that composed this factor represented the area of major consumer purchases, as well as the area of expenditures for telephone calls. From these statements it would appear that these areas were likely to be assigned a lower priority than the achievement of a housing goal.

Summary of Factor Analysis of Resource Commitment Statements

The results of this factor analytical study of the 26 commitment items revealed that the variables did indeed cluster, as hypothesized earlier. The information provided by the five factors could well be used in place of the original 26 items without too much loss of information. The factor analysis appeared to successfully identify the principal components or source variables of commitment of resources to housing goals for this particular study group. The major factors or components, thus revealed, were used as dependent variables in multiple regression equations in a later section of this report. The multiple regression technique was used to examine the relationship between independent and dependent variables and to test to see how well the independent variables can predict a respondent's score on a dependent variable.

Multiple Regression Analyses

Stepwise multiple regression analyses were performed in this study to examine the relationships between the independent variables: (1) the respondent's age, (3) sex, (3) education, and (4) occupation, (5) the household's size, (6) household composition, (7) family income, and (8) the housing mobility of the family; and the dependent variables: the seven housing values, rate of change for expected future housing goal achievement, and the five goal commitment factors. Through the multiple regression technique, it was possible to

obtain a prediction equation that indicates how scores on the independent variables can be weighted and summed to yield the best possible prediction of the independent variable under examination. The technique also calculated statistics that indicate how accurate the prediction equation was, and how much of the variation in the dependent variable was accounted for by the joint influences of the set of independent variables. With the use of the forward stepwise solution, it was possible to "simplify" the prediction equation by the removal of any independent variables that did not add to the predictive accuracy of the equation, once certain of the other independent variables were added (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

The evaluation and interpretation of each regression equation was based on the following criteria, listed in order according to their relative importance to the process:

1. The F value for the overall equation, which revealed whether the regression of the dependent variable on the independent variables was statistically significant, thereby lending support to the claim that a relationship did exist between the two and was not due solely to chance.
2. The F value for the regression coefficients (b) of each separate independent variable which indicated whether the relationship between it and the dependent variable was statistically significant or due to chance. The regression coefficient, or b value, indicated the direction and magnitude of the relationship between each single independent variable and the dependent variable.

3. The R^2 (multiple correlation coefficient squared) for the equation described the proportion of the variability of the dependent variable explained by the independent variables used in the equation. The adjusted R^2 reflects the amount of variability explained adjusted for the changing number of independent variables entered at each step of the equation.

4. The standard error of the estimate (SEE) reported the accuracy of the prediction equation in terms of the absolute amounts of explained or unexplained variability. It enabled an estimation to be made about the proportion of cases that will fall between $\pm$ 1 SEE units from the predicted values, $\pm$ 2 SEE's, and so on. It was a measure of the variability of the error. If it was relatively large when compared to the standard deviation of the dependent variable, then the prediction value of the equation was poor; thus, the smaller the error, the better the prediction.

Thirteen separate regression analyses were performed using the eight selected independent variables and the dependent variables: the seven housing values, rate of change in expected future housing goal achievement, and the five goal commitment factors. While the proportions of explained variability (R^2 adj.) were low (ranging from five percent to 16 percent), four of the dependent variables had a significant overall F value. Two of the four were significant at the .01 level, while the other two were significant at the .05 level.

Regression Analysis of Housing Values

For two of the seven housing values, inexpensive and friends and neighbors, a significant regression equation was produced which was indicative of a relationship between these two values and the set of independent variables. The remaining five housing values were not significantly related to this particular set of independent variables. In a similar study of the housing values of condominium residents by Humphries (1976), none of the housing values studied had a significant relationship to any of the independent variables, which were nearly identical to those used in this present study.

Value of Inexpensive

For the housing value identified as economy, the adjusted R^2 was .16 ($F = 4.04$, $p < .01$); therefore, 16 percent of its variability was explained by a set of the independent variables (Table 12). Of that set, only housing mobility and family income were statistically significant at the .01 level, while sex of the respondent was significant at the .05 level. In all three instances, the relationship with the housing value economy was a negative one. These results can be interpreted as meaning that the fewer times a respondent had moved, the more times he selected the value of inexpensive over the other values. By the same token, the lower the family's income, the more times the value of inexpensive was selected. Female respondents chose this value less often than did male respondents.

Housing mobility has often been associated with an upward improvement in a family's status position and income level;

Table 12

Results of Multiple Regression Analysis For Economy (Housing Value)

Variable	b	Beta	Standard Error of b	F
Number of Moves	-.56492	-.38009	.17930	9.927**
Family Income	-.000076	-.28401	.00003	7.469**
Sex of Respondent				
Female (Male Omitted)	-.85307	-.22969	.38935	4.800*
Age of Respondent	-.01721	-.13234	.01565	1.209
Composition of Household				
Singles, Separated, Divorced, Widowed (Couples With Children Omitted)	.51073	.06544	.80555	0.402
Constant	4.88276			

R^2 = .208

R^2 adj. = .156

F = 4.0373**

Standard Error = 1.716

(n = 83)

**Significant at .01 level.

*Significant at .05 level.

Note. Variables not entered into equation: education and occupation of the respondent, and size of household.

therefore, it seems natural to assume that those who have moved infrequently may not have experienced such benefits to the same degree as those who have moved more frequently. Additionally, it would seem reasonable to expect families with low incomes or limited resources to be deeply concerned about costs, and the most efficient and effective ways to allocate their limited resources. Thus, it is understandable why infrequent movers and families with low incomes would rank highly a housing value that stressed economy. As to why females were less likely to highly rank this value is less clear. Traditionally, it has been the man of the house who has controlled the checkbook and has been the one most aware of the family's financial situation. Therefore, it could be asserted that he would be the one most concerned about efficient resource management. On the other hand, perhaps females were less concerned about economy, because they were more concerned about other values that contributed more toward making a house a home--things that cost money instead of save money.

A look at the Beta weights revealed that housing mobility was the most important variable related to a respondent's valuing economy in housing. The two other statistically significant variables, family income and sex of the respondent, were each decreasingly less important than housing mobility in determining how many times a respondent was likely to select the value of economy over any of the other values.

Since each value had the potential to be selected by each respondent from zero to six times, an error of $\pm$ 1.7 would appear to mean that the predictive capability of this regression equation might

be only fairly successful if applied to another sample of similar respondents. However, the standard error of the estimate was smaller than the standard deviation (1.87) for this value; therefore, the range of predicted scores would fall within the range of scores that actually occurred. Since the smaller the error term is relative to the standard deviation, the better the prediction, this equation would be fairly successful if applied to another sample of similar respondents.

Value of Friends and Neighbors

The second housing value that yielded a statistically significant regression equation ($F = 5.4$, $p < .05$) was friends and neighbors (Table 13). The adjusted R^2 of .078 indicated that after adjusting for the number of independent variables entered into the equation, nearly eight percent of the variability of the value was explained. The independent variables which were statistically significant in the equation were sex of the respondent and the respondent's occupation. Sex of the respondent was positively related to the frequency of choosing friends and neighbors, as was occupation. This indicated females were likely to select friends and neighbors as a housing value more frequently than males, while respondents in occupational categories at the upper end of the occupational scale were more likely to rank this value highly than were those at the lower end. The female respondents, even though many worked, were probably much more likely to spend time at home with the increased opportunities afforded there for interaction with friends and neighbors than were

Table 13

Results of Multiple Regression Analysis For Friends and Neighbors (Housing Value)

Variable	b	Beta	Standard Error of b	F
Sex of Respondent				
Female (Male Omitted)	.93078	.25255	.40058	5.399*
Occupation of Respondent	.25341	.25313	.11870	4.558*
Education of Respondent	.08877	.12243	.08339	1.133
Family Income	.000042	.15820	.00003	1.790
Number of Moves	.16708	.11328	.16315	1.049
Constant	1.43338			

R^2 = .134

R^2 adj. = .078

F = 2.379*

Standard Error = 1.780

(n = 83)

*Significant at .05 level.

Note. Variables not entered into equation: composition and size of the household, and age of respondent.

males, since traditionally female roles have emphasized home and family care. Males are usually more career-oriented with more contacts with the larger community that they may value more highly than neighborhood contacts. Persons at the lower end of the occupational scale generally are considered to have lower incomes, are often either traditional or inner directed, and more concerned with physical safety (Rainwater, 1966). Persons of higher occupational rank, in contrast, are more outer directed or community centered rather than house centered, and reasonably could be expected to highly value friends and neighbors. According to the Beta weights, occupation was only slightly more important than sex of the respondent in explaining the variability in the dependent variable, friends and neighbors. The standard error of the estimate, 1.78, was smaller than the standard deviation (1.83) for this value, indicating that occupation and sex of a subject would be fairly good predictors of whether individuals would select this housing value more frequently than other values.

Regression Analysis of Expected Rate of Change in Future Housing Achievement

In this regression equation, approximately 14 percent ($F = 3.63$, $p < .01$) of the variability in the dependent variable, expected rate of change in future housing goal achievement, was explained by the independent variables (Table 14). Only the respondent's age was statistically significant ($p < .01$), and the relationship found was a negative one. Therefore, as a respondent's age increased, the

Table 14

Results of Multiple Regression Analysis For Expected Rate of Change in Future Housing Goal Achievement

Variable	b	Beta	Standard Error of b	F
Age of Respondent	-.03442	-.34049	.01224	7.9111**
Composition of Household				
Couples without Children (Couples With Children Omitted)	-.07903	-.02354	.49448	0.026
Sex of Respondent				
Female (Male Omitted)	-.29025	-.10307	.30056	0.933
Size of Household	.20260	.16698	.19435	1.087
Composition of Household				
Single, Separated, Divorced, Widowed (Couples With Children Omitted)	.83190	.14387	.80451	1.069
Constant	1.5983			

R^2 = .199 F = 3.6354**

R^2 adj. = .145 Standard Error = 1.3106

(n = 79) **Significant at .01 level.

Note. Variables not entered into equation: occupation and education of the respondent, family income, and number of moves.

greater the likelihood of a great deal of change to occur between present level of housing achievement and future level of housing achievement. Changes or improvements in one's housing situation are brought about by a number of factors, but the major factor may be the pressure of space needs generated by life cycle changes. Older families who are in the process or have already launched their children into independence may no longer be affected by space need pressures. As a result, they would probably expect to remain in their present home for some time to come or to make only minor adjustments in the level of their housing achievement.

However, life-cycle changes associated with age cannot totally explain why older individuals expected little improvement to occur in their housing level over time. After all, family composition was one of the set of independent variables entered into this equation, although its relationship to expected rate of change was not found to be significant. A number of studies concerned with factors influencing residential mobility have identified age as being frequently correlated with mobility (Foote, Abu-Hughod, Foley, & Winnick, 1960; Long, 1974; Morgan, 1973; Petersen, 1969; Pickvance, 1973; Rossi, 1955). As age increased, housing mobility appeared to decrease, probably due to an inability or unwillingness to make adjustments to new situations and surroundings, a declining need to make such moves because of increased job stability, or a shrinking income. These same reasons could doubtlessly affect a family's expectations of the level of housing achievement they might attain through a future housing move.

Although other independent variables were entered into the regression equation, only the age of the respondent was significant. The Beta weights revealed that age was the most important variable in the equation. The standard error of the estimate was 1.31, and it was smaller than the standard deviation (1.417) of the actual scores. The smaller the error term is in relation to the standard deviation, the better the prediction value of the equation. Therefore, the success of this regression equation in predicting the rate of change in future housing achievement for another sample group would be fairly good.

Regression Analysis of Resource Commitment Factors

Only one of the five commitment factors could be explained to some degree by the set of independent variables. The one factor, derived earlier from the results of a factor analysis of the resource commitment items, appeared to have a statistically significant relationship only to age of the respondent, but to none of the other independent variables. Since all the factor loadings were positive, it was easier to make unambiguous interpretations of the relationships found between the factor score and the independent variables.

Educational Expenses

In Table 15, the results of the regression analysis, utilizing the dependent variable willingness to limit educational expenses in order to achieve a housing goal, and the eight selected independent variables are presented. Only one of the independent variables, age

Table 15

Results of Multiple Regression Analysis For

Willingness to Limit Educational Expenses

To Achieve Housing Goals

Variable	b	Beta	Standard Error of b	F
Age of Respondent	.030633	.24270	.01361	5.070*
Constant	-.87250			

R^2 = .05890 F = 5.0696*

R^2 adj. = .04728 Standard Error = 1.76998

(n = 83) *Significant at .05 level.

Note. Variables not entered into equation: occupation of respondent, family income, sex of respondent, housing mobility, education of respondent, size of household, and composition of household.

of the respondent was significantly related to the dependent variable ($F = 5.07$, $p < .05$). The relationship between the two was a positive one, indicating that as age of the respondent increased, the more likely the respondent was to support limiting resources allocated to educational expenses in order to reach a housing goal. It can be asserted that as age increases, the need for education decreases as adults and children in the family complete various educational levels of achievement. Therefore, older families would be more likely to reallocate resources formerly earmarked for educational needs to a housing goal.

The adjusted R^2 of .047 conveyed that only a very small proportion of the variability in the resource commitment factor of educational expenses was explained by the independent variable entered in the regression equation. The standard error of the estimate, 1.77, was smaller than the standard deviation of 1,81, and implied a successful prediction process for another similar group of respondents.

Summary of Regression Analyses

This study sought to identify some of the demographic variables that serve to explain individuals' and families' housing values and aspirations, and their resource commitment to housing goals. Findings indicated that a number of the demographic variables--age, sex, and occupation of the respondent, family income, and housing mobility--were statistically significant in explaining at least some of the housing values, short-term aspirations, and resource commitment to housing goals, but in different patterns and to different degrees. No one of the demographic variables was found to influence all of the dependent variables.

The statistically significant relationships between the selected independent variables and the dependent variables are summarized in Table 16. The explanatory power of the independent variables was low, ranging from five to 16 percent (adjusted R^2), but the standard error of the estimates was relatively low, too. Therefore, even though the amount of explained variability was small, the success of

Table 16

Summary of Factors Influencing Housing Values, Aspirations, and Resource Commitment To Housing Goals

Dependent Variables	Independent Variables				
	Age	Sex	Occupation	Family Income	Housing Mobility
Housing Values					
Inexpensive	0	-**	0	-**	-**
Friends and Neighbors	0	+**	+*	0	0
Aspirations					
Expected Rate of Future Housing Achievement	-**	0	0	0	0
Resource Commitment Factor Groupings					
Educational Expenses	**	0	0	0	0

**Significant at .01 level *Significant at .05 level.

the overall prediction process was good. Only the analysis of two of the seven housing values, economy and friends and neighbors, resulted in significant F values. For one of them, economy, the relationship was a negative one. The analysis indicated that as a respondent's income and rate of housing mobility decreased, the more frequently this value was selected. In addition, female respondents less often chose this value than did males.

For the other housing value, friends and neighbors, a positive relationship was found between it and sex and occupation of the respondent. Thus, females selected this value more frequently than males, while respondents in higher ranking occupational categories (professionals, managers, teachers and administrators) were more likely to pick this value than lower ranking occupational categories.

A statistically significant negative relationship occurred between age and the respondent's expected rate of future housing goal achievement. As age increased, the respondent was less likely to expect a significant improvement to occur between his present level of housing achievement and his anticipated future level of achievement. In an earlier study of condominium residents (Humphries, 1976), age was found to be significantly related to expected rate of change in future housing goal achievement also.

Only one of the five resource commitment factor groupings resulted in a statistically significant relationship to any of the independent variables under study. In this instance, the factor grouping labeled educational expenses had a positive relationship with age of the respondent. Results of the analysis revealed that

as age increased, the more supportive the respondent became toward limiting expenditures for educational needs in order to gain a housing goal.

In general, findings of this study indicated that some demographic variables did indeed affect some of the housing values, housing aspirations, and willingness to allocate resources to housing goals of single-family housing residents, but not to any great degree. Apparently, other variables, either demographic, economic, situational, or sociological, may have had a far greater impact than the set of demographic variables examined here. To investigate that possibility, several other potentially useful independent variables that were included on the questionnaire were examined to test their influence on the various dependent variables. Five other independent variables utilized were: form of tenure for previous house, length of time at present address, former house type (single-family, apartment, mobile home), perceived market value of present house, and number of rooms in present house. These five were added to the most significant of the original variables (five out of eight) and additional multiple regression analyses were performed. Two of the five additional independent variables--form of tenure for previous house, and the perceived market value of the present house--resulted in statistically significant relationships to some of the dependent variables, particularly for more of the housing values (Table 17).

The respondent's perception of the present market value of his house seemed to offer most in explanatory power, but as with the original set of independent variables, it explained only a small

Table 17

Summary of Additional Factors Related to Housing Values, Aspirations, and Resource Commitment to Housing Goals

Dependent Variables	Independent Variables: Tenure of Former Home	Independent Variables: Perceived Market Value of Present Home
Housing Values		
Location	**	0
Inexpensive	0	*
Friends and Neighbors	0	**
Aesthetics	0	*
Resource Commitment Factor Groupings		
Contributions and Health Protection Expenses	0	*

**Significant at .01 level.
*Significant at .05 level.

amount of the total variability of the dependent variables (three to 12 percent). Additionally, the variable of perceived market value of the house appeared to replace the contribution made by one of the variables in the original set, age of the respondent. Apparently, factors or combinations of factors other than the demographic ones examined here played a far more important role in explaining any of the dependent variables.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The dream of most American families is to own a single-family house situated on its own lot. That dream has become increasingly more difficult to bring into reality in recent years as housing costs have skyrocketed beyond the means of most Americans. Given the increasing difficulty of obtaining affordable housing and the strength of the desire Americans have for an owned single-family dwelling, can alternatives to the ideal be found that will "fit" families as well as the ideal? Obviously, among the first steps in such a process is to investigate present occupants of owned, single-family houses to determine more precisely the needs and aspirations such housing fulfills, and how strongly committed families are toward achieving this type of housing.

The purpose of this study was to: (1) identify the housing values of single-family housing owners; (2) identify their goals and aspirations for future housing; (3) determine their willingness to commit resources to achieving housing goals; (4) identify relationships between selected demographic variables and the values, aspirations, and resource commitment to housing goals of single-family housing residents; and (5) to compare owners to condominium units and those of single-family housing units for similarities or differences in relation to these different groups of variables.

A six-part questionnaire, modeled after a similar instrument used to survey multiunit housing residents, was mailed to 400 randomly selected single-family residents in Greensboro, North Carolina, during the spring of 1977. The response rate was 28.5 percent, yielding 112 usable questionnaires coded and analyzed by the VAX 11.780 computer system. Frequencies, factor analysis, and multiple regression were the statistical procedures used to analyze the data.

Respondents in the sample were fairly evenly distributed according to sex. Two-thirds of them were 36 years of age or older. Well over three-fourths (82.1 percent) of the respondents were married, and the average length of time married was nearly 21 years. Most of the respondents had at least a high school education, while over half had either a bachelors or an advanced degree. Occupational positions held reflected the high levels of education they had acquired, since nearly half (42.2 percent) were either professionals, managers, administrators or teachers.

About 60 percent of the survey households numbered three or more persons, with most of the children in the household over age six. Over three-quarters of the households reported an income equal to or greater than $15,000 per year. For the most part, the families were not very mobile; less than half (43.6 percent) had moved one or more times during the previous five years.

Most of the houses occupied by the respondents were moderate to large in size with six or more rooms and three or more bedrooms. As to the value of the house, nearly two-thirds of all respondents perceived the market value of their house to be low or less than $45,000,

a figure that was roughly equivalent to the median cost of a new house located in the South at the time of the survey.

The seven housing values utilized in this study were ranked by each of the respondents. Values chosen most frequently were comfort and convenience, location, and privacy. Economy (inexpensive) and safety appeared to be the least important values as perceived by this sample group.

When asked what they liked best about their present housing situation, the characteristics cited most frequently by the respondents were location, and aspects related to the physical housing unit. Characteristics of public services was the category cited least frequently.

As to what the respondents might like to have in a future home, most statements referred to physical characteristics of the dwelling unit--comfort, convenience or maintainability, additional or larger rooms, and more storage. Characteristics of the neighboring environment and locational aspects were the least often cited category of responses. When asked what might be preventing them from achieving the living situation they would like, most respondents answered in terms of economic constraints--lack of money, the high costs of living and of housing.

Respondents were asked to rank the positions they would assign to their past, present, and expected future housing goal achievement on a continuum of from one to ten. Most perceived that their present housing was at a higher level than their previous housing, and expected their future housing to be at a still higher level. However,

less of a change was anticipated between their present and future housing achievement level than had occurred between their past and present levels of housing. As for what their future housing might be like, nearly all of those who responded envisioned another single-family detached dwelling unit, preferably in a rural setting.

One portion of the survey dealt with respondents' willingness to allocate or reallocate their financial resources toward the achievement of a housing goal. A majority of the families indicated a willingness on their part to limit resources allocated to utilities, additional children, food purchases, telephone calls, transportation, major purchases, and entertainment needs. They did not support reallocating resources budgeted for savings, life and hospitalization insurance, medical and dental visits, and the children's education. Nor did they favor family members taking on more than one job. A factor analysis was computed for the 26 resource commitment statements, and resulted in the identification of five factors that appeared to underlie commitment of resources to housing goals. The five factor groupings or clusters of resource commitment variables were named: basic living and personal expenses, medical expenses, contributions and health protection expenses, educational expenses, and consumer purchase and communication expenses. These five factor groupings retained only 17 of the original 26 resource commitment statements, but explained nearly 80 percent of the information provided by the larger set of variables.

Multiple regression analyses were utilized in order to determine any relationships that might exist among the demographic variables

(sex, age, education, and occupation of the respondent, size and composition of the household, family income, housing mobility), and the housing values, expected rate of change in future housing goal achievement, and the resource commitment factors. Statistically significant relationships were found for only two of the seven housing values--economy, and friends and neighbors. Sex, family income, and housing mobility were the important contributors to the determination of the housing value, economy, while sex and occupation were important to the value of friends and neighbors. However, none of the independent variables was involved to any great extent.

A statistically significant relationship was also found between the dependent variable, expected rate of future housing goal achievement, and age. Although age was the independent variable of most importance, it was to only a small degree.

Only one of the five resource commitment factor groupings, educational expenses, yielded a statistically significant relationship to any of the independent variables. Age was the only variable found to be significantly related to that resource commitment factor.

Conclusions

The intent of this study was primarily exploratory in nature, to try to gain some insight into characteristics that owners of single-family housing units have in common. In this way, some of the factors that may influence families to choose this type of housing situation over other possible housing alternatives may be identified.

Perhaps the major conclusion of this study, based on results of the multiple regression analyses, is that traditional demographic variables appeared to exert little influence on the housing-related decisions of this group of respondents. While some statistically significant relationships were identified between the independent and dependent variables, they were few in number, and the amount of explained variability in the dependent variables contributed by the independent variables was small. Other factors--economic, personal, sociological, or situational--not considered in this study may play a far greater role than demographic variables.

While the multiple regression analyses may have been the major undertaking of this study, another analysis of a different kind was also thought to be of some importance. Comparisons of this sample group were made to a group of multiunit condominium residents in the same locality (Humphries, 1976) to discover if there might be some variables or relationships that had a bearing on why some families chose to buy condominiums, while others chose to buy single-family houses. The variables, both independent and dependent, investigated in this present study and the study of condominium residents were very nearly identical. While some of the demographic characteristics of the two groups were different, the patterns of their housing values, aspirations, and resource commitment to housing goals were very similar. However, when the results of the multiple regression analyses were compared, differences between the two groups emerged. In the study of condominium residents, no statistically significant relationships to any of the housing values were found, nor was one

found with any of the resource commitment factors that were similar to those identified by this present study. A relationship was established between age and expected rate of future housing goal achievement of condominium residents similar to the relationship found between these same two variables for the single-family housing residents. The confounding nature of this comparison of the two resident groups made the drawing of any firm conclusions difficult. If housing values, housing aspirations, and degree of resource commitment to housing goals can be assumed to form the basis or to underlie housing decisions or choices of one type of housing over another, then demographic variables of the kind analyzed in these two studies would seem to offer little in the way of illuminating why people choose one type of housing over another.

The results from both the housing values test and most preferred characteristics section of the questionnaire revealed that the respondents gave primary importance to physical features of the actual housing unit, rather than other aspects of housing such as the neighboring environment or community facilities and services. It may be appropriate to conclude that characteristics of the unit itself loomed large when housing decisions were made, and subsequently, influenced a family's satisfaction with their particular housing situation.

While economy was cited as the least important housing value, economic constraints were identified by the respondents as the chief obstacle preventing them from obtaining their housing goal. Therefore, it can be concluded that while economics may deter families

from achieving their desired housing, a housing unit that was economical to buy or maintain, perhaps even a stripped-down housing unit, was not at all what they desired.

Since age was found to be a significant predictor of the amount of change expected between present and future housing achievement levels, with older families expecting less, it may be concluded that older families would not be as willing to make sacrifices or adjustments in their level of living in order to achieve a housing goal. After all, they would only be making what they perceived to be only a slight improvement in their housing level.

Not surprisingly, most of the respondents perceived that their future housing situation would be another owned, single-family housing unit. It was clear that only when families begin to encounter greater difficulties in obtaining such housing will the rosy glow that surrounds this ideal housing type become clouded. And that day may be fast approaching. Perhaps, other housing alternatives might then be given the consideration they deserve.

These families appeared to be willing to make sacrifices in order to achieve a housing goal, but only sacrifices of particular kinds. Most supported economizing on basic living expenses or limiting the size of the family, but few seemed willing to limit savings, insurance, medical visits, or education. Obviously, families have a hierarchy of goals, and the achievement of a housing goal, while important, had a lower priority than goals affecting the family's future security or well-being. It can be concluded that for these respondents, their housing was perceived more as a living environment

for the family rather than as an economic resource or investment for the future, and surely it is that, too. In addition, it may be that other families with different characteristics and living under different circumstances will assign a higher or, perhaps, a lower priority to achieving a housing goal than this sample group actually did.

The resource commitment measure used in this investigation appeared to be good, particularly since it seemed to rather accurately represent real-life decision-making through the use of priority rankings and trade-offs that are often required in the process. The original measure, developed by Paynter (1975), was changed and apparently improved. Therefore, it can be concluded that the measure has some potential as an investigative tool for probing goal-oriented behavior aimed at achieving housing goals or even for other goal-related areas.

Recommendations for Future Research

The identification and inclusion of other kinds of independent variables that may be related to housing values, housing aspirations, and resource commitment beyond the demographic ones used in this study would be a useful and important task. Variables that would contribute more toward explaining the dependent variables would add much to the investigation of the factors influencing families and their housing-related decisions. It is even conceivable that some of the dependent variables used in this study could well become independent variables, particularly the housing values.

Populations of single-family and multiunit-housing units could be investigated and discriminant analysis, a statistical technique that forces groups to be as statistically distinct from each other as possible, could be performed to discover which variables have the capability of discriminating between the two types of resident groups in the sense of being able to tell them apart. Such an endeavor might provide another avenue of investigation to illuminate more about factors at work in the housing-decision process.

Since the value of the resource commitment measure was reaffirmed as a result of this study, it is recommended that it be used with other sample populations and other goal-related areas. Based on the outcome of the factor analysis of the resource commitment statements, it may even be possible to use an abbreviated version of it without much loss of valuable information.

Use of the resource commitment measure with other income groups would be profitable and should be encouraged. Families with higher incomes, and those with lower incomes might well be willing to sacrifice different things in different degrees in order to achieve a housing goal.

In that the respondents appeared to assign considerable importance to the physical characteristics of their housing unit, particularly comfort, convenience, privacy, size, and room arrangement, builders and developers would be well advised to evaluate their designs in terms of these characteristics. Apparently, they warrant considerable attention. Further, other research endeavors are needed to discover just what specific physical features best speak to the concerns identified by this respondent group.

While the term aspirations was used in this study to refer to (1) the respondents' desires for future housing, and (2) the rate of change they anticipated to occur between their present and future housing, the term expectation may be a more accurate one, particularly for the latter case. Although both relate to some future time, aspirations are more like desires, while expectations are a more realistic assessment of what future conditions might be like (Morris & Winter, 1978). For this study, desires for future housing were couched in terms of the short-run or only five years in the future. It was highly probable that the respondents were answering in terms of what they actually expected the future to hold for them rather than just their dreams. It is recommended that future studies utilizing a Cantril-type ladder for aspirations specify a longer-term future choice in order to more accurately discover what the respondents' aspirations may be.

The research methodology used in this survey drew a random sample from county property tax records. If tax records are computerized, and a program already exists to randomly sample the data base, the use of this procedure should be considered for other research efforts wishing to survey housing residents due to its accuracy and speed.

Others contemplating the use of mail questionnaires would do well to investigate Dillman's (1978) systems approach as a means of improving overall response rates. Unfortunately, his approach was not published until the year following the date of the actual data collection phase of this survey.

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