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ACCEPTABILITY OF HOUSING ALTERNATIVES BY FAMILIES

Ву

Constance C. Whitaker

A DISSERTATION

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ABSTRACT

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The primary goal of this research was to determine the acceptability of alternatives to the American housing norm of ownership of an adequate single-family house. Further examination focused on the socioeconomic and demographic characteristics of male and female heads of households which might be related to the acceptability or to the choice of the alternatives. Preliminary exploration was also made of selected financial, spatial, structural and locational attributes of present housing of respondents as they were related to the choice of housing alternatives.

The questions which served as the basis of the study were developed by the researcher as part of the 1976 phase of the larger Family Energy Project, which examined knowledge, behaviors and attitudes related to the family's use of energy. The sample included male and female heads of households of 263 families living within the Lansing Standard Metropolitan Statistical Area who were selected by a multistage probability procedure. Where both husband and wife were present in a household, responses from each were included and each was considered as a head of household. Questions for this study were included

in a self-administered questionnaire; trained personnel conducted personal interviews to obtain the socioeconomic and demographic data.

The housing alternatives component of the larger study was motivated by the recognition of the need for information to guide future changes in housing for a less energy intensive style of living. Respondents were asked to rate the acceptability of commonly known housing structural and tenure types other than that of ownership of an adequate single-family house. The alternative housing options included were: (1) purchase a less adequate single-family house, (2) purchase an adequate mobile home, (3) purchase an adequate duplex, townhouse or apartment, (4) rent an adequate single-family house, (5) rent an adequate duplex, townhouse or apartment, (6) share a large single-family house with another family.

Analysis of the data provided comparative, descriptive information about the acceptability of housing other than the norm. The methods of analysis included cross tabulation, identification of significant differences by use of chi square and analysis of variance procedures and discriminant analysis. The research was exploratory in nature, was hypothesis building rather than hypothesis testing, and sought to identify relationships which could be examined in further study.

The housing alternative which received the highest acceptability rating and which also was the most frequently selected as the first choice among the options, was "purchase a less adequate single-family house." That option was selected by 48 percent of the sample as first choice. The second most frequently selected option was "rent an adequate single-family house" (11%) for female and male heads of

households, while an equal number of females also chose "purchase an adequate mobile home" as first choice.

None of the alternatives received as high as an "acceptable"

(3) rating. There were considerably fewer relationships of socioeconomic and demographic characteristics to the choice of options than to their acceptability. When rating reasons for selection of present housing, respondents indicated that "the right price," "good schools in the area," and "privacy in my yard" were very important reasons in selection.

Major conclusions of the research were the relative unacceptability of any alternatives to the housing norm and the importance of education and experience in housing alternatives when discriminating among choices of alternative housing options. Understanding of such relationships may prove useful to educators, to builders and to policy makers if alternatives to the housing norm are to be introduced successfully.

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CHAPTER I

INTRODUCTION

Single-family detached homes are once again becoming popular . . . in spite of the higher costs of these units. After a period of several years when purchasers favored townhouses and condominiums . . . there has been a recent resurgence of demand for the 1-family home. Surveys show that . . . generally . . . in 1974 only about a third of new home sales were for single-family units . . . in 1976 this had risen to about 45 percent. Plans filed . . . and permits issued in the early months of 1977 . . . indicate at least 50 percent of the units contemplated this year will be 1-family . . . and some builders are predicting that 70 percent will be in that category in the next year or so. This is true although it is known that the single-family home requires more land, costs more to build, and uses more energy than an attached structure. Some people have compared it to the "gas guzzler" car. The old "American dream" of a house-and-lot for every family still lives on . . . in spite of the fact that it is less economical ("Single Family Houses," 1977, p. 1).

What is it about the ownership of a house-and-lot which continues to make it such a desired achievement? Why are many Americans willing to "mortgage their souls" in order to own their own home? What is it that the American family is buying when it purchases a single-family detached home?

In earlier times, it was common for engaged couples not to marry until they could afford to "set up housekeeping" in a home of their own. Young couples often have planned that both of them will continue working for a period of years until they have enough money for a down payment on a house and then can "start a family." Other young people have been fortunate enough to have a home or the down payment given to them as a

wedding present by more affluent parents. By whatever route, the expected behavior of American families has been that they attempt as soon as possible--at least by the time that children arrive--to purchase their own home.

In addition to its being a socially accepted behavior pattern, the ownership of one's own home has for over 40 years been intentionally supported by several government policies and programs. In 1933, Congress passed the Homeowner's Loan Act in order "to relieve the distress of homeowners faced with foreclosure, and to aid lending institutions" (Beyer, 1965, p. 456). In 1934, federally insured, long term, amortized mortgage loans were instituted by the National Housing Act which included the provision that approved loans which were not repaid by the homeowner-borrower, would be paid by a newly created federal agency, the Federal Housing Administration. Such a provision encouraged lending agencies to be more willing to loan money for purchase of a home to families which might not otherwise have been thought to be good financial risks (Hartman, 1975, p. 28).

As a reward for service in World War II, veterans were granted no-down-payment mortgages. Legislation in 1944, the Serviceman's Readjustment Act, "was to assist returning veterans to purchase housing on a liberal basis . . . under this arrangement [combination FHA-VA loan] veterans could purchase houses [until 1959] with a 100 percent loan . . . " (Beyer, 1965, p. 459).

"By far the largest subsidy given to housing comes through the workings of the Internal Revenue Code . . ." (Hartman, 1975, p. 108).
"The personal income tax encourages taxpayers to buy rather than rent housing by making the tax bill of homeowners smaller than that of

renters who invest in other assets" (Aaron, 1972, p. 53). The interest on mortage and home repair loans can be claimed as basic deductions when determining income tax payments, and in addition, taxes which are paid on the property are also deductible. With such societal and governmental support, families become socialized to expect to buy a single-family dwelling for their own.

Yet in 1976, news reporters and other observers of the housing market proclaimed that 60 percent of the nation's families could not afford to buy a new home (Breckenfeld, 1976, p. 85). The MIT-Harvard Joint Center for Urban Studies in its 1977 study reported that: "Since 1970, sales prices of new and existing houses, the costs of ownership, and operating and maintenance costs for housing have all risen faster than the cost-of-living index and family incomes." (Frieden & Solomon, p. 6)

. . . for the buyer of a median-priced new house, housing costs doubled (a 102.3 percent increase) between 1970 and 1976. . . . During this same period of time, median family incomes increased by only 47 percent . . . and the consumer price index increased 46 percent . . . In 1970, . . . some 46 percent of all families in the country were able to afford the cost of a median-priced new house. . . . By 1976 only 27 percent of all families were able to afford the cost of a median-priced new house . . . (pp. 103, 104).

Statement of the Problem

For over 100 years the ownership of a single-family detached dwelling has been the desired form of providing housing for one's family. Normatively prescribed behavior for American families has been the purchase of an adequate one-family house. If now the housing norm is not attainable to the average American family, a problem has been created.

Current federal concern about families' inability to buy housing has resulted in several studies (HUD, 1978b; Comptroller General, 1978) of ways in which to make the financial drain on families less of a burden. But defining the problem solely as a financial problem limits the possible alternatives which might be examined. Is it not possible also to consider that some mode of tenure other than ownership and some structure other than the detached single-family house might also be possible and might in fact be a more desirable norm for the future? As the American dream continues to exceed the American grasp, is it not feasible to examine whether there are other types of alternatives which might be acceptable and attainable?

Earlier researchers have attempted to identify why families move, why families do not want what designers want, whether homeownership is sound, and the housing choices and contraints placed on families, among other concerns. But to date, studies have not attempted to identify the "essence" of the apparent general insistence on ownership of a single-family dwelling. If it is possible to identify which objectives are basic to the family's continued preference for ownership of a single-family house, it may then be possible to develop alternative ways in which those factors could be satisfied.

The overall purpose of this study is first, to clarify which of several commonly available alternative housing structures and tenure types would be an acceptable substitution for the ownership of a single-family house, and secondly to assess which of the individual, family or housing characteristics might predict acceptability of an alternative choice.

Rationale for the Study

It is a commonly held assumption that the ownership of a single-family dwelling is the American housing norm. A generally accepted behavior for families with children is to attempt to meet that expectation. However, both "ownership" and "single-family" structure may have differing meanings to different people.

It must be noted that already the precise definition of <u>owner-ship</u> has been construed to include "paying on a mortgage." Until the Federal laws of the early 1930s, the typical home mortgage was for 1 to 5 years--and seldom for longer than 10 years" (HUD, 1974, p. 8). Such a debt constituted a major financial burden for most families who usually put off making any other major purchases or enjoying expensive trips until such time as the house was paid off. They could then "burn the mortgage" and thus achieve ownership. But in 1976, at least 24 million families living in owner-occupied housing had a mortgage, a deed of trust, or land contract arrangement for continued payment of their debt; approximately 14 million families occupied housing which they owned "free and clear" (Census Bureau, p. 10). The meaning of ownership has been interpreted broadly enough to include paying on a mortgage, even of 30 years duration. Apparently such a modification is being accommodated within the perception of the norm of "ownership."

Another modification of the stated norm which has also been accepted by some families is that of ownership of non-detached dwellings, usually in urban areas or under some special circumstances as a retirement or second home. Owners of cooperative apartments and condominiums while retaining some degree of control over interior space and structure, have chosen to relinquish the responsibility for performing exterior

maintenance. They have at the same time, however, also given up the freedom to modify the exterior of the dwelling as they might wish. The condominium type of ownership, then, is a modification of the norm of ownership, as well as a modification of the structure norm. It is still too early to tell if and by whom condominiums have been accepted. Some developers have been told in the financial terms of very slow sales, that what they have offered was not an acceptable alternative (Michelson, 1977).

Production figures of the mobile home industry may be reflective of another modification in the accepted meaning of "single-family dwelling." In 1950 mobile homes constituted "less than 1 percent of the occupied year-round units, but by 1970 this had grown to 3 percent. In 1972 mobile home shipments constituted 19.5 percent of all new units and 30.5 percent of all new single-family units" (HUD, 1974, p. 223). Variations in construction, financing terms, zoning regulations, size, life expectancy and depreciation of the living unit are all ways in which mobile homes differ from the standard single-family house. It remains to be seen whether the acceptance of the mobile home will continue and become one of the several forms of the structure type norm. To date it appears that the structural aspect of the norm admits only a narrow perception of the meaning of "single-family house."

In other attempts to cope with the recognized financial constraints on families, spokesmen for the housing industry are already presenting additional alternatives. One article questions: "Will single-family <u>DE</u>tached turn into single-family <u>AT</u>tached?" and then assuming an affirmative answer to its question, proclaims that in order to make "the change more palatable . . . privacy and outdoor living

for example, are absolutely essential if the detached buyer is to accept an attached home" ("Will Single Family," 1974, p. 83).

Such assertions by the industry notwithstanding, if families were not able to purchase an adequate single-family house how difficult would it be for them to accept something else? Most families select their housing from standing stock which is on the market, structures which were built in some earlier time or which have been built recently to meet some builder's specifications. And within the parameters which building regulations or the family's pocketbook have permitted, the typical house has varied little over the years. If a new norm would suit the current conditions better, builders, educators and families need first to try to unravel the attitudes which shape the general perceptions of the housing which families "should" want. It is important therefore to examine the factors which are related to the acceptability of alternatives to the housing norm. In an attempt to get at the elusive qualities of acceptable housing, this research seeks to determine if any structure type or mode of tenure appears to have greater potential for the possible development of a new norm.

Conceptual Framework

Although family members make very personal decisions about the particular housing which they select for their own use, the choice of housing alternatives is appropriately examined within the context of an ecological perspective. The family's choice of its housing is circumscribed in large measure by what is available in the housing market, the personal financial resources available to the family, the financial conditions of the mortgage market, and the amenities located in the

neighborhood. The family's perception of acceptable housing also serves as a constraint on its choice. The family's activity of choosing a dwelling can be described by the ecological pattern of a family unit or heads of households (organism) interacting with the housing market, the financial institutions and the neighborhood characteristics (its environments).

To examine fully the acceptability to families of any housing alternative to the present norm, requires then, an ecological decision-making perspective. "A family ecology perspective, which focuses attention on family members and their environments allows one to better understand problems and arrive at solutions because it forces one to look at each part of the ecosystem and the relationships among them" (Paolucci, Hall, & Axinn, 1977, p. 25).

The Family System

The family is viewed as a system composed of interdependent but independent members working together to achieve a common purpose (Paolucci, Hall, & Axinn, 1977, p. 18) i.e., the choice of living space. Such a view of the family unit as a system identifies family members as component parts having common goals and commitment to one another over time (American Home Economics Association, 1975, p. 26).

Family ecologists stress that not only is the family a system composed of its interacting parts, but also that the family unit must be considered to be a component part of the larger society interacting with other systems toward a common purpose (Hook & Paolucci, 1970). When viewed this way the family members and the surrounding family environments can be seen from an ecosystem perspective, where the basic

elements of the family ecosystem are: (1) organisms (family members),
(2) environments (natural and human built), and (3) the family organization, which is the processing system that transforms matter-energy and information and directs it toward family goal achievement (Paolucci, Hall, & Axinn, 1977, pp. 11-19).

Deacon and Firebaugh (1975) explain that the processes of searching, developing alternatives, and weighing the alternatives define the quality and quantity factors desired in a product, such as housing. "In setting standards, the family or the individual assesses resources, searches for further information, develops alternatives, considers these alternatives in relation to goals and available resources, and arrives at a decision . . . [and creates a plan] with criteria (standards) to guide . . . buying" (Deacon & Firebaugh, pp. 52-54).

The Housing System

A specific concern of the study is the family's choice of housing which must also take cognizance of the ecological nature of the housing industry. The preferences which families express are only one aspect influencing the availability of housing.

Wallace Smith refers to the legal and financial institutions critical to the functioning of the housing market, stating that "the most effective and efficient private housing industry will not meet a housing need which is not backed up with purchasing power" (1973, p. 9). He further notes that

^{. . .} the housing sector--the portion of the economic system which is concerned with the production, management and distribution of housing--is a blend of private enterprise and government activity. . . Public and private components of the housing sector are generally so closely interdependent that the housing sector may be said to have a dual decision-making system (pp. 9-10).

Smith uses the term household's housing status to "mean the whole complex of activities, satisfactions, rights, obligations, conveniences, and expectations surrounding the use of a particular dwelling unit by a particular household," nothing that "in turn, both the community and the individual household participate in determining what this housing status will be" (p. 11). Smith recognizes that housing status is not inert and describes the complex of effects created by the household's housing status. He concludes by summarizing that

housing is as diverse in its effects as in its components. We can suppose that within the range of its information and choices the household tries to select that dwelling which provides the best combination of current housing satisfactions, long term housing security and the enjoyment of other goods (p. 18).

It is realistic then, to view the family as a complex system interacting with the housing system, and to view the housing sector as a multifaceted system responding in part to supply and demand pressures from the family. Such a perspective allows one to understand the interplay and exchanges which occur as families examine alternative housing options.

Research Questions

The following research questions were developed to guide this study:

- 1. How acceptable are various housing options as alternatives to the housing norm?
- 2. Are there patterns to the choice of alternatives to the housing norm?
- 3. Do socioeconomic and demographic characteristics and the reasons for selection of present housing, predict choice of alternatives to the housing norm?

Assumptions

- American families prefer ownership of single-family detached housing.
- 2. The choice of present housing reflects a family's selection of housing which met its expectations as nearly as it was able to reach them at the time.
- 3. Given a hypothetical situation, the choice of alternatives to the housing norm reflects an individual's preference for housing which is important to that family.
- 4. The responses of male and female heads of households reflect concerns of the family unit of which they are a part.

Definitions

Acceptability: worthy of being received as offered.

Alternative: "one of a set of elements each capable of fulfilling a common objective to some degree, but each resulting in somewhat different consequences" (Gross, Crandall, & Knoll, 1973, p. 215).

Duplex: a detached structure which contains two complete living units, having either a common wall, or stacked one unit above the other.

two or more individuals related by birth or marriage, one of whom is 18 years of age or older, and who share living space.

Head of Household: adult male or female who is or has been married and is now living with spouse and/or child.

Household: term used interchangeably with family unit or family as defined in this study.

Housing Norm: ownership of adequate single-family house, not including mobile home or condominum.

Ownership: control of housing achieved either by having completed financial obligations or by being in the process of making payments as prescribed.

Mobile Home: a dwelling completely constructed at a factory site and delivered to a sales or living site on its own wheels.

Single-family House: a detached structure designed for use by one family unit.

Townhouse: three or more individual housing units attached by adjoining side walls which completely separate the units.

CHAPTER II

RELATED LITERATURE

This chapter includes a historical view of the development of the land ownership norm and the home ownership norm, followed by census data describing the current housing stock, specific housing norms and alternatives to the norm. It then examines reports of the availability of housing for families and the relevant preference studies.

Evolution and Development of the Land Ownership Norm

Historians have reported on the activities of individuals and groups as the American colonies grew from the earliest small units of survival to the megalopoli we recognize today, noting several conditions, attitudes and developments which can be identified as contributions to the American norm of ownership of a single-family dwelling. Three or four themes which appeared consistently in the more than three hundred years prior to the 1930s, seem directly related to the American penchant for the ownership of one's own house and lot: the availability of land at very low cost; the requirement of land ownership for suffrage rights and to achieve recognition as a decent contributing member of the community; and the protection of the rights of personal property owners.

Availability of Land

Long before the Gold Rush came the Land Rush. We hear less about it because it is only another name for much of American history. A nearly empty continent provided the setting. Men who in the Old World would have hoped to acquire a ten- or twenty-acre plot after countless peasant generations, when transplanted to the New World looked forward to 160 or 320 acres or more within a few weeks or months (Boorstin, 1965, p. 72).

The vast acreage of a continent of undeveloped land was available to anyone who could meet some very simple conditions. Many of the residents who came to Virginia were aiming to rise into the ranks of the landed gentry and the acquisition of land was possible in several ways. "After only a few years of service, youths who had come as mere apprentices, . . . could expect 'Land given them and Cattel to set them up'" (Boorstin, 1966, p. 100). In the latter part of the seventeenth century "there was a numerous 'yeomanry'--men who owned between 20 and 500 acres. . . . The system of granting land by 'headrights,' under which anyone could receive 50 acres for every person he transported to the colony, made it simple enough to buy an entourage of dependents," (p. 100) and acreage for their maintenance. "Until around 1660 it was customary for an indentured servant to remain in the colony at the end of his term of service to acquire a piece of land, and to look hopefully up the social ladder" (p. 102).

In the settlement of the New England colonies, early distribution of land had originally provided "a closely-set arrangement of residences, public buildings and open spaces for public use--with fields, pastures and woodlands in the surrounding area" (Sutter, 1973, p. 84). In order to enhance the unity of the settlement, landholders had promised that they would continue to live in the village and let servants take care of their farms. But those "great lots" just a few

miles away which were to have been used only as farmlands very soon became the site of the family home, and a new community of large lots set rather far apart had evolved. "Nine towns in addition to Plymouth are named by Bradford in his account for 1639 and 1640" (p. 83).

In other parts of the countryside, the dispersed settlement pattern of ". . . separate residences on--not apart from--at least enough land to support a family became the common pattern in North Carolina, New York and Pennsylvania" (p. 88).

In a later stage of the country's development, the availability of land served political as well as financial purposes. "To encourage the cessions, Congress passed a resolution in 1780 that the lands be settled and formed into distinct states, but south of the Ohio both state and private speculative actions and intrigues complicated the problem" (p. 112). As a result of the need to bring new political units into being, the Ordinance of 1785 divided land into regular rectangular townships (six square miles) and sections (one square mile or 640 acres) which "sold at auction at a minimum price of one dollar an acre" (p. 112). The settlement of Marietta, Ohio had specified that "the first settlers had a right to a town lot, an eight acre field outside the village, pasturage along the Ohio, and a halfpint of whiskey on the first Fourth of July" (p. 114).

By 1862, the Homestead Act . . . enabled a settler (after five years of continuous residence and payment of a nominal registration fee) to secure Federal title to 160 acres, free of any other charge (Boorstin, 1965, p. 74). Settlers, many of whom were really "Squatters" because the land dispersal process moved so slowly, had ways of protecting their own and others' claims. A Claims Club could make a

newcomer aware of a claimant's rights even to the point of disassembling an interloper's nearly finished home as he stood ready with hammer in hand to place another board (p. 76). The intensity of the desire to acquire land, fostered such "obeying the letter of the law" tricks as the building of a 12 inch by 14 inch house to meet the 12x12 (foot) requirements; the use of a mobile house on wheels which could be rented for \$5 per day allowing a settler to say that he had an already constructed dwelling on the site; the baby which could be rented for temporary, reversible formal adoption. Any of those circumstances could certify intent to follow the requirement of living on the land (pp. 75-80).

Suffrage Requirement and Social Standing

In earlier years there had been no property qualification in Virginia, "for a while every free white man could vote for members of the House of Burgess." But "by 1670, the legislature . . . established a property qualification: voters included only 'such as by their estates real or personal, have interest enough to tye them to the endeavors of the public good.'"

As time passed, the suffrage was further restricted to include leaseholders and life-tenants; after 1699 one could not vote unless he was a "freeholder," that is one who owned land outright. One hundred unsettled acres or 25 acres with a house and plantation came to be required for a voice in choosing burgesses (Boorstin, 1966, p. 101).

In Newburyport, Massachusetts only property owners were allowed to vote in the town meeting and in 1773 "when only 59.8 percent of the adult male residents in the town had the franchise, the property requirement was indeed an obstacle of considerable significance" (Thernstrom, 1964, p. 40). The majority of professionals and merchants

could vote, but barely half of the maritime artisans and less than half of the laborers were able to qualify. "A lowering of the property requirement and growing prosperity combined to make 86 percent of the town's adult males eligible to vote in 1785, and the figure increased to 92 percent in 1807" (p. 40). A study of the progress of Irish immigrants in Newburyport between 1850 and 1880 showed that "most often . . . these families advanced themselves by accumulating significant amounts of property." Such a condition occurred only when two or more members of the family had been wage earners or by the family's "ruthless underconsumption" of basic necessities (p. 160). Such sacrifies were considered important because "families belonging to the propertied stratum of the working class, in short, were socially mobile in the sense that they had climbed a rung higher on the social ladder, and had established themselves as decent, respectable, hard-working, churchgoing members of the community" (p. 163).

A local paper in May 1856 summed up the situation: "The man who owns the roof that is over his head and the earth under his dwelling can't help thinking that he's more of a man than though he had nothing, with poverty upon his back and want at home; and if he don't [sic] think so other people will" (p. 164).

Alexis de Tocqueville's general perception was that "everywhere voting rights were restricted within certain limits and subject to some property qualifications. That qualification was very low in the North but quite considerable in the South" (1966, p. 52).

Property qualifications for the right of suffrage and for office holding were general during this period, [1750-1800] as they were thought to be "sufficient evidence of permanent common interest with, and attachment to the community; (from the Bill of Rights adopted in 1776). Only Pennsylvania allowed anyone who paid taxes

to vote and to be elected. Restrictions were gradually lifted in the older states in the first part of the nineteenth century and most of the new states were admitted with only small taxpaying qualifications or none at all--that is with white manhood suffrage (Sutter, 1973, p. 114).

Although ownership of real estate or any other property is no longer required for suffrage, the attitude is still common that those persons who do not own their own property do not have the same commitment to the community and that their process of decision-making does not consider the best interests of the locality. "In colonial times the ownership of land conferred the right to vote and to be a member of the political community; today it means security, credit, and the social standing that is a protection against the harrassments of police, welfare and health officials" (Warner, 1972, pp. 16-17).

Sense of Control of Life

A final consideration of the meanings of land ownership has to do with a sense of security and personal control.

In America a man owned land and paid taxes, or rented land and paid cash or goods to the landlord, but neither as owner or tenant did anyone have the right to dictate to whom he might or might not sell his land, who might inherit his property... the faith of farmers and townsmen in land as a civil liberty meant not only freedom from the meddling of feudal lords or town officials, at least as important, it meant freedom for even the poorest family to win autonomy, freedom to profit from rising values in a country teeming with new settlers, and freedom to achieve the dignities and prerogatives that went with the possession of even the smallest holding (p. 16).

"A man's property represented his free status, and it was not to be disturbed except for important public purposes, and only then after a full hearing and just compensation" (p. 17).

Evolution and Development of the Home Ownerhip Norm

As late as 1850, only 5 percent of the American population lived in cities larger than 100,000 with 85 percent living in rural areas. Most farmers built their own homes or acquired them when purchasing already developed acreage. Early development in cities generally followed the pattern of individual home ownership until the rapid urbanization occurring in the late 1800s. Immigration as well as migration increased the number of urban dwellers to over 30 percent of the population by 1900, and created overcrowded conditions.

The 1930s Urge to Own

Due to attitudes about land ownership, employers, chambers of commerce and other civic groups urged home ownership, and participated in campaigns furnishing advice, building plans and information about financing and construction costs. "It is chiefly by these promoters that home ownership on the installment plan has been advocated" (Craven & Meyerand, 1932, p. 432). With the push of urban congestion and the attendant increase in land prices; the development of the streetcar; and later the increasing availability of privately owned motorcars, private home ownership became more common in the outlying areas. The suburbanization trend of owned single-family dwellings was on its way.

Two differing conditions however, made home ownership somewhat less than a general pattern of behavior:

- 1. The popularity of apartment house dwelling is due to the growing preference of women for work outside the home, their demand for labor saving devices, the desire on the part of both men and women for freedom to move from one locality to another and their unwillingness to face certain economic liabilities that go with the ownership of a home.
- 2. The average cost of single family dwellings built in eighty-five large American cities in the year 1929 was \$4,902,

exclusive of land. . . . Using the convenient rule of thumb which asserts that a family should not undertake the purchase of a home costing more than twice its annual income, it follows that for the two-thirds of the population whose income is \$1200 or less per year home ownership is out of the question (p. 433).

The President's Conference on Home Building and Home Ownership was called by President Hoover to attend to precisely that condition. "It is doubtful whether democracy is possible where tenants overwhelmingly outnumber home owners," so stated Robert P. Lamont in the opening sentence of the Foreword to the avowedly objective report of the conference (Gries & Ford, 1932, p. vii). The purpose of the study was to 'make ownership possible for families that desire to own their own homes and to protect them in such ownership from needlessly heavy burdens of financing, taxation and legal difficulties. Home ownership should be rendered possible for every thrifty family" (p. xi). The Committee on Home Ownership and Leasing announced bluntly: "the committee believes that the social consequences which would accompany an increase in the proportion of home owners, for whom home ownership is sound, would be distinctly desirable and that this increase can be accomplished by removing or reducing the difficulties which limit the spread of home ownership" (p. 2).

Although some recommendations of the committee recognized that the renters' point of view should not be overlooked in planning community development and that landlord and tenant conditions should both be improved, most of their concern was with the continued problems of attainment of home ownership. Recommendation #6 states: "The committee recommends that efforts be encouraged and continued for the purpose of reducing the cost of financing to those for whom home ownership is sound and desirable" (pp. 8-9). They noted further that it was harder

for a home buyer to obtain a loan when he is buying at the bottom of the market; and also that a drop in realty values could cause the home owner who has a five or three year mortgage to reduce the principal substantially as a condition of renewing the loan just at a time when he most needs the credit. They believed that a well-recognized procedure by which loan lending institutions could obtain a more liquid supply of credit with which to meet demands of prospective home buyers would be useful. President Hoover had suggested a system of home loan banks and on July 22, 1932, the Federal Home Loan Bank Act was approved, providing the opportunity of discounting by mortgagees of first mortgage paper (p. 9).

The Federal Housing Administration was established in 1934 and provided for the potential home owner the opportunity for a lower down payment, lower interest rates and a longer period of amortization.

The volume of new homes financed under FHA more than tripled from 1937 to 1940 while the proportion of all privately financed new single-family homes financed by FHA loans increased from 24 percent in 1937 to 42 percent in 1940 (pp. 42-49). By the late 1930s the FHA had taken over the merchandising of home ownership.

Another committee of the President's Conference on Home Building and Home Ownership was asked to evaluate different types of dwellings, giving the advantages and disadvantages of each type. It carefully defined and cautiously received agreement from other committees on the classification of dwellings into three types with three varieties in each type: (1) one family dwelling, (2) two family dwelling, (3) multiple dwelling; each of these types may be a) detached or free standing, b) semi-detached or twin, c) group and row (p. 150). In order to

complete their task, the committee established guidelines, including the following for the purpose of determining housing needs:

The one-family house has advantages for the family with children. The small apartment has advantages of convenience and economy for many families of adults. In most families there is need both for one-family houses and for multiple-dwellings.

The typical apartment is a temporary abode, which does not have the atmosphere and associations of a permanent home. The apartment population is a relatively nomadic population reluctant to assume local responsibilities.

Occupants of one-family houses, whether owned or rented, tend to have greater stability, a greater concern in the character of their neighborhood. With genuine home ownership, stability and concern in neighborhood and civic affairs are increased (pp. 169-172).

Other comments of the time on the issue of home ownership included the results of a mail survey published in 1937 by the Milwau-kee Journal of 253 families who had recently purchased homes in or near Milwaukee. Of the respondents, 75 percent had owned no home previous to their present home, and "only 15.73 percent of them would rather have rented but were not able to find the kind of rental home they wanted" ("253 New Families," August, p. 147). In answer to why they had bought rather than rented, the most frequent responses were listed as follows:

	Reason	Reason	
	<u>No. 1</u>	No. 2	
Belief in home ownership	23.80%	7.21%	
Belief that a home is a good investment	15.88	12.92	
Tired of renting	14.85	5.66	
Advantages for children	11.38	11.38	
Cheaper to buy than to rent	7.42	7.73	
Safeguard against the future	4.95	11.89	
Previous home too small	4.95	2.57	
Belief real estate prices are going up	3.96	15.50	

The study conducted for <u>The Architectural Forum</u>, reported in November 1937, serves as factual basis for the recognition of changing attitudes, as well as itself proving to be some of the earliest survey research done in the assessment of renter/owner attitudes. Its report was based on

1,003 face-to-face interviews scientifically selected to account for variations in income, size of town, location . . ., conducted by the staff of Cherington and Roper . . . the firm which, since July 1935, has collaborated with Fortune on its phenomenally accurate Quarterly Surveys of public opinion (p. 371).

Respondents were persons considered to be potential customers for the "under \$5,000 house."

Of the respondents surveyed, 43.4 percent were home owners and 56.6 percent were home renters with 58 percent of those owning being 40 years of age or older and 63 percent of those renting under 40. Of those who rented nearly half lived in apartments and duplexes rather than in houses. In summarizing the attitudes expressed, The Architectural Forum said, "The big news: four out of every five people in the 'middle-middle' 'lower-middle' classes definitely prefer to own their homes rather than rent them and . . . 91 percent of those now owning homes want to keep on owning them, [but] only 32.7 percent of those now renting their homes want to keep on renting them."

Easily the most provocative are the reasons given for and against home ownership. The four out of five respondents who favor ownership gave as their two leading reasons "Like feeling of ownership" and "Like to fix to suit self," these two accounting for exactly 50 percent of all motives for ownership. "Good investment," the Ben Franklin answer which any business man is expected to give, ranked a poor third. The obvious implication should warm the heart of poets and Chambers of Commerce alike: to most people, a home is still a castle first, and an economic method of keeping out the weather second. Which, considering that mortgage payments customarily account for one-fourth of the average monthly budget, speaks volumes for the power of sentiment. The unexpectedly large role played by the emotions when it comes to homes is even more clearly revealed in two sets of answers dealing with the financial responsibility involved in ownership. Among those who prefer to rent, the dislike of this financial responsibility is the leading argument against buying a home. And yet among a second group which differs from the first group only in that it would prefer to own, the financial responsibility involved dwindles to almost no problem at all. In each case the mortgage payments would bear exactly the same relation to the family budget, therefore exactly as hard or as easy to bear; but a simple difference of feeling about ownership is apparently sufficient to conjure a responsibility where none grew before.

Significantly, all the arguments given in favor of ownership are positive ("Like feeling of ownership," "More economical," "Like to fix to suit self" (etc.), whereas almost all of the arguments in favor of renting are negative ("Dislike financial responsibility," "Can't afford kind wanted." "Kind wanted not available," etc.). This suggests that whereas one out of every four respondents plumped for renting his home, he would still like to own one if it seemed at all possible or practicable (p. 373).

Changing Purpose and Identity of the House

David Handlin's historical research (1976) examined the changing purpose and identity of the single-family detached house, proclaimed by Andrew Jackson Downing among others as "the ideal seat of domestic life." Downing encouraged the general public to believe that they also could aspire to the wholesome life of the single family house which provided the elements of nostalgia, separateness, and self-sufficiency of farm life, while all the time they were being more connected with urban communications and utility networks.

By the mid 1800s, the house was becoming a "container of carefully planned spaces" in which only certain activities were to take place at certain times, and rooms were rather permanently identified by the activities and the attendant objects assigned to each room.

By the Civil War the essential qualities that were to distinguish American housing for the next hundred years had been established. The home's transformation from a place of "domestic manufacture" to one merely of "residence" established an identity that involved not only architectural and environmental characteristics, but also a relationship to other emerging institutions such as libraries, factories, offices, schools, hospitals, department stores, etc. (p. 33).

By the turn of the century, the single-family house had changed from an object of nostalgia, to a tangible presence of social achievement for the wage earner, and by the time of the 1930s era, it had become a container of consumer goods.

Handlin believes that "group housing was conceived in terms of concepts that were distilled from single-family housing." Architects operated under the delusion that the inclusion of a typical roof line or window treatment would carry over the illusion of the single-family house. Yet none of these modifications served, "because the essential qualities of the single-family house had been compromised out of existence." To date no viable way of providing the "identity" of the single-family house has been provided in mass housing to the satisfaction of low, moderate or better income groups. "A more realistic appraisal of what living in groups meant, from the point of view of what happened both inside and outside the unit, might have helped to avoid some of the problems that have beset many projects" (p. 35).

The 1960s Problem

In 1960, Foote, Abu-Lughod, Foley and Winnick (Foote et al., 1960), examined previous studies of housing preferences, needs and demands offering suggestions for improving housing. Writing from the perspective of the consumer of housing, they recognized that "the house is the home" and that "unlike most other economic commodities, housing is also a social commodity." With a continuing interest in the concept of the family life cycle and the changes which it creates in demand for housing, each contributing author highlighted other variables which have changed the "housing need."

Louis Winnick assessed the 1960 housing problem as due to consumer's lessened financial allocations to housing which was in turn due to the "inordinate rise in housing costs; they had gone up faster than any other components of the consumer's standard of living." His suggestion was that more government assistance in insuring higher value mortgages would encourage more affluent families to spend more and thus prime the house building pump a bit.

Janet Abu-Lughod and Mary Mix Foley assessed the problem as a "maldistribution of housing" due to "unequal distribution of shelter space among people who occupy the various stages of the family life cycle."

Winnick observed that in general, families with higher education levels consumed more housing. "So implicitly it comes through that with rising education, consumer aspirations for more and better housing are rising and will affect demand for housing."

Nelson Foote called for a reassessment of housing standards looking especially to the need for more flexibility in building

design which would allow for greater ease in remodeling to adjust to variations in life style or life stage. The consumer's housing problem is thus conceived not merely as the inadequacy of shelter space relative to income, but increasingly as the "inadequacy of the inflexible dwelling itself to express and implement some chosen style of life of its occupants" (pp. xi-xxvii).

The Current Housing Stock

Census Data

From 1890 to 1930, the percent of owner-occupied housing remained relatively constant at approximately 46 percent of the nation's occupied housing units. The 1940 figures show a low of 43.6 percent owner-occupied units, representing a decline of 4 percent during the decade of the depression. But from that time onward, the total number and percentage of homes occupied by owners began its uninterrupted increase to the 1970 high of 39,885,000 owner-occupied units, equal to 62.9 percent of the total number of occupied housing units in the United States (Table 1). Annual housing sample survey data since 1970 show continued increases, with the 1976 report indicating that 47,904,000 units are owner-occupied, representing 64.7 percent of the currently occupied housing stock.

Of the 39.9 million owner-occupied units in 1970, nine out of ten (89%) were one family houses (Table 2).

Table 1.--Occupied Housing Units and Tenure of Homes: 1890 to 1970.

		Tenure of Homes				
	Total Occupied	(IMMER (ICC)IM) ed		Renter Occupied		
Total	Housing Units (1,000)	Number (1,000)	Percent	Number (1,000)	Percent	
1970	63,450	39,885	62.9	23,565	37.1	
1 9 60*	53,024	32,796	61.9	20,227	38.1	
1956 ^a	49,874	30,121	60.4	19,753	39.6	
1950	42,826	23,560	55.0	19,266	45.0	
1945 ^a	37,600	20,009	53.2	17,591	46.8	
1940	34,855	15,196	43.6	19,659	56.4	
1930	29,905	14,002	47.8	15,320	52.2	
19 20	24,353	10,867	45.6	12,944	54.4	
1910	20,256	9,084	45.9	10,698	54.1	
1900	15,964	7,205	46.7	8,224	53.3	
1890	12,690	6,066	47.8	6,624	52.2	

^{*}Denotes first year for which figures include Alaska and Hawaii.

^aFigures for 1956 are for December 31; figures for 1945 are for November 1 (based on sample surveys) (Historical Statistics of the U.S., 1975, p. 646), figures for decennial years, 1890 to 1970, are for census dates.

Table 2.--Occupied* Housing Units: 1976.

Occupied Units	Owner Occupied		Renter Occupied
74,005,000 (total)	47,904,000		26,101,000
1 detached	40,476,000		7,242,000
1 attached	1,660,000		1,235,000
2 to 4 units in			
structure	2,143,000		7,116,000
5 or more units			
in structure	638,000	5 -9	3,081,000
		10-19	2,523,000
		20-49	1,925,000
		50+	2,338,000
mobile home or			-
trailer	2,987,000		640,000

^{*}Additional owner-occupied housing units not included in the same census data table, included 405,000 units which were under cooperative ownership, and 634,000 under condominium ownership (U.S. Bureau of the Census, 1978, p. 1).

Housing Norms

General U.S. housing norms can be described very simply as "ownership of a single-family house." Such a description is not only an explicit statement of two of the norms, i.e., tenure type and structure type, but in addition, the ownership of a single-family house holds implicit provision for the other identified norms of space, quality, expenditure and neighborhood. Tenure and structure norms have become so closely intertwined however that the two norms are often thought of as being a single norm; and when the two norms are found together, the other norms of space, quality, expenditure and neighborhood often seem to be available at a higher level of acceptability.

The ownership of real property has historically been an available and much sought after goal in the United States. Positive sanctions of income tax credit and investment benefits for owners are

well-known. Other than the absence of those benefits available to owners, the negative sanctions for non-ownership are less obvious but are nonetheless effective. In most communities zoning regulations have been created to preserve homogeneity of the single-family house and lot. "Single-family districts represent a most exclusive type of zoning. All other types of residential, business and industrial uses are excluded from these districts" (Barlowe, p. 544). Therefore those families which prefer to live in a rented house or mobile home or apartment may not be able to find adequate accommodations near good schools, or in a safe place for children, i.e., the desirable amenities of the neighborhood are withheld.

Cultural norms clearly prescribe ownership of a single-family dwelling for families with children, whether there are one or two parents present. Of the two norms [structure-tenure], it is the norm for structure type that appears to be the stronger for families with children. . . . More deviation is permitted when the children are younger than when they are teenagers. . . . When a family has school-age children, rental tenure is a strong indication to the community that the family has some sort of financial problem. . . . Of the two norms, it seems that the ownership norm is stronger for single individuals and childless couples than is the norm for the single-family dwelling. Hence condominiums, cooperatives and mobile homes are normative structure types for such households (Morris & Winter, 1978, pp. 119-120).

Some recent research has shown that although "the overwhelming majority (over 90%) of all respondents felt that ownership of a single-family dwelling was the norm for American families" and also their own family preference, that among those under age 40, those with education beyond high school, and with income over \$15,000, there was a lesser percentage who expressed those same norms and preferences. Nevertheless, Morris and Winter conclude: "It seems doubtful that rapid or extensive changes have occurred in norms for ownership and structure type" (1976, pp. 118-121).

Space norms prescribe the amount of space a family should have and are dependent upon family size and composition . . . may be expressed in terms of the number of square feet in the dwelling . . . the number of rooms, or the number of bedrooms . . . the number of square feet per person, persons per room or persons per sleeping room (Morris & Winter, 1978, p. 87).

The American Public Health Association outlined ten activities generally performed within the dwelling unit and "presented space standards as the amounts of space needed for each activity calculated separately for various household sizes." Adding the individual space allowances for the specified activities, the standards ranged from 400 square feet for one person to 1550 square feet for six persons. More recently (1971) APHA has also developed standards of habitable space, "those thought to be necessary to 'insure that the quality of housing is adequate for protection of public health, safety and general welfare,'" of 150 sq. ft. up to 650 sq. ft. for six persons. When these minimum standards of habitable space are compared to the optimum standards previously recommended, "a range of permissible deviation from the standards or norms," has been described (pp. 88-90).

HUD specifications, developed on the basis of square feet per room, became the guidelines for FHA minimum requirements and "because of the nature of the building industry and the housing market, the HUD standards became virtual descriptions of new dwellings insured by FHA mortgages . . . in essence, these minimums dictated the size of millions of dwelling units" (p. 94). Morris and Winter noted that HUD set a lower minimum space requirement for low-income housing than for other units.

A second way to measure space norms is to establish a standard based on the persons-per-room ratio. . . It has become accepted practice to term housing units with more than 1.0 persons per room as "overcrowded" and those with more than 1.5 persons per room as "severely overcrowded."

The U.S. Census Bureau has established a 1.01 standard descriptive measure for comparative purposes. Such ratios however, take no account of sex or age or activity differences which would influence the usefulness and the degree of crowdedness which families might feel, thus the more realistic assessment of bedroom need is recommended (pp. 94-95).

"Because the space norms that apply to families depend on the age, sex, and role of each family member, there are many changes that occur in the norms that apply as families with children progress through the life cycle" (p. 100). In their summary statement about space norms, Morris and Winter show clearly the importance they place on stage in the family life cycle as a variable influencing spatial standards.

There can be little doubt that the number of bedrooms needed, based on age and sex composition, is the way that the majority of American families define their space needs. It is important, therefore, that housing researchers and housing policy makers utilize similar measures when defining crowding and space needs. Measures of persons per room, persons per sleeping room, and square feet of space needed should probably be abandoned in favor of measures of bedroom need . . . if culturally-relevant evaluation of residential crowding is required (p. 103).

Morris and Winter have also identified quality, expenditure and neighborhood norms, but state that the "content or specific prescriptions of these norms are much more closely related to income and social status." Quality norms prescribe that housing should be congruent with the family's social status... expenditure levels should be reflective of income and "neighborhood norms require that the family live in a neighborhood appropriate to their social and economic status" (p. 125).

Although not specifically labeled as norms, the MIT-Harvard Joint Center for Urban Studies report, America's Housing Needs: 1970 to 1980, including ". . . some guidelines as to the kinds of new housing units that will most nearly satisfy public demand in 1980 . . ., pointed out

certain factors in consumer aspirations . . ." (p. 5-3). In depth interviews with 600 Greater Boston area homeowners and renters in May and June 1971 and 300 similar residents of the Greater Kansas City area in November and December 1972, established that respondents in those cities were able to identify characteristics of housing quality which served as the basis for "an interpretation of the housing standards and goals that each socio-economic class in the United States seems to be setting for itself in the 1970's."

It is proposed here that knowing a family's (or individual's) social-class identification is crucial for understanding its housing aspirations. At each of the four main class levels-upper status, middle class, working class and lower class, one finds that a different set of expectations has been established about the kind of housing which provides a proper symbolic statement for each life stage (Birch et al., p. 5-6).

Seven levels of housing in public imagery were established: prestige class, very good, pleasantly good, standard-comfortable, standard marginal, sub-standard, and slum (p. D-11). For each level the number of rooms, location, type of structure, tenure type and probable expenditure were specified along with the social class, income and/or occupation for whom the housing was considered appropriate (see Appendix A).

From 1940 through 1970 the ratio of average weekly wages to housing ownership costs was decidely in favor of the incipient home owner. Americans have benefited from an increasing ability to purchase housing throughout most of the last four decades (Barlowe, 1979, p. 59).

The dynamics of our stratified society are such that increasing affluence has lead families to raise their standards about what they expect from their housing.

Wants and aspirations now influence the size, the composition, and the timing of much of consumer spending. The share consumers have been spending on optional purchases, especially on durable goods, housing, travel, and leisure time pursuits has been constantly increasing (Katona, Strumpel, & Zahn, 1971, p. 8).

Aspirations toward upgrading as reported by Birch place emphasis on two kinds of issues: additional space for hobbies, a family room, interior storage, or a two car garage; and secondly, the concern that their housing be "up-to-date." The basic problem is that the American house has not kept up with the American family's acquisition of recreational equipment and expansion of its wardrobe. The idea of private space was identified as a "central underlying theme in housing aspirations . . . it is generally admitted, however, that in a cost squeeze the easiest thing to sacrifice in future housing will be yard space-people can imagine themselves cutting back on the size of their yard so long as they can still have one that is private" (Birch et al., 1973, pp. 5-45-5-71).

Alternatives to the Norm

Alternatives to the norm of ownership of a detached single-family house, include varying combinations of ownership of attached multiunit housing, rental of single-family or multiunit, and either renting or owning a mobile home.

In 1960 one and three tenths percent of all year-round housing units were "mobile homes or trailers," with the percentage having increased to three and one tenth percent by 1970 (1970 Census of Housing). The 1976 Annual Housing Survey reported that 3.6 million mobile home units were being used as year-round housing, constituting four and six tenths percent of the total. Of great significance to this study is

the fact that "in 1976 mobile homes accounted for 96 percent of the sales of new single-family homes under \$20,000 and 76 percent of those under \$30,000" (Meeks, 1979, p. 220).

Even though a mobile home is essentially a "one-family house detached from any other house," when the 1970 census takers asked the question "which best described this building?" possible responses included in addition to the one-family house the category of "mobile home or trailer" (1970 Census of Housing, Appendix 13). According to census definition, "when one or more rooms have been added to a mobile home or trailer, it is classified as a one-family house. If however, only a porch or shed has been added, it is still counted as a mobile home or trailer" (Appendix 9).

In 1976 Breckenfeld charged that the housing crisis was being overstated because reports did not include the number of families who were purchasing mobile homes:

It is no trivial matter that mobile homes stand outside the national calculus of housing needs, market and finance. The omission warps our perception about what is happening in the total shelter market. Mobile homes have been providing nearly 20 percent of the nation's output of shelter and more than 90 percent of new housing prices below \$20,000. If mobiles were generally counted as one-family houses, a lot less would be heard about families of modest means being priced out of the housing market (p. 87).

Yet, it is not clear whether the purchase of mobile homes by American families is increasing by design or by default. The acceptability of the mobile home may be essentially a factor of individual or general financial conditions. Lindamood (1974) found that "because their income is not as high as it will be later in the life cycle, young families often find that a small apartment or a mobile home provides sufficient space" (Morris & Winter, 1978, p. 100). In another context, it was

found that "very few families with school age children live in mobile homes" (p. 120).

Some of the disadvantages which have been cited as factors deterring the acceptance of mobile homes are: higher interest rates charged for mobile home loans, depreciation or less appreciation than realized by owners of conventional single-unit housing, the lower resistance of mobile homes to wind storms, and the higher loss of life in the event of fire (Angell, 1979).

Even current industry reports and projections show some mixed acceptance. In 1978, the 275,000 mobile home units which were shipped were about 4 percent fewer than the industry had expected to produce, thus recording only a 4 percent gain over 1977. The Department of Commerce projects a 9 percent decline in production in 1979, due to a drop off in sales because of the high cost of loans to consumers. A bright note for mobile home manufacturers is, however, the increasing number of mobile home subdivisions being planned within commuting distance of major cities. Rather than the typical trailer or mobile home park, these lots will be standard subdivision size -- "6,000 squarefoot lots of cul-de-sacs and landscaped common areas"--with homes from 960 to 1500 square foot to be sold in the \$30,000 to upper \$40,000 range. One spokesman for the industry believes that instead of their current 17 percent share of the new single-family home market, that by 1985, about 20 percent of new single-family homes sold will be mobile homes (Hershberg, 1979).

Multi-unit housing of apartments, townhouses or duplexes comprise about 25 percent of housing units, with approximately 81 percent of the multi-unit structures being held under leased arrangements. Only 17 percent of such structures in 1970 were owner-occupied, although 56 percent of the units classified as attached single-family units were owned by the residents (Angell, 1979, pp. 245-271).

Most typically an apartment structure is composed of units separated vertically and horizontally from other units, while townhouses share only walls with adjoining units. The number of units in the structure for either type can vary and the density of units in the structure as well as the number of multi-unit structures in an area can be a major factor in housing decisions (Michelson, 1977).

Whether rented or owned, multi-unit contractual arrangements usually include maintenance agreements which free the resident from the responsibility for external care, a feature desired by many. Renting advantages include: low initial financial demand, freedom to move readily with little financial expenditure or delay, and stabilization of housing operation costs.

A general disadvantage cited by many is that privacy inside the unit is not easily obtained unless construction methods have carefully considered arrangements of rooms as well as sound insulation requirements. Successful units have provided privacy in the yard by the use of step-back facades as well as by the inclusion of various structural barriers between units.

The Current Problem, a Potential Policy Issue

In their second study of America's housing need, the MIT-Harvard Joint Center expanded its analysis of housing deprivation and examined aspects of the problem of young families attempting to buy single-family houses for the first time.

In addition to the obvious factor of increase in population causing increased housing need, they recognized that "incidence of households" was a major variant within the population which must be considered. "For the past several years, there has been a trend among all categories of the population toward forming more households per capita . . ." (Frieden & Solomon, 1977, p. 21). From their research they identified six basic factors which they believe have caused most of the differences in the incidence of households over time: marital status, family size or number of children, the availability of relatives, income and wealth, the costs of household separation and the household-housing match.

Too often analyses of the incidence of households have focused narrowly on one or two factors without considering a broad range of lifestyle issues that affect people's total well being. . . . Whether or not a person finds a housing situation attractive depends, in addition to the person's own headship status, on the type of dwelling, the composition of the household to live in that unit and the unit's cost (pp. 25-30).

The Joint Center Staff recognized that young families who wish to buy homes for the first time are suffering a kind of housing deprivation. Having described the impact of cost increases for single-family houses, the report examines the question, "How Are Consumers Adjusting?"

Faced with rising prices for single-family homes, families of average income can make adjustments to cope with their housing needs. They can stretch their resources and take on heavy mortgage commitments by economizing on other expenses, or they can try to increase their resources by adding the income of a working wife. They can search out older houses in marginal condition and renovate them to their own standards. They can live in rental apartments, taking advantage of the fact that rent levels have been increasing much more slowly than ownership costs and even more slowly than the consumer price index. If they live in areas where such units are permitted, they can buy mobile homes. Or, they can reduce the expectations they have for single-family houses by searching for new homes that are smaller and less elaborately equipped than what had become typical for new homes of the past few years. Also, they can rent out rooms or convert part of single-family houses into rental apartments (p. 105).

Current Empirical Studies

Empirical studies which can be useful to an examination of the acceptability of alternative housing structures or alternative housing tenure have focused mainly on satisfaction or dissatisfaction with housing, residential mobility or propensity to move, and housing as a reflection of preference for location. The examination of factors influencing residential mobility helps to identify attributes which would be predictors of choice of alternatives.

Residential mobility, residential satisfaction and propensity to move were recently examined by Speare, 1970, 1974; Pickvance, 1974; and also by Morris, Crull, and Winter, 1976, among others. In general, results from these studies have identified that residential satisfaction is positively correlated with moving or the propensity to move; that housing which is "crowded" had a positive influence on potential mobility.

Rossi's work (1955) continues to be upheld: renters are more likely than others to be potential movers, presumably because renters have no other way to adjust to some dissatisfactions with the housing. Michelson et al., (1973) examined "push-pull" factors noting that movers from apartments to houses most often identified preference for ownership as a major factor influencing a move.

Michelson's most recently published work (1977) continues to report on choice, human behavior and residential satisfaction by examining the patterns of moves within the Toronto area between downtown high-rise apartments and single family homes and suburban high-rise apartments and single-family homes. From the perspective of the push-pull factors influencing mobility, Michelson concluded that

satisfaction with certain types of existing housing is at least partly a function of the availability of more desirable forms of housing. As the market now stands, the surest way to improve satisfaction with high-rise housing, particularly for the less-affluent sectors of the population, would be to build more detached houses at affordable prices (p. 367).

Some specific findings about housing from the University of Michigan's Quality of Life study (Pfaff, 1976) are of interest to this research: housing appears to be an important component of living standards, and satisfaction in housing is highly correlated with general economic measures. Also germane is their examination of the relationship of one's satisfaction with the attributes of a product to the general satisfaction with the product: housing satisfaction was found to be closely related to the satisfaction with the physical attributes of the house; i.e., general appearance, number and size of rooms, lot size, quality of workmanship and somewhat less closely related to neighborhood characteristics including distance to schools. The financial attributes of satisfaction with taxes and utility costs and satisfaction with monthly payments for rent or mortgages and interest appeared to be related to each other but did not appear to be related to other attributes, nor to general satisfactions with housing. "In other words, people may have a negative (or positive) reaction to the financial burden they have to bear for their home or apartment, but it has little bearing on whether or not they are satisfied with their housing. Consumers do not consider costs as part (or an attribute) of their place of residence" (p. 208).

Winger (1969) assumed that "given a budget constraint and the multi-dimensional character of the dwelling, . . . that households, when purchasing a home, are forced to substitute or trade-off certain

characteristics of the dwelling for others" (p. 413). In order to examine the trade-offs made, he studied such housing components as internal space, location and a group of "other general attributes" using metropolitan area tabulations of single-family homes which had been purchased with the use of an FHA insured mortgage.

His conclusions were that families have minimum space standards, that "if income enables the family to purchase more than that minimum, however, these results indicate that additional space will be traded for . . . location and all other quality attributes" in that order (p. 416). (Unfortunately due to the nature of the data used, "other quality attributes" could not be identified.) "After the space requirements are met, apparently another set of standards comes into view . . . middle-class families who buy homes in places where location costs are relatively high are shown to be willing to pay the extra cost required to get the location they want" (p. 417).

Michelson (1977) has found that "it is not the ornate features of the house that serve as the major attraction to the respondents surveyed, but rather some of its most basic characteristics--control of the premises, relative economic security, self-containment and private, open space" (p. 367).

Relatively fewer studies have attended to the possible development of housing alternatives or to the meanings or purposes which

Americans attribute to their homes.

Focusing on middle-income families with young children living in urban apartments, D. Geoffrey Hayward's research (1977) first derived 85 different meanings of "home" from interviews and questionnaire data. Respondents then sorted the ideas into nine categories of similar

meanings: home as a relationship with others; as social network; as self-identity; as place of privacy and refuge; as continuity; as a personalized place; as a base of activity; as childhood home and as physical structure. Thus "home" is perceived as a structural entity but also as "a relationship to such an environment rather than the environment itself." Hayward believes that each of the several dimensions "is permeated with physical design considerations, with issues of personal abilities and with social influences, simultaneously" (Hayward, p. 13). He indicated the potential value of replication of his research with residents of single-family houses.

In a study designed to learn about the quality of homes in the state of Washington, Tremblay, Dillman, and Dillman (1977) assessed housing satisfactions and preferences; what kind of home respondents wanted and whether they would accept certain home energy conservation measures.

When asked to select one of seven kinds of housing in which they would consider living, 77 percent of the sample chose the owned single-family house with the next greatest frequency of response indicating "buy a mobile home located on a lot that you also buy" (17%) (p. 13). The third most frequently selected alternative was renting a single-family home--preferred by 16 percent of respondents.

The researchers noted that "yard ownership seems to be very important to people" (p. 11). When respondents were asked how difficult it might be to accept each of several possible energy saving policies, space reduction of the home by as much as "1-2 less rooms than present average" was rated as "somewhat easy" and "very easy" by 34 percent of the sample, but only 5 percent considered that to "build homes on smaller

lots so that the side walls are shared with homes next door" would be equally as "easy" (p. 14).

In their study of 204 freshmen college students living with their parents in New York City, Hinshaw and Allott (1972) asked respondents to project their preferences for alternative housing environments to a period ten years hence.

Their study demonstrated the continuing preference for single-family homes: "An overwhelming percentage [75%] of our sample preferred to own single-family detached homes" (p. 104). Of those respondents presently living in high rise buildings, 25 percent appeared to prefer that type of structure.

"Planners have been trying to satisfy the desire for single-family unit living and to economize on land by proposing cluster housing with common open space. We found, however, that people may be willing to trade off interior space in return for private exterior space" (p. 107). The hypothetical choice between (1) a small house with individual private outdoor space, and (2) a larger house with outdoor space which would be shared by several other families, yielded responses which "all overwhelmingly preferred the first choice," with the desire for first choice increasing proportionally with income (p. 106). This finding seems consistent with Michleson's report (1970, p. 146) that "they want it [space separating homes] for what they can do on the land as individuals or as families."

The literature indicates that the housing norm is the ownership of an adequate single-family detached house. Viable alternative structures to the norm appear to be a mobile home, a duplex, townhouse or apartment, any one of which could be rented or purchased.

CHAPTER III

METHODOLOGY

This study is of a descriptive, comparative nature designed to assess the acceptability of alternatives to the norm of ownership of single-family dwellings. It is exploratory in approach and is hypothesis building rather than hypothesis testing. The data used were obtained from questions included in the larger study, "Functioning of the Family Ecosystem in a World of Changing Energy Availability" conducted in the greater metropolitan area of Lansing, Michigan during the months of May and June 1976, with families as the surveyed unit. The 1976 study was the second phase of the project which had been initiated in 1974; both phases were funded by the Michigan Agricultural Experiment Station.*

Data Collection Procedures

Data were gathered by trained interviewers who first contacted the male or female head of the household to determine eligibility and to obtain agreement for participation as described by the research team. Participation included (1) response by a head of household to personal interviews conducted by the interviewer at the first contact and also

^{*}This research was conducted through the Institute for Family and Child Studies, College of Human Ecology, Michigan State University and was funded by the Michigan Agricultural Experiment Station, Project, 3152.

at a later date when the interviewer returned to pick up the selfadministered sections of the questionnaire; and (2) independent responses
by male head of household, female head of household and the oldest child
if between 12 and 20 years of age, to the questionnaire left by the
interviewer in the selected eligible households. The self-administered
section assessed knowledge, attitudes and behaviors related to use and
availability of energy. It also probed attitudes about family relationships, interest in home related behaviors and the acceptability of
housing alternatives. Demographic and socioeconomic data were collected
by the interviewer during the second contact with the head of household.
A ten dollar honorarium was given to the household when all information
had been obtained.

The data were checked by the research team for completeness and independence of responses, after which coding, keypunching and verification were completed by trained personnel. Cases of obvious collusion were excluded from the sample.

The Sample

Sampling Procedure

A multi-stage probability sampling procedure was used in the selection of the sample. The site of the study was the Lansing Standard Metropolitan Statistical Area (SMSA) which is considered to be a well defined metropolitan area covering parts of Clinton, Eaton, and Ingham Counties and is populated by 367,000 persons, including 89,610 families (1970 Census). The diversity of functions of the area includes the seat of the state government, a major university, plus heavy and light industry, all set within an agricultural sector.

For the urban portion of the sample, ten census tracts were randomly selected, each of which had a probability of selection proportionate to the number of households included. From 34 selected blocks within those tracts, again proportionate to the population, more than 600 home addresses were selected using the 1973 Polk City Directory. Of the addresses, 20 percent were sampled which provided 171 urban families for the study.

In selecting the rural portion of the sample, two townships were randomly chosen from 12 which had no incorporated city or village. The 36 sections in each township were used as the primary sampling frame with one section randomly chosen from each row of six. Every second residence was sampled and 92 rural families were thus included in the sample.

Because the 1976 study was the second phase of the project, it was desirable that as many as possible of the 1974 addresses and families be used (Morrison, 1975; Hogan, 1976; Keith, 1977; Humgerford, 1978). In addition the main focus of the larger study was the family's use of energy which was more easily examined with as many as possible single-family dwellings included, hence the sample tends to have a large representation of single-family dwellings. Nevertheless, comparisons made between this sample and the 1970 census data for the Lansing SMSA determined that in general the area probability sample was representative of the Lansing SMSA, with the sole exception of a smaller representation of single member households (Zuiches et al., 1976; U.S. Bureau of Census, 1975). The final sample was composed of 263 families.

Description of the Sample

Family Characteristics. -- The 263 families thus selected included primarily families in which husband and wife were both present and in which there were children. Approximately half as many of the families had no children but did include both husband and wife. The remainder of the families included children but were headed by single parents (Table 3). All of the 263 families of the larger 1976 sample were used in this study.

Table 3.--Family Type of Respondents.

	% 100	N 263
Husband/wife with children	60.5	159
Husband/wife no children	29.3	77
Female head with children	9.3	26
Male heads with children	.4	1

The range of family incomes for the sample is shown in Table 4. The greatest number of families (34.2%) had incomes between \$15,000 and \$24,999 with the next largest category being \$10,000--\$14,999. More families had incomes below \$10,000 than above \$24,999. The median family income for the sample was \$15,100 which is slightly lower than that of \$16,600, the median for the tri-county area (U.S. Bureau of Census, 1977).

The family life cycle classification included the age of children younger than 20, the age of the oldest child and the wife's age categorized as either younger or older than 40 (see Appendix A for

Table 4.--Selected Characteristics of Families.

Family Characteristic	% 100	N 263
Household Income, 1975		
Less than \$4,999	7.6	(20)
\$ 5,000 - \$ 9,999	15.2	(40)
\$10,000 - \$14,999	24.0	(63)
\$15,000 - \$24,999	34.2	(90)
\$25,000 or more	14.1	(37)
Missing	4.9	(13)
Median Income	\$15,100	
Family Life Cycle		
Wife's age less than 40, no children less than 20	8.4	(22)
Age of oldest child less than 3	6.5	(17)
Age of oldest child is 3 - 4	4.2	(11)
Age of oldest child is 5 - 12	24.3	(64)
Age of oldest child is 13 - 19	22.8	(60)
Age of oldest child greater than 20, other children less than 20 in household	4.6	(12)
Wife's age greater than 40, age of oldest child is greater than 20, no children less than 20 in household	6.1	(16)
Wife's age greater than 40, no children in household	23.2	(61)
Number of Children		
No children	30.0	(79)
One child	24.0	(63)
Two children	23.6	(62)
Three children	14.8	(39)
Four or more children	7.6	(20)

complete documentation). Nearly one quarter of the sample was composed of families in which the age of the oldest child was between five and 12 years with approximately the same number of families having children between 13 and 19. A third large group of families were those in which there were no children in the household and the wife was older than 40 years of age (Table 4).

Approximately one quarter of the sampled families had one child present, with nearly the same number of families having two children (Table 4). However in 30 percent of the families there were no children present.

Housing Characteristics. -- The largest percentage of families (84.4%) in this study lived in single-family houses with 15 percent living in other types of dwellings (Table 5).

Table 5.--Selected Housing Characteristics of Families.

Housing Characteristic	% 100	N 263
Structure Type of Present Dwelling		
Single-family house	84.4	(223)
Multiple unit structure	11.1	(29)
Mobile Home	3.8	(10)
Missing	.4	(1)
Housing Tenure		
Owner	78.7	(207)
Renter	20.5	(54)
Missing	.8	(2)
Residential Location		
Urban	65.0	(171)
Rural	35.0	(92)

Of the families in the sample, nearly 80 percent were home owners, while 20 percent were renting the housing in which they lived (Table 5). In the Lansing SMSA, about 70 percent of the occupied housing units were owner occupied (1970 Census). It should be noted, however, that the Census data include families, unrelated individuals and single person units as well. A study focusing on the family would be expected to have a slight overpresentation of single-family and owner occupied dwellings. As shown in Table 5, 65 percent of the families lived in the urban area and 35 percent lived in rural locations within the Lansing SMSA.

Individual Characteristics.--As is shown in Table 6, there were slightly more female heads of households than male heads. Twenty-six females were single parent heads of households. When both adult males and females were present, both were considered heads of households.

Table 6.--Sex of Heads of Households.

Sex	Percentage	Number
Male Head of Household	47.5	236
Female Head of Household	52.5	<u>261</u>
Total	100.0	497

The greatest number of both males (41.5%) and females (32.2%) were in the age group 30-44 years with the next largest group being 45-64 years of age. Only 11.9 percent of male heads of households and 8.8 percent of the female heads were of "retirement age" of 65 years or more (Table 7).

Table 7.--Selected Characteristics of Heads of Households.

Head of Household Characteristic	Male Head of Household		Female Head of Household	
	100%	N=236	100%	N=261
Age Level:				
18-29 years	18.6	(44)	28.0	(73)
30-44 years	41.5	(98)	32.2	(84)
45-64 years	26.7	(63)	29.1	(76)
65 years or more	11.9	(28)	8.8	(23)
Missing	1.2	(3)	1.9	(5)
Educational Level:				
Less than high school	19.9	(47)	18.0	(47)
High school graduate	32.2	(76)	42.1	(110)
1-3 years of college	21.2	(50)	24.5	(64)
College graduate	26.7	(63)	15.3	(40)

The educational level of female heads of households was predominantly that of high school graduate (42.1%) which was also the level attained by most male heads (32.2%) (Table 7). However, a greater percentage of male heads (26.7%) than female heads (15.3%) were college graduates.

Instrumentation and Description of the Variables

The questions which this investigator prepared especially for the housing alternatives study (see Appendix B) were developed along with the larger schedule of the 1976 Family Energy Project and were included in the Family Section of the self-administered questionnaire. For this research, which was concerned with the acceptability of selected housing alternatives to the housing norm, the following variables were operationalized:

- Demographic and socioeconomic characteristics of male and female heads of households
- 2. Acceptability of alternative housing options
- 3. Choice of alternative housing options
- 4. Reasons for the selection of present housing

Demographic and Socioeconomic Characteristics

Demographic and socioeconomic characteristics were derived from questions designed for the larger Family Energy Study and were included in the self-administered questionnaire or were obtained in personal interviews.

Age, sex, and education were used to describe male and female heads of households individually. Responses were recorded independently, but their identification with their family unit was also retained.

Congruency tests of responses of spouses could thus be accomplished.

Income level, structure type of present housing, family type, number of children, housing tenure and residential location were family and housing measures which were matched with the individual head of household responses in any calculation. Also included was the variable, "family life cycle," which had been created for other studies growing out of the larger Family Energy Project (see Appendix B for complete documentation). These demographic and socioeconomic descriptors of individuals and families are presented in more detail in the Description of Sample section. They were regarded as independent variables in examining the acceptability and the choice variables.

Acceptability of Alternative Housing Options

Acceptability of alternative housing options was derived from the responses to the question, "If you could not build or buy the home you desired, how acceptable would each of the following options be?" which forced respondents to think of housing other than the norm and then to respond to "how acceptable" each of the non-norm alternatives would be. Respondents were presented with six housing options, all varying from the norm in some respect. They were asked to rate each alternative housing option as "very acceptable," "acceptable," "somewhat unacceptable," and "not at all acceptable." Using a Likert type scoring of 1-4 for the responses, 4 reflected the highest degree of acceptability.

Any response to this question is a hypothetical violation of the standard and provides information about how difficult it might be for respondents to accept a possible substitution for the norm.

Although the accepted housing norm is ownership of a single-family house, approximately 35 percent of the population lives in some way alternative to that norm. Alternative housing options described in this study were modes of tenure and modes of structure which are recognized forms of housing and were types utilized by some respondents at the time of the study. The alternative housing options were stated in combinations of tenure and structure which were intended to permit examination of any preference for type of tenure without regard to structure, or type of structure without regard to tenure. The alternative housing options included were: (1) purchase an existing less adequate single-family house, (2) purchase an adequate mobile home,

(3) purchase an adequate duplex, townhouse or apartment, (4) rent an adequate single-family house, (5) rent an adequate duplex, townhouse or apartment, (6) share a large single-family house with another family.

Choice of Alternative Housing Options

Choice of alternative housing options was secured by asking respondents to make a first, second, and third choice of the alternative housing options.

After respondents had been asked to rate the acceptability of alternatives to the housing norm, a final question forced a choice among those alternatives (or any other which the respondents might have written in). The number indicated in the response was the number identifying the preferred alternative housing option and was used as the basis for data analysis.

Because the question stated the assumption that many American families would prefer ownership of an adequate single-family house, any alternative selected, even as a first choice may be thought of as only a "second best." Selection of an alternative to the norm can be categorized as behavior that violates a standard. Some respondents refused to be forced into such a position and even after having responded to the acceptability of the alternatives, 50 male heads of households and 48 females did not make a first choice among the alternatives.

Examination of the raw data (questionnaires) from all respondents confirmed that a lack of response to those questions could not have occurred inadvertently. The location of the question on the page and the phrasing of the question had made it a logical extension of the previous question. A non-response to the "first choice" question by

persons who had answered at least 16 of the previous 20 questions on the same page was regarded as a denial of the acceptability of the options. It was therefore concluded that the omission of a response to the "choice" question was a type of response and it was coded as "no option chosen." The "no option chosen" responses became a fourth category of choice which was incorporated into the analysis, wherever appropriate.

Respondents also indicated that "none of the above alternatives" was a viable choice for them by writing in other alternatives which they then selected as first choice (males N=11, females N=7). In the cases of write-ins by three male heads of households and four female heads of households, the alternatives were considered as modifications of the options listed and they were recorded into the appropriate categories. In general the "other" responses proved to be a refusal to face up to the problem posed, but nevertheless their content made them statements of resistance to a condition of not being able to obtain the housing they desired: "live in a houseboat," "live in a recreational vehicle," "live in a yurt."*

No respondents selected option $\underline{6}$, "share a large single-family house with another family," as first choice, therefore any analysis examining first choice of options excluded that alternative housing option.

Reasons for Selection of Present Housing

Reasons for selection of present housing, identified from previous research as related to the selection of housing, were presented

^{*}A yurt is a dome tent made from skins, of Siberian origin but adopted by the U.S. counter culture movement (Shelter, p. 16).

to respondents who were asked to indicate how important each reason was in the selection of their present housing. The 14 reasons were chosen to elicit the importance of structural, neighborhood, spatial and financial attributes when respondents had made a previous choice of housing (see Appendix B for the questions which were included in the questionnaire).

The 14 items were presented with a Likert-type response format.

A scale of "very important," "important," "not at all important," and
"never thought about it" was used with numerical weights of one to four assigned. A higher value represented greater importance.

Analysis Strategies

Three research questions were posed to explore the issues of interest in this study. The analysis strategies used to address each question are presented in this section.

Question 1. How acceptable are various housing options as alternatives

to the housing norm? The degree of acceptability of each of the options

was reported in percentages and a ranking of order of acceptability

was determined. The weighting of responses to "not at all acceptable"

(1), "somewhat unacceptable" (2), "acceptable" (3), and "very acceptable"

(4) was accomplished and a mean derived for the acceptability of each

option.

Acceptability responses were analyzed based on socioeconomic and demographic measures for both female and male heads of households. Wherever appropriate, significance of differences among responses were examined by employing one way analysis of variance; F scores and probability levels were included and all were reported in table form.

Question 2. Are there patterns to the choice of alternatives to the housing norm? Analysis of the data included a tabular compilation of the responses to the first, second, and third choice expressed by female and male heads of households, showing the percentage selecting each option as first choice. Chi square analysis was used to determine the significance of differences between males and females.

In order to examine whether there was any pattern of individual selection of options as first, second, and third choice, a "tree" format was developed which displayed the frequency of sequences of choices of individual respondents. The most frequently developed patterns of second and third choice which followed the options selected as first choice were identified and expressed in percentages.

The responses of husbands and wives were matched to examine the congruency of selection of first choice by respondents married to each other. The distributions were reported in percentages.

A post hoc cross tabulation of the acceptability responses with the choice responses gave further information about the variations involved in the choice of alternatives to the norm. Analysis included a reporting of percentage distribution and mean acceptability comparing the responses of the total sample with the responses of the heads of households who had selected the option as first choice.

Question 3. Do socioeconomic and demographic characteristics and the reasons for selection of present housing predict the choice of alternatives? The socioeconomic and demographic characteristics of the sample which have been previously described were used as independent variables to examine their relationship to the choice of alternatives.

Cross tabulation of first choice and the family, housing and individual characteristics were reported in table form. Frequency data and chi square analysis were reported for each of the variables. For some variables, collapsing the categories was necessary to achieve cell size sufficiently large for meaningful results; for other variables only a subset of the data could be included in the test. Any variations were indicated on each table.

As a further means of developing a more understandable description of the factors related to choice, a discriminant analysis was done using selected demographic variables as predictors to separate respondents, based on their first choice of housing option. Male and female heads of households who chose the option to "purchase a less adequate single-family house" were categorized into one group, while all others were categorized together into a second group. (This alternative housing option was the only one examined in this way because of the small number of respondents who selected each of the other options.) It was possible then to identify the attributes of respondents who would prefer to purchase a less adequate single-family house as distinguished from those heads of households who expressed other preferences.

In the stepwise process of discriminant analysis, the variable which most maximizes the explanation of the variance, is selected to enter the equation first. Analysis of results included reporting of the order in which the variables entered, the F value of each variable which was included, the overall level of probability and the probability level of the individual variables (Nie et al., 1975). For this study an F value of 1.3 was set as the criterion for inclusion, and p<.05 was required for recognition of significant difference.

Reasons which respondents believed were important in their actual selection of present housing were considered as past experiences which may continue to be operant in their selection of possible future housing alternatives. It was conceptualized that reasons which had previously been important for past selection could be considered attributes influencing a concrete rather than a hypothetical situation and therefore might give more meaningful information about the relative importance of housing attributes.

The importance of the 14 "reasons for selection of present housing" was calculated and presented in table form showing the frequency of each rating for each reason. Also included in the table was a mean for each variable which had been computed from the weights given to the rating of importance indicated by respondents.

The percentage of responses to the importance of each reason were also presented in a histogram with shaded areas showing the percentage of the total sample who had responded that the item was very important. Respondents in the study had been living in their present housing for differing numbers of years, therefore, it was not appropriate to search for any relationship of the present contextual characteristics with the past reasons for selection of housing.

Discriminant analysis was also conducted with the 14 reasons as predictors for the choice of alternative housing, following the same analytical and reporting procedures as described for the socioeconomic and demographic variables.

Summary of Analysis Procedures

In summary, then, analysis of the data from this study provided comparative, descriptive information about the acceptability of housing

other than the norm. The methods of analysis used included cross tabulation, identification of significant differences by use of the chi square and analysis of variance techniques and discriminant analysis. When cell size made it impossible to employ other statistical procedures, the data were reported in percentages.

Limitations of the Study

Respondents in this study were husbands and wives (currently or at some time in the past) and thus were considered as responding with concerns for family living. Nevertheless, in several situations there were some obvious differences of opinions presented between persons married to each other, even in the case of past "reasons for choice of present housing." There was no known way by which separate husband and wife responses could be combined to give a family response, even when it was obvious that husband and wife had come to some meeting of the minds and were living in the same house.

An additional limitation is that the purposes of the focus of the larger study were served better by overemphasizing home owners in the sample. It is possible that if a greater number of persons in the sample had been currently living in rental housing of some form, that the results would have shown some different responses. For females, some significant differences were noted in choice made by those currently living in mobile homes. It is possible that had the sample contained a larger percentage of non-single-family dwellers, that the acceptability mean of some of the alternative housing options would have been greater.

The housing decisions which families make are directly related in practice, to economic conditions. Because of the ecological nature of the housing market, it is possible that behaviors related to housing decisions may not reflect preferences or choices which would occur under different conditions. Although not evident in this study, it is expected that increasing financial constraints and the lessened availability of fossil fuel resources may influence housing practices.

CHAPTER IV

FINDINGS AND ANALYSIS OF DATA

The results of the data analyses are reported in this chapter, based on the three basic research questions of the study. Each question is stated with any subsections also being identified, and the results of the tests related to that question are presented. Following the presentation of findings for each question, a discussion integrating the findings from the analyses related to that question is included. Finally, a general summary of the results of the entire study is presented.

Research Question I: How Acceptable Are Various Housing Options as Alternatives to the Housing Norm?

Apparently none of the alternative housing options was very acceptable as an alternative to the norm. When requested to rate the acceptability of each alternative housing option, none of the alternatives received even as much as a 20 percent frequency of "very acceptable" responses. Only one option, "purchasing a less adequate single-family house," was rated "very acceptable" by any more than 10 percent of those responding to that option. Another option, "rent an adequate single-family house" received the next greatest frequency of "very

acceptable" responses. The responses to the relative acceptability of each housing option are presented in Table 8.

Both of the options specifying a single-family house, whether to purchase or to rent, whether adequate or less adequate, were given the greatest frequency of "acceptable" responses. When the responses which were rated "acceptable" were added to the responses, "very acceptable," the purchase of a less adequate single-family house was rated more acceptable to more respondents than was any other housing alternative and the option "to rent an adequate single-family house" was next in acceptability among the alternatives.

The rating "not at all acceptable" yielded the greatest total number of responses, with 84.3 percent of the sample indicating that to share a large single-family house with another family was "not at all acceptable." The next highest "not at all acceptable" rating was for the "purchase of an adequate mobile home," with nearly half of the heads of households giving that response.

When the degree of acceptability of responses to each alternative was given a weight of 4 to 1 (as described in the previous chapter) with 4 denoting a "very acceptable" rating, an acceptability mean of each housing alternative was computed and is also included in Table 8. The mean rating ranged from 1.19 to 2.67 with none of the alternatives reaching an "acceptable" (3) level.

Are there differences in the acceptability of the alternative housing options based on socioeconomic and demographic characteristics?

<u>Sex</u>: As seen in Table 9 when the Dependent T test was computed, none of the ratings of acceptability of the alternative options was significantly different for male heads of households when compared

Table 8.--Percentage and Mean Acceptability of Each Alternative Housing Option as Rated by Heads of Households.

Alternative Housing Option	Very Acceptable	Acceptable	Somewhat Unacceptable	Not at All Acceptable	Mean Acceptability
	Rc	Row = 100% N	N = 470		
Purchase less adequate single-family house	13.4	52.1	23.4	11.1	2.67
Rent an adequate single- family house	8.5	45.6	23.4	22.8	2.39
Purchase an adequate duplex, townhouse or apartment	4.7	30.0	27.9	36.8	2.03
Rent an adequate duplex, townhouse or apartment	4.7	27.9	28.3	39.4	1.97
Purchase an adequate mobile home	5.7	22.8	22.9	47.0	1.87
Share a large single-family house with another family	1.3	1.9	12.1	84.3	1.19

Table 9.--Mean Acceptability of Each Alternative Housing Option for Male and Female Heads of Households.

Alternative Housing Option	Sex N=214	Mean	Standard Deviation
Purchase less adequate single-	Female heads	2.68	.86
family house	Male heads	2.71	.81
Rent an adequate single-family house	Female heads	2.35	.95
	Male heads	2.43	.90
Purchase an adequate duplex, townhouse or apartment	Female heads	2.05	.93
	Male heads	2.00	.91
Rent an adequate duplex, townhouse or apartment	Female heads	2.00	.93
	Male heads	1.93	.90
Purchase an adequate mobile home	Female heads	1.92	.99
	Male heads	1.87	.93
Share a larger single-family house with another family	Female heads	1.17	.52
	Male heads	1.23	.53

No t values reached significance at p < .05.

to the ratings given by female heads. Thus no differences in acceptability based on sex are evident.

Owner-renter: Consistent with the entire sample, the purchase or the rental of the single-family dwelling was the only alternative option to receive mean acceptance of 2.5 or above regardless of the present tenure status of the household (Table 10). For both male and female heads of households, the option to rent an adequate single-family house was given a significantly (p<.00) higher mean of acceptability by renters than by owners. However, for the three options to "purchase" housing, present tenure status was not a distinguishing factor. Among male heads of households the mean acceptability of renting an adequate duplex, townhouse or apartment was significantly higher ($\bar{x}=2.38$) for renters than for owners $(\bar{x}=1.81)$. Differences in acceptability of alternatives to the norm did prove to be influenced by the present tenure of the respondents in this study. Both male and female heads of households who are presently renting found rental alternatives significantly more acceptable than they found ownership alternatives.

Structure type of present dwelling: As seen in Table 11, multiple unit dwellers gave the option "to purchase an adequate duplex, town-house or apartment" significantly (f.p<.01, m.p<.01) higher acceptability scores than other respondents and mobile home dwellers gave that option a significantly lower rating. Multiple home dwellers also found the option to rent an adequate duplex, townhouse or apartment more acceptable than other respondents. The highest mean for any alternative was that given by females currently living in mobile homes when responding to the option, "to purchase an adequate mobile

Table 10.--Mean Level of Acceptability of Each Alternative Housing Option as Rated by Owner-Renter Heads of Households.

Altomotive Design	Female Heads of Households' Mea	Female Heads of Households' Mean	Male Heads of Households' Me	Male Heads of Households' Mean	Mean of All Heads of
Aicernative nousing option	Owner N=195	Renter N=51	Owner N=180	Renter N=43	Households N=469
Purchase a less adequate single-family house	2.69	2.53	2.67	2.81	2.68
Rent an adequate single-family house	2.25	2.84a	2.30	2.93 ^b	2.40
Purchase an adequate duplex, townhouse or apartment	2.01	2.16	1.96	2.16	2.02
Rent an adequate duplex, townhouse or apartment	1.97	2.25	1.81	2.38 ^c	1.98
Purchase an adequate mobile home	1.90	2.04	1.81	2.07	1.90
Share a large single-family house with another family	1.10	1.39 ^d	1.21	1.37	1.20
^a F 16.16, significant, p < .00, df 1,243	1,243	^b F 18.11,	significan	^b F 18.11, significant, p < .00, df 1,222	df 1,222
^C F 14.76, significant, p < .00, df 1,220	1,220	d _F 15.36,	significan	dF 15.36, significant, p < .00, df 1,243	df 1,243

Table 11.--Mean Level of Acceptability of Each Alternative Housing Option as Rated by Heads of Households Living in Different Type Structures.

A1+comp+ive	Female Heads of	Househo	Heads of Households' Mean	Male Heads of Households' Mean	Househol	ds' Mean	Mean of All
Housing Option	Single-family House N=208	Mobile Home N=9	Multiple Dwelling N=28	Single-family House N=195	Mobile Home N=8	Multiple Dwelling N=22	Heads of Households N=460
Purchase a less ade- quate single-family house	2.71	2.22	2.5	2.71	2.75	2.64	2.68
Rent an adequate single-family house	2.36	1.78	2.68	2.38	2.38	2.73	2.40
Purchase an adequate duplex, townhouse or apartment	2.00	1.67 ^a	2.57 ^a	1.95	1.75 ^b	2.50 ^b	2.02
Rent an adequate duplex, townhouse or apartment	1.97	1.56	2.66 ^c	1.83	1.88	2.67 ^d	1.98
Purchase an adequate mobile home	1.90	3.33 ^e	1.75	1.81	2.50	2.00	1.89
Share a large single- family house with another family	1.14	1.22	1.32	1.22	1.13	1.41	1.20

^b F 3.94, significant, p < .02, df 2,218	$^{ m d}_{ m F}$ 8.75, significant, p < .00, df 2,220	
^b F 3.94,	d _F 8.75,	
$^{ m a}$ F 4.12, significant, p < .01, df 3,242	^C F 5.90, significant, p < .00, df 3,244	<pre>eF 6.68, significant, p < .00, df 3,245</pre>

home." These responses were significantly higher than those of females living in any other structure type. Differences in structure type of present dwellings then, were related to differences in the acceptability rating of housing options. The dwelling type in which respondents presently lived was rated as more acceptable by both mobile home and multiple-unit residents.

Income level: Differences in income served to distinguish between respondents' acceptability of alternative housing primarily when the income level was under \$4,999 and also when it was \$25,000 and over (Table 12). Both male and female heads in the lowest income category indicated significantly greater acceptance of the option "to purchase an adequate mobile home" while both males and females in the highest income category indicated lower acceptance of that option than did the other income groups. For those female heads in the highest income group, the rental or the purchase of a duplex, townhouse or apartment received an acceptability mean score which was significantly higher (p<.01) than the mean acceptability of other income groups for that option. For male heads in the "under \$4,999" category, the option "rent an adequate single-family house" was the most acceptable option (\bar{x} =3.00), while for male heads in the \$25,000 bracket that option reached only 2.17 mean acceptability.

Family-life cycle: The family life cycle construct of wife's age and age of children provided difference in acceptability only in relation to the options to "rent" an adequate single-family house or to "rent" an adequate duplex, townhouse or apartment (Table 13). The renting of an adequate single-family house received higher acceptability means for the male heads of households either when

	Fem	ale Head	s of Hous	Female Heads of Households' Mean	lean	Ma	le Heads	of House	Male Heads of Households' Mean	an	Mean of All
Housing Option	Under \$4,999 N=19	5,000- 9,999 N=34	10,000- 14,999 N=61	15,000- 24,999 N=85	25,000 or more N=36	Under \$4,999 N=11	5,000- 9,999 N=31	10,000- 14,999 N=61	15,000- 24,999 N=85	25,000 or more N=36	Heads of Households N=448
Purchase a less adequate single- family house	2.63	2.62	2.70	2.67	2.80	2,90	2.66	2.76	2.63	2.77	2.69
Rent an adequate single-family house	2.42	2.15	2.60	2.29	2.5	3.00ª	2.45	2.63	2.33	2.17 ^a	2.41
Purchase an adequate duplex, townhouse or apartment	2.05	1.74 ^b	1.96	2.14	2.48 ^b	2.09	2.00	1.91	1.91	2.37	2.05
Rent an adequate duplex, townhouse or apartment	1.84	1.86	2.16	1.92	2.47 ^c	2.09	1.90	2.11	1.77	2.00	1.99
Purchase an adequate mobile home	2.32 ^d	2.11	1.92	1.91	1.47 ^d	2.55 ^e	1.68	1.98	1.84	1.53 ^e	1.88
Share a large single- family house with another family	1.21	1.20	1.18	1.18	1.02	1.45	1.26	1.30	1.18	1.25	1.20

 $^{\mathbf{a}}$ F 2.97, significant, p < .02, df 4,210

 $^{\mathrm{b}_{\mathrm{F}}}$ 3.11, significant, p < .02, df 4,229

d_F 2.94, significant, p < .02, df 4,232

^CF 3.12, significant, p < .02, df 4,232

eF 3.34, significant, p < .01, df 4,209</pre>

Table 13.--Mean Level of Acceptability of Each Alternative Housing Option as Rated by Heads of Households at Different Stages in Family Life Cycle.

Louis de la constant		Fema	le Head	ds of 1	Female Heads of Households' Mean	olds'	Mean			Male	Head:	s of H	Male Heads of Households' Mean	lds' Me	ean		Mean of All Heads of
ionating operon	1	2	3	4	S	2 6	7	∞	-	2	8	4	5 6	و	_	∞	Households N=470
Purchase a less ade- quate single- family house	2.67	2.67 2.81 2.79	2.79	2.68	2.59	2.81	2.68 2.59 2.81 2.47 2.62 3.20 2.75 2.75 2.58 2.54 2.70 2.36 2.78	2.62	3.20	2.75	2.75	2.58	2.54	2.70	2.36	2.78	2.68
Rent an adequate single-family house	2.71	2.71 2.38 2.38	2.38	2.53	2.23	2.18	2.23 2.18 2.67 2.22 3.00 ^a 2.56 2.21 2.49 2.49 2.30 2.64 ^a 2.20	2.22	3.00ª	2.56	2.21	2.49	2.49	2.30	2.64 ^a	2.20	2.40
Purchase an adequate duplex, townhouse or apartment	2.00	2.00 2.47 2.25	2.25	2.14	1.93	1.91	2.20	1.86	2.20 1.86 2.40 2.33		2.08	2.00	2.08 2.00 1.78 2.00 1.91	2.00		1.94	2.02
Rent an adequate duplex, townhouse or apartment	2.10	2.12	2.60 ^b	2.02	1.82	2.09	2.10 2.12 2.60 ^b 2.02 1.82 2.09 2.27 1.90 2.50 ^c 2.20 ^c 2.13 1.80 1.61 ^c 1.50 ^c 2.18 1.89	1.90	2.50 ^c	2.20 ^c	2.13	1.80	1.61	1.50	2.18	1.89	1.98
Purchase an adequate mobile home	1.52	1.52 2.12 1.83	1.83	1.72	1.98	1.64	1.72 1.98 1.64 2.07 2.24 1.70 1.93 1.75 1.80 1.78 2.20 2.00 1.94	2.24	1.70	1.93	1.75	1.80	1.78	2.20	2.00	1.94	1.89
Share a large single- family house with another family	1.38	1.38 1.35 1.04	1.04	1.14	1.10	1.27	1.14 1.10 1.27 1.07 1.16 1.50 1.53 1.25 1.28 1.22 1.10 1.18 1.17	1.16	1.50	1.53	1.25	1.28	1.22	1.10	1.18	1.17	1.20
																-	

 ^{b}F 2.04, significant, p $^{<}$.05, df 7,240 ^aF 2.09, significant, p < .04, df 7,217

^cF 3.13, significant, p < .00, df 7,215

Stages:

(1) Wife's age less than 40, no children less than 20 (N=22)
(2) Age of oldest child less than 3 (N=17)
(3) Age of oldest child is 3-4 (N=11)
(4) Age of oldest child is 5-12 (N=64)
(5) Age of oldest child is 13-19 (N=60)
(6) Age of oldest child greater than 20, other children less than 20 in household (N=12)
(7) Wife's age greater than 40, age of oldest child is greater than 20, no children less than 20 in household

Wife's age greater than 40, no children in household (N=61) 8

there were no children in a very young family or when the only child in the household was over 20. The rental of duplex, townhouse or apartment received higher acceptability scores for males $(\bar{x}=2.50)$ also in the early stages of the family life cycle and significantly lower scores when there were teen-age children in the family. For females the only differences noted were for female heads of households with preschool-age children who rated the acceptability of renting an adequate duplex, townhouse or apartment higher than any other group of females. Thus the family life cycle variable differentiated responses for male heads of households in relation to greater acceptability of rental housing when there were no children present and for females when preschoolers were present. Number of Children: The number of children in a family significantly differentiated among families on the alternative housing options to rent or to purchase an adequate duplex, townhouse or apartment (Table 14). The differences were observed only when there were three or four children in the family and among male heads of households. The purchase and the rental of a duplex, townhouse or apartment was less acceptable for these respondents than for other categories of respondents (p<.01).

<u>Urban-rural place of residence</u>: Urban and rural residents differed in their rating of the acceptability of the duplex, townhouse or apartment and the mobile home options (Table 15). Both male and female heads of households who were rural residents rated the adequate duplex, townhouse or apartment either as a rental or as a purchase alternative less acceptable than did the urban residents.

Table 14.--Mean Level of Acceptability of Each Alternative Housing Option as Ranked by Heads of Households with Different Number of Children in the Family.

		Female b	Female Heads of Ho	Households'	Mean		Male Ho	eads of Ho	Male Heads of Households' Mean	lds' Mean	Mean of All
Housing Option	No Children N=68	One Child N=62	Two Children N=60	Three Children N=38	Four or More Children N=19	No Children N=69	One Child N=45	Two Children N=55	Three Children N=37	Four or More Children N=17	Heads of Households N=470
Purchase a less adequate single- single-family house	2.65	2.69	2.66	2.79	2.32	2.91	2.61	2.64	2.64	2.41	2.68
Rent an adequate duplex, town- house or apartment	2.37	2.44	2.25	2.55	2.26	2.40	2.30	2.47	2.51	2.41	2.40
Purchase an adequate duplex, townhouse or apartment	1.92	2.14	2.20	1.79	2.21	2.10	2.20	2.11	1.51	1.76 ^a	2.02
Rent an adequate duplex, town- house or apartment	2.00	2.16	2.10	1.87	1.95	2.06	2.04	1.98	1.46 ^b	1.70	1.98
Purchase an adequate mobile home	2.08	2.03	1.62	1.95	1.95	1.88	1.91	1.69	2.05	1.65	1.89
Share a large single-family house with another family	1.24	1.16	1.03	1.16	1.31	1.28	1.29	1.30	1.06	1.18	1.20

 $^{\mathbf{a}}_{\mathbf{F}}$ 4.06, significant, p < .00, df 4,216

 $^{\mathrm{b}_{\mathrm{F}}}$ 3.48, significant, p < .01, df 4,218

Table 15.--Mean Level of Acceptability of Each Alternative Housing Option as Ranked by Urban and Rural Heads of Households.

Dougland Ontion	Female Heads of Households' Mean	eads of ds' Mean	Male Heads Households'	Male Heads of ouseholds' Mean	Mean of All Heads of
	Urban N=163	Rural N=83	Urban N=145	Rural N=78	Households N=469
Purchase a less adequate single-family house	2.65	2.67	2.64	2.81	2.68
Rent an adequate single-family house	2.38	2.38	2.44	2.37	2.40
Purchase an adequate duplex, townhouse or apartment	2.18 ^a	1.78 ^a	2.20 ^b	1.64 ^b	2.02
Rent an adequate duplex, townhouse or apartment	2.16 ^c	1.79 ^c	2.09 ^d	1.58 ^d	1.98
Purchase an adequate mobile home	1.77	2.24 ^e	1.71 ^f	2.11 ^f	1.89
Share a large single- family house with another family	1.16	1.17	1.23	1.25	1.20
 a_F 10.34, significant, p < .00, df 1,244 c_F 8.63, significant, p < .00, df 1,246 e_F 13.37, significant, p < .00, df 1,247 	ant, p < .00, d ut, p < .00, d ant, p < .00, c	df 1,244 f 1,246 df 1,247	<pre>b_F 20.19, significant, p < .00, df 1,219 d_F 17.66, significant, p < .00, df 1,221 f_F 10.26, significant, p < .00, df 1,222</pre>	20.19, significant, p < .00, df 1,219 17.66, significant, p < .00, df 1,221 10.26, significant, p < .00, df 1,222	, df 1,219 , df 1,221 , df 1,222
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Rural residents indicated significantly more willingness to accept the purchase of an adequate mobile home than did urban residents. Educational level: Heads of households with different levels of education gave significantly different ratings of acceptability for most of the alternative housing options (Table 16). Male and female heads who had not graduated from high school gave low acceptability ratings to the option to purchase an adequate duplex, townhouse or apartment, while college graduates rated that option significantly higher. The option to purchase a less adequate single-family house received the lowest mean score (2.23) from female heads of households who did not graduate from high school and the highest mean score (3.00) from females who were college graduates (p<.00). For both males and females the acceptability rating of the option to purchase an adequate mobile home was higher for less well educated respondents than for those with more education (p<.02). Thus, level of education was found to be related to acceptability scores. Age: Differences in age (Table 17) were related to the acceptability of the option, "rent an adequate single-family house" with male heads of households under 29 giving it a significantly higher acceptability rating $(\bar{x}=2.73)$ than other males, and male heads in the age bracket 45-64 giving it the lowest acceptability rating $(\bar{x}=2.17)$. The same younger age males indicated a significantly higher acceptance of the option to "share a large single-family house with another family" (p<.01) than did other males. Among females, those in the age range from 30-44 rated the rental of an adequate duplex, townhouse or apartment less acceptable than other females. A relationship between age and the acceptability of

Table 16.--Mean Level of Acceptability of Each Alternative Housing Option as Ranked by Heads of Households of Different Educational Levels.

	Female Heads	leads of House	of Households' Mean	an	Male He	Male Heads of Households' Mean	olds' Mea	E	Mean of All
Housing Option	Did Not Grad. from H.School	High School Graduate N=104	Some College N=62	College Graduate N=38	Did Not Grad. from H.School N=43	High School Graduate N=71	Some College N=48	College Graduate N=61	Heads of Households N=470
Purchase a less adequate single- family house	2,23 ^a	2.71	2.66	3.00ª	2.60	2.37	2.54	2.69	2.68
Rent an adequate single-family house	2.38	2.35	2.29	2.58	2.45	2.48	2.06 ^b	2.60	2.40
Purchase an adequate duplex, townhouse or apartment	1.51	2.03	2.10	2.63°	1.74 ^d	1.74	1.97	2.49 ^d	2.03
Rent an adequate duplex, town-house or apartment	1.89	1.90	2.03	2.59 ^e	1.73	1.70	1.77	2.39 ^f	1.98
Purchase an ade- quate mobile home	1.95	2.228	1.648	1.588	2.19 ^h	1.82	1.92	1.61 ^h	1.89
Share a large single-family house with another family	1.14	1.12	1.15	1.34	1.12	1.22	1.21	1.36	1.20
a _F 5.83, si	a _F 5.83, significant, p <	.00, df 3,242			^b F 3.54, si	significant, p < .02, df 3,221	< .02, df	3,221	
^C F 10.72, s	^c F 10.72, significant, p <	.00, df 3,242	7		d _{F 9.93, si}	significant, p <	< .00, df 3,217	3,217	
^e F 5.80, si	^e F 5.80, significant, p <	.00, df 3,244			f _F 8.98, si	significant, p <	< .00, df 3,219	3,219	

 $^{\textrm{h}}_{\textrm{F}}$ 3.49, significant, p $_{\textrm{c}}$.02, df 3,220

 $^{\mbox{\footnotesize g}}_{\mbox{\footnotesize F}}$ 6.54, significant, p < .00, df 3,245

Table 17.--Mean Level of Acceptability of Each Alternative Housing Option as Ranked by Heads of Households of Different Ages.

	Female Heads of Households' Mean	lds of Hc	ouseholds'	Mean	Male Heads of Households' Mean	s of Hou	seholds'	Mean	Mean of All
Housing Option	Under 29 N=71	30-44 N=82	45-64 N=72	65+ N=21	Under 29 N=41	30-44 N=95	45-64 N=59	65+ N=28	Households N=469
Purchase a less adequate single-family house	2.69	2.67	2.61	2.68	2.29	2.71	2.50	2.78	2.68
Rent an adequate single-family house	2.45	2.36	2.31	2.43	2.73 ^a	2.47	2.17 ^a	2.31	2.40
Purchase an adequate duplex, townhouse or apartment	2.19	2.06	1.90	2.00	2.23	1.95	1.98	1.89	2.03
Rent an adequate duplex, townhouse or apartment	2.26	1.85 ^b	1.99	2.19	2.26 ^c	1.79	1.83	1.96	1.98
Purchase an adequate mobile home	1.85	1.87	2.03	2.14	2.00	1.76	1.83	2.00	1.89
Share a large single- family house with another family	1.15	1.22	1.12	1.10	1.50 ^d	1.19	1.15	1.21	1.20
^a F 3.48, significant, p < .02, df 3,221 ^c F 2.99, significant, p < .03, df 3,219	ficant, p ficant, p	p < .02, df p < .03, df	f 3,221		^b F 2.68, s ^d F 3.82, s	ignifica	2.68, significant, p < .05, df 3,244 3.82, significant, p < .01, df 3,218	.05, df	f 3,244 f 3,218

housing options was apparent mainly for rental options and differed among males and females.

Discussion of Findings

When examining the acceptability of alternative housing options, one is struck by the general non-acceptability indicated by the respondents. Not only did they consider none of the alternatives "very acceptable," but when they ranked the alternatives, only two options, those of renting or of purchasing the single-family house received more "acceptability" than "non-acceptability" responses. Even though each of the alternatives listed is already extant and presently serves some of the United States population as housing, clearly nothing is currently acceptable as an alternative to the norm.

Once respondents got beyond the two options including the single-family house, however, there was little distinction made between the acceptability of renting or owning, or between the alternative structures in the housing options. Demographic and socioeconomic factors seemed to be related to acceptability more frequently in the rating of those alternatives other than the one most commonly accepted by most male and female heads of households, i.e., the pervasiveness of the cultural norm seemed to mask the differences which were found to be related to the acceptability of other alternative housing options.

Family characteristics which served to differentiate among the degree of acceptability of the options included income level, family life cycle and the number of children. Those respondents with presently lower incomes appeared to be more accepting, even in a hypothetical situation, of those housing options which are generally less demanding

financially. It may be that "acceptability" is reflective of the conditions which heads of households perceive might at some time be forced upon them. Those heads with higher incomes may perceive that they would generally be in a condition of income expectation which would permit the greater financial outlay needed. It is also possible that for those heads of households in higher income brackets the perception of greater investment benefits from these options may make them more acceptable.

When there are three or more children in the family, the male heads of households found the non-single family house less acceptable whether to rent or to purchase. It appears that the structure type may be more of a factor than the tenure type. As a single factor, three or four children can require more bedrooms than are commonly available in many multi-unit structures. Gladhart (1973) found that "bedroom need" (relationship of age and sex of children to number of bedrooms) was a useful measure in predicting family housing adjustment behavior.

The characteristics in the family life cycle measure seemed to discriminate only in relation to the rental option. Respondents in this study found rental housing acceptable primarily in the stage when no children or only young children were present in the family. Morris and Winter (1978) have asserted that families who have children but continue to rent, obviously have some financial problems; such a conclusion could not be drawn from this study.

Housing characteristics of structure type and tenure type were related to the acceptability of several alternative housing options.

The greater acceptability to renters of the option to rent an adequate single-family house put those heads of households in general contrast

to the rest of the sample. As with tenure type, there was greater acceptance of the housing type in which respondents were currently living. Although Pfaff (1977), Michelson (1977), and Speare (1974) found that residents living in rented housing expressed lesser satisfaction with their housing, in this study a higher acceptability of living in a multi-unit structure was expressed by residents who were currently renting and currently living in multi-unit dwellings.

Differences noted between urban and rural respondents can be explained in part by the urban/rural variations in familiarity and general acceptance of the mobile home. Tremblay et al., found that respondents would consider living in a mobile home on its separate owned lot--a distinct possibility in most rural areas. Urban areas however have tended to zone out mobile home parks or individual mobile homes by building code requirements. If the present attempt to use mobile homes as replacements for stick-built housing on a standard lot in a subdivision is accepted, perhaps changed regulations and more general acceptance could follow.

Individual characteristics of age and education appeared to have some relationship to the acceptability of the alternative options, but difference in sex was not observed to have any significant relationship. It is possible to posit that additional education allows for less rigidity in the form required to meet a standard, or that it permits even greater willingness to disregard the norm. Hence greater acceptability of non-norm alternatives is easier for the college graduate. On the other hand significantly lower acceptability means for college graduate male and female heads could be reflective of standard stereotypic reactions to the mobile home, or of perceptions

that a mobile home was not adequate housing for the respondent's educational attainment.

It is suggested that the relationship of age to the acceptability of the rental option is more dependent on other demographic characteristics concomitant with age i.e., stage in the life cycle.

Greater acceptability of the option to "share a large house with another family" by younger male heads of households is perhaps reflective of a continuing 1960s interest in communal arrangements.

In summary then those characteristics describing the sample which were identified as family, as housing or as individual characteristics were found to be related to the differences in the degree of acceptability of the housing options. Key among these relationships were that tenure type and structure type of respondents' present dwelling were related to greater acceptability of that same type of tenure or structure, less education and lower income were both related to greater acceptance of the mobile home alternative.

Research Question II: Are There Patterns to the Choice of Alternatives to the Housing Norm?

Examination of the selection of the housing options as preferred choices of the alternatives permitted identification of the following:

- (1) percentage of respondents selecting each option as first choice,
- (2) any similarity of characteristics among the three choices, (3) the degree of congruency of choice between spouses, and (4) the comparative acceptability of first choice options to the general acceptability of those options.

What was the first choice among the options? The greatest frequency of selection of any of the alternative housing options for

first choice was "purchase a less adequate single-family house." Almost 50 percent of the heads of households identified that option as their first choice (see Table 18).

The next greatest frequency of responses to this question was an absence of response. Ninety-eight male and female heads of house-holds who had rated the degree of acceptability of each of the housing alternatives did not select a first choice among those alternatives. This lack of choice was judged (see description of sample for explanation) as an indication of choice, i.e., "none of the above," and was accepted as another option from which a choice had been made. Nearly 20 percent of the sample thus indicated that none of the options listed was a viable first choice.

As seen in Figure 1, "rent an adequate single-family house" was selected by 11 percent of both male and female heads of households as their first choice of the options. The same percentage of females also selected another option, to "purchase an adequate mobile home," but only half that number of males selected the mobile home option as their first choice. When chi square analysis was conducted on the first choice of respondents, differences proved to be significant at the p<.001 level, with much of the difference apparently being explained by the choices made about the mobile home option.

Given the first choice, was there any pattern to subsequent choices? A sequence tree of the patterns of second and third choices when the first choice was "purchase a less adequate single-family house" is displayed in Figure 2. Just as with the sample as a whole, the housing alternative most frequently selected as second choice by those persons who had made a first choice of "purchase a less adequate

Table 18.--Percentage of Heads of Households Selecting Alternative Housing Options as First, Second and Third Choice.

Housing Alternative	First Choice 100% ₂ N=497 ^X	Second Choice 100% N=378	Third Choice 100% N=357
Purchase less adequate single-family house	48.1	15.1	11.5
No option chosen*	19.7	-	-
Rent an adequate single-family house	11.3	27.2	26.9
Purchase an adequate mobile home	8.2	22.2	14.8
Purchase an adequate duplex, townhouse or apartment	7.6	24.1	19.0
Rent an adequate duplex, townhouse or apartment	2.8	9.2	23.2
Share a large single- family house with another family	-	1.9	3.1
Other	2.2	-	1.4

^{*}See description of sample.

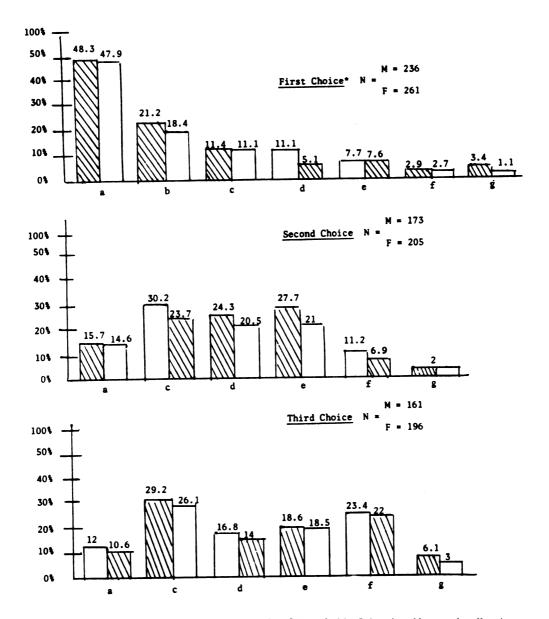


Figure 1. Percentage of Male and Female Heads of Households Selecting Alternative Housing Options as First, Second, and Third Choice.

*Chi square = 58.40, 7df, p<.001 (on first choice only)

Male Female

Identification of the Alternative Housing Options

- a = purchase a less adequate single family house
- b = no option chosen
- c = rent an adequate single-family house
- d = purchase an adequate mobile home
- e = purchase an adequate duplex,
 - townhouse or apartment
- f = rent an adequate duplex, townhouse
 or apartment
- g = share a large single-family house
 with another family

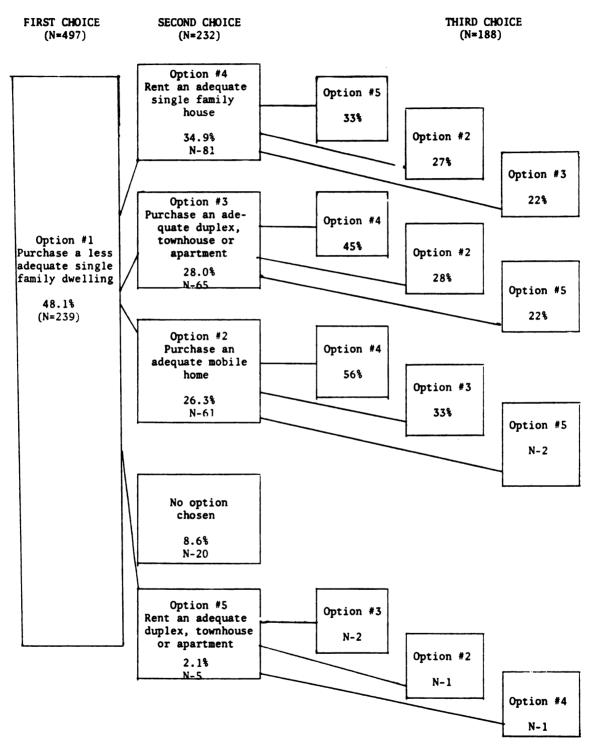


Figure 2. Pattern of Sequence of First, Second, and Third Choice of Alternative Housing Options When Option #1 Selected as First Choice.

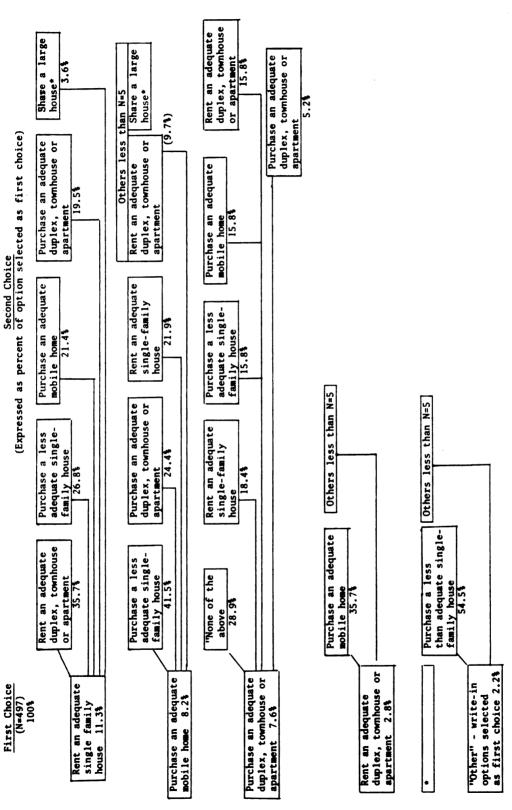
single-family house," was "rent an adequate single-family house."

Regardless of what other options were selected as second choice, the three-choice pattern most frequently created by the selections included "rent an adequate single-family house." Tenure type may also be a preference for a considerable percentage of the sample. As noted in both Figure 2 and Figure 3, at least 29 percent of the male and female heads of households included "purchase" options in their first two choices.

To what extent is there congruency between husbands' and wives' first choice of alternative housing options? Of the 229 families from which responses for both husband and wife are available, 125 pairs chose the same option (Table 19). Approximately 70 percent of husbands and wives who chose "purchase a less adequate single-family house" are married to persons who also selected that option as their first choice. The major exception to the congruency of husband and wife selections is the difference in the percentage of husbands and wives whose spouse also chose "purchase an adequate mobile home" as first choice. In only 28 percent of the cases where a wife selected the mobile home option as first choice, did her husband also make that selection.

Is there a relationship between acceptability ratings and choice of housing options? The housing option selected as first choice by respondents was crosstabulated with the degree of acceptability of that option which had been indicated in the previous question.

Although no statistical tests were applied, the pattern of responses suggests that a relationship exists. As would be expected, heads of households made first choice of those options to which they had assigned a higher rating of acceptability. A comparison of the mean acceptability of alternative options for the total sample with



Sequence of First and Second Choices of Alternative Housing Options Other Than the Purchase of a Less Adequate Single-Family House with Frequency of Selection Expressed in Percent. Figure 3.

*Share a large house with another family was not selected by any respondents as first choice.

Table 19.--Distribution of Wives and Husbands with Similar Selection of First Choice of Alternative Housing Options.

Alternative Housing Option	% of Wives Whose Husbands Made Same First Choice	% of Husbands Whose Wives Made Same First Choice
Purchase less adequate single-family house N=77	68.8	69.4
No option chosen options N=24	61.5	51.1
Rent an adequate single-family house N=7	25.9	25.9
Purchase an adequate mobile home N=7	28.0	58.3
Purchase an adequate duplex, townhouse or apartment N=7	38.9	38.9
Rent an adequate duplex, townhouse or apartment N=1	16.7	14.3
Other N=2	100	28.6

the mean acceptability of the alternatives selected as first choice is presented in Table 20. The comparative difference in rating of acceptability by the total sample and by the first choice respondents varies with the option chosen. When less popular options were chosen as first choice the difference in acceptability ratings between the total sample and first choice sample was greater than when a more popular option was chosen. For example, the mobile home option was rated "very acceptable" six times more frequently among those who chose it as their first choice than among the total sample; the purchase of an adequate duplex, townhouse or apartment option was rated "very acceptable" five times more frequently among this group of respondents. These percentages and means are based on a very small number of respondents, thus care should be taken in reaching conclusions from these results. However a pattern seems to emerge of relationships between first choice and ratings of acceptability.

In further illustration of the relationship between choice and acceptability, Figure 4 is presented. Regardless of the specific option chosen, the mean acceptability of the first choice ranged from 3.00 to 3.28--well within the "acceptable" range. This is in sharp contrast to ratings of acceptability of options by the total sample, none of which reached an "acceptable" level.

Discussion of Findings

The most frequent selection of a first choice of the alternative housing options was "purchase a less adequate single-family house."

The ownership of an adequate single-family dwelling, while considered a norm, is rather two separable components which have come to

Table 20.--Percentage Distribution and Mean Acceptability of Housing Alternatives for Total Sample and for Those Heads of Households Who Selected the Alternative as First Choice.

Alternative Housing Option	V Acce	Very Acceptable	Acceptable	Somewhat Unacceptable	Not At All Acceptable	Mean Acceptability
			Row = 100%	%00		
Purchase less adequate	*	13.4	52.1	23.4	11.1	2.67
single-family house	*B	20.0	63.8	13.2	2.9	3.00
Rent an adequate	A	8.5	45.6	23.4	22.8	2.39
single-family house	B	25.0	73.2	0	1.8	3.20
Purchase an adequate duplex, townhouse	A 8	4.7	30.0	27.9	36.8 0	2.03
or apartment	1) ;)	· • •) • •)	
Rent an adequate	A	4.7	27.9	28.3	39.4	1.97
duplex, commouse or apartment	B	42.8	42.8	14.3	0	3.28
Purchase an adequate	A	5.7	22.8	22.9	47.0	1.87
mobile home	В	29.3	58.5	8.6	2.4	3.14

 $^{\text{A}}$ A = total sample of male and female heads of household (N=470) B = male and female heads of households selecting option as first choice (N=399) (but varies with each option).

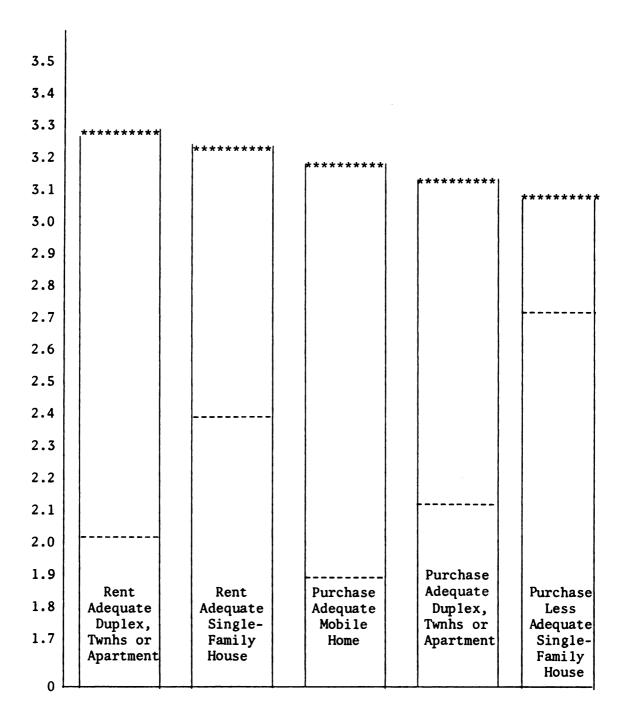


Figure 4. Mean Acceptability of Options Selected as First Choice Compared to Mean Acceptability of Options as Rated by Total Sample.

^{*****}Mean of Male and Female Heads of Households' Rating of Acceptability of Option Selected as First Choice (N=399).

⁻⁻⁻⁻Mean of Male and Female Heads of Households' Rating of Acceptability of Each Option by Total Sample (N=470).

be used together and should be thought of perhaps as a "collective norm." Census data show that the 1976 home ownership rate was 64.7 percent and that detached single housing units constitute 63.6 percent of all year-round housing stock (U.S. Bureau of the Census, 1978, p. 1), allowing "owned" and "single-family" to be used almost interchangeably.

In considering the relative importance of ownership and of single-family structure, to respondents in this study it is possible to come to some differing conclusions. One conclusion is that the option, "purchase a less adequate single-family house" is only slightly less desirable than the norm. It contains both the purchase component and the single-family structure component, and logically might be the most desired of alternative options.

It is also possible however, to view the option "purchase a less adequate single-family house" and the option "rent an adequate single-family house" as posing a direct test of the importance of the type of tenure desired. In both cases a single-family dwelling was offered as the structure type, although as noted, the house in the purchase alternative was less adequate. Assuming that adequacy is not essential and that the respondents considered type of structure equal, the difference between these options could then be considered as the choice of type of tenure. On that basis of analysis, ownership of a single-family house is much preferred (48%) over renting (11.3%) of a single-family house.

Given, however, that both the first and the second most frequently selected alternative housing option for the sample as a whole included the single-family house regardless of tenure type, one could on that basis of analysis, come to a different conclusion. If the

single-family house is available, ownership is preferred, but rental of the single-family house is a next best alternative. In short, respondents in this study indicated that they would give up adequacy first, and ownership next, before they would be willing to give up the singlefamily structure.

The preference for single-family structure seems to be stronger than the preference for ownership of any non-norm housing. Currently, even though outright ownership is commonly not achieved by most families, most of the benefits of ownership continue to be available. Families "owning" mortgaged single-family houses can make any desired structural modifications, any equipment modifications, can control the access of others and can, of course, sell the property when they choose. The amount of time and money which must be invested in maintenance and repair is influenced only by anticipated long-range consequences of the resale value.

If a family can overcome the drain of an initial down payment, the monthly payment and operating costs of homeownership although appreciably of no greater outlay than is rent, permit easier access to better quality neighborhoods, more amenities in the house itself as well as tax advantages and good long-term investment.

The sample as a whole was quite "outspoken" in the ratings of several options as "not at all acceptable." However, when the acceptability ratings of those less popular options were summarized separately for those who subsequently selected them as first choice, the rating mathematically attained a higher mean level of acceptability. Nevertheless, there is a substantial difference in the mean acceptability of options reported by the total sample and those reported by "first"

choicers." In addition there is no comparable pattern in the rank order of acceptability between the groups. Contrary to the general attitude of the sample as a whole, the male and female heads of households who selected those less acceptable options would find them acceptable choices. It appears that the selection of an alternative housing option as "first choice" has some validity as a real preference, not solely as a hypothetical simulated choice.

The congruency of responses between the first choices made by male and female heads of households who are married to each other highlights general agreement between the spouses in this sample. The exception to this pattern which is worthy of note is the option to "purchase an adequate mobile home." As seen in Figure 1, and in Table 19, the pattern is true of male and female heads in general as well as of those who are members of the same household. As other analyses in this study indicate, it appears that the choice by the female head is the source of the discrepancy, and it would be of interest to probe further for clarification of the preference. If husbands and wives are to live in the same structure, it would be useful to know what housing attributes contribute to the compromise which must be reached.

Some trend for selection of options which showed continuity of preference for tenure type or for structure type in the first and second choices was noted. It was difficult to follow this pattern for each option due to small size of some cells, yet further probing of the strength of preference or of the relationship of the preference to other variables could be informative.

In summary, then, when male and female heads of households made forced choices among the alternative housing options, at least half of

the sample selected ownership of a less adequate single-family house as their first choice of alternatives; the remainder of the sample was distributed somewhat unequally among the other alternatives. The pattern which emerged from their choices reflected (1) some continuity of preference for tenure type or structure type, (2) congruency of choices made by spouses, and (3) sharp contrasts between acceptability of alternatives to the total sample and acceptability of alternatives selected as first choice.

Research Question III: Do Socioeconomic and
Demographic Characteristics and Reasons for
Choice of Present Housing Predict Choice of
of Alternatives to the Housing Norm?

Two sets of independent variables were employed in the examination of their relationship to the selection of an alternative housing option as first choice: selected family, housing and individual characteristics of male and female heads of households served as independent variables in one series of analyses; the 14 reasons for selection of present housing also served as independent variables in the exploration for possible predictors of the first choice of alternatives to the housing norm.

Are socioeconomic and demographic characteristics related to choice of alternatives to the housing norm?

<u>Sex</u>: Male and female heads of households maintained a fairly consistent similarity of selection of options as first choice. In Figure 1 (p. 84), differences of responses by male and female heads of households are displayed. The observed differences on first choice were shown to be significant due in large part to the difference in choice of the mobile home option. The option to purchase

an adequate mobile home, was chosen by 11.1 percent of females but by only 5.1 percent of males. Thus the only observed difference in choice based on sex was in relation to the choice of the mobile home option.

Owner-renter: As seen in Table 21, female heads of households who owned their own homes made some different choices from those respondents who rented housing. A smaller number of female renters than would have been expected, identified the option to purchase a less adequate single-family house as their first choice of options. However, a significantly greater number of female renters than female owners chose the options to rent an adequate single-family house and to purchase an adequate mobile home as their first choice of alternatives (x²=16.68, 4df, p<.05). The tenure type of respondents, thus, served to distinguish between female renters and owners. No differences were observed which were related to male owner-renter status.

Educational level: Heads of households with different levels of education selected different housing alternatives as first choice (Table 22). Both female and male heads who did not graduate from high school selected the purchase of a less adequate single-family house as first choice less often than the rest of the sample. Female heads with less education were much more likely to select the option to purchase an adequate mobile home as first choice. College educated male heads of households were more likely than the less well educated male heads to select "purchase an adequate duplex, townhouse or apartment" as their first choice. Differences in educational

Table 21.--Percentage of Heads of Households Selecting Each Housing Alternative as First Choice by Type of Tenure.

A 1 & Comp. 0 & 1 & 0	Female Heads of Hous	Female Heads of Households	Male Heads of Hous	eho	sb1
Aiternative Housing Options	Owner N=202	Renter N=52	Owner N=188	Renter N=43	neads of nouseholds N=485
 Purchase a less adequate single- family house 	54.5	26.9*	50.0	39.5	48.4
(2) No option chosen	16.3	17.3	20.0	23.3	18.6
(3) Rent an adequate single-family house	8.4	23.1*	11.2	14.0	11.5
(4) Purchase an adequate mobile home	6.6	17.3*	4.8	7.0	8.4
(5) Purchase an adequate duplex, townhouse or apartment	7.4	9.6	0.6	2.3	7.8
Rent an adequate duplex, townhouse or apartment	2.5	3.8	2.7	4.7	2.9
Other	1.0	1.9			2.3

*Female Heads' chi square = 16.68, 4 df, p < .05, N.S. Male Heads' chi square = 3.44, 4 df, p > .05. Computed only on options 1-5 as listed above.

Table 22.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Educational Level.

	Female Heads	Female Heads of Households	Male Heads	Male Heads of Households
Alternative Housing Option	No College N=147	Some College N=98	No College N=115	No College Some College N=115 N=102
Purchase less adequate single- family house	43.5*	62.2*	45.2*	58.8*
No option chosen	19.0	14.3	31.3*	11.7*
Rent adequate single-family house	14.3*	8.2	11.3	13.7
Purchase an adequate mobile home	15.6	6.1*	7.8	2.9
Purchase an adequate duplex, townhouse or apartment	7.5*	9.1	4.3	12.7

*Female Heads of Households' chi square = 11.39, 4 df, p < .05. Male Heads of Households' chi square = 18.45, 4 df, p < .05. Computed only on options and categories shown.

level, then, were related to differences in the choice of housing options.

Structure type of present dwelling: Because of the relatively fewer number of families living in housing types other than single-family dwellings, it was not possible to implement a significance test on the type of present dwelling structure. The chi square analysis conducted only with residents of single-family dwellings showed no significant differences in choice of housing options for males and females (see Appendix C for table).

The variables of <u>income level</u>, <u>age</u>, <u>family life cycle</u>, <u>number</u>

<u>of children</u>, and <u>family type</u> were also examined. However, none of

these variables showed significant differences in their relationship to first choice of alternatives (see Appendix C for the tables).

Do socioeconomic and demographic factors discriminate between those who selected a single-family dwelling as first choice and all others?

A discriminant analysis was conducted to identify the relative contribution of socioeconomic and demographic variables in predicting choice of alternatives to the housing norm. The results indicated significant differences between respondents who chose the option to purchase a less adequate single-family house compared to those who did not, for a limited number of characteristics for female heads of households but not for male heads.

Selected variables were entered as independent variables in the stepwise discriminant analysis procedure to predict selection of the housing option, "purchase a less adequate single-family house." The variables used were: urban-rural location of living, stage in the

family life cycle, family type, owner-renter status, type of housing presently occupied, family's income level, age and education of both male and female head of household and the number of children in the family.

For female heads, the owner-renter status was the first variable to enter the analysis and contributed the only significant explanation of the difference between the two groups in the choice of alternative housing options. As evidenced in Table 23, five other variables met the criterion for inclusion in the analysis, but failed to significantly contribute individually to the separation of the two groups. Family type, age of both female and male head, urban-rural location and female educational level were identified as contributors along with owner-renter status to the creation of an equation to predict separation between those who would choose the purchase of a less adequate single-family house and all others.

For male heads, the discriminant analysis procedure identified only one variable, "family type," as meeting the criterion for inclusion, but even that characteristic proved to be not statistically significant in differentiating between the groups (see Table 24). For males, then, the selected demographic-socioeconomic variables could not be used to develop a separation between the two groups on the choice of housing option.

The demographic variables used for classifying female heads into the groups which they chose achieved a 62 percent success with a probability level of <.001. However, for male heads only 50 percent of the known cases were classified correctly and the results were not considered statistically significant (p<.939).

Table 23.--Results of Discriminant Analysis Using Selected Demographic Variables to Predict Female Heads of Households' First Choice of "Purchase a Less Adequate Single-Family House" or Not.

	N=186		
Demographic Variables	F To Enter	Overall Level of Probability	Stepwise Level of Probability
Owner-renter Status	14.37020	.000	.000
Family Type	1.54815	.000	.194
Age of Female Head	1.94400	.001	.143
Age of Male Head	2.00661	.001	.133
Urban-rural Location	1.94378	.001	.136
Female Head's Educational			
Level	1.46546	.001	.192

Table 24.--Results of Discriminant Analysis Using Selected Demographic Variables to Predict Male Heads of Households' First Choice of "Purchase a Less Adequate Single-Family House" or Not.

	N=173		
Demographic Variables	F To Enter	Overall Level of Probability	Stepwise Level of Probability
Family Type	1.35825	.245	.244

Are there patterns among reasons for choice of present housing?

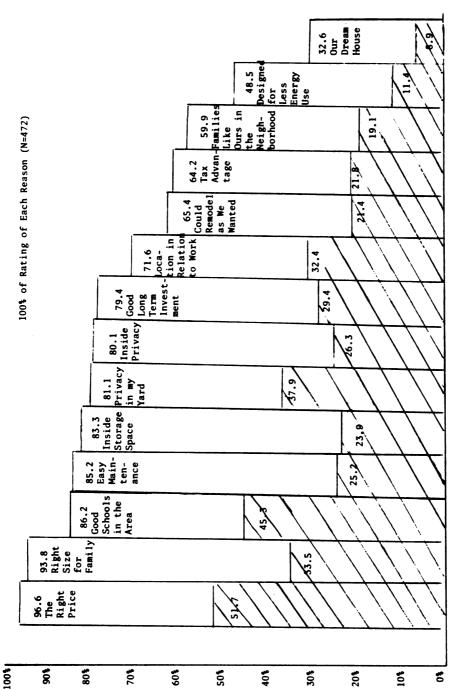
Respondents were presented with "14 reasons" which earlier researchers have identified as being related to housing selection. When asked how important each of the reasons was in the selection of their present housing, heads of households stated not surprisingly, that price was very important. Approximately 50 percent of the persons who ranked the item, "the right price," indicated that it was very important and only 4 percent said that it was not at all important or that they had never thought about it. Second and third ranked "very important" reasons were "good schools in the area" and "privacy in my yard" (Table 25). A mean of the responses was calculated which produced a range of 2.08 to 3.44 with 4 as the value of "very important."

Respondents clearly made a distinction between the ratings "very important" and "important." The frequency of rating the items as "very important" was almost identical for male and female heads of households. But as can be observed in Table 25 and more especially in Figure 5, when the responses rated as "important" were added to the "very important" responses, the order of frequency in which respondents considered that reason to be "very important" and "important" was substantially modified.

The discriminant analysis procedure was also implemented to identify the relative contribution of the 14 "reasons for selection of present housing" in predicting the choice of alternatives to the housing norm. The results indicated significant differences between respondents who chose the option to purchase a less adequate single-family house compared to those who did not, for both male and female heads of house-holds.

Table 25.--Percentage Frequency and Mean of Importance of the Reasons for Selection of Present Housing by Heads of Households.

The right price 51 Good schools in the area 45	ımpoı canıc	Important	Important	about it	Importance
	51.7	44.9	2.1	2.3	3.44
	45.3	40.9	7.8	9.9	3.24
Privacy in my yard 37	37.9	43.2	11.2	8.3	3.10
Right size for family needs 33	33.5	60.4	2.3	4.6	3.22
Location in relation to work 32	32.4	39.2	15.8	13.1	2.90
A good long term investment 29	29.4	50.0	6.6	10.2	2.99
Privacy in the house for each 26 family member	26.3	53.8	10.8	9.1	2.97
Easy maintenance 29	25.2	59.9	8.9	8.7	3.01
Amount of inside storage space 23	23.9	59.3	10.2	7.6	3.04
Tax advantages 21	21.8	42.4	15.9	19.5	2.67
Could remodel it as we wanted 2	21.4	44.1	17.4	18.2	2.68
Families like ours in the neighborhood	19.1	40.9	23.3	16.9	2.62
Designed for less energy use	11.4	37.1	11.9	39.6	2.20
Our dream house	8.9	23.7	30.7	37.9	2.08



Reasons for Selection of Present Housing: Frequency of Responses* by Male and Female Members to Very Important and Important Rating of Each Reason. Figure 5.

*Shaded area represents percentage of each response rated as "Very Important."

All 14 reasons were entered as separate independent variables in the stepwise discriminant analysis procedure to predict selection of the housing option, "purchase of a less adequate single-family house." The reasons were: location in relation to work, privacy in my yard, the right price, a good long term investment, families like ours in the neighborhood, designed for less energy use, right size for family needs, privacy in the house for each family member, could remodel it as we wanted, easy maintenance, good schools in the area, amount of inside storage space, tax advantages, our dream house.

For female heads, "good long term investment" was the first variable to enter the analysis. It contributed the only significant explanation of the differences between the groups which had chosen the option, "purchase a less adequate single-family house" and all others. One other reason, "right size for family needs," met the criterion for inclusion in the analysis, but its effect was not statistically significant (Table 26).

Table 26.--Results of Discriminant Analysis Using Reasons for Selection of Present Housing to Predict Female Heads of Households' First Choice of "Purchase a Less Adequate Single-Family House" or Not.

		N-213	
Reasons for Selection	F To Enter	Overall Level of Probability	Stepwise Level of Probability
Good Long Term Investment	10.98589	.001	.001
Right Size for Family Needs	1.43783	.002	.218

For male heads, the variables which entered the analysis were:
"good long term investment," "our dream house," and "amount of inside
storage space." Other variables which met the criterion for inclusion,
but did not make a statistically significant contribution to separating
the two groups were: "the right price," "designed for less energy use,"
"good schools in the area," "privacy in my yard," "right size for family
needs" (Table 27).

Table 27.--Results of Discriminant Analysis Using Reasons for Selection of Present Housing to Predice Male Heads of Households' First Choice of "Purchase a Less Adequate Single-Family House" or Not.

		N-186	
Reasons for Selection	F To Enter	Overall Level of Probability	Stepwise Level of Probability
Good Long Term Investment	5.37835	.021	.020
Our Dream House	3.59558	.012	.054
Amount of Inside Storage Space	3.75977	.006	.046
The Right Price	3.18081	.003	.063
Designed for Less Energy Use	2.82573	.002	.076
Good Schools in the Area	2.57539	.002	.087
Privacy in My Yard	2.41378	.001	.094
Right Size for Family Needs	2.02910	.001	.121

The "reasons" variables used for classifying female heads of households in the groups which they chose achieved a 63 percent success with a probability level of <.000. For male heads, 67 percent of the known cases were correctly classified, and the results were significant at p<.000.

Discussion of Findings

The significant differences in relationships which were identified were related to those respondents who were renters, who were female, and who had less education. When those three characteristics were each examined separately, in each case the option chosen more frequently was "purchase an adequate mobile home." Female renters had greater preference also for renting an adequate single-family house and were less apt to choose to "purchase a less adequate single-family house." The options chosen prove consistent only in the adequacy component, and perhaps in practice the choices would be consistent also in the lessened financial and maintenance demands.

Significant relationships for male respondents were found only with differences in educational level. The highest and lowest educational levels appeared each to be significantly related to a different choice, with the males who had less education, selecting the less preferred option, and those with more education choosing" purchase an adequate duplex, townhouse or apartment" more frequently.

The question probing the reasons for selection of present housing, attempted to identify some of the major characteristics of housing which were important to family members. Rather than pose a completely hypothetical "what would you like in future housing?" type

of question, the assessment of the importance of certain features in present housing seemed to provide a more realistic base for evaluating how essential certain specific features might be. In the real world, a family is rarely able to make a completely unfettered selection of its housing. Other financial commitments, availability of housing alternatives, or the immediacy of the anticipated change are some of the major constraints which cause families to make different decisions about their use of resources to acquire housing. Family members responded to the realness of the situation by indicating overwhelmingly that "the right price" was "very important" and "important" to more of them than was any other reason for the selection of their present housing.

How is the right price for housing determined by families?

There must be some standards by which the family assesses housing to be "the right price" for its use. Respondents in this study placed "the right price" and "our dream house" at either ends of a continuum when indicating the importance of each reason in the selection of their present housing. Such a relationship indicates that some degree of compromise must have been accomplished when the concrete decision had to be made. When the "if only's" and the "I wish they had's" were finally weighed, what characteristics made the present housing "the right price"?

The "right size for family needs" is also a non-specific characteristic, but the importance attached to it by families in this study suggests that different family types would need housing of varying sizes. If in a future study families were asked, could they be specific about the number of square feet, the number of rooms, the

size of the yard or any of the other aspects of dimension about which builders must make decisions?

The socioeconomic and demographic characteristics of the male and female heads of households in this study had limited relationships to their choice of alternative housing options. In general, differences in choice due to variations in socioeconomic and demographic characteristics of the sample were related to differences in selection of the housing options other than "purchase of a less adequate single-family house." Tenure type of present dwelling, sex and education were found to make significant differences in the choice of the less commonly selected options; other characteristics of the respondents appeared to have no significant relationships to the choices made.

Summary of the Results

The results of the data analysis can be summarized as follows:

- The acceptability of presently available alternatives to the norm of ownership of an adequate single-family house
 - a. No currently available alternative included in this study was very acceptable.
 - b. The most acceptable alternative to the norm was ownership of a less adequate single-family house, with the next most acceptable alternative being "rent an adequate singlefamily house."
 - c. Present housing structure was positively related to acceptability of similar structure types; multiple home dwellers found multiple home options more acceptable than did non-multiple home dwellers, while mobile home dweller females

- found the mobile home option the most acceptable housing alternative.
- d. Lower income female heads of households found mobile homes more acceptable than did other income groups, and lower income male heads of households found renting an adequate single-family house more acceptable than did other income groups.
- e. Rural residents were less accepting than urban residents of duplex housing, while urban residents were less accepting than rural residents of mobile homes.
- f. Level of education was related to the acceptability of purchasing a duplex, townhouse or apartment for both males and females, with an increase in education related to higher acceptability. Mobile home acceptance was greater for respondents with less education.
- 2. The choice of alternative housing options
 - a. The most frequently selected choice by both husbands and wives was "purchase a less adequate single-family house" selected by 48 percent of the sample as first choice.
 - b. The next most frequently selected first choice was "rent an adequate single-family house" for male heads. That option was chosen by an equal percentage of female heads, but the same percentage of female heads also chose "purchase an adequate mobile home."
 - c. The mean acceptability of housing options selected as first choice was higher than the mean acceptability of those options as rated by the total sample across all options.

- The patterns of acceptability of first choice options were generally not related to the degree of acceptability as rated by the sample as a whole.
- d. General similarity of first choice responses reflects congruency of husbands and wives preferences with the exception of wives' greater frequency of selecting "purchase an adequate mobile home" as first choice.
- Socioeconomic and demographic characteristics as predictors of first choice
 - a. Increased education increased the frequency of choosing the purchase of a less adequate single-family house and also the purchase of an adequate duplex, townhouse or apartment, while less education, for female heads of households especially, increased the frequency of choosing "purchase an adequate mobile home."
 - b. For female heads of households, the tenure type of present housing was related to the frequency of choosing non-norm housing alternatives. Female renters were more apt to select rental options as first choice and less apt to select ownership of a less adequate single-family house than were female owners. Female renters also selected "purchase an adequate mobile home" more frequently than did female owners.
 - c. Clearly the most important reason for selection of present housing was "the right price." "Good schools in the area," "privacy in the yard," and "right size for family needs" were next in frequency of rating as "very important."

When very important and important ratings were combined, the second most highly rated reason became "right size for family needs." "Good schools" and "easy maintenance" clustered together as third ranked with "inside storage," "privacy in my yard," "privacy inside," and "good long term investment" all receiving approximately the same frequency of ranking as fourth in importance.

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

An immediate goal of this research was to examine how acceptable the currently available alternatives to the housing norm of ownership of a single-family house would be. Conclusions from the study are that while the overall acceptability of alternatives to the norm was fairly diverse, in general, none of the suggested housing options was rated as an acceptable alternative to the norm. The alternative housing option receiving the highest acceptability rating (\bar{x} =2.67 on scale 1-4) was "purchase a less adequate single-family house." Some options were rated as "not at all acceptable."

When forced to make a choice among the alternatives, nearly half the sample chose the option most similar to the current norm--an apparent reinforcement of the home ownership norm. Clearly the American public, as represented by this sample, continues to be enamored of the ownership of a single-family house.

Recommendations and Hypotheses Developed From This Study

Because this study was designed to be exploratory in approach, hypotheses were not formulated for empirical testing in the study.

Statistical procedures were used to identify relationships from which

hypotheses could be developed for further research. The following hypotheses were generated from this study.

Experience in non-norm type housing is positively related to the acceptability of alternatives to the housing norm.

This research shows that current experience in alternative structure types is related to the acceptability and to the willingness to choose housing alternatives. It is well known that familiarity can lessen resistance to previously unknown situations. It is also well known that humans tend to adopt attitudes in order to reduce dissonance in situations which cannot immediately be made more acceptable. Either of these behaviors could have been operative as respondents rated the acceptability of the alternatives in this study. Further research with a greater number of respondents currently living in each housing type is recommended before generalizations can be substantiated.

Acceptability or preference for housing alternatives is related to clusters of individual, housing and family characteristics.

As discussed in the development of the conceptual framework, housing behavior is ecological in nature. There is no single factor which by itself can be identified as the causal variable in any ecological model: the family's choice of housing is no exception. Characteristics of family and housing environments were selected and exploratory assessment conducted of the relative importance of each. Variables which were shown to be related to choice in this research are: the family characteristics of income, and family life cycle; the characteristics of present housing; reasons for selection of present housing; and the individual characteristics of sex and education. Each of these variables individually or in some interrelated manner, appeared to be

related to acceptability and/or to choice of housing alternatives.

Additional, more rigorous testing which might lead to a predictive equation could be an immediate follow-up to this research.

Male and female heads of households differed in their attitudes toward acceptability and their preferences for alternatives to the housing norm.

Males and females in this study indicated different ratings of the acceptability of housing alternatives and also made some different choices of those housing alternatives. There was also some evidence of differences in the interrelatedness of attributes which influenced the selection of present housing. Clarification of these differences could provide an interesting basis for family decision-making studies.

Heads of households will be more willing to give up adequacy in their housing, and sequentially ownership, in order to retain the single-family structure.

This research suggests that further clarification of all aspects of the norm, ownership of an adequate single-family house, could be useful in defining the standards of acceptable alternatives.

Single-family house: Does this mean only a free standing house for one family on a separately defined plot of ground? Does the lot or the interior space have a minimum? Is direct entrance from ground level a necessity? What is it that most provides "a sense of house?"

Could a two-family house with provision for good sound insulation between units become a very acceptable structure? Could a mobile home on a regular purchased lot in a freely selected neighborhood be an acceptable alternative? Could it become the norm?

Could the title to one unit of a multi-unit structure insure the same commitments now expected from a "nation of homeowners?"

Ownership: If the meaning of "ownership" can be stretched to include
"a 35 year no-down payment mortgage" and can still be more desirable
than renting, one must question what paying on a mortgage provides
for, that renting does not. Is it a greater sense of ownership,
i.e., control, responsibility and privilege to make decisions about
who enters, about what the conditions of the living area will be?
Or is it a greater choice of neighborhood characteristics and
amenities? Is it the financial gains which make ownership more
desired? Or is it that ownership of the land is at the crux of it
all, but that in most urban/suburban areas the purchase of a singlefamily house is the only way to acquire some land?

Adequacy: How do families set their standards about adequacy? Is there something like Maslow's hierarchy which could be determined. Is there a level of minimum space which must first be met, and once that is achieved, additional space may be traded for other amenities about the house itself and/or about the neighborhood? Is there a consistency to the order in which any one family or most families would rank their needs and wants? Or is "adequate" defined only idiosyncratically by each family on the basis of its total circumstances at the time of decision?

Implications of This Research

A major issue which policy makers must face has been highlighted by this research. Americans continue to prefer ownership of a singlefamily house and cost is the major constraint. When this preference is presented to builders it appears that currently the housing market-place has some hesitancy about responding. A recent report to HUD and to Congress indicates that one-income, first-time-home-owner families, especially the young, were not able to find housing which they could afford. The response came from builders that there was little incentive for them to build more affordable housing when they could sell all the larger houses they could build (Comptroller General, 1978).

A large portion of the respondents in this study indicated that the housing alternative which they selected as first choice was an acceptable alternative. Continued research probing the attributes of the housing which families find acceptable could lead to design or tenure modifications not yet considered by builders.

The demand for ownership of a single-family house must also be set within a broader context. A more compelling long range goal of this research has been to seek alternative housing which would be less demanding of the nation's land resources and of the world's fossil fuel. Thoughtful observers of the world's resources have indicated that we have reached the limits of the past type of energy intensive life which we have been able to enjoy in this country, and that we must adopt a more disciplined, less self-indulgent existence.

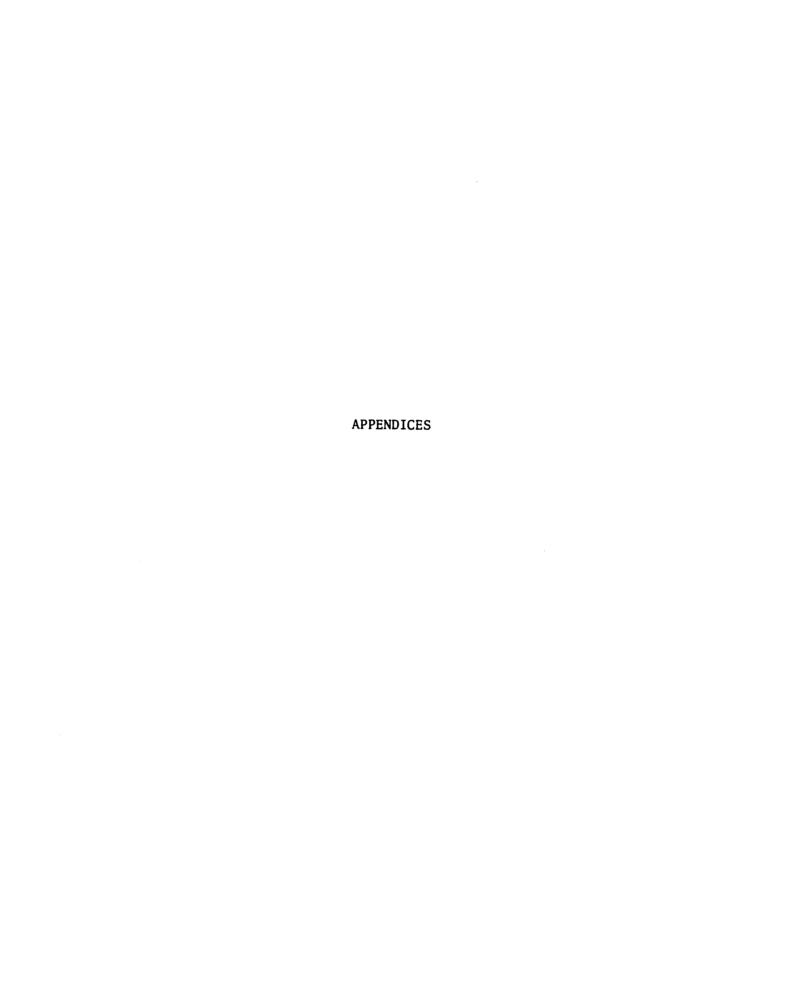
Given the identification of scarcity and limitation of resources, the insistence on the ownership of a single-family house on its own lot could be categorized as undisciplined and self-indulgent. Families have assumed that it was their duty and their right to acquire a single-family house which they would own. If future resources do not continue to offer such largesse, then Americans must become more disciplined about what patterns would better serve their (and the world's) needs for shelter.

This research has identified educational level and experience in living in alternative housing types as related to the acceptability of housing alternatives. It appears that socialization and the educational process contribute to the acceptance of housing patterns other than the norm. It is argued here, as in other reports from the larger Family Energy Project, that it is possible for educators to assist families in recognizing that their everyday activities create demands on diminishing natural resources. Because of the ecological nature of housing, it is desirable that builders, educators and families work together toward the development of acceptable housing which is less energy consuming.

A changing resource base may herald a period of radical social change which will call for some major changes in house form. In the past the single-family detached house has been flexible enough to be modified and still hold the qualities of the newly developed living patterns, but

what may be possible, if not necessary, is a complete redefinition of our concept of a "planned environment" at the scale of the home and our attitude toward "place" in a broader sphere. Ultimately the detached house may still prevail as a common building type, but its content is likely to be . . [very different] (Handlin, 1976, p. 37).

When viewing the problems of maldistribution and high cost of housing within a decreasingly energy-driven environment, Nelson Foote's recommendation seems viable. It may again be time to "illuminate the situation of the housing consumer in such a way that not only housing professionals but the consumer himself will see ways of acting not previously clearly visible" (1960, p. xxvii).



APPENDIX A

DOCUMENTS FROM OTHER SOURCES

Appendix A

Summary: Seven Levels of Housing and Associated Levels of Living

Levels of Housing: P	rototypes
and Estimated Percen	t Distribu-
tion (Greater Boston,	1970-71)

PRESTIGE CLASS HOUSING—
"estates," "mansions,"
"luxury spreads in subur—
bia," "fancy townhouses,"
and "elegant penthouses."
Estimated as 1.6 % of
Boston area housing stock.

VERY GOOD HOUSING—cight-room colonial in top condition or "custom contemporary"; this level is far above the common man's dreams. Estimated as 4.9% of Boston area housing stock.

PLEASANTLY GOOD HOU-SING--seven-room Cape, split-level, or ranch; this is "definitely above standard," but within the range of the common man's aspirations. Estimated as 15.1% of Boston area housing stock.

STANDARD-COMFORTABLE—
six-room post-war tract
house or pre-war Cape; other
bungalows, or story-andhalf houses; a home deemed
satisfactorily comfortable
to 4-person family. Predominantly single-family and
owner-occupied. Estimated
at 25.4% of Boston area
housing.

Associated Market Values and Rentals (Late Spring 1971)

\$70,000 and up for single-family houses Rents: \$585 or more unfurnished

\$42,000 up to \$69,9000 for single-family houses

Rents: \$375 to \$584 gross unfurnished

\$28,000 up to \$41,900 for singlefamily houses

Rents: \$240 to \$374 gross unfurnished

\$20,000 up to \$27,900 forsinglefamily houses

Rents: \$182.50 to \$239 gross, but as low as \$160 contract (Image: \$160 to \$225) Who Lives There? -- Seven Socio-Economic Status Groups, or Levels of Living, Associated with Each Level of Housing

THE SUCCESS ELITE—professionals, politicians, executives, businessmen "making at least \$35,000 a year"—on up to THE REALLY, REALLYWEALTHY.

THE ESTABLISHED UPPER-MIDDLE CLASS--professional and managerial families, usually with college degrees (both husband and wife), who have attained an income in the range from \$22,400 up to \$34,900.

PEOPLE LEADING A "GOOD LIFE" -- found in a wide variety of occupations, from the professions down to top-pay bluecollar workers; significant share of two-income families. Income range is \$14,5000-\$22,400.

"COMFORTABLE" LIVING --Composed of middle-income white-collar workers and betterpaid blue-collar workers and many two-income families. Income range is \$11,000 to \$14,400. Levels of Housing: Prototypes and Estimated Percent Distribution (Greater Boston, 1970–71) Associated Market Values and Rentals (Late Spring 1971) Socio-Economic Status Groups, or Levels of Living, Associated with Each Level of Housing

STANDARD-MARGINAL -below average in desirability
as result of age or being
"smaller than you'd want,"
but not substandard in structural condition; predominantly
rental, multi-unit structures.
Estimated at 26.9% of Boston
area housing.

\$12,750 up to \$19,900 for singlefamily houses

Rents: \$137.50 to Po \$180 gross, but as co low as \$105 contract lo (Image: \$135 to re

FAMILIES "JUST AVERAGE,"
OR WITH JUST "EN OUGH TO
GET ALONG" — This latter is a
phrase adopted from the Gallup
Poll: it parallels the B.L.S.
concept of families at "the
lower living standard." Income
range is \$7,500 to \$10,900.

SUBSTANDARD -- "Projects" ond older housing with endemic deficiencies of condition -- "below inspection standards but not true slum"; still rehabilitable. Estimated as 21.5% of Boston area housing.

Market value moot for single-family houses

\$159 for five rooms)

Rents: \$85 to \$135 gross for private housing, less for public: as low as \$55 contract (Image: \$110 to \$134 for four rooms) FAMILIES ABOVE "THE POVERTY LINE" — but without enough income to "get along" in a manner defined by most Bostonians as satisfactory. Income range is \$4,500 to \$7,400.

SLUM -- already abandoned or "should be"; stigmata are "broken windows," "rats scurrying around," "trash & garbage in the streets," "ragged children," "unemployed men," apathetic tenants not caring. Estimated at 4.6% of Boston area housing.

Monthly rentals run below \$85 except in special cases of "exploitable" tenantry (Image: \$95 on up --"more than it's worth") PEOPLE LIVING BELOW "THE POVERTY LINE" -- For a family of four this would be with annual incomes below \$4,500, as judged by Bostonians.

Source: Richard Patrick Coleman, Seven Levels of Housing: An Exploration in Public Imagery, Working Paper No. 20 (Cambridge, Mass.: Joint Center For Urban Studies of the Massachusetts Institute of Technology and Harvard University, April 1973), pp. 66-67.

APPENDIX B

QUESTIONS FOR THIS STUDY

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QUESTIONS FOR THIS STUDY

4. We are interested in knowing the reasons for your choice of housing. Please indicate how important each of the following was in the choice of your present housing.

Never

		Very Important	Important	Not at all Important	thought about it
1.	Location in relation to work				
2.	Privacy in my yard				
3.					
4.	•				
5.	•				
	hood				
6.	Designed for less energy use				
7.	Right size for family needs			-	
8.	Privacy in the house for each family member				
9.	Could remodel it as we wanted				
10.	Easy maintenance				
11.	Good schools in the area				
12.	Amount of inside storage space				
13.	Tax advantages				
14.	Our dream house				
15. Ma	ny Americans are interested in	 owning t	heir own	homes, but	if you
Ma CC	ny Americans are interested in uld not build or buy the home llowing choices be?	you desir Very	ed, how a	somewhat	would the
Ma co fo	ny Americans are interested in uld not build or buy the home llowing choices be?	you desir Very cceptable	ed, how a	cceptable	would the
Ma CC	ny Americans are interested in uld not build or buy the home llowing choices be?	you desir Very cceptable	ed, how a	somewhat	would the
Ma co fo	ny Americans are interested in ould not build or buy the home ollowing choices be? Purchase an existing less adequate single family house	you desir Very cceptable	ed, how a	somewhat	would the
Ma co fo	ny Americans are interested in culd not build or buy the home cllowing choices be? Purchase an existing less adequate single family house Purchase an adequate mobile home	you desir Very cceptable	ed, how a	somewhat	would the
Ma cc fo	ny Americans are interested in uld not build or buy the home allowing choices be? Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, town-house or apartment	you desir Very cceptable	ed, how a	somewhat	would the
Ma co fo . 1. 2. 3.	ny Americans are interested in culd not build or buy the home cllowing choices be? Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, townhouse or apartment Rent adequate single family house	Very cceptable !	ed, how a	somewhat	would the
Macco for . 1. 2. 3.	ny Americans are interested in culd not build or buy the home collowing choices be? A Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, townhouse or apartment Rent adequate single family house Rent an adequate duplex, townhouse or apartment	Very cceptable !	ed, how a	somewhat	would the
Ma co fo . 1. 2. 3. 4. 5.	ny Americans are interested in uld not build or buy the home bellowing choices be? Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, townhouse or apartment Rent adequate single family house Rent an adequate duplex, townhouse or apartment Share a large single family house with another family	Very cceptable !	ed, how a	somewhat	would the
Macco for . 1. 2. 3. 4. 5. 6. 7. Fr	ny Americans are interested in culd not build or buy the home collowing choices be? Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, townhouse or apartment Rent adequate single family house Rent an adequate duplex, townhouse or apartment Share a large single family house with another family Other (please specify) om the list above(including an ite down the number which woul First	Very cceptable i	ou may have	Somewhat Unacceptable	would the Not at all Acceptable
Macco for . 1. 2. 3. 4. 5. 6. 7. Fr	Purchase an existing less adequate single family house Purchase an adequate mobile home Purchase an adequate duplex, town-house or apartment Rent adequate single family house Rent an adequate duplex, townhouse or apartment Share a large single family house with another family Other (please specify) om the list above(including an ite down the number which woul First	Very cceptable ! ything yo	acceptable in the second secon	Somewhat Unacceptable	would the Not at all Acceptable

Source: Institute for Family and Child Study, Family Energy Project (East Lansing, Mich.: College of Human Ecology, Michigan State University, 1976), p. 16.

FAMILY LIFECYCLE DOCUMENTATION *

Using AGECHID1 to AGECHID7, the variable YOUNG was computed to determine the presence or absence of children younger than 20 in the household:

Compute

Young=0

Do Repeat

Xl=Agechldl to Agechld7

Ιf

(X1 gt 0 and X1 le 240) Young=1

End Repeat

YOUNG

1) a child le 20 in the household

0) no child le 20 in the household

WAGECOD76 is the variable which computes the wife's age code. It is based on the wife's age (WAGE) and the presence or absence of a child younger than 20:

WAGECOD76

1)wife's age le 39 and YOUNG=0

2) wife's age ge 40 and le 39 and YOUNG=0

3) wife's age ge 60 and YOUNG=0

The age of the oldest child was categorized using the variable OCAGE76:

OCAGE76

1) age of the oldest child 1t 3 2) age of the oldest child 3-4 3) age of the oldest child 5-12 4) age of the oldest child 13-19

5) age of the oldest child ge 20 and there is a child

younger than 20 in the household .

6) age of the oldest child ge 20 and there is no child

younger than 20 in the household

Using WAGECOD76 and OCAGE76, the final step was to determine the family lifecycle code:

FAMILY LIFECYCLE

1) wife's age is 1t 40 and no children 1t 20

2) age of the oldest child is 1t 3 3) age of the oldest child is 3-4 4) age of the oldest child is 5-12 5) age of the oldest child is 13-19

6) age of the oldest child is ge 20 and there is a child

younger than 20 in the household

7) age of the oldest child is ge 20 and there is no child

younger than 20 in the household, when wife's age is gt 40

8) wife's age is gt 40 and there are no children in the

household

^{*} Based on Evelyn Diwall and Roy Rodgers. See Gladhart, 1973, for discussion and related use.

APPENDIX C

TABLES FROM THIS STUDY

Table C-1.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Residents of Single-Family House.

Alternative Housing Option	Female Heads of Households Living in Single-Family House	Male Heads of Households Living in Single-Family House
Purchase less adequate single-family house	53.6	51.8
No option chosen	17.9	22.5
Rent an adequate single-family house	12.6	11.5
Purchase an adequate mobile home	8.7	4.7
Purchase an adequate duplex, townhouse or apartment	7.2	9.4

Chi square = 4.11, 4 fd, p < .05 N.S. Computed only on options and categories shown.

Table C-2.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Different Income Levels.

	Female H	Female Heads of Households	useholds	Male Hea	Male Heads of Households	seholds
Alternative Housing Option	\$4,999 to 9,999 N=52	10,000 to 14,999 N=60	15,000 and up N=121	\$4,999 to 9,999 N=39	10,000 to 14,999 N=52	15,000 and up N=115
Purchase less adequate single- family house	42.3	61.7	52.1	48.7	48.1	54.8
No option chosen	26.9*	*9.9	18.2	23.1	23.1	20.9
Rent an adequate single-family house	5.8	18.3	2.5	10.2	15.4	13.0
Purchase an adequate mobile home	21.2	6.67	7.4	10.2	3.8	2.6
Purchase an adequate duplex, townhouse or apartment	3.8	6.67	11.6	7.7	9.6	8.7

*Female heads of households' chi square = 23.31 8 df, p < .05. Male heads of households' chi square = 5.0, 8 df, p > .05. N.S. Computed only on options and categories shown.

Table C-3.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Age of Respondent.

A 1 4 A 1	Female Heads of Households	ads of H	ouseholds	Male Heads of Households	s of Ho	useholds
Alternative Housing Option	Less than 29 N=67	30-44 N=82	45 and older N=97	Less than 29 N=40	30-44 N=92	45 and older N=85
Purchase a less adequate single-family house	55.2	48.8	48.4	55.0	53.3	48.2
No option chosen	13.4	15.8	21.6	22.5	16.3	28.2
Rent an adequate single- family house	11.9	17.1	72.2	20.0	16.3	9.4
Purchase an adequate mobile home	10.4	12.2	12.4	17.5	4.35	7.1
Purchase an adequate duplex, townhouse or apartment	8.9	6.1	9.5	15.0	8.6	7.1

Female heads of households' chi square = 6.51, 8 df, p < .05, N.S. Male heads of households' chi square = 6.14, 8 df, p < .05, N.S. Computed only on options and categories shown.

Table C-4.--Percentage of Male and Female Heads of Households Selecting Each Alternative Housing Option by Different Stages in the Life Cycle.

	Female He	ads of I	emale Heads of Households	Male Hea	ds of H	Male Heads of Households
Alternative	Age of Oldes	t Child	of Oldest Child in Household	Age of Oldes	t Child	Age of Oldest Child in Household
	Less than 3-12 N=87	13-19 N=69	20-none at home N=69	Less than 3-12 N=78	13-19 N=58	20-none at home N=62
Purchase a less adequate single- family house	51.7	52.2	46.4	51.3	44.9	50.0
No option chosen	12.6	20.3	21.7	19.2	25.9	27.4
Rent an adequate single-family house	17.2	8.7	7.2	15.4	12.1	9.7
Purchase an adequate mobile home	9.2	14.5	14.5	3.8	10.3	4.8
Purchase an adequate duplex, townhouse or apartment	9.2	4.3	10.1	10.2	6.9	8.1

Female heads of households' chi square = 9.38, 8 df, p > .05, N.S. Male heads of households' chi square = 5.35, 8 df, p > .05, N.S. Computed only on options and categories shown.

Table C-5.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Family Type.

	Female Heads	Female Heads of Households	Male Heads o	Male Heads of Households
Alternative Housing Option	Husband/Wife Children N=153	Husband/Wife No Child N=70	Husband/Wife Children N=149	Husband/Wife No Child N=67
Purchase an adequate single- family house	48.4	57.1	48.3*	59.7*
No option chosen	16.3	20.0	20.1	25.4
Rent an adequate single- family house	15.7	4.2	16.1	4.5
Purchase an adequate mobile home	11.1	11.4	7.38	1.5
Purchase an adequate duplex, townhouse or apartment	8.5	7.1	8.05*	*6.8

Female heads of households' chi square = 6.36, 4 df, p > .05, N.S. Male heads of households' chi square = 9.67, 4 df, p < .05. Computed only on options and categories listed.

Table C-6.--Percentage of Male and Female Heads of Households Selecting Each Housing Alternative as First Choice by Number of Children.

	Female Heads	Female Heads of Households	Male Heads o	Male Heads of Households
Alternative Housing Option	2 children or less N=155	More than 2 Children N=50	2 children or less N=164	More than 2 Children N=45
Purchase a less adequate single-family house	43.2	48.0	53.0	46.7
No option chosen	20.0	16.0	21.0	26.7
Rent an adequate single- family house	11.0	20.0	11.6	22.2
Purchase an adequate mobile home	14.2	12.0	4.8	6.67
Purchase an adequate duplex, townhouse or apartment	11.6	4.0	8.6	2.22
townhouse or apartment				

Female heads of households' chi square = 5.23, 4 df, p > .05, N.S. Male heads of households' chi square = 4.57, 4 df, p > .05, N.S. Computed only on options and categories shown.



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