A SOCIOLOGICAL PERSPECTIVE
OF THE MOBILE HOME
IN APPALACHIAN EASTERN KENTUCKY

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ABSTRACT

The Appalachian section of eastern Kentucky has often exhibited unique social, political, and economic characteristics which frequently differ from the nation as a whole. In relationship to housing there is no exception. One in sixteen housing units in the United States is classified as a mobile home, yet in some areas of eastern Kentucky that number can rise to over one in four. The study utilized both qualitative and quantitative research methods to investigate the causes and implications of this housing phenomenon. Three theoretical concepts of: (1) individual Housing Norms/Preferences, (2) county level Socioeconomic Characteristics, and (3) endogenous Contextual Factors were incorporated into the study’s analysis.

Qualitative methods were used to ascertain underlying factors of this high mobile home concentration, through an understanding of regional housing norms and preferences. The data inferred that mobile home residents of the
region conformed to, or wished to conform to the housing norms of: (1) home ownership, (2) conventional construction, (3) detached dwelling, and (4) private outdoor space. However, the analysis suggests that most mobile home residents were precluded from achieving the conventional construction norm/preference due to a lack of income and the high cost of conventional housing.

The quantitative research section analyzed county level social, economic, and endogenous regional factors to explain the high mobile home concentrations at the macro level. Socioeconomic characteristics of race, education, employment, income, and age; and contextual factors such as rurality, and geographic region; were quantified in a multiple regression model. Results from the multi-variate analysis concluded that most of these variables were significantly associated, accounting for 74 percent of the variance in Kentucky’s mobile home concentrations. Specifically, rurality and median income were the strongest variables in the regression analysis.

The study reinforces the notion that mobile homes are an important and growing source of housing in eastern Kentucky. However, for many low and now moderate income families in rural areas, the mobile home has become their only viable home ownership option. This high concentration and recent proliferation has profound implications on almost every strata of society in central Appalachia. The study infers possible effects on the regional
economy, social perception, and local community tax revenues. Yet, most important are the quality of life, safety, and financial aspects this type of housing holds for over 90,000 eastern Kentucky residents who inhabit mobile homes.

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DEDICATION

I humbly dedicate this work to Tom Carew and all of those in the non-profit housing sector who work tirelessly, and all too often thanklessly, so that those less fortunate may have better homes, and ultimately better lives.
Economics is all about how people make choices.
Sociology is all about why they don't have any choices to make.

James S. Duesenberry
# TABLE OF CONTENTS

## CHAPTER 1
- INTRODUCTION .................................................................................................................. 1
- Research Question ............................................................................................................. 5

## CHAPTER 2
- REVIEW OF LITERATURE .................................................................................................. 6
  - Terminology .................................................................................................................. 6
  - The Evolution of the Mobile Home Into the U.S. Housing Market .................................. 7
  - Mobile Home Trends and Current Conditions ............................................................... 12
  - Affordability .................................................................................................................. 14
  - Issues Affecting Investment Value ................................................................................. 15
  - Issues Affecting Use Value ............................................................................................ 19
  - Social Perception ......................................................................................................... 22
  - The Mobile Home in Appalachian Eastern Kentucky ................................................... 23
  - Theoretical Model ......................................................................................................... 27
  - Research Hypotheses .................................................................................................... 34

## CHAPTER 3
- METHODOLOGY .................................................................................................................. 36
  - Qualitative Analysis ....................................................................................................... 37
  - Quantitative Analysis .................................................................................................... 39

## CHAPTER 4
- HOUSING NORMS & PREFERENCES
  - Qualitative Analysis ....................................................................................................... 43
  - Description of Sample .................................................................................................... 44
  - Case Studies .................................................................................................................. 46
    - "It’s really good for people like us" .............................................................................. 46
    - 10’ x 50’ .................................................................................................................. 50
    - "Anything would be better than this" .......................................................................... 55
    - "It serves a purpose" .................................................................................................... 58
    - "All I want is a decent house for me and my son" ................................................. 61
  - Significant Themes from case Studies ............................................................................ 63
  - Conclusion ..................................................................................................................... 66
CHAPTER 5 ................................................................................................................. 70
SOCIOECONOMIC CONSTRAINTS AND CONTEXTUAL FACILITATORS Multivariate Analysis .................................................. 70
  Description of Data .................................................................................................. 71
  Concentration of Mobile Homes; Regression Analysis ........................................... 79
  Summary .................................................................................................................. 83

CHAPTER 6 .................................................................................................................. 85
RESEARCH SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS ................................................................................. 85
  Summary .................................................................................................................. 85
  Implications .............................................................................................................. 90
  Recommendations .................................................................................................. 94

REFERENCES .............................................................................................................. 97

LIST OF FIGURES

Figure 2.1
  Cost of Housing ........................................................................................................ 14

Figure 2.2
  Mobile Home Financing ........................................................................................... 17

Figure 2.3
  Mobile Homes as a Percentage of Housing Units (1950-1990)................................ 24b

Figure 2.4
  1996 New Housing Starts, NE Kentucky .................................................................. 25

Figure 2.5
  Tremblay & Dillman, Model of Housing Preferences ............................................. 28

Figure 2.6
  Morris & Winter Model of Housing Adjustment .................................................... 30
Figure 2.7
Adapted Theoretical Model................................................................. 33a

Figure 3.1
Research Model.................................................................................. 42a

LIST OF MAPS

Map 2.1
U.S. Mobile Home Concentrations, 1990........................................... 13

Map 2.2
Mobile Home Concentrations in Kentucky........................................ 24a

Map 3.1
Interview Area.................................................................................... 38a

Map 5.1
Mobile Home Concentrations in Kentucky........................................ 73

Map 5.2
Percent White, Kentucky................................................................. 78a

Map 5.3
Percent High School Graduate, Kentucky........................................ 78a

Map 5.4
Percent Unemployed, Kentucky....................................................... 78a

Map 5.5
Median Income, Kentucky............................................................... 78a

Map 5.6
Median Age, Kentucky....................................................................... 78a

Map 5.7
Percent Rural, Kentucky.................................................................... 78a
Map 5.8
Appalachian Region, Kentucky............................................................... 78a

LIST OF TABLES

Table 5.1
Mean Scores of Data............................................................................ 71

Table 5.2
Correlation Matrix for Dependent and Independent Variables......... 71a

Table 5.3
Regression Analysis for Mobile Home Concentrations.................... 79
This discipline [Sociology] is concerned with what is true of man by virtue of the fact that he leads a group life. What sociologists must discover about housing, therefore, is all those aspects which are factors in and products of man's involvement in social life. At first glance, this may seem to be virtually everything, for the politics and economics of housing, as well as art, architecture and law, business, financing and administration, designing and planning, are also factors in and products of social relations.

*Louis Wirth

CHAPTER 1
INTRODUCTION

On February 4th 1998, a massive and unexpected snow storm ravaged Kentucky. Especially hard-hit was the south-eastern portion of the state, where in some areas, over thirty inches of snow was reported. Accompanying the storm were downed power lines and hazardous or impassable roads. Because of the wet nature of the snow, another problem arose: collapsed roofs. Mobile homes in the region were especially hard hit.

A few days after the snow ended, many of the back mountain roads were finally becoming passable. I embarked into this winter-wonderland with Tom Carew, Executive Director of Frontier Housing, Inc., a non-profit housing organization which builds homes for low income families in this part of eastern Kentucky. He had received several referrals of such roof collapses from the American Red Cross and was going to investigate the damage to see if his organization could aid any of the storm victims. "We normally don't work on trailers much anymore" said Carew, "They're difficult to repair, and when you do repair them, they just don't last. Older trailers deteriorate quickly no matter what you do to them. But these people are in a crisis situation and we'll see what we can do." The first mobile home we visited belonged to Carl and Ellie, an elderly couple, age 69 and 64.
The damage was apparent when we drove up to their 1969 mobile home. However, the destruction on the inside was much more extensive. The ceiling panels throughout most of the mobile home had already been removed, exposing a palate of twisted, buckled, and rusty sheet metal entwined by splintered 2" x 2" wooden roof joists. The ceiling, or what was left of it, was supported only by two makeshift braces which were essentially large oak boards placed on slabs of fire wood to level them. This remedy resembled some form of crude barn construction. "It just came down all of a sudden" said Ellie, "and my neighbors helped me prop this up." "These old trailers are notorious for this," said Carew as he inspected the damage, "two by twos just aren't proper building material, especially for roofs."

Carew explained some options to the elderly couple, most of which were just short term solutions, such as another temporary mobile home from FEMA if the area were declared a federal disaster. However, in the long run, Carew estimated the repair costs to be over $6,000, which is more than the appraised value of their home. "We're just old poor people, we don't have that kind of money, and not a drop of insurance," said Ellie. Allowing the couple to think over their options, he sent some of his construction employees to place a temporary covering of heavy mill plastic on the roof to try and minimize the effects of a forecasted rain on the now roofless and vulnerable
home.

Carl and Ellie are one of over 80,000 households in Appalachian eastern Kentucky who live in a mobile home. This form of housing has had an explosive, yet controversial progression into the U.S. housing market. Some of this dissension can be exemplified through the plight of Carl and Ellie's mobile home. However, of equal, or even greater debate, are social and economic factors that often accompany them. Mobile homes have traditionally been occupied by lower income groups, which exacerbates the stigmatization of this form of housing. The mobile home is the center of many "white trash" or "red-neck" jokes and is stereotypically associated with poverty in rural communities.

In eastern Kentucky, mobile homes are concentrated at over three times the national average. However, they actually only comprise 23 percent of the region's housing stock. Despite their actual numerical minority, they seem to have a ubiquitous presence in the central Appalachians. Mobile homes are commonly spotted from back mountain roads dotting the hillsides, straddling the creeks and valleys, or flocked together in parks. Another common characteristic of mobile home placements in the region is close proximity to the parental home. This situation is described by Finn & Kerr (1994):

Like the tenant farmhouse and the shotgun shack before them, compact trailers provide a basic form of folk housing, offering economic
However, unlike the traditional camp house or log cabin of the mountains, mobile homes do not exude an impression of rugged individualism or perseverance so frequently associated with Appalachian culture. In contrast, these aluminum "box-like" structures are more likely to carry stigmas of impoverishment, impermanence, and non-acceptance.

The goal of this study is to gain a comprehensive understanding of the mobile home's popularity in Appalachian eastern Kentucky. Namely the study will investigate the causes and effects of this large mobile home concentration. The study will seek to answer the following:

- Is the large and increasing presence of the mobile home in Appalachian eastern Kentucky simply a progressive transformation of low-income housing? Or, does it in fact signal a new trend in housing behavior and preferences in the region?

- Is this housing phenomenon in response to preference or relegation?

- What possible social and economic ramifications does this relatively large concentration of mobile homes have on the region and those who reside in them?
These questions and issues relating to mobile homes in eastern Kentucky are integrated into one comprehensive research question which asks:

**What factors are responsible for the relatively large and increasing concentration of mobile homes in the Appalachian section of eastern Kentucky?**

Housing is often not a flamboyant or exciting issue, but it is of great significance for it addresses one of the most important components of our lives: shelter. Housing, in its most basic form, is shelter from the elements, but in our modern society, it has evolved into much more than this singular component. As Tremblay & Dillman (1983) state:

> People spend much of their day in the confines of their homes; the home separates people from others; the home provides a place of retreat and replenishment... It represents socioeconomic status in the eyes of the community, and housing costs demand a large piece of the family budget pie (Tremblay & Dillman, 1983; 20).

This conceptualization of “home” is the basis for a greater understanding of the mobile home in Appalachian eastern Kentucky. Many social, economic, and quality of life issues are directly related to the proliferation of mobile homes in this region. Therefore, a greater understanding of this housing phenomenon will inform community planners, housing officials, and policy makers of the factors and possible implications of this unique form of housing in which over 180,000 Kentucky families reside.
CHAPTER 2
Review of Literature

Not only have mobile homes become conspicuous features in the landscape of the south, they have, more importantly become a part of its culture.

*David Rigsbee

CHAPTER 2
REVIEW OF LITERATURE

This chapter will introduce a review of literature pertinent to the study of mobile homes in Appalachian eastern Kentucky. As a precursor, a brief history of the mobile home and an overview of relevant issues concerning this type of housing will be presented. This will be followed by a delineation of these mobile home issues within the geographical region of Appalachian eastern Kentucky. Finally, a theoretical model and corresponding hypothesis will be presented to serve as a framework for the study.

Terminology

The actual terminology for this type of housing varies upon what specific entity is consulted. The term manufactured housing is preferred by the industry that produces these homes (Housing Assistance Council, 1996). The Manufactured Housing Institute's (MFI) definition is contingent upon the date in which the structure was built. They define a manufactured home as a unit which was constructed after June 15, 1976, which indicates the initial implementation of the U.S. Department of Housing and Urban Development (HUD) Code. Likewise, the MFI defines factory built units constructed before the HUD Code as mobile homes (Manufactured Housing Institute, 1997).
These particular definitions are also utilized by the U.S. Department of Housing and Urban Development. The 1990 Census does not use the term **manufactured housing**, instead they define any living quarters that were originally constructed to be towed on a chassis as a **mobile home** (U.S. Bureau of the Census, 1993a). Yet another term is **trailer** and although considered antiquated, it is still colloquially used by many when referring to this type of housing. The term **trailer** is also commonly used in the Appalachian region and occurs often throughout the study.

Much of the data for this study derives from the 1990 Census, which utilizes the term **mobile home** in referring to this type of factory built housing. Thus, the term **mobile home** will also be officially used by this study to remain consistent with the data source. However, all three terms, **mobile home**, **manufactured housing**, and **trailer** will occur throughout the study and will basically refer to the same type of housing.

**The Evolution of the Mobile Home Into the U.S. Housing Market**

The mobile home has had a unique and somewhat controversial progression into the U.S. housing market. Originating in the 1920s and 1930s, the seminal “travel trailer” served primarily as a recreational vehicle which was bolstered by the automobile boom of the period. Although initially
intended solely for leisure purposes, its usefulness was soon expanded and an increasing number of households were utilizing them as a form of permanent residence. This brought about the development of the "house trailer" in the late 1930s. By 1939, an estimated ten percent of new commercially manufactured trailers were being purchased to serve as full-time housing (Wallis, 1991). These house trailers were not well received by the general public as permanent residences and were acceptable only in cases where the head of the household was involved in some type of transient work, such as construction (Wallis, 1991). However, the tumultuous events of the next two decades would serve to greatly expand the mobile home's prevalence in the housing market and subsequently, its controversial status in society.

The Great Depression of the 1930s ravaged the U.S. economy, unemploying millions of American workers. As a result, it produced great transient populations which often sought scarce working options over long distances. For many of these families, a recreational travel trailer converted to a permanent form of mobile housing facilitated their migrant and nomadic lifestyles. However, just as the depression encouraged year-around travel trailer use, it also fueled resistance to the trend (Wallis, 1991). Trailer camps acquired the image of "shanty-towns on wheels," and the cycle of negative
perceptions began to set in the minds of conventional housing residents (Atiles, 1995). Many home-owners feared that the unrestricted placement of trailers and trailer camps threatened real estate values, and that people who lived in trailers tended to behave immorally, endangering the standards of the community (Wallis, 1991). In response to the outcry of more politically prominent and powerful homeowners, zoning ordinances and restrictions emerged at all levels of government to impede this new form of housing.

Following the Great Depression, World War II also significantly affected the mobile home’s status and had a lasting impact on U.S. housing patterns. In the early 1940s the country was scrambling to meet the war effort, and the government purchased 1500 trailers to house construction workers in defense production areas. By the end of the war it was estimated that more than 120,000 trailers were in use by migrant workers for the war effort (Wallis, 1991). The war had strengthened the mobile home industry, and in an attempt to gain more prominence in the post-war housing market, manufacturers started producing a more amenable product for permanent living. Mobile homes were becoming larger and less mobile, and now almost exclusively designed for permanent living.

A significant development in mobile housing during this time period was the revolutionary “Ten Wide,” introduced in 1954. It was soon followed by 12
and 14 foot wide models which dominated the 1960s (Atiles, 1995). In the late 1960s and early 1970s the mobile home witnessed its greatest success in retail markets. The industry experienced a dramatic increase in the number of new mobile home shipments, climaxing in 1973 with a reported 566,920 shipments, comprising 37.1 percent of the nation's housing completions for that year (Manufactured Housing, Institute, 1997; Wallis, 1991). However, after this peak the number of shipments declined and plateaued at a level of 200,000 to 300,000 shipments per year, where the industry has remained to the present. (Manufactured Housing Institute, 1997).

The mobile home experienced another significant milestone during with the advent of the 1976 HUD Code. More specifically, the Mobile Home Construction and Safety Standards Act (42 U.S.C. Section 5402(6), 1976) passed by Congress regulated the construction of mobile homes in regard to safety and quality. The implementation of this preemptive “Code” was spurred by a combination of factors, including a rapid expansion in the number of mobile homes now in use and mounting concerns over their quality and safety. This was especially true in areas where no construction standards were required. These factors provided a type of housing that was plagued with the stigma of poor quality and safety. An example may be found in excerpts from a 1975 Center for Automotive Safety report concerning mobile
homes:

Three factors contribute to the low quality of mobile home construction: poor design, cheap materials, and sloppy workmanship.... In areas where the code is lax or ambiguous, many manufactures still use the cheapest and shoddiest materials available. Poor workmanship by unskilled and untrained workers slapping together homes at a frantic pace is an equally important cause of low quality houses. These factors also often result in shoddy or bad products (Wallis, 1991; 213).

The implementation of the HUD Code provided for a uniform set of construction and quality guidelines for all mobile home manufacturers. In addition to these construction specifications, the Code had a profound impact on other, less tangible aspects of this form of housing. With government involvement, many ascertained that the HUD Code helped legitimize the mobile home as an acceptable form of permanent residence, status that had been long fought for by the industry.

The mobile home continued to sustain a significant market in the 1980s and early 1990s, comprising somewhere between 15 percent and 25 percent of new housing starts in the country (Manufactured Housing Institute, 1997). More recent years have witnessed the emergence and increased popularity of "Double Wide" units which are much larger than the traditional single wide unit and in appearance, greatly resembles conventional "site built" housing. However, this type of mobile home is typically accompanied by a much higher cost, with an average purchase price of $36,900 as opposed to $19,900 (both without land) for a single wide unit in 1992 (Manufactured Housing Institute,
Mobile Home Trends and Current Conditions

As of 1990, there were over seven million mobile homes in the United States, comprising 7.2 percent of the nation's occupied housing units (U.S. Bureau of the Census, 1993c). Of these, most were located in the south and southwestern portion of the country (See Map 2.1). Approximately half of all mobile homes in the United States are located in 1 metropolitan areas; the other half are located in 2 nonmetropolitan areas (Housing Assistance Council, 1996). Those in urban areas are generally clustered together in “parks” on the periphery of cities, while rural mobile homes are more likely to be located on individual lots (O'Hare, 1993).

Mobile homes are a significant and growing source of housing in rural areas, where they comprise 14 percent of the total housing stock; between 1980 and 1990 the number of mobile homes in rural areas accounted for two

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1 Metropolitan Areas (MA's) are defined in the US Census as those areas containing a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 1000,000 (75,000 in New England). An MA comprises one or more central counties.

2 Nonmetropolitan Areas are defined by the Census Bureau as places outside Metropolitan Areas that have populations below 50,000.
out of every three new housing units (U.S. Bureau of the Census, 1993c, Housing Assistance Council, 1996).

In general, mobile home residents tend to have less education - only one in five mobile home residents have a college degree. They also have lower incomes, higher poverty rates, and less savings than other households (O'Hare, 1993). The median income of mobile home households in 1990 was $20,026 as compared to $30,531 for other households. (U.S. Bureau of the Census, 1993d; O'Hare 1993). Mobile home owners tend to be wage earners, as 71 percent reported employment as a primary source of income,
yet 69 percent reported having no savings or investment earnings (American Housing Survey, 1993; Housing Assistance Council, 1996). Most mobile home residents tend to be white, with minorities occupying only ten percent of the mobile homes nationally (U.S. Bureau of the Census, 1993c). This racial discrepancy may be contingent on the fact that mobile homes are primarily located in rural areas, while minorities most often reside in urban areas (O'Hare, 1993).

**Affordability**

Affordability is the reason most often cited for purchasing a mobile home (Foremost 1989; O'Hare, 1993). In general, mobile homes are much less expensive to purchase than building or buying a conventional home. In 1995, the median purchase price of a new site-built home was $106,678, whereas the median purchase price of a new mobile home was only $17,860 (See Figure 2.1) (American Housing Survey, 1997). In a 1993
income and housing cost comparison study it was determined that a used, single wide mobile home was the least expensive home ownership option in terms of both initial purchase and annual housing costs (Johnson & Scheur, 1993). The study highlighted that an annual income of $18,700 was needed to obtain a used mobile home, as opposed to $50,057 for a new site-built home (Johnson & Scheur, 1993; Housing Assistance Council, 1996).

Likewise, the Survey of Income and Program Participation (SIPP), conducted by the Bureau of the Census, found that 60 percent of U.S. families could not afford a median priced house, and 51 percent could not afford a modestly priced home. The SIPP study concluded that many factors played a role in the inability to buy a home, but the most prominent reason was that family income was not sufficient to qualify for the necessary mortgage (Savage & Fronzeck, 1993).

**Issues Affecting Investment Value**

Traditionally, the purchase of a home is one of the largest and most important economic investments a family makes (Harvard University Joint Center for Housing Studies, 1998). It is commonly perceived that mobile homes are not as good investments as conventional homes. For many
families, they are intended to be the initial step in upward mobility. However, after several years of wear and tear, the mobile home's value is usually considerably depreciated (Fitchen, 1992).

This issue of mobile home life and use has evoked a debate which has resulted in anything but a clear consensus. National housing groups have estimated the average life of a mobile home to be fifteen years (Spence, 1987). On the other hand, a 1995 report sponsored by the Manufactured Housing Institute estimated the life expectancy of a mobile home to be 55.8 years (Meeks, 1995). A variety of different factors, such as unit age, geographic location, and owner upkeep were considered by both of these sources which may account for the extreme discrepancy in longevity estimates. However, it is clear that mobile homes have a much lower life expectancy than conventional site built homes.

Subsequently, the issue of appreciation and depreciation of mobile homes is also highly debated within the housing field. It is generally perceived that mobile homes, especially single wide units, at best appreciate only slightly, and in many cases depreciate in value. In 1993, the American Housing Survey reported that while the median value of conventional homes was $65,341, over twice the median purchase price, the median value of rural mobile homes was $15,956 only five percent more than the median purchase
price (American Housing Survey, 1995; Housing Assistance Council, 1996). Again, consensus on this aspect of mobile homes is encumbered by an array of factors including date of construction, neighborhood location, owner upkeep, and the extent of an organized resale network.

Financing is another investment concern related to this type of housing. Mobile homes are typically financed through installment, or personal property loans, much like automobiles. Nearly three out of every four mobile homes are purchased in this manner (See Figure 2.2) (American Housing Survey, 1995). Most of these loans are made directly through finance companies. These consumer installment loans carry advantages for both retailers and buyers, as their loans are quick and easy to obtain and generally have relaxed credit requirements (Housing Assistance Council, 1996). However, installment loans have shorter terms and higher interest rates, which are typically four or five points higher than a conventional home mortgage and often require larger down payments (Housing Assistance Council, 1996).
More stringent requirements have kept prospective buyers away from conventional mortgage lending for mobile homes. In fact, it is estimated that only 10 percent were made through this lending mechanism in 1993 (American Housing Survey, 1995). Although more consumer friendly, many of the freedoms experienced by installment loans are limited by the requirement that the structure be placed on owner-occupied land and made into a permanent structure. In essence, forcing mobile homes to conform to more conventional site built home standards.

As indicated, finance companies are becoming an increasingly popular source of financing for mobile homes. These institutions often cater to low and moderate income families who are unable to easily obtain financing from conventional lenders. In October of 1996 it was announced that Larry Coss, CEO of Green Tree Mobile Home Finance (the nation’s largest mobile home financier) was the highest paid CEO of any company on the Dow Jones stock market (National Public Radio, 1996). Much of his financial earnings were contingent on the company’s recent success since he has been at the helm. Critics of Green Tree maintain that their great economic windfalls are gained on the backs of poor people who are charged exceptionally high interest rates. Marjorie Kelly, publisher of Business Ethics states, “I look and see people who are not terribly sophisticated about economics. They’re really no
match for the sophistication of a company like Green Tree, and so in sum, Green Tree is taking advantage of these people buying mobile homes" (National Public Radio, 1996). However, Green Tree maintains that they are operating in a free capitalistic market and actually help people of modest means buy homes, who other conventional lenders shun. This and other issues affecting investment value serve to exemplify the controversy which has accompanied mobile homes since their inception.

**Issues Affecting Use Value (Quality of Life)**

A basic interpretation of the use value of a home may simply consist of shelter from the elements. However, in our nation it is also likely to encompass other aspects such as comfort, quality, safety and other aspects related to quality of life. In a study conducted by the Foremost Insurance Company (1989), mobile home residents reported enjoying low purchase prices and pride of home ownership as appealing factors of mobile homes. However, they disliked such factors as lack of space, speed of deterioration, danger from storms, and problems with heating (Foremost, 1988; O'Hare, 1993; Parrott & Goss et al. 1991). As Finn and Kerr (1994; 64) note: “The stigma of mobile homes as poverty and tornado traps is hard to die.”
However the implementation of the 1976 HUD Code served to stem the onslaught of poor quality and safety hazards that have plagued mobile home inhabitants. Although mobile homes built after 1976 still suffer from some specific construction-related problems, the HUD Code is generally perceived as beneficial to housing quality, and therefore also positively affecting the use value of these mobile homes. The most profound improvement has been fire safety. The rate of deaths by fire in post-1976 homes decreased by 74 percent, and fire injuries declined by 34 percent (Housing Assistance Council, 1996).

In contrast, some health and safety related problems have worsened since the inception of the HUD Code. As mobile homes have been constructed more "tightly" in efforts to conserve energy, indoor/outdoor air flow has decreased (Housing Assistance Council, 1996). Although they are now more energy efficient, this construction aspect has been linked to health problems. Particle board, used in mobile home construction emits formaldehyde, a chemical commonly used in wood products. It is estimated that even low levels of formaldehyde exposure can cause eye irritation and respiratory problems (Lui et al., 1991). As air flow in newer units has been reduced, formaldehyde levels in these homes have risen. In a 1991 study, Lui et al. (1991) found that irritant effects of formaldehyde were compounded
in persons who spend over 60 percent of their time in a mobile home.

Wind damage is also a concern for mobile homes; tie-down techniques tend to reduce risk for this hazard but don't eliminate all weather related threats. In 1992, Hurricane Andrew destroyed 97 percent of the mobile homes in Dade county, Florida, but only 11 percent of single family homes (Housing Assistance Council, 1996).

In sum it is generally accepted that mobile homes are not equivalent to conventional housing on the basis of safety, durability, and quality. These problems tend to be exacerbated in mobile homes built prior to 1976. Additionally, the American Housing Survey (1993) reports that approximately half of all currently occupied mobile homes were built before 1976. Clearly families residing in these older units face even greater risk of financial disinvestment, injury, and property damage. As a community-based housing organization in Wisconsin notes, “The poorer the family, the older the mobile home, the longer they live there, the worse the condition” (Housing Assistance Council, 1996). This aspect of mobile home living may be more accurately portrayed through an excerpt from Janet Fitchen's Endangered Spaces, Enduring Places:

For people of insecure and inadequate income, perhaps hovering just around the poverty line, trailers are the housing of choice. A choice severely constrained by low income and low earning potential, and by high costs of other forms of housing. The older trailers that many lower-income people own or rent are inadequate in terms of space and
quality. Many are expensive to heat, burning up a lot of kerosene and leaking a lot of heat to the outdoors. And in midsummer they can be unbearably hot. Furthermore, they are not cheap in proportion to the income their occupants earn, or the housing allowance from public assistance (Fitchen 1991:127).

Social Perception

As a whole, mobile home owners tend to feel very positive about the housing they live in and 57 percent expect to stay in their current housing forever (Foremost 1989, O'Hare, 1993). Likewise, mobile home dwellers aren't particularly concerned about status. Only 14 percent, in one study, stated that negative public opinion about this form of housing was a disadvantage (O'Hare, 1993; Foremost; 1989). However, the general public's views of mobile homes are not as positive. This form of housing continues to carry a stigma of impoverishment and impermanence. And despite improvements in design and quality of construction, the general public still considers mobile homes as inferior to conventional homes (Atilies, 1995; Brown & Sellman, 1987). These negative attitudes towards mobile homes have resulted in the continuation of exclusionary practices, such as zoning ordinances and regulations to preclude unfettered mobile home placements within communities. Such restrictions are often founded upon minimum size and code requirements of the structure, inhibiting mobile homes from acceptance in many communities. Some argue that these
restrictions operate under the guise of safety and are actually implemented to exclude lower income groups in order to protect against the diminution of property values. Since rural areas generally lack zoning laws and restrictions, there are often no exclusionary barriers to mobile homes, allowing for a market with few if any regulatory impediments. In turn, this factor may also serve to increase positive perceptions about mobile homes. For example, Atiles (1995) found that a higher percentage of mobile homes in an area also provide for greater mobile home acceptance in communities.

**The Mobile Home in Appalachian Eastern Kentucky**

The eastern section of Kentucky, located in the Appalachian mountain chain, has often exhibited unique social, economic, and political characteristics that differ from much of the rest of the country as a whole, as noted by Ergood and Kuhre (1991):

The region can be defined in terms of physical geographic features, its economic relationship to metropolitan America, its demographic characteristics and homogenous nature of its coal based economy. It can also be defined in terms of certain shared indexes of low incomes poor health, inadequate housing and substandard education. The region has frequently been defined as a subculture within the broader context of main stream America (Ergood & Kuhre, 1991; 4).

In relation to housing patterns, the Appalachian region of Kentucky also differs from national norms. This discrepancy primarily lies in the
concentration of mobile homes within the region. Nationally, mobile homes make up approximately 7 percent of the occupied housing units. In eastern Kentucky however, they are concentrated at over three times this level, comprising 23 percent of the occupied housing stock (U.S. Bureau of the Census, 1993a). In addition, close to one half (47 percent) of Kentucky’s 185,336 mobile homes are located in its forty-nine Appalachian counties (See Map 2.2). While at the same time, only 28 percent of the state’s population live in these counties (U.S. Bureau of the Census, 1993a). In 1950, the census reported only 469 mobile homes in eastern Kentucky. This number grew to 88,739 by 1990, accounting for a 189.2 percent increase over forty years (See Figure 2.3) (U.S. Bureau of the Census: 1950, 1960, 1970, 1980, 1993a).

Mobile homes continue to be a growing source of housing in this region. In 1989, The Housing Report for Kentucky noted that 50 percent of the mobile homes shipped to Kentucky that year went to counties in the southeast and south central portions of the state (Koebel, Lewis-Kline, Dillihay, 1989). Likewise, the report stated that counties where mobile homes make up a majority (and in some cases over three-fourths) of new housing are predominantly in the eastern portion of the state, particularly in the mountainous region where it is difficult to develop site-built housing (Koebel,
MAP 2.2
MOBILE HOME CONCENTRATIONS IN KENTUCKY

Percent
- Less than 7.2
- 7.2 to 13.9
- 13.9 to 19.9
- More than 20

National Average is 7.2%

Source: 1990 Census
Cartographer: Kevin Calhoun
Figure 2.3 MOBILE HOMES
As A Percentage of Housing Units: 1950-1990

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>%</th>
<th>1960</th>
<th>%</th>
<th>1970</th>
<th>%</th>
<th>1980</th>
<th>%</th>
<th>1990</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>315,218</td>
<td>0.7</td>
<td>766,565</td>
<td>1.3</td>
<td>2,072,887</td>
<td>3.1</td>
<td>4,401,056</td>
<td>5.1</td>
<td>7,399,855</td>
<td>7.2</td>
</tr>
<tr>
<td>KY.</td>
<td>3,121</td>
<td>0.4</td>
<td>10,076</td>
<td>4.1</td>
<td>43,291</td>
<td>8.2</td>
<td>108,261</td>
<td>8.0</td>
<td>185,336</td>
<td>12.3</td>
</tr>
<tr>
<td>KY-APP</td>
<td>469</td>
<td>0.1</td>
<td>1,745</td>
<td>0.7</td>
<td>23,338</td>
<td>4.1</td>
<td>50,124</td>
<td>8.2</td>
<td>88,739</td>
<td>13.1</td>
</tr>
</tbody>
</table>


24b
This trend toward mobile homes seems to be continuing strongly into the 1990's. A more recent investigation of 1996 housing starts in four northeastern Kentucky counties (Bath, Carter, Elliott, and Rowan) found that 46 percent of the new housing starts consisted of mobile homes. Single family homes accounted for 43 percent of the new starts, 10 percent were multi-family units (apartments), and modular housing accounted for the remaining 1 percent (See figure 2.4) (Kentucky Division of Housing, 1997).

Mobile homes in this area also tend to be older than those found nationally. The 1993 American Housing Survey estimated that nearly half of the nation's mobile homes were built before 1976. However, a review of Census data indicates that approximately 63 percent of owner occupied mobile homes and 72 percent of renter occupied units were built before this date (U.S. Bureau of the Census, Summary Tape File 4; 1993b). This
information regarding mobile home age is significant in that many of these older mobile homes are unaffected by the 1976 HUD Code. Approximately 60 percent of eastern Kentucky’s mobile homes were built before implementation of the code making them more susceptible to reduced quality and increased safety hazards.

Despite large concentrations of mobile homes in the Appalachian region, community level dissent still accompanies this type of housing. Parrott & Goss et al. (1991) found in focus group research that mobile homes were one of the most controversial housing issues among residents in Appalachian portions of Virginia. They cited the following community attitudes in their research: a general prejudice against any form of lower cost housing, undesirable appearance (especially of older mobile homes), and the perception that mobile home residents didn’t share the same values of the community (Parrott & Goss et al. 1991). However, consistent with other literature, their research also noted that these negative attitudes were less predominant in areas with larger mobile home concentrations. (Parrot & Goss, et al., 1991).
Theoretical Model

To provide an understanding of the mobile home’s popularity and position in Appalachian eastern Kentucky, this study will utilize a theoretical model that utilizes the concepts of (1) housing preferences, (2) socioeconomic constraints, and (3) contextual facilitators. The model derives from an integration of two prominent housing theories from the late 1970s and early 1980s. Both Morris & Winter's (1978) Model of Housing Adjustment and Tremblay & Dillmans (1983) Theory of Housing Preferences have a sociological base are structural/functional in nature, and rely heavily on the concept of cultural norms. Although definitions vary, norms are generally perceived as a shared expectation of behavior that is considered culturally desirable and appropriate, which can also reward or punish (Johnson, 1994). Thus, if norms (appropriate or desired behavior) are strictly adhered to, they result in societal rewards for those who conform. Conversely, if norms are not completely followed, they result in punishments, or sanctions. Therefore, norms create social consequences that have the effect of regulating appearance and behavior (Johnson, 1994).

Tremblay & Dillman (1983) contribute insights on housing preferences (in the United States), which lead to the development of universal housing norms. They maintain that Americans’ housing preferences are based upon
four basic norms: (1) ownership; (2) conventional structure; (3) private outdoor space; and (4) detached structure. Individual housing preferences will depend on how closely they satisfy the four housing norms (See Figure 2.5).

However, they also maintain that, "If the most preferred housing situation is not attainable, people will substitute a housing situation which most closely satisfies a similar number and similar kind of norms as met by their first preference" (Tremblay & Dillman, 1983). For example, ownership of a mobile home allows for the satisfaction of all of the norms except that of conventional

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**Figure 2.5  TREMBLAY & DILLMAN HOUSING PREFERENCES**

<table>
<thead>
<tr>
<th>Types of Norms</th>
<th>Buy Single Family House</th>
<th>Buy Mobile Home &amp; Lot</th>
<th>Rent Single Family House</th>
<th>Buy Townhouse</th>
<th>Rent Duplex</th>
<th>Buy Mobile Home on Rented Space</th>
<th>Rent Apartment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Private Outdoor Space</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Conventional Structure</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Detached Structure</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td></td>
<td></td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Norms Satisfied</th>
<th>4</th>
<th>3</th>
<th>3</th>
<th>2½</th>
<th>1½</th>
<th>1½</th>
<th>1</th>
</tr>
</thead>
</table>

Tremblay & Dillman, 1983
construction. Three out of four housing norms achieved is a relatively high level of compliance and would explain why many "constrained" residents opt for ownership of a mobile home when the choice of conventional housing is not attainable or available. However, the role of "sanctions" also come into play when making this housing choice:

Mobile homes are frowned upon by most Americans, as they violate the true image of a home... A person who lives in a house that moves must somehow be as unstable as the structure he inhabits. Thus, there exists effective sanctions to encourage Americans to live in conventionally constructed housing (Tremblay & Dillman, 1983).

Tremblay and Dillman (1983) provide a model to explain individual housing choices in the context of universal housing norms. Morris & Winter's (1978) Model of Housing Adjustment expounds upon these preferences to provide a more complete interpretation of factors affecting housing norms. They contribute greater insights into the various social, and economic factors that hinder conformance to housing norms. Like Tremblay & Dillman, they too agree upon the existence of universal housing norms. In addition, they maintain that each family continuously evaluates its housing to determine whether it is in accord with the cultural norms. If a family's housing does not fit
with their normatively derived needs, a "deficit" is said to exist. A key component of their housing model is that some of these deficits may be beyond the families' or individuals' control, in which case a "constraint" is present. Although they provide an array of constraints, the most pertinent to this study is that of extra familial constraints. These involve such characteristics as income, social class, race, and sex of the head of household (See Figure 2.6) (Morris & Winter, 1978).

Figure 2.6 MORRIS & WINTER MODEL (Model of Housing Adjustment)
Among these constraints, income is in an integral aspect of their model:

Family income acts to constrain housing adjustment when the cost of adequate housing (as culturally defined) is higher than the amount of money the family can afford to spend for housing. Thus, the norm against over expenditure is often in conflict with the norms for space, tenure, structure type, quality, and neighborhood. (Morris & Winter, 1978).

In these cases, families may not be able to adjust their housing to a perceived cultural status and may have to compromise their norms and accept a lower level of housing satisfaction. Therefore, the prime constraint of income, along with other socioeconomic variables such as class, race, and education, can explain housing choices made relative to a common set of norms.

While both models are similar in respect to their emphasis on norms, they also complement each other. As noted, Tremblay & Dillman's (1983) work is geared toward housing preferences., whereas Morris & Winter's (1978) model of housing adjustment allows for greater insight to various social and economic constraints which may negatively affect conformance to norms.

Although the integration of these two models provides a comprehensive framework, additional variables not highlighted in the prior works are required to address the specific role of the mobile home within the study. This will be achieved through the implementation of two additional contextual variables; rurality, and geographic region. Tremblay & Dillman (1983) mention the
aspect of rurality in relation to housing norms and the mobile home in which they state: "Owning a mobile home and a lot, reflecting a willingness to sacrifice conventionality, was preferred to a greater degree by rural residents as opposed to urban residents. Whereas only 17.4 percent of those living in cities gave this as first or second choice, 44.9% of those living in rural places selected it" (Tremblay & Dillman, 1983). Finally, the geographic region variable was included to address the location specific nature of the study, which concentrated on Appalachian eastern Kentucky. As far as can be determined, no prior study has dealt with the concept of housing norms in this specific section of the nation.

In summation, this study will utilize three primary constructs for its theoretical model. The first component from Trembaly & Dillman (1983) sets forth housing preferences that prescribe desired and normative housing behavior. Secondly, the study will include the concept of socioeconomic constraints drawn from Morris & Winter's (1978) theory of housing adjustment. These constraints in areas of income, education, and employment often act to impede complete compliance with the norms. Finally, the third component of contextual facilitators is added to the model in order to address unique aspects of this study not available from the two major theories. These facilitators include both rurality and geographic region, which may influence
housing patterns. Thus, the adapted model will address (1) housing preferences; (2) socioeconomic constraints; and (3) contextual facilitators, all within the context of universal housing norms (See Figure 2.7).
**Conventional Construction**
Detached Dwelling
Private Outdoor Space

Figure 2.7. ADAPTED THEORETICAL MODEL
The Mobile Home in Appalachian Eastern Kentucky

Tremblay & Dillman

**UNIVERSAL HOUSING NORMS**
(Preferences)
- Home Ownership
- Conventional Construction
- Detached Dwelling
- Private Outdoor Space

Morris & Winter

SOCIOECONOMIC & CONTEXTUAL FACTORS AFFECTING HOUSING PATTERNS
- Income
- Education
- Employment Status
- Race
- Age
- Rurality
- Appalachian Region

Research Specific Construct

Contextual Factors

PERCENTAGE OF MOBILE HOMES
Research Hypotheses

With the aforementioned theoretical basis, the study will be guided by the following hypotheses:

It is expected that a relatively large and increasing concentration of mobile homes in the Appalachian section of eastern Kentucky is contingent upon:

1. Housing norms and preferences of:
   a. Homeownership
   b. Conventional construction
   c. Private outdoor space
   d. Detached dwelling

2. Socioeconomic factors such as:
   e. Percent white
   f. Percent high school graduate
   g. Percent unemployed
   h. Median income
   i. Median age

3. Contextual factors:
   j. Percent rural
   k. Appalachian region
The anticipated relationship between the dependent variable and the independent variables is: A high percentage of mobile homes in eastern Kentucky is related to:

**Housing norms/preferences**
- a. residents’ preference for home-ownership
- b. residents’ preference for conventionally constructed units
- c. residents’ preference for a detached dwelling
- d. residents’ preference for private outdoor space

**Socioeconomic factors**
- e. counties with a high white population
- f. counties with a lower percent of high school graduates
- g. counties with a higher percent of unemployment
- h. counties with a lower median income
- i. counties with a lower median age

**Contextual factors**
- j. counties with a large rural population
- h. counties located within the Appalachian region
CHAPTER 3
Methodology

"I don’t like to hear people call them trailers,... Manufactured homes are as good as any stick house".

* North Carolina mobile home salesman

* obtained from Finn, Leila and Mary Lee Kerr. 1991, Winter. Still the South: Mobile Homes. Southern Exposure
CHAPTER 3
METHODOLOGY

The methodology for this study will employ both qualitative and quantitative data for analysis. This dual-faceted approach allows for a more complete interpretation of this type of housing and its impact on both the specific geographic region, and families of the region who reside in mobile homes. The instrument of measurement derives from the previously mentioned theoretical model. The model is an adapted integration of two prominent housing theories and a research specific construct. Both Tremblay & Dillman (1983), and Morris & Winter's (1978) models have a basis of norms, yet each provide specific contributions as to how these norms affect housing patterns. The Tremblay and Dillman (1983) model provides greater insight into preferences which constitute universal housing norms. This aspect of the model will be addressed primarily through qualitative analysis. The Morris & Winter (1978) aspect of the model, on how socioeconomic and contextual factors affect these norms, will be primarily addressed through quantitative analysis.
Qualitative Analysis

The qualitative data for this study was collected by formal and informal interviews with mobile home residents of the region. These mobile home residents were all located within a particular geographical area of northeastern Kentucky which included Bath, Carter, Elliott, Fleming, and Rowan Counties (See Map 3.1). The selection process for these interviews included a *purposive* sample of mobile home residents with the intent of yielding a comprehensive understanding of the subject. The sample was derived from a pool of potential interviewees stemming from relevant conversations about housing, and from prior contacts made while working for a local community-based housing organization.

The interviews consisted of semi-structured questions that were intended to evoke open ended responses. In addition, further probes were often elicited from interviewees to expound on certain points of interest. To maintain continuity in relationship to the topic of housing norms and preferences, many questions within the interview derived from Tremblay & Dillman's (1983) Survey, "Your Home: Does It Fit Your Needs?" Additional questions were also presented to address specifics relating to mobile homes. The interviews were transcribed and finally compiled into brief case studies of the individual's or families' housing situation. While the primary goal of the qualitative section
was to ascertain an understanding of housing norms and preferences among various mobile home residents, it also intended to illustrate various characteristics of mobile home living, and mobile home residents of the region.

The qualitative data's primary limitation is its scope and range. A limited number of mobile home residents were interviewed, and these interviews were restricted to a five county area, representing only a small portion of eastern Kentucky. Further, there was no randomization within the data collection; the interviews originated from informal contacts and "snowball" gathering techniques.
MAP 3.1 INTERVIEW AREA
Bath, Carter, Elliott, Fleming and Rowan Counties of Kentucky.
Quantitative Analysis

The quantitative analysis focuses on socioeconomic and contextual factors that affect housing norms and ultimately housing patterns within the region. The study utilizes regression analysis of these factors to determine their relationship on the percentage of mobile homes in eastern Kentucky counties. The regression model seeks to establish the collective explanatory power of the variables and the relative importance of each one individually. The model is represented as follows:

\[ Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + e \]

The data utilized in the regression analysis was county level information derived from the 1990 U.S. Census. Selected statistics were obtained for each of Kentucky’s 120 counties from, “Selected Population and Housing Characteristics” (U.S. Bureau of the Census, 1993, CPH-L-4). This data was procured from the University of Louisville’s State Data Center (http://www.louisville.edu/cbpu/sdckentucky-counties).

Definitions of the variables included in the regression analysis are as follows: (The definitions also derived from the 1990 Census CHP - L -4 in order to correspond with the data).
Dependent Variable:

[Y] Percentage of Mobile Homes is the percentage of housing units in a county which are classified as a mobile home. The Census Bureau defines a mobile home as any living quarters that were originally constructed to be towed on a chassis. Housing units recognized by the Census are classified as either a house, an apartment, a mobile home, a group of homes, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters.

Independent Variables

Socioeconomic Variables

[X1] Percent white is the percentage of a county’s population that is white. The Census Bureau classifies basic racial categories as American Indian or Alaska Native, Asian or Pacific Islander, Black, and White. The variable reflects self-identification by respondents.

[X2] Percent high school graduate is the percentage of a county’s population over the age of twenty-five that has attained at least a high school diploma.

[X3] Percent unemployed is the percentage of a county’s population that is classified as unemployed. Civilians 16 years of age and over are classified as
unemployed if they were: (1) neither "at work" nor "with job but not at work"
during the reference week, and (2) looking for work during the last four weeks,
and (3) able to accept a job.

[ X₄ ] Median income of a county is based on money income received in the
calendar year 1989 requested from persons 15 years and over.

[ X₅ ] Median age within a given county is the classification based on the age
of the person (in number of years) as of April 1, 1990.

**Contextual Variables**

[ X₆ ] Percent Rural is the percentage of a county's population that is
classified as rural. The Census defines rural as a territory, population, and
housing units in places of less than 2,500 people, including rural portions of
extended cities and areas outside incorporated places.

[ X₇ ] Appalachian Region indicates counties within the Appalachian region of
Kentucky as recognized by the Appalachian Regional Commission (1965).
"Appalachian region" is a dummy variable in which all counties located within
the defined region are coded as 1, and all those outside the region were coded
as 0.
Most of the data for the quantitative analysis section derived from the 1990 U.S. Census of Population and Housing. The Census Bureau, other government agencies, and non-profit groups agree that the level of error in the 1990 Census of Population and Housing was the highest since the Decennial Census began (Housing Assistance Council, 1994). The Government Accounting office estimates that there were between 14 and 16 million gross errors in the 1990 Census (U.S. General Accounting Office, 1991). The Housing Assistance Council (1994) reports that the level of error was particularly high in minority and rural communities.
Figure 3.1 RESEARCH MODEL
THE MOBILE HOME IN APPALACHIAN EASTERN KENTUCKY

(Qualitative Analysis)

UNIVERSAL HOUSING NORMS
- Home Ownership
- Conventional Construction
- Detached Dwelling
- Private Outdoor Space

(Quantitative Analysis)

SOCIOECONOMIC & CONTEXTUAL FACTORS AFFECTING HOUSING PATTERNS
- Income
- Education
- Employment Status
- Race
- Age
- Rurality
- Appalachian Region

PERCENTAGE OF MOBILE HOMES
A scaled down version of the American Dream is better than no dream at all.

William O'Hare
CHAPTER 4
HOUSING NORMS/PREFERENCES AND THE MOBILE HOME
Qualitative Analysis

This chapter addresses the first research hypothesis of the study concerning housing norms in relationship to mobile home residency. The hypothesis utilizes Tremblay & Dillman’s (1983) concept of four universal housing norms/preferences of:

1. Home Ownership;
2. Conventional Construction;
3. Private Outdoor Space; and
4. Detached Dwelling;

The hypothesis maintains that these housing preferences are strong among rural mobile home residents. Further, these micro level norms/preferences are the basis for understanding larger housing patterns. Through qualitative research methods, this section will provide an indication to what degree these norms are preferred by mobile home residents of the region. Descriptions and observations of residents and their mobile homes will also be presented. These depictions will address the primary research hypothesis of norms/preferences, but are also intended to give greater insight into conditions, circumstances, and aspects of mobile home living and the residents who dwell in this unique form of housing.
Description of Sample

While conducting this research project, I spoke both formally and informally with a number of individuals on the topic of mobile homes. They took place in social settings ranging from a factory where mobile homes are built to a small cubicle in a state housing department. There were countless mobile home visits and e-mail conversations in between. These conversations included individuals from all walks of life, representing the manufactured housing industry, regional housing specialists, community and government officials, and members of the local community. While gaining a varied and rich perspective of the mobile home from these diverse entities one group in particular was of special interest - mobile home residents of the region, who have the most direct relationship with this type of housing. More than any other group, they best explain and exemplify the mobile home's popularity in the region.

The five case studies presented are of mobile home residents from the Appalachian region. Although a widely varied group, they more aptly represent the changing face of the mobile home in rural areas such as eastern Kentucky. They also speak indirectly about who lives in mobile homes, how these homes impact their lives, and why they chose this type of housing. The following are accounts of mobile home residents from eastern Kentucky:
A recently married young couple who decided to purchase a mobile home instead of renting. Of their first new home they state, "It's good for people like us."

A middle aged couple who has lived most of their adult lives in the same mobile home, which is now over forty years old. While searching for a new home they stated "We'll probably buy another trailer because we don't want to go into debt."

A young physician who recently bought a second mobile home in the midst of an unexpected family enlargement. For now, a mobile home "serves a purpose" for him and his family.

A very low income family who reside in a dilapidated mobile home that was given to them by a Christian ministry. With an air of despair, the mother of the family stated, "It's a roof over our heads, and that's about it."

A single mother who desperately wants to move out of the older model mobile home that she rents. Another mobile home is not of high priority in her housing search. She emphasizes, "All I want is a decent house for me and my son."
“It’s Really Good For People Like Us”
Rick & Angela

Rick and Angela are a young couple in their early twenties who recently got married. Rick works in a local factory and makes about nine dollars an hour, while Angela, a recent college graduate is employed at a local bank as a teller. Together they have a combined income of just over $30,000 dollars a year. At this juncture in their lives, the couple are experiencing several milestones - their marriage, their jobs, and their first home, a 1997 model single wide mobile home.

“ We actually bought the trailer before we got married and put it up here so it would be ready to move into when we did get married,” says Angela. “Up here” refers to the location of their home, a unique phenomena of mobile home communities in eastern Kentucky, which may best be described as a rural mobile home park. It is a hybrid between the traditional metropolitan mobile home park, mixed with the wilderness and seclusion of the Appalachian foothills. Clustered at the end of a mountain road, Rick and Angela’s mobile home is among fifteen others, arranged single-file up the narrow valley shrouded on either side by two enormous hills. All of the mobile homes in this rural neighborhood are newer and of similar style and size. Like the other residents of this valley, Rick and Angela own their mobile home but rent the space on which it is located.
The interior of their new home is attractively decorated and is accentuated by its new furniture. "The furniture came with it," explained Rick, which is often an accompanying feature of "new lot" purchases. They financed their mobile home on the sales lot where they purchased it. Their interest rate from the finance company, Oakwood Finance, is thirteen percent, and they make monthly payments of around $269, not including the lot rental which is $50 also a month.

Rick and Angela seem pleased with their choice of housing, especially with the convenience of it. "I like a trailer because it's already set up, decorated, and it's really good for people like us who got just got married," said Angela. "Yeah, you can get it the way you want it," added Rick. While the convenient attributes of the mobile home scored well with the young couple, the economic elements associated with this type of housing was the primary factor in their decision to buy a mobile home. "You don't have to worry about a big down payment as you would with a regular home, and you don't have to own the land it's on," stated Rick. The financial factors also played a large role in their choice of a mobile home in light of other housing options. "You're wasting your money renting when you could own, our payments are less than you could go out and pay rent for. I mean especially with our incomes, we couldn't qualify for apartments like Rodburn (a local rental assistance apartment complex), we
would have to pay the maximum (rent), which is something like three or four-
hundred dollars for something that wouldn't even belong to us. Whereas with
this (the mobile home), if we decided we did want to move, we could move it,
or sell it, or whatever, you know, several different things."

Conversely, they cited a of lack of structural integrity and quality of
construction as drawbacks to their mobile home. Rick pointed out at least
three occasions in the short time they have owned it that service men had to
repair construction faults. Most significant of these was a 220 amp wire
leading to the air conditioner which was nailed under a part of the frame, and
causing a short circuit in the entire electrical system of their home. Painting a
picture of overall inferiority with the mobile home’s construction, Rick stated,
“It’s not built as well as a real house... It’s filmsier than a (conventional) house,
it’s not as sturdy, the walls are thinner and the flooring is made out of particle
board.”

Both Angela and Rick had lived in mobile homes prior to this one; in fact,
Rick had for most of his life. They maintained that they didn’t regret purchasing
this mobile home and also didn’t perceive being looked down upon their by
their peers for their housing choice. In fact, many of their friends have also
purchased mobile homes just like them, “by starting out in something they
could afford.” However, they also made it clear that they weren’t entirely
content with this form of housing, especially in the future. They ultimately
desired a secluded log cabin in the hills and felt this was a realistic goal. With
continued employment and success they anticipated purchasing the land for
their "dream home" within the next ten years.

A first home has traditionally been a significant milestone in the lives of
couples such as Rick and Angela. It serves to perpetuate not only the
"American dream" of home ownership, but that of the first step in financial
investment and prosperity. However, we may be witnessing the emergence of
a modification of this rite of passage, especially in rural areas. Twenty years
ago, a somewhat highly educated couple with moderate earning potential
would most likely choose to build or buy a conventional "stick-built" home.
However, in the 1990s economic conditions have changed, the mobile home
industry has progressed to provide a much more safe and amenable product
that is significantly less expensive (even with higher interest rates) than
building or buying a conventional home. Thus, for prospective first-time home
buyers such as Angela and Rick, the purchase of a mobile home, especially in
rural eastern Kentucky, may be the most tenable housing choice. However,
only time will tell whether their purchase was a significant investment, or just
stop-gap housing, that will, at best, only sustain them to their next housing
endeavor.
When I first came to know Stella and Mitchell they were living in an antiquated 1955 mobile home that was ten feet wide by fifty feet long. The actual “smallness” of their home is not sufficiently conveyed by the numerical size representation of 10’ x 50’. I am only about 5’ 7” and could almost touch the opposite living room walls with my arms extended, and my head nearly touched the ceiling. Thus it is difficult to comprehend how Mitchell, a man of much larger stature has fared in this confined area. Their mobile home is a relic of the 1950s; a cross between the mobile travel trailer of the 30s and 40s, and the modern mobile home built for stationary living. For twenty-four years Stella and Mitchell have resided in this same dwelling, which was close to twenty years old when they bought it in 1973, after the birth of their first and only daughter. She now lives only a few feet from them in a mobile home too. Stella is employed as a maintenance person at a business in town, cleaning offices at night. Mitchell has developed emphysema and is unable to work, though he likes to occupy his time by performing make-shift mechanical work on older cars.

“It’s bad when you have company or people staying with you, there’s no place for them to sleep,” said Stella referring to their home’s small size. This,
she claimed, is one of its greatest drawbacks. Indeed the lack of space in this mobile home also seemed to cause other inconveniences. Access to the back bedroom and bathroom required walking through the other bedroom for there was no hallway. In addition, there is not enough room for a washer and dryer, so they had to be placed in a small shed located about fifty feet from the house. According to Stella, this made for many cold “laundry runs” during winters. “It’s a roof over our head, and at least I’m not out on the street, which is more than I can say for some people,” said Stella. When asked about the prospects of new housing or replacing their current mobile home Stella remarked, “Mitchell and I have talked about building a house, but we would probably buy another trailer.” Their reasoning was based on the couple’s finances. They simply didn’t want to go into debt by building a conventional home.

Several months after my initial inquiries and interviews, Stella informed me that she and Mitchell were buying a new mobile home, a 1993 model. They had been looking for a new “trailer” for some time, and with the help of her daughter, had located one for sale “just a few miles down the road.” The couple had saved enough money over the years to pay for a considerable portion of the principal. They acquired only a small loan, taken out by their daughter, from a local savings and loan institution to avoid a lien or mortgage
being placed on the unit.

"We're getting moved in right now. We paid a man $200 to move it, and he's only taking it five miles. You know they won't hook up to them for less than $100," stated Stella referring to often exorbitant fees accompanying the transportation of a mobile home, which by law can only be performed by licensed professionals. Stella and Mitchell found a buyer for their old mobile home rather quickly. They sold it to a family for $600 who lived close to them, or as Stella said "up the holler a piece." She said the buyers were part of a very poor family currently living in a mobile home with nine other people. She told Mitchell; "If they (the purchasers) didn't have the money, go ahead and give it to them, there's no sense in people living like that."

Stella seemed almost ecstatic about her new mobile home as she proudly showed it to me. There was no doubt that this was a significant improvement over her older home, lending credence to the manufactured housing industry's claims that modern mobile homes aren't the "trailers" of yesterday. Indeed the differences were quite significant, especially regarding the physical space that the newer model offered. They were now able to bring in the washer from the shed. Their purchase of a new home also seemed to induce other changes, both materially and non-materially. Their family treated them to a house warming party which included many gifts that would simply not fit in their old
mobile home, such as a new living room suite, larger bed, and a microwave. Some changes were less tangible, like Stella’s utter surprise to Mitchell’s re-invigorated sense of pride in their new home. "He used to not care what it (the older mobile home) looked like. If he missed the ash tray, he didn’t care. He would get up from his chair and there would be a pile of ashes. Why now he’s even vacuumed and done the dishes, something I’ve never known him to do in over twenty years of marriage”.

Mitchell and Stella’s choice to purchase a new mobile home after inhabiting one for most of their adult lives was significantly affected by their current financial situation and future prospects. They are a couple entering into the latter part of their life, with little education and low paid employment, who have struggled financially for many years and maximized the use of an older mobile home by doubling its life expectancy. Therefore, the option of using their savings to pay for a significant portion of the price of a mobile home, as opposed to putting a down payment on a new home was clearly a rational choice to provide security for Stella and Mitchell well into their remaining years.
"Anything would be better than this"
Rhonda & Harold

At the top of a mountain where the blacktop pavement ended miles ago, a gravel road snakes through a seemingly undisturbed venue of nature. A sign emerges that reads "Lost Hill Road," and ironically, the sign was befitting, for this was the entrance to one of the most "lost" communities I have ever known. Lost, not only in the thick and untamed landscaped of the Appalachian foothills, but also in a myriad of poverty, despair, and hopelessness. At the bottom of this valley were six mobile homes positioned alongside a winding and muddy road. They were all older models and in very poor condition. Most had broken or absent windows covered with plastic trash bags and were dotted with boards or roof tin to patch holes in their faded aluminum exteriors. Each of them seemed to sit precariously in the steep terrain, leaning to one side or the other. Their yards were strewn with old cars, rusting appliances, and unstacked wood piles. As Shelby Lee Adams (1993:7), renowned Appalachian photographer has stated of similar populations, "these people were cut off from the mainstream, passed by much of the ephemeral development of modern America, isolated, they experience what most Americans consider impossible living conditions."

One particular mobile home at the bottom of Lost Hill Road was home to
Rhonda and Harold both age 38, and their four children, ages 17, 13, 10, and 6. I met this family through a social worker and have had several conversations with them for over two years. However, most of my interviews were with Rhonda because Harold was not willing to talk and the children were usually in school. Neither Rhonda nor Harold ever attended high school, and both work in fast food restaurants in a nearby town. With this, and some small public assistance benefits they have a total annual income of around $10,000. Their mobile home was given to them by a Christian ministry. It had previously been reclaimed from a flood and was in serious disrepair when they received it. Although their mobile home probably wasn't the best or worst of this community, it appeared to be the most dilapidated of the units I encountered while conducting the research. There were gaping holes in the floor, some at least eight inches in diameter, insufficient heat, no running water, an electric panel box with exposed wires, and an eerie sense of instability when walking on the floor. Their home was unkept, with piles of dishes in the sink and dirty clothes strewn over every piece of furniture. The bare plywood floor resembled an ash tray, covered with cigarette butts, ashes, and dirt. This spectacle was compounded by a pervasive and obnoxious odor which flowed through the home and was intensified by the inferno-type heat of a large wood stove in the middle of the living room. A few minutes after I started one of my
interviews, Rhonda came over to me and started picking roaches off me. “It’s a shame someone comes to your house and gets eaten up by roaches. I’ve spent over fifty dollars to try and get rid of them,” she said apologetically.

Rhonda stated that all six of the family members were sleeping in only two bedrooms, “except when it gets too cold”, she exclaimed, then they’re forced to sleep in the front room where the wood stove is located. “My son (age six) sleeps in the bed with Harold and me, and the girls sleep in that room. It’s kind of crowded and he don’t like to sleep in there with us now”. “I guess the worst thing about it is there’s no water. We carry our bath water from the pond.” This pond she speaks of is located about five hundred feet below her house, and according to Rhonda, it also serves as a primary source of water for the other families in this community, as none of them have running water. “It’s a roof over our head, and that’s about it,” states Rhonda with a tone of despair while sitting on her couch smoking a cigarette. “It’s in a good location, except for in the winter. It’s hard to get up that hill when it gets slick, and a lot of days the bus won’t come and pick the kids up.” When asked why she liked the location, Rhonda said she had good neighbors. Despite the severe poverty of the people in this valley, Rhonda maintained there was a cohesive and supportive nature among them. “I am friends with all of them, we all try to help each other out the best we can.”
When asked about housing preferences, Rhonda stated that she would most prefer a conventional house. “I would just like to have a small house, anything would be better than this.” However, as the interview progressed, her expectations of achieving this goal waned. Instead, the family’s housing plans for the immediate future are to try and renovate or even add rooms to their current dwelling utilizing some lumber they had gleaned from an old demolished house.

This family’s living condition is truly at the bottom of the scale in relation to most households in the area. And although this old and substandard mobile home is not the root cause of many of this family’s problems, it is evident that the malignant condition of their shelter severely reduces the quality of life for each household member. The effects of this may be most profound among their children, especially the adolescent girls, who at this age are highly affected by the impressions of their peers. For them, this living environment precludes any relief from their economically strained lives. This family’s mobile home may be the picture post card for the pervasive Appalachian stereotype living a culture of poverty. And although exaggerated, far too many families in eastern Kentucky do still live in these conditions. Just as the corrugated tin shacks in slums of Calcutta or the shanties of Mexico City’s barrios, older mobile homes often serve as the primary form of shelter among eastern
Kentucky's poorest rural families.

"It serves a purpose"
Dr. Conely

While conducting my research, I was having a conversation with a local homeowner and noticed a mobile home perched on an isolated hill in the middle of a cattle pasture. "Who lives there?" I asked. "Oh, Doctor Conley," she replied. "Doctor?" I probed deeper and found that Dr. Conely was a physician at the regional hospital's emergency room. As previously mentioned, mobile homes tend to be occupied by younger, less educated, and lower income households. So why was a medical doctor (the antithesis of the aforementioned demographic) living in a mobile home that appeared to be over twenty years old?

Dr. Alex Conley (age 33) has been practicing medicine for about four years. He returned to his native county after graduating from the medical school. For initial living arrangements he purchased a 1976 model mobile home for $7000 from a local dealer and placed it atop a ridge on his father's farm. Originally it was intended to be a temporary form of housing while Alex took a year or so to plot his career. A year turned into four, and Alex now seems content with his situation in the area, especially since he recently got married. His wife Jessica
(38) has two children ages 13 and 3, from a previous marriage. The family’s total household income is $220,000 a year from Alex’s earnings alone. The recent marriage and increase in household size spurred them to make adjustments in their current housing situation. So Alex and Jessica patronized the same mobile home dealer where he purchased his 1976 model and acquired a new 1996 model single wide mobile home. “Yeah, I got another one because it had an extra room that we needed when her kids moved in, and the floor was getting in pretty bad shape in the ’76. I had fixed it once and it started getting weak in spots again, so I thought I would just get another one.” They purchased the newer home for a little over $26,000, and again rather uncharacteristic of most mobile home residents, paid for it in cash. Alex placed his newer mobile home in the same location adjacent to his older 76 model, which he still uses as a library. When asked why he chose this type of housing Alex cited employment concerns for his reasoning. “I didn’t rent anything because I still wanted to stay on the land. I didn’t build because I didn’t want to be committed to this specific location or investment at the time.” Having a mobile home allowed him to live where wanted, when he wanted to live there.

Alex’s recent marriage has apparently reduced his desire for spontaneous mobility. He stated that probably in two years he would start construction on
what he described as a two story, cedar, A-Frame house with a wing. It will be located in the same general vicinity as their current mobile homes. But for now Alex and Jessica seem content with their mobile home except, for Alex’s complaints about its size and lack of space. “It serves it’s purpose I guess, with two kids and two adults it’s kind of cramped, but again, it serves its purpose.”

Alex and his new, expanded family are not typical mobile home residents, primarily due to their socioeconomic status. Although they reside in this unique form of housing common to the region, it is clear that this family is an outlier and not "constrained" like many other mobile home families. They will most likely achieve the goal of home ownership easier and quicker than most other mobile home residents. Despite this fact, it is important to understand that they too, like many other mobile home residents, have the desire to live in a conventionally constructed home. Yet Alex and his family choose to live in a mobile home not so much because they are economically constrained, but rather because this type of housing provides a high degree of convenience and without a significant degree of commitment.
“All I want is a decent house for me and my son”
Teresa

When I first visited Teresa she and her four year old son were renting a small two bedroom mobile home over thirty years old. Although close to the county’s largest city, her mobile home was located in a rather remote area. Ensconced at the bottom of a valley, it resembled many mobile home communities of the area, sparsely situated with three other older mobile homes. Teresa is a single mother, and at age 28 she is employed at an insurance agency. To supplement her income, she works some nights and weekends at a local restaurant. She has an annual income of around $14,000.

Teresa had been living in this mobile home for about five years, moving in soon after her son was born. “It’s too small and it’s a fire hazard, I don’t feel safe here, the fuses keep burning out, and when it rains the roof leaks and drips water into the light fixtures.” Teresa said it was simply “a cheap place to live” for a single mother struggling to make it on her own. The only thing she enjoyed about living there was it’s affordability, a bargain at $160 a month. Teresa began working at the insurance agency as a secretary earning minimum wage, however eight years later she is now a full agent. This advancement in her employment increased her income which was an opportunity to improve her housing situation. However, another mobile home,
either owned or rented, was not a priority of Teresa's. She made it clear she was primarily interested in buying a new conventional home. "All I want is a decent house for me and my son." Despite her determination, she encountered many obstacles that hindered her housing search. Although she had made significant gains in her employment and income, Teresa was still unable to amass savings that would allow her to make a down payment on a home or purchase land.

With patience and persistence, Teresa was able to jump this hurdle with assistance from the federal government. She purchased a home through special financing from the United States Department of Agriculture's Rural Housing Service (USDA/ RHS) (formerly Farmers Home Administration FmHA). Through this loan she obtained an interest rate much lower than current bank rates, and she was required to make no down payment. The home she bought was originally built and financed by RHS and had been reconveyed to them. Teresa stated that her wait was worth while and she was glad that she didn't "settle for a mobile home." It was a modest ranch style dwelling with brick facing and 1000 square feet and had been refurbished and remodeled. Through this program her monthly house payment is an affordable $252.

Although Teresa was eventually successful in her housing search, she may
be the last of a dying breed in this respect. She was significantly aided by the USDA-Rural Housing Services loan program through a low interest loan and no down payment. However, the USDA/ Rural Housing Service which has traditionally been the primary provider of low income housing support in rural areas, has recently had it's activities curtailed by massive budget cuts, and it's programs are now geared to assisting more moderate income households and fewer low-income families. Therefore, prospective homeowners such as Teresa will be unable to take advantage of this financing for the purchase of conventional homes. This indicates another circumstance in rural areas that will perpetuate the mobile home as the most practical choice of new housing in eastern Kentucky.

**Summary:**

During my initial investigation into this subject, a sociologist specializing in Appalachian studies told me, "It's not just poor people who are living in these mobile homes anymore." The interview data presented a varied array of mobile home residents. They differed in almost every socioeconomic category from poor to professional. This was done in order to focus on the similarities within a diverse group. But it also confirms the statement that mobile homes
are not housing exclusively for the poor anymore. Young couples like Rick and Angela who are relatively well educated and have solid employment are finding that a mobile home may be the only form of affordable home ownership in rural areas. Likewise, I witnessed other professionals, such as teachers, who had purchased mobile homes, even though they are often among the best educated and well paid individuals in some of these Appalachian counties. These instances of higher SES groups buying mobile homes may signal a “relaxation” of (conventional construction) housing norms in rural areas.

While middle and lower-middle class families are purchasing this type of housing, most of the rural mobile home residents of the area are working class and lower class families. For this majority the mobile home is “the housing of choice” (Fitchen, 1992). For the region’s poorest families, they are almost the universal type of housing. Most of them live in older models, which are often in the worst condition, and exacerbate many health, safety and economic problems experienced by these families. So based on the qualitative data, the statement maintaining that “mobile homes aren’t just for the poor anymore” has some merit. But it is generally assumed that mobile homes of the region are mostly occupied by poorer and working class families at the lower end of the economic ladder.

While an array of residents were interviewed for this study, the mobile
homes in which they lived were just as varied. Some were new, modern structures that were well furnished, others were older, dilapidated and falling apart. But whether the mobile home was old or new, inhabited by rich or poor, one aspect of the structure was universal; space was limited. Terms such as: small, cramped, crowded and, little, were most often used by residents when asked what they liked least about their home. As one woman stated, “it’s just too small, my sons outgrew their room years ago.” And she was correct in her statement, their room resembled a jail cell more than a bedroom, in which two single beds were boxed in by dark paneled walls. There was no room for a desk or a bookshelf or even a clothes hamper, just a few pictures and tokens of the boy’s extracurricular activities. As the poet David Rigsbee noted, (mobile homes) are scaled down, stringently edited versions of houses... The kitchen area is scaled down by a good fourth and the bedroom furniture seems shrunken, suited to the dimensions of a room with near walls and a seven foot ceiling.” (Burch-Brown & Rigsbee, 1996; 49,82).

While many of these spacial deficiencies may seem trivial, they can have serious quality of life impacts on inhabitants. Privacy is highly valued in our culture, yet it is all but diminished when a hallway that runs through ones bedroom. This lack of space also strains family relations when two or three children of varied ages and sexes sleep in a bedroom the size of a walk-in
closet. However, for many mobile home residents, moving into a house which does fit their spacial needs is not an option. Often they address these structural inadequacies by either adapting to the unit or, more commonly, adapting the unit to their needs. This is most often accomplished by building a small room addition onto the mobile home. In fact, mobile homes with built on room additions are commonplace throughout the eastern Kentucky hills. Indicative of working class values, families who most often occupy mobile homes are proud of what they have, even if it is second rate. This holds true for their unique type of housing, despite the often apparent structural, spacial, and quality, shortcomings. As O'Hare & O'Hare (1993) state, “a scaled down version of the American Dream is better than no dream at all.”

**Conclusion**

As previously presented, universal housing preferences/norms are presumed to be a home that is owned, conventionally constructed, detached, and has private outdoor space (single family home). Some postmodern housing theorists question the applicability of these housing norms in the 1990s. Maintaining these norms are actually relics of 1950s values, and that now the desire for a little white house with a picket fence is not as great (Burns, 1997). However, this divergence from the norms does not seem to be
evident in the more traditional culture of Appalachian eastern Kentucky. Here, among mobile home residents, the norms/preferences (or at least the desire to achieve them) were overwhelmingly present from a doctor, who made over $200,000 per year, to an impoverished single mother of three.

Pride of home ownership was conclusively the strongest preference. Almost the entire research cohort owned their mobile home and preferred this scenario. This is consistent with much of the related research, as home ownership tends to be the strongest of the four preferences. However, of mobile home residents of the region, this preference tends to be even stronger. In Appalachian eastern Kentucky, 78 percent of mobile home residents own their dwelling as opposed to 66 percent home ownership for all types of housing. (U.S. Bureau of the Census, 1993a, Housing Assistance Council, 1994).

The preference for private outdoor space (a yard) was also strong and clearly evident among interviewees, as most of their mobile homes were located on single lots by themselves. Most residents stated that they desired or enjoyed their yards to conduct outdoor activities, such as playing with children, planting and gardening, or working on automobiles. Privacy was also an attribute accentuated by having a private outdoor space. This feature was highly desired by the interviewees, and is generally held in high regard in rural...
areas (Tremblay & Dillman, 1982). The detached dwelling preference is similar to private outdoor space in the attributes, such as privacy, that it affords residents. This preference was also strong among the research cohort. However, this is to be expected as attached (primarily apartments) housing options are not as abundant or even available in most rural areas.

Finally the conventional construction norm is of key importance in the analysis, for it separates these families from complete conformance to the norms. While a disproportionally high number of Appalachian residents actually reside in this type of housing, it does not necessarily mean that they wish to. When asked of their optimum housing preference, every interviewee indicated they would ultimately wish to own a "conventional" single family home. The research is consistent with the literature on universal housing norms and reaffirms the notion that, "the popularity of the single family house is so great its choice is independent of any variable analyzed" (Mitchelson, 1966). However when social and economic reality collide with "ultimate housing preferences" in this region, the outcome for many constrained residents is likely to be a mobile home.

The upcoming quantitative analysis will address this aspect of "constraints" in greater detail. However, in the final analysis I wish to dwell on a quote from a mobile home dealer who told me confidently, "People used to buy them
(mobile homes) because they had to now, they buy them because they want to.” The qualitative data presents indications that both support and refute this quote simultaneously. From the interviews, the research indicated that mobile home owners typically wanted to purchase their mobile home, yet (given the choice) they actually desired a site-built home, and were precluded from this option for primarily financial reasons. Thus, the mobile home was simply the next best housing option. Responses from this small sample infer support of the entire research model. However, it is clear that they fully support the first research hypothesis in which mobile home residents of the region adhere to, or at least wish to adhere to the presented housing norms/preferences of (1) home ownership, (2) conventional construction, (3) private outdoor space, and (4) detached dwelling. Appreciation of these norms and preferences are instrumental in providing an understanding of the regions housing patterns. In sum, the qualitative data indicates that for more and more of eastern Kentucky’s, residents choosing a mobile home is not particularly because they want to, it's still because they have to.
CHAPTER 5
Socioeconomic Constraints &
Contextual Facilitators (multivariate analysis)

In its most unadorned form, economics is the theory of allocation of limited resources among competing ends in order to maximize satisfaction...subject to the constraints imposed by limitations in the availability of resources required to achieve those ends.

*J. Nerlove

CHAPTER 5
SOCIOECONOMIC CONSTRAINTS & CONTEXTUAL FACILITATORS
Multivariate Analysis

The quantitative aspect of the study focused on the second and third research hypotheses which dealt with various socioeconomic and contextual factors in relationship to mobile home concentrations. Specifically, the research tested for significant relationships between the dependent variable (Y), "concentration of mobile homes" (percent mobile home) and independent variables of:

**Socioeconomic Variables**

- \( X_1 \) Racial composition of a county (percent white)
- \( X_2 \) Educational attainment level within a county (percent high school graduate.)
- \( X_3 \) Employment status within a county (percent unemployed)
- \( X_4 \) Income level within a county (median income)
- \( X_5 \) Age levels within a county (median age)

**Contextual Variables**

- \( X_6 \) Rural/Urban composition of a county (percent rural)
- \( X_7 \) Geographic region of a county (Appalachian region)
Description of Data

This study utilized population data from the 1990 U.S. Census of Housing and Population. Seven socioeconomic and contextual variables were analyzed for each of Kentucky’s 120 counties. The county level data is presented for each of the variables and is the primary unit of analysis for the regression model. The study represented 100 percent of Kentucky’s 1,279,000 occupied housing units, and 3,392,615 population (U.S. Bureau of the Census, 1993a). This description of the data also includes an analysis from a sub-sample of the 49 counties in Kentucky’s Appalachian region (See Map 5.8.) The sub-sample was included to permit a comparison in terms of socioeconomic and contextual variables between the region of Appalachian Kentucky and the remainder of the state, as well as the nation as a whole.

Table 5.1
Mean Scores of the Data

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<th>Variable Name</th>
<th>M</th>
<th>SD</th>
<th>N</th>
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<tr>
<td>Percent White</td>
<td>95.3</td>
<td>4.7</td>
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<tr>
<td>Percent High School Grad.</td>
<td>56.7</td>
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<tr>
<td>Percent Unemployed</td>
<td>8.9</td>
<td>3.7</td>
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<tr>
<td>Median Income</td>
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<tr>
<td>Median Age</td>
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<tr>
<td>Percent Rural</td>
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<td>25.2</td>
<td>120</td>
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<tr>
<td>Appalachian Region</td>
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<td>0.4</td>
<td>120</td>
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<tr>
<td>Percent Mobile Homes</td>
<td>17.7</td>
<td>7.4</td>
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Table 5.2  
Correlation Matrix for Dependent and Independent Variables

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<th>5</th>
<th>6</th>
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<th>8</th>
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<td>1. Race</td>
<td>-</td>
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<td>.329**</td>
<td>-.366**</td>
<td>.095</td>
<td>.555**</td>
<td>.437**</td>
<td>.543**</td>
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<td>2. Education</td>
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<td>-.887**</td>
<td>-.043</td>
<td>-.681**</td>
<td>-.658**</td>
<td>-.651**</td>
<td></td>
</tr>
<tr>
<td>3. Employment Status</td>
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<td>-.706**</td>
<td>-.311**</td>
<td>.387**</td>
<td>.601**</td>
<td>.641**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Income</td>
<td></td>
<td>.010</td>
<td>-.533**</td>
<td>-.637**</td>
<td>-.654**</td>
<td></td>
<td></td>
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<tr>
<td>5. Age</td>
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<td></td>
<td></td>
<td>.169*</td>
<td>-.239**</td>
<td>-.151*</td>
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</tr>
<tr>
<td>6. Rural/Urban</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.315**</td>
</tr>
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<td>7. Geographic Region</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>8. Percent Mobile Homes</td>
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</tbody>
</table>

Note: One-tailed significance levels: *p = .05. **p = .01.
The bi-variate correlations between the independent variables and the dependent variable are also presented in this section to illustrate each variable's individual relationship with a county's mobile home concentration (See Table 5.2).

**Dependent Variable**

**Concentration of Mobile Homes (percent mobile home)**

As of 1990 there were 185,336 housing units classified as a "mobile home" or "trailer" in the state of Kentucky (U.S. Bureau of the Census, 1993d). Mobile homes comprise 12.3 percent of the housing units within the state, compared with a national level of a little over 7 percent. The mean percent of mobile homes in Kentucky counties is 17.7 percent with a standard deviation of 7.4 percent. While Kentucky has a higher percentage of mobile homes than the national average, this proportion is even larger within some specific areas of the state. The greatest distinction is in its Appalachian counties, where close to half (47 percent) of Kentucky's mobile homes are located (See Map 5.1). The mobile home population for these 49 counties is over three times the national average at 23 of the occupied housing stock. (U.S. Bureau of the Census, 1993a).
Independent Variables

Socioeconomic Characteristics of Counties

Race (percent white)

The race variable for this analysis indicates the percentage of the white
population within a county. Kentucky has an extremely homogenous racial composition in which 91 percent of Kentuckians are white. This density is somewhat higher than the national average of 76 percent (U.S. Bureau of the Census, 1993c). From the county level data, this independent variable yielded a mean of 95.3 percent with a standard deviation of 4.7 percent (\(N = 120\)). The state’s geographic distribution of race is just as unbalanced; 105 of Kentucky’s 120 counties have white populations over 90 percent. However, racial compositions tend to be more diverse around the state’s urban areas, Louisville and Lexington (See Map 5.2). The race variable showed a positive correlation with the dependent variable (\(r = .541 ** p < .01\)), indicating that counties with a large white population had higher concentrations of mobile homes.

**Education (percent high school graduate)**

The education variable reflects the percentage of a county’s population over the age of 25 that has attained at least a high school diploma (percent high school graduate). Approximately 64 percent of Kentuckians have a high school diploma, compared to 76% of the nation as a whole (U.S. Bureau of Census, 1993c). The mean county graduation rate was 56.7% with a standard deviation of 10.4% (\(N = 120\)). Kentucky has traditionally had low
educational attainment levels (Karran & Mather, 1977), yet, these lower levels are even more profound in the eastern Appalachian Section of the state. In this geographic area, the county level data indicated that less than half (48.5%) of the population had attained a high school diploma (See map 5.3). Education attainment levels tended to have a negative effect on mobile home concentrations. As the percentage of high school graduates decrease, the percentage of mobile homes in a county increased ($r = -.651** \ p < .01$).

**Employment (percent unemployed)**

The employment variable within the research model is represented by the percentage of a county's population that is unemployed (percent unemployed). In 1991, Kentucky had an average unemployment rate of 7.5 percent, slightly more than the national rate of 5.9 percent (U.S. Bureau of the Census, 1993c). The mean unemployment level based on the county level data was 8.9 percent ($M = 8.9\%, \ SD = 3.7, \ N = 120$). While unemployment levels vary, the far southeastern section of the state tends to consistently have higher unemployment rates (See Map 5.4). In this area, unemployment is twice the national average, as the county level data indicates a mean unemployment level of 11.9 percent for the Appalachian subsection. Unemployment rates correlated positively with the dependent variable of percent mobile home
(641** p< .01), signaling that counties with higher levels of unemployment also had more mobile homes.

**Income (median income)**

The income variable for the analysis indicates the median income for a given county. In 1990, the median income for the state of Kentucky was $22,543 compared to a national level of $30,056 (U.S. Bureau of the Census, 1993c). The mean income from the county level analysis was $19,823 with a standard deviation of $5,388 (N = 120). As for the Appalachian subsection, the median income drops to $15,175, which is almost less than half of the national average (See Map 5.5). Income is negatively associated with mobile home concentrations. Counties with lower median incomes had more mobile homes as a percentage of their housing stock. This bi-variate correlation was also strong, producing a correlation coefficient of (r = -.654 p < .01).

**Age (median age)**

The age variable represents the median age within a county (median age). The median age for the entire state of Kentucky is 35.0 years, which is almost identical to a national median age of 34.9 years (U.S. Bureau of the Census, 1993c). The mean age from the county level data was 33.7 years with a standard deviation of 2.4 years (N =120). The median age tended to be slightly lower in the Appalachian subsection, with a median age of 33.0 years.
Median age was negatively associated with the percentage of mobile homes in a county. As such, counties with a lower median age had higher concentrations of mobile homes. It may be inferred that this is consistent with data that indicates mobile homes are more often occupied by younger families. Conversely, the negative correlation of this variable may also be interpreted through the opposite end of the age spectrum, in which county’s with older populations had fewer mobile homes. For older age groups this type of housing was not as socially acceptable or even as readily available when many of them were initially purchasing or building homes. Although the age variable was statistically significant, it showed a weak bi-variate correlation with the dependent variable ($r = -0.151\, p < .01$).

**Contextual Variables**

**Rural/Urban (percent rural)**

The rural/urban variable represents the percent of a county’s population classified as rural (percent rural). Nationally, only 24 percent of the population lives in rural areas, however, in Kentucky that number rises to 48 percent of the state’s population. (U.S. Bureau of the Census, 1993a; Housing Assistance Council, 1994). Over half of Kentucky’s population (52%) is considered urban, however, these populations are primarily concentrated in the states three
urban centers, Louisville, Lexington and Northern Kentucky. In fact, a majority of the states counties are actually rural in nature (See Map 5.7). This discrepancy is evident in the county level analysis which produced a mean of 75.7 percent rural \( (N = 120) \). In relationship to the concentration of mobile homes in a county, the percent rural variable proved to have the strongest bi-variate correlation in the model \( (r = .733^{**} p < .01) \). Thus, counties with a higher rural population had significantly higher mobile home concentrations.

**Geographic Region (Appalachian region)**

The other contextual variable indicated whether a particular county was located within the geographic area of the Appalachian Region (Appalachian Region). The counties located within the Appalachian region are defined by the U.S. Appalachian Regional Commission (1965). Overall, 49 of Kentucky's 120 counties are located in the designated Appalachian Region, comprising 40 percent of the states counties (See Map 5.8). This was a nominal and dichotomous variable, and as such was treated as a dummy variable in the regression model. Counties located inside the Appalachian Region were coded as "1" and those outside the region as "0." The bi-variate correlation with the dependent variable indicated a positive relationship between counties located within the Appalachian region of Kentucky and higher mobile home concentrations \( (r = .456^{**} p < .01) \).
Concentration of Mobile Homes: Regression Analysis

Seven independent variables were regressed on the dependent variable (percent mobile home) to account for the explanation of mobile home concentrations. The multiple regression analysis on the data was conducted to test the hypotheses that socioeconomic and contextual variables were significant predictors of mobile home concentrations. The following model tested this regression equation:

\[ Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + e \]

Table 5.3 shows the results of the regression analysis.

Table 5.3
Regression Analysis for Mobile Home Concentrations

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$ Percent White</td>
<td>.311</td>
<td>.100</td>
<td>.197</td>
<td>3.096**</td>
</tr>
<tr>
<td>$X_2$ Percent H.S. Grad</td>
<td>.173</td>
<td>.093</td>
<td>.243</td>
<td>1.861</td>
</tr>
<tr>
<td>$X_3$ Percent Unemployed</td>
<td>.459</td>
<td>.154</td>
<td>.231</td>
<td>2.980**</td>
</tr>
<tr>
<td>$X_4$ Median Income</td>
<td>-.001</td>
<td>.000</td>
<td>-.369</td>
<td>-3.031**</td>
</tr>
<tr>
<td>$X_5$ Median Age</td>
<td>-.582</td>
<td>.173</td>
<td>-.191</td>
<td>-3.367**</td>
</tr>
<tr>
<td>$X_6$ Percent Rural</td>
<td>.161</td>
<td>.022</td>
<td>.547</td>
<td>7.402**</td>
</tr>
<tr>
<td>$X_7$ Appalachian Region</td>
<td>-.937</td>
<td>1.122</td>
<td>-.062</td>
<td>-0.853</td>
</tr>
</tbody>
</table>

Note: $p < .01; R = .860; R^2 = .740; F = 45.531.$

The overall multiple regression model yielded a Multiple Correlation Coefficient of .860 and accounted for 74 percent of the variance in mobile home concentrations in Kentucky ($R^2 = .740$). The F test revealed that mobile home percentages were significantly predicted by the socioeconomic
and contextual variables tested. \( F = 45.531 \ p < .01 \). Therefore, taking into account the very strong Coefficient of Multiple Determination, it may be ascertained that the overall regression equation was highly effective in predicting mobile home concentrations.

An examination of the standardized beta coefficients reveals that five of the seven independent variables in the regression model were significant in accounting for the explanation of mobile home concentrations (see Figure 5.3). However, after controlling for each independent variable's effects on one another, the variables, percent rural and median income proved to be the strongest predictors within the model.

Percent rural was the strongest variable of the entire regression model. It also showed the highest bivariate correlation accounting for 53.5 percent of the total variation in mobile home concentrations individually. In addition, when controlling for the other variables it also provided the highest standardized regression coefficient \( \beta = .547 \) of the model.

This particular variable may be the strongest predictor for several reasons. First is the mobile home's availability, which is precipitated by lack of regulatory impediments (namely zoning laws), in rural areas. Typically in more urban locales these zoning laws often preclude the placement of mobile homes. Yet, rural neighborhoods, for the most part, are devoid of municipal
oversight and easily allow for mobile home placements. Land is another issue concerning availability and mobile home placements. In some rural areas land on which to place a mobile home is more plentiful. Conversely, a lack of quality land may also expedite mobile home placements in rural areas such as Appalachian Kentucky, where, rough, mountainous terrain often hinders site built housing. In these areas mobile homes provide a more convenient and cost effective housing alternative in the face of geographic impediments such as the Appalachian Mountain chain.

The median income variable had the second largest standardized regression coefficient (β = -.367) and was also a strong contributor to the explanation of mobile home concentrations. As noted, mobile homes are a significantly less expensive form of housing which make them more financially viable for lower income groups. Median income was also the strongest of the socioeconomic variables and infers support for the Morris & Winter (1976) model which maintains that income is the single greatest "constraint" to achieved housing.

The three remaining significant variables within the regression analysis, percent unemployed, percent white, and median age, showed moderate to weak associations when controlling for the other variables. A county’s unemployment level had a moderate contribution to the model with a
standardized regression coefficient of ($\beta = .231$). High unemployment rates account for lower incomes and in turn a need for lower cost housing. However, as indicated, this variable is closely associated with the income variable, and much of it's predictive power is reduced by the stronger variable. With the second lowest standardized regression coefficient ($\beta = .197$) race (percent white) contributed only minimally to the entire model. This weak outcome may be the result of an extremely high percentage of the state being white, therefore minimizing any variation relative to housing patterns. The final significant variable was median age which produced a standardized regression coefficient of ($\beta = -.191$). The variable infers that younger people do in fact reside in mobile homes more than older families. However, they are also more likely to have lower incomes, and less education. After controlling for these other socioeconomic variables, the age variable's contribution remains significant, but not large.

Two variables, education (percent h.s. grad), and geographic region (Appalachian Region), proved insignificant in the regression model. This finding most likely indicates that these variables may be multi-collinear with the other socioeconomic and contextual variables.
Summary

The preceding quantitative analysis demonstrated the effect of various socioeconomic and contextual variables on mobile home concentrations within the state of Kentucky. The current study utilized a multiple regression analysis of seven socioeconomic and contextual variables. Results from the regression analysis indicated that counties with:

1. a high white population,
2. relatively high unemployment rate,
3. low median income,
4. low median age,
5. high rural population,

have higher mobile home concentrations as a part of their housing stock. These variables in the model accounted for 74 percent of the variance in mobile home concentrations in the state ($R^2 = .740$).

While most of the variables were significant and contributed to the model, the variables percent rural and median income supplied the most predictive power to the regression model. Although these two variables are interrelated ($r = -.533$), they seem to account for the variation in mobile home concentrations differently. Socioeconomic factors, such as low income, generally act to "constrain" achievement of the prescribed housing norms.
Whereas the contextual variable, rural environment “facilitates” the housing choice made under these constraints. For example, a family may experience socioeconomic conditions identical to those in the model which prescribe mobile home ownership. However, if they live in the metropolitan area of Chicago, the mobile home is obviously not an option, as zoning ordinances, along with other factors would most assuredly preclude them for this type of housing. By the same token, housing options common in urban areas, such as multifamily apartments and townhouses simply do not exist in many rural locations. Therefore, the context in which these housing constraints are experienced, either urban or rural, is of great importance in understanding housing patterns.

In the regression model, the Appalachian Region variable proved not to be significant. However, many counties within Appalachian eastern Kentucky experience high levels of socioeconomic “constraints” and contextual “facilitators” which were shown to account for larger mobile home concentrations. Thus, the analysis supports the second and third research hypotheses, maintaining that a high percentage of mobile homes in Appalachian eastern Kentucky is significantly related to the various socioeconomic and contextual factors experienced by the region.
I remembered the end of my first semester at Penn when, after months of talk in our housing course, learning unfamiliar acronyms and digesting strange statistics, I finally realized that all the talk and all the figures suggested no remedy, but masked the scandal that Americans with houses don’t care about those who don’t have them.

“But what are you going to do?” “I don’t know,” said Wheaton, doyen of housers, walker of Washington corridors, drafter of legislation: “What are you going to do?”

Denise Scott Brown
CHAPTER 6
RESEARCH SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

Summary

In a little over half of a decade, the mobile home has progressed from the small recreational travel trailer of the 1930s to the more conventional "home like" double wide of the 1990s. And whether it's a successful market niche or merely a form of stop gap housing, the mobile home is truly, "one of the most significant and unique housing innovations of the 20th century" (Wallis 1991).

This study clearly supports the claim that mobile homes are an important and growing form of housing in rural areas. Case in point is the Appalachian section of eastern Kentucky, where mobile homes are concentrated at three times the national average. In addition, there is every indication that this number is growing rapidly. It is estimated that 50 percent of the new homes east of Interstate 75 in Kentucky are mobile homes. The present research investigated this issue in an attempt to better understand the large and increasing concentrations of mobile homes in Appalachian eastern Kentucky. A foundation for this understanding drew upon a theoretical base of housing norms. These norms, which prescribe housing behavior, are based upon four basic "preferences": ownership, conventional construction, private outdoor space, and detached dwelling. However, these preferences are not always
achieved and are primarily hindered by certain socioeconomic “constraints” that often preclude complete conformity to the these norms. Therefore, if one is constrained in their housing choice, they choose an alternative housing option which meets the most number of housing preferences. According to the adapted theoretical model, the choice of a mobile home allows constrained households to achieve all of the housing preferences except conventional construction.

Interviews and observations through qualitative research methods revealed that mobile home residents are not only increasing but are also becoming a more diverse group as well. The research noted some households from higher socioeconomic backgrounds residing in mobile homes, which has generally been considered housing for the rural poor. Although higher SES groups are moving into mobile homes, for the most part they are primarily occupied by lower income, and working class households. Among these families, the mobile home is the “housing of choice”, (Fitchen, 1992) in rural areas. Mobile homes are even more popular among the poorest families of the region since they are usually the least expensive housing option available. Also, the mobile homes occupied by very low income families tend to be older and subsequently in worse shape than most others.
A primary question of this research concerned adherence to housing norms and preferences. The qualitative interviews infer that mobile home residents of the region overwhelmingly adhere to, or at least, wish to adhere to the prescribed housing norms, namely that of home ownership. However, the operative norm of conventional construction was obviously not attained by these residents. The research also notes that this situation is not necessarily by choice, as nearly every resident in the research cohort indicated that they ultimately desired to live in conventionally constructed housing. This micro-level assessment of housing norms and preferences among mobile home residents is instrumental in addressing the primary research question.

Expounding upon the housing preferences of mobile home residents, the study also implemented a quantitative analysis of county level Census data. Socioeconomic factors of race, education, employment, income, and age were analyzed in relationship to mobile home concentrations. Contextual factors, including rurality and geographic region were also analyzed in the research instrument. An analysis of these macro-level variables indicated a strong correlation with mobile home concentrations. As such, counties with a relatively high percentage of mobile homes tended to be rural and have large white populations, lower median incomes, higher unemployment rates and lower median ages. However, when controlling for the effects of variables
through regression analysis, the variables of *rurality* \((\beta = .547 < .01)\) and *median income* \((\beta = -.369 p < .01)\) ultimately were the strongest factors in relationship to mobile home concentrations. Rurality and lower income conditions tend to be more prevalent in Appalachian counties of eastern Kentucky, helping to explain why mobile home concentrations are higher in this specific region. It is clearly evident from the quantitative analysis that at a county level, socioeconomic constraints and contextual facilitators strongly influence housing patterns.

The major issues addressed in this research, *norms/preferences*, *socioeconomic constraints*, and *contextual facilitators*, successfully explains the presence, and growth of relatively large mobile home concentrations in eastern Kentucky. The two major conclusions from the study are:

1. mobile home residents of the region generally wish to conform to universal housing norms. However, various socioeconomic constraints serve to hinder them from achieving all of the norms. Therefore, in rural areas the choice of a mobile home allows many constrained residents the ability to achieve three of the four universal housing norms/preferences.
(2) At a macro level, socioeconomic and contextual variables of 
*rurality, median income, percent white, percent unemployed, and 
*median age*, provide an explanation of the factors which help explain 
the high concentration of mobile homes in the region.

The theoretical framework for understanding this housing phenomenon 
was constructed from Morris & Winter's (1978) model of housing adjustment, 
and Tremblay and Dillman's (1983) model of housing preferences. The 
adapted model, which is primarily based on micro-level housing behavior, has 
been successfully extrapolated onto a larger, more macro level of analysis to 
account for statewide and regional housing patterns. This research supports 
the theorists models, and infers that they are still pertinent twenty years after 
their inception. However, the inclusion of a rural/urban indicator has served to 
expand prior models to allow for a greater understanding of regional 
responses to housing constraints.

The study was regional in nature and focused on eastern Kentucky. 
Though, the findings from this study may not be applicable only to this area. 
The geographic region variable proved not to be significant in the regression 
model. It was the contextual variable of rurality that was one of the strongest 
indicators of housing patterns in the entire study. Therefore, to the extent that
other rural areas share similar characteristics, findings from this study may be
generalizable in terms of understanding of housing patterns in other rural
communities.

Implications
After twenty years, what do you have?

The research model provides a clear understanding for the presence of
large concentrations of mobile homes in eastern Kentucky. However, the
question may also be raised as to what affects this large concentration may
have on the region and those who reside in the this type of housing.
Implications of these large mobile home concentrations may be examined
through two concepts laid forth in the literature review, use value and
investment value.

In its purest form, the mobile home is shelter from the elements for over
180,000 households in Kentucky alone. From this perspective, the mobile
home provides a great deal of use value. However, mobile homes are
generally deemed as socially and structurally inferior to site-built housing.
While most mobile home owners in the study were generally satisfied with
their current dwelling, many cited problems with overall poor quality, safety,
and structural integrity. Most problematic was the lack of size and available
space. These negative aspects of mobile homes tend to be compounded in older units, especially those built before the implementation of the 1976 HUD Code. This aspect may be of particular concern in eastern Kentucky where the mobile home stock is considerably older. Here a majority of this region's mobile homes were built before 1976. Inhabitants of these older units are at a greater risk of financial disinvestment, injury, property damage, and overall reduced use value.

In relation to investment value issues, the purchase of a home is, for most Americans, the largest financial investment they will ever make (Harvard University Joint Center for Housing, 1998). Further, the importance of investment income on future financial stability and well-being is profound (Adams & Sherradan, 1996). While conventional housing usually appreciates in value, there is no indication that mobile homes as a group appreciate in value, in many cases they actually depreciate. Thus it may be inferred that the purchase of a mobile home severely limits any investment value reaped from this type of home ownership. Furthermore, mobile home residents often pay higher housing costs in proportion to their loan amount. This is primarily due to the fact that most mobile homes are financed through sub-prime lending companies (finance companies) which generally charge higher interest rates. These issues are inexorably linked to investment value and mobile
homes. For example, a family purchases a mobile home and lives in it for twenty years. Throughout this time period it adequately served their housing needs, but the home most likely has not appreciated in value. In addition, they probably paid proportionally higher mortgage payments on a higher interest loan from a finance company. This scenario begs the question, what do they have in terms of investment value? One could infer that they have paid relatively exorbitant fees for something that isn't worth much more than they paid for it twenty years ago.

This inference is not intended to ridicule or blame mobile home residents for their housing choice. Much of the evidence from this study maintains that they are simply, "doing the best they can, with what they've got" in relationship to housing. Rather, it is to signal concern about many of the mobile homes in Appalachian eastern Kentucky that are nearing the end of their use value, and are inhabited by families who will be economically powerless to replace their mobile home with a new or better housing due to a lack of prior housing investment. Therefore, it may be that the choice of a mobile home could have long term impacts on a families economic well being and could possibly cause a reverberating cycle of financial disinvestment among already disadvantaged families.

Furthermore, these investment value issues of mobile homes are not
limited to individual families but may impact entire Appalachian communities as well. Property tax is an important source of revenue for Kentucky counties. As previously noted, mobile homes have significantly less appraised value than conventional homes (and in some counties as much as 50 percent less). Thus, counties with larger mobile home concentrations are likely to receive less tax revenue from these units. In addition, they are also more likely to depreciate in value so that less and less tax revenue may be reaped in subsequent years.

It is conceded that most of the implications presented were negative towards mobile homes. However, as noted in the theoretical model, when norms are not conformed to, sanctions will ultimately arise. Further, these sanctions may not limited to nonconforming families but likely the entire region as well. In summation, mobile homes generally offer families reduced use value, and virtually no, or even negative investment value.

Mobile homes are an important aspect of housing in Appalachian eastern Kentucky. For many low and moderate income families, the mobile home has become the only viable housing option that will allow them to meet their desired housing preferences, especially in rural areas. However, this housing option is not necessarily the best, as mobile homes are generally deemed both structurally and socially inferior to site built housing. In an overall perspective,
the presence of a large concentration of mobile homes is both an outcome and indicator of yet another aspect of society which has left eastern Kentucky and many of its residents relegated to a form of housing secondary in preference.

**Recommendations**

As a result of this inquiry into mobile home concentrations in Eastern Kentucky, the following recommendations are presented:

1. The study supports the thesis that most mobile home residents have an overwhelming desire to achieve the conventional construction norm. Therefore, it is recommended that services which will facilitate conformance to this norm be expanded. This may be most effectively achieved by increased funding of non-profit housing providers in the region. Many of these organizations effectively implement private and public funding to build conventionally constructed homes at low or reduced costs. In addition, they often provide special subsidized financing that make conventional homes affordable for low and moderate income families. Ultimately, meeting the desired housing preference of conventionally constructed homes will provide greater *investment* and *use value* for residents and the region alike.
2. Similar to the first recommendation, the study also supports expansion of federally funded housing programs in the Appalachian region and rural areas, namely the U.S. Department of Housing and Urban Development's HOME and CDBG programs, and the USDA/Rural Housing Service's Section 502 program. These programs allow low and moderate income families to purchase conventionally constructed housing at more affordable rates. In concert, the study also recommends that the Appalachian Regional Commission (ARC), place increased emphasis on housing issues in the Appalachian region.

3. As indicated in the study, many families in eastern Kentucky are economically “constrained” in areas with high poverty, low education, and few employment prospects. Therefore, to address the systemic cause of housing constraints, the study recommends increased support of programs in Appalachian eastern Kentucky that will facilitate increased social, economy, and educational empowerment among its residents.

4. While mobile homes are not the most preferred housing situation, the study clearly indicates that they are an ever growing and important source of housing in rural areas such as eastern Kentucky. Therefore, every effort should be
made to make this housing option as beneficial as possible to their inhabitants. Most important may be the aspect of investment value and financing. Currently most mobile homes are financed by sub-prime lending agencies which often charge higher interest rates. However, there is some indication that mobile homes financed through conventional lending sources (banks), which provide a mortgage instead of a transfer title, will result in greater investment value because the mobile home must be placed on a foundation and conform to other site-built characteristics. Therefore, efforts to educate potential mobile home customers on the most beneficial purchase and investment avenues is recommended.

5. Ultimately this study investigated only a small aspect of mobile homes and housing in a limited geographic region. Therefore, it is highly recommended that additional and more comprehensive studies be undertaken on the subject. A greater understanding of housing and mobile homes in general may have profound impacts on nearly every strata of society. In furtherance of this study, some aspects which to specifically address may be the pre mentioned concepts of use value and investment value, in relationship to mobile home ownership.
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