

**A CASUAL MODEL OF BARRIERS AND INCENTIVES TO AFFORDABLE HOUSING IN SOUTHERN RURAL COMMUNITIES: HOUSING QUALITY**

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**Abstract**

*Housing quality was one of three dependent measures used to examine a model of housing affordability in rural communities. Often adequate or quality housing is not available at costs that are affordable for low-income families. Data from the S-194 Southern Region Research Project, "Barriers and Incentives to Affordable Housing" were used to examine the housing conditions in 28 Southern communities and to determine factors related to problems in housing quality. The dependent variables used to measure quality were taken from the 1980 Census: percentage of units built before 1959 and percentage of units which were crowded and lacked plumbing. Most of the communities had a large portion of old housing stock and a small portion of units that experienced both plumbing and crowding problems. A series of stepwise regression procedures was performed with the various independent variable sets utilizing each dependent variable. In the final modeling, the variables, median age, and number of educational institutions, accounted for 59.8% of the variance for the percentage of units built before 1959 model. The proportion of white residents, household's perception of demand for mobile homes, and percentile range of school children below poverty variables accounted for 84.4% of the variance in the percentage of units crowded and lacking plumbing model.*

**Introduction**

Housing quality is an important concept in the evaluation and selection of housing in the United States. Standards have emerged and evolved that promote quality as a criteria in establishing and revising housing policy and as an important concept in the decision making process of households. The condition of housing offered in a community contributes to the overall quality of the environment in the community and has potential to impact the economic and social climate in the area.

Recent reports on housing affordability examined the relationship between affordable units and the adequacy or quality of the units available at affordable rates for low-income households (Congressional Budget Office [CBO], 1988; Ford Foundation, 1989; Lazere, Leonard, and Kravitz, 1989; National Housing Task Force, 1988). Generally, low-income households are suffering from housing inadequacy at a higher rate than higher income households. One-fifth of very low-income renters suffer from both affordability and housing inadequacy problems (CBO, 1988). Housing that is in poor condition and does not provide for basic necessities is not suitable housing, even if offered at low costs. In small rural communities in the South, a lack of growth and a historic pattern of housing deficiencies may indicate that poor housing quality is a factor that needs to be addressed.

The purpose of this paper is to examine various measures of housing quality within rural communities and explore the relationships that might exist between these quality measures and various demographic, economic, consumer, and housing industry factors. The housing quality component is one of three dependent variables examined in the S-194 Southern Region Housing Research Project "Barriers and Incentives to Affordable Housing."

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### Literature Review

Housing quality has long been an important yardstick used to measure the condition of the living environment of Americans. Various measures from U.S. Census data and the American Housing Survey (AHS) data have included the lack of complete plumbing, crowding, age of housing unit, and specific measures of inadequacy related to maintenance and the provision of equipment. While some researchers have presented data supporting the continued improvement of the quality of the U.S. housing stock (Weicher, 1989), others have noted actual increases in the number of units with quality deficits, especially among low-income households (Apgar, 1989).

By 1990, three percent of the units in the rural South lacked complete plumbing (U.S. Department of Commerce, 1993). The Congressional Budget Office (1988) estimated that in 1985, 27% of very low-income renters and 30% of very low-income homeowners in non-metropolitan areas lacked complete plumbing. The 1989 American Housing Survey indicated that 2.7% of all occupied housing lacked some or all plumbing, while in the South 2.4% of occupied housing experienced this deficit (U.S. Department of Housing and Urban Development, 1990).

Measures of crowding in official reports have varied over time as improvements have been made in this condition. The census currently considers 1.01 or more persons per room as a crowded housing unit. Measures that examine adequate bedroom space for the household size may be more appropriate in predicting housing dissatisfaction (Morris & Winter, 1978). By 1990, 4.9% of all U.S. households experienced crowding, up from 4.5% in 1980. (U. S. Department of Commerce, 1981; 1992). In the South 4.8% of all units still experienced crowding in 1990. The problem is persistent among families with three or more children. Thirty-five percent of very low-income large families, 40% of low-income large families, and 28% of other large households faced a crowding problem as measured by more than two persons per bedroom (CBO, 1988).

Age of housing structure is another census measure that is often used to provide an indication of housing quality. Older houses were built at a time when certain amenities were not included in the construction of the house and may indicate a less "modern" home if they have not been remodeled. Older structures may also require high levels of maintenance and upkeep. The Census measure classifies units as built before 1939, and then in ten year increments. By 1990, 18.4% of the U.S. housing was built before 1939, while in the South only 9.4% was this old. (U. S. Department of Commerce, 1992). Thirty percent of the housing in the South was built before 1959 (Tan, 1993). However, in rural areas of this region 26% were this old. Tan (1993) further reports that rural renters live in older housing than urban renters, but rural homeowners occupied newer housing. In Baer's (1990) examination of the aging of the housing stock, older units were found to be more susceptible to change and more apt to be removed from the housing stock.

Finally, specific housing conditions have been examined in the AHS data. The extensive list of housing conditions examined in this data set include the lack of plumbing, problems in plumbing, crowding, electrical breakdowns, heating and problems with heating systems, lack of adequate kitchen facilities, maintenance problems (such as broken windows and steps), leaking roofs, and holes in floors and walls. Recent analysis of AHS data found that the rural South continues to have problems with housing inadequacy. In 1991, 13% of rural housing units in the South had housing quality problems; four percent were judged to be severe (Tan, 1993). Although 42% of the non-metro housing is located in the South, more than three-fourths of the households living in substandard housing reside in the South. Poor rural Southerners are most likely to live in housing with inadequate waste disposal (79%) and water supplies (52%), inadequate heating equipment (61%), evidence of rats (93%), holes in the floor (73%), cracks in the walls (53%), and without complete bathrooms (62%) (Lazere, Leonard & Kravitz, 1989).

While the measures of quality indicate improvements in the nation's housing stock, they also indicate problems in certain regions, particularly the rural South. Most examinations of housing quality report on the conditions of housing among specific groups that have higher than average incidence of housing inadequacies. Households with low-incomes and those

in poverty often experience higher rates of housing inadequacy (CBO, 1988; Ford Foundation, 1988; Weicher, 1989; Apgar, 1989; Lazere, Leonard, & Kravitz, 1989). Other demographic characteristics associated with quality are race, age, and sex. The Ford Foundation's (1988) analysis of AHS data indicated that 30% of black households earning 50% of median income and 19% of hispanic households earning 50% of median income had inadequate housing. In Lazere, Leonard, and Kravitz's (1989) report of 1985 AHS data, 41% of blacks living in non-metropolitan areas lived in substandard housing. These two reports also indicated that 14% of elderly households earning 50% of median income lived in inadequate units (Ford Foundation, 1988) and 13% of all elderly in non-metropolitan areas lived in substandard housing (Lazere, Leonard, & Kravitz, 1989). The Ford Foundation (1988) also reported that 16% of female heads earning 50% of median income experienced inadequate units. Spain (1990) reported that although female-headed households may have lower rates of crowding than married-couple households, they were more likely to live in units built before 1939.

While incidence of housing inadequacy depict problems for certain groups, analysis of causes and solutions for improving housing quality are less clear. On a national level, generally rising incomes, additions of new construction in the private housing market, and the resulting filtering process have been credited with improving housing conditions (Weicher, 1989). Weicher also contends that subsidized housing production has not significantly led to improved housing conditions. Apgar (1989) disputes the premise of improvements in housing conditions, noting that the number of renter occupied inadequate units rose by 3.4% between 1974 and 1981. The real income of these people has not risen and the use of subsidized units to assist this population group has not been effective because many of the subsidized units are not adequate.

On a local community level, issues of determining and improving housing quality are closely related to the local economy. McCray's (1980) study of 25 Arkansas counties identified positive correlations between percentages of units lacking complete plumbing and the percentage of the work force in blue-collar jobs, families below the poverty level, and the percentage of farm workers. Positive correlations were also found between overcrowding and the percentage of the civilian workforce unemployed and employed in farm work. Negative correlations were found between crowding and median contract rent, percentage employed in white collar positions, and the percentage employed in manufacturing. McCray (1980) concluded that housing quality was adversely affected by the low-economic status of the county. Further examination of the complexities of factors influencing housing at the local level is needed to better understand the housing quality within the community.

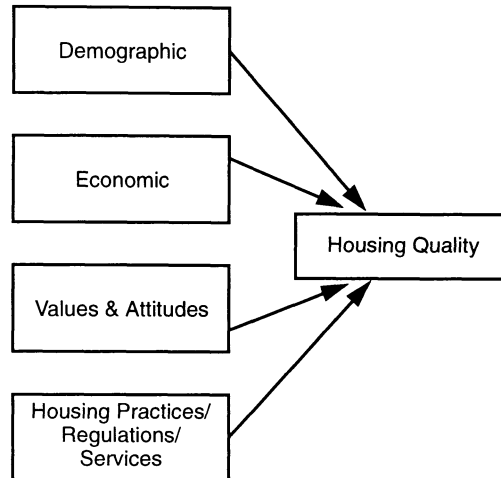
#### **Barriers and Incentives to Housing Quality Model**

The conceptual model of Barriers and Incentives to Housing Quality encompasses a range of components that potentially impact housing quality within the community positively and negatively. The theoretical basis developed for this research project, as presented in McCray's article (this issue), indicate that housing quality is impacted by many community and consumer characteristics and practices. Past research has primarily examined relationships between housing quality and various demographic variables, including age, income, race, and sex. These variables were the starting place in developing the model (See Figure 1). The economic considerations of rural communities as developed by McCray (1980) were a second component that was selected for investigation. Rural communities often experience limitations in economic development related to their isolation and problems with economies of scales. Economic studies indicate that improved economic conditions that raise incomes and promote housing production could be important in improving housing quality. Several variables related to local funding and economic development were identified as potential factors affecting housing quality within rural areas. People living in small communities have general attitudes, perceptions, and values about their housing and the housing of their communities which could be important in determining an inclination for growth and a general raising of standards related to housing quality. Several variables related to the attitudes of households and housing intermediaries (persons involved in the local housing process) were included in the conceptual model. The housing process operating within the rural com-

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munity may also have an important influence on the housing situation in the area. Subsidized housing programs were designed to improve housing quality and their utilization in rural communities should be important in the level of housing quality. Further, the use of codes, ordinances, the installation of water and sewer systems, and the level of services in the community could directly impact the quality of new and old units. Financing of new construction, existing housing, and rehabilitation could also impact the quality of housing that is available.

Figure 1. Conceptual model of barriers and incentives to housing quality.



### Methodology

The data for this study were obtained from the S-194 Southern Region Housing Research Project, "Barriers and Incentives to Affordable Housing." The purpose of the project was to assess institutional and infrastructural barriers and incentives to community acceptance of innovations in housing design, construction, and financing and to develop a conceptual model that delineates the interrelationships and interactions of these barriers and incentives. Four communities in each of seven states were selected for study based on criteria that had categorized all eligible communities into quadrants based on population and diversity in housing. The communities were classified as Low Diversity-Low Population, Low Diversity-High Population, High Diversity-Low Population, and High Diversity-High Population. Data for each of the 28 communities were collected from a variety of sources including census reports, community data sheets, interviews with community officials, and surveys mailed to samples of residents (households), housing leaders (persons concerned and active in housing in the community) and intermediaries (lenders, realtors, builders and others involved in the housing industry within the community). For a complete discussion of the methodology of the project, see Hanna, McManus, Beamish, and Goss (1991).

Fully developing the conceptual model for factors affecting housing quality within rural communities required the identification of variables that would measure housing quality and variables that would represent appropriate independent components. The following sections will discuss each of these variable sets.

### Formulation of Dependent Variables

Two variables were utilized to measure housing quality at the community level. These measures were calculated from the 1980 Census data for each community. The calculations

involved the number of units of a certain age or with crowding and plumbing problems as a portion of the total housing units in the community. These variables were:

- (1) Percentage of housing units built before 1959, and
- (2) Percentage of housing units that were crowded and lacked complete plumbing.

The lack of plumbing and crowded measure combines two conditions, so that households in these units were experiencing double housing problems and would be considered to have extreme housing quality deficits.

Small communities of less than 2,500 did not have information in the census for age of housing structures. Arkansas, Tennessee, and Virginia each had one community that did not have data available. Pearson product moment correlations were calculated between these variables to identify problems in multi-collinearity. The correlation was at -0.001 and was not significant at the .05 level.

#### **Description of Housing Quality**

There was a wide range in the percentages of housing units that were built before 1959 in the study communities (Table 1). The High Diversity-Low Population community in North Carolina had the lowest percentage of units built before 1959 (40.72), while the Low Diversity-Low Population community in Tennessee had the highest percentage of units built be-

Table 1. Quality measures for 28 selected individual communities in seven southern states, 1980.

State	Community Type	Quality Measures	
		% Built Before 1959	% Crowded Lacking Plumbing
Alabama	Low Diversity-Low Population	63.58	2.54
	Low Diversity-High Population	50.58	1.65
	High Diversity-Low Population	59.29	1.36
	High Diversity-High Population	53.79	0.30
Arkansas	Low Diversity-Low Population	--	0.00
	Low Diversity-High Population	61.41	1.56
	High Diversity-Low Population	48.05	0.56
	High Diversity-High Population	53.33	0.25
Georgia	Low Diversity-Low Population	58.88	1.29
	Low Diversity-High Population	59.91	1.26
	High Diversity-Low Population	66.67	1.41
	High Diversity-High Population	61.84	0.40
North Carolina	Low Diversity-Low Population	70.52	0.08
	Low Diversity-High Population	64.82	1.05
	High Diversity-Low Population	40.72	0.22
	High Diversity-High Population	58.08	0.31
Oklahoma	Low Diversity-Low Population	72.76	0.00
	Low Diversity-High Population	63.75	0.00
	High Diversity-Low Population	81.92	0.12
	High Diversity-High Population	47.71	0.18
Tennessee	Low Diversity-Low Population	--	0.70
	Low Diversity-High Population	73.22	0.04
	High Diversity-Low Population	49.42	0.17
	High Diversity-High Population	58.85	0.06
Virginia	Low Diversity-Low Population	--	0.17
	Low Diversity-High Population	66.97	0.31
	High Diversity-Low Population	72.87	0.18
	High Diversity-High Population	62.45	0.34

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fore this time (73.22) Most of the communities had a higher percentage of housing built before 1959 than was typical of the Southern region as a whole (44%). This probably indicates that these were older communities and that they had not experienced a great deal of growth in their housing market in recent years.

The range in percentages of units that lacked plumbing and were crowded was between 0.00 and 2.54. The Low Diversity-Low Population community in Alabama had the highest score, while the Low Diversity-Low Population community in Arkansas and the Low Diversity-Low Population and Low Diversity-High Population communities in Oklahoma had no units that had both of these quality problems. The study communities had water and sewer systems within their town limits and most residents had been provided with and utilized these services. While census data indicate that crowding was still being experienced by approximately five percent of Southern households, the proportion of residents that had this problem and plumbing problems was small.

T-tests were used to compare the communities when they were categorized by diversity. There were lower scores in the low diversity communities on the age variable and a higher score on the crowded/plumbing variable. However, they were not significant at the .05 level.

### **Analysis of Data**

#### ***Clarification of Independent Variables: Model and Subset Analysis***

A number of potentially relevant independent variables were identified by the researchers of the S-194 project for use in each of the model components. These variables were categorized as follows: demographic, economic base, attitudes and values/household (H), attitudes and values/intermediaries and leaders (IL), and housing practices/regulations/community services. The large number of variables to be examined suggested this preliminary analysis as a way of reducing the data. For a complete listing of the variables and the sources of the data, see McCray (this issue). Pearson product moment correlations were calculated for each subset of variables. When variables were highly correlated at .80, one variable was eliminated to prevent problems of multi-collinearity.

Following this procedure, each set or subset of variables was entered into separate regression models with the two dependent variables utilizing SAS stepwise regression procedures (see Table 2). The housing practices/regulations/community services model component explained the most variance in the percentage of units built before 1959 (adjusted  $R^2 = .54$ ); however, only one independent variable (educational institutions) in this component was significant. Other variables listed on the tables contributed to the model, but were not significant at 0.05. The demographic and economic model components also contained significant variables related to this variable. These regression models identified only three variables within the total variable set that would be used in the final model analysis. The variables that were significant within each model were: median age of household head (demographic); school children below poverty level (economic base); and educational institutions (housing practices/regulations/community services).

The demographic model component explained 76% of the variance in the percentage of units crowded and lacking plumbing. Both the percent white and the number of families below poverty were significant in this model. The economic model component explained 64% of the variance in this variable, with percentile of school children in poverty and expenditures per student being significant variables in this analysis. The two barriers and incentive variable sets within the values and attitudes component (household and intermediary) explained approximately 40% of the variance each. The households' perceptions of lenders' attitudes and housing production were significant in one set of variables, while intermediaries' perceptions of housing affordability and availability were significant in the other variable set. The other models that contained significant variables and explained variance in the percentage of units crowded and lacking plumbing were: household housing demand (31%); household ranking of housing values (31%); housing programs/regulations/community services (27%); intermediaries' disposition toward innovativeness (21%); and intermediary receptivity to support (13%).

Table 2. Relationships between housing quality variables and model components: Regression analysis.

	Built Before 1959	% Plumb/Crowded
	Beta Coefficients	
<b>Demographic Model Component</b>		
Number of families below poverty	.035	-.001*
Median age of household head	1.987*	.034*
Percentage white	--	.034*
Adjusted R <sup>2</sup>	.178	.758
<b>Economic Model Component</b>		
Percentile range of school children below poverty	9.168*	-1.1685*
Expenditures per student	--	-0.6491*
Total market value of real estate	--	-0.0000
Turnback funds	--	-0.0000
Adjusted R <sup>2</sup>	.1741	.6394
<b>Values and Attitudes Model Component</b>		
Households perceptions of barriers and incentives		
Building regulations		1.08
Lenders' attitudes		1.48*
Housing production		-2.23*
Acceptance of housing alternatives		--
Adjusted R <sup>2</sup>		0.407
Household ranking of housing values		
Family values		-2.36
Economy values		-5.00*
Personal values		-1.18
Adjusted R <sup>2</sup>		0.3138
Household demand for housing option		
House demand		1.87*
Mobile home demand		0.31
Adjusted R <sup>2</sup>		0.3142
Intermediary perceptions of barriers and incentives		
Housing production		-0.40
Housing affordability		1.01*
Housing availability		-1.22*
Mobile homes		0.89*
Adjusted R <sup>2</sup>		0.2145
Intermediary disposition toward innovativeness		
Receptivity to new housing ideas		-1.30
Work with things and ideas		0.30
Innovative attitude toward housing		3.36*
Adjusted R <sup>2</sup>		0.2145
Intermediary receptivity to support program for rental units		
Adjusted R <sup>2</sup>		1.32*
		0.1343
<b>Housing Practices/Regulations/Service Model Component</b>		
Housing regulations score	-4.06	--
Rescue service	--	-0.15*
Community club/media	--	-0.18
Water	--	-0.11*
Educational institutions	-4.79*	--
Recreation	-2.34	--
Housing finance score	--	0.24*
Adjusted R <sup>2</sup>	0.5369	0.2688

\*p≤0.05

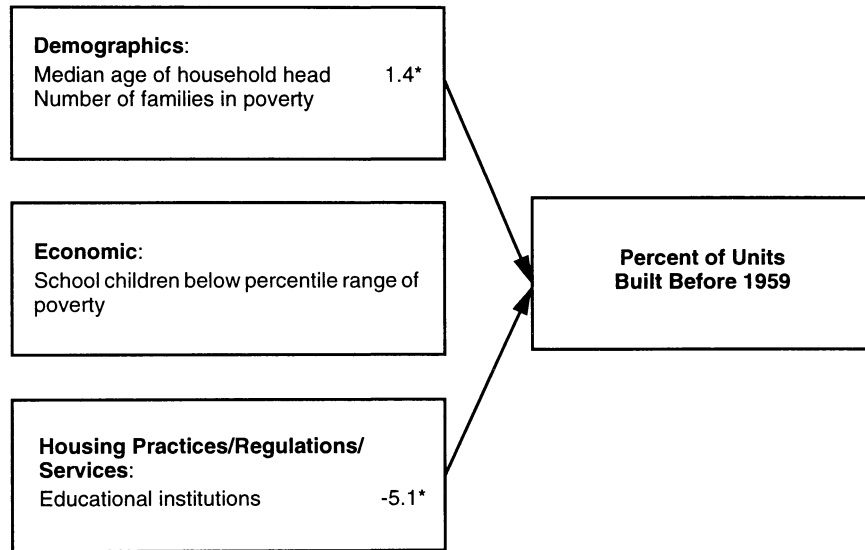
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The significant variables from each of these models were selected for use in the final modeling. The independent variables identified for use with percentage of units crowded and lacking plumbing were: percentage white and number of families in poverty (demographic); school children below poverty level and expenditures per student (economic base); lenders' attitude/H, housing production/H, economy value/H, and mobile home demand/H (attitudes and values/H); housing affordability/IL, housing availability/IL, attitudes toward mobile homes/IL, innovative attitudes toward housing improvements/IL, and receptivity to rental assistance/IL (attitudes and values/IL); and housing finance, rescue service, and public water (housing practices/regulations/community services).

**Final Model Determination**

The SAS stepwise regression procedure was used to develop the final regression models. It was predetermined that regression models with an upper bounds on condition number greater than 21 would not be used. Separate stepwise regressions were performed using each housing quality measure as a dependent variable. The independent variables identified in the subset analysis were entered into the analysis. For each measure a different set of variables was found to be contributing to the explanation of variance in the measure (see Figures 2 and 3).

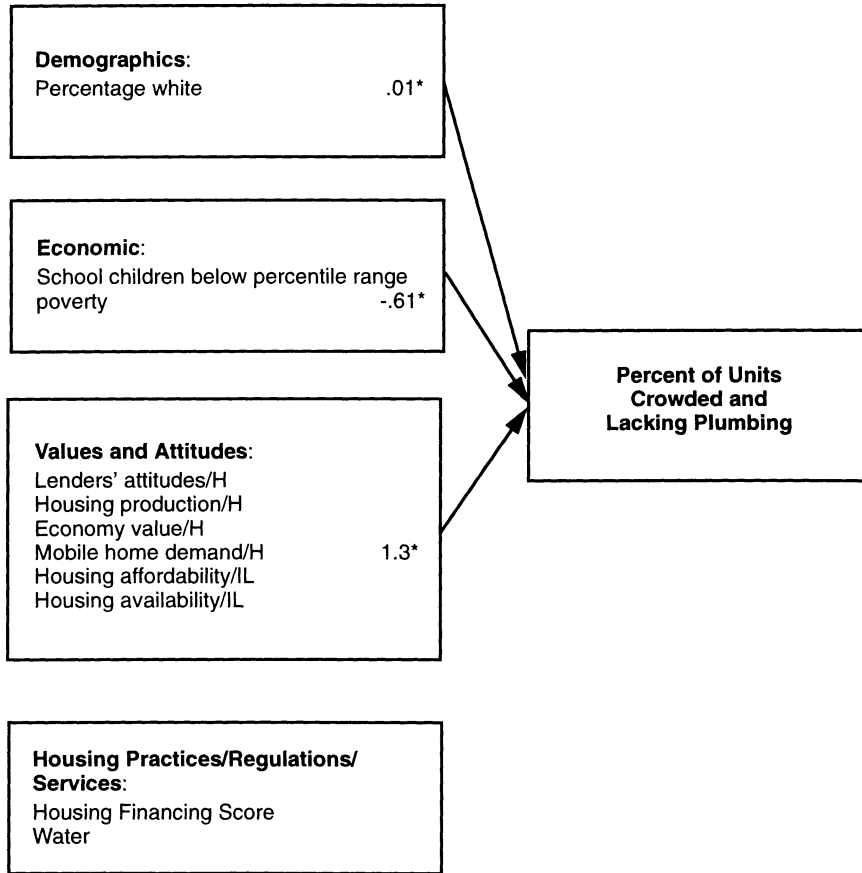
Figure 2. Final model of barriers and incentives to housing quality.



For the variable percentage of units built before 1959, two of the three variables were found to contribute to the model (see Table 3). The median age of community residents and the number of educational institutions in the community accounted for an adjusted  $R^2$  of .60. Both of these variables were significant at .05. This finding indicates that communities with older housing stock were likely to have older residents, and communities with fewer schools per population were likely to have a higher proportion of houses over 30 years old. Together, this may indicate fewer young families and a lack of growth in the community among this population segment.

Only three variables contributed to the model for percentage of units crowded and lacking plumbing which had an adjusted  $R^2$  of .84 (see Table 3). These variables were percentage white, percentile range of school children below poverty, and mobile home demand/H.

Figure 3. Final model of barriers and incentives to housing quality.



Note: H indicates household data set.  
 IL indicates the intermediaries and leader data set.

All of these were significant at the .05 level. Percentage white and school children below poverty were both negatively associated with this variable. Communities with lower proportions of white residents had more housing units with both plumbing and crowding problems. School children below poverty was coded so that communities with the highest percentage of school children in poverty had the lowest score. This indicates that communities with high proportions of families in poverty also had high percentages of units experiencing plumbing and crowding deficiencies. Households' perceptions of higher demand for mobile homes in their community was associated with higher percentages of units with plumbing and crowding deficits.

The factors associated with housing quality incorporate variables from several sources. The demographic variables associated with quality were age and race. An older population was associated with a higher proportion of older housing units in the community. Communities with higher minority populations were also likely to have a higher proportion of units lacking plumbing and being crowded. The economic base variable -- school children below

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Table 3. Factors influencing housing quality in 28 southern rural communities: Regression analysis.

Variables	Model 1	Model 2
	% Built Before 1959	% Crowded/Lacking Plumbing
	Regression Coefficient	
Median age of household head	1.44*	
Educational institutions	-5.11*	
Percentage white		-.0113*
Percentile range of school children poverty		-.6081*
Mobile home demand		1.2560*
R <sup>2</sup>	.641	.869
Adjusted R <sup>2</sup>	.598	.844

\*P ≤ 0.05 level of significance

Note: H indicates household data set.

poverty level -- was associated with units lacking plumbing and experiencing crowding. The only program or service variable to be associated with either dependent variable was the number of educational institutions. Education as a community service was a negative association, indicating that communities that have not seen increases in newer housing stock have probably not seen a need for growth in their schools. The residents' perception of a demand for mobile homes is associated with the percentage of units lacking plumbing and crowded and indicates that residents may recognize a quality deficit in their community that could be alleviated through the use of mobile homes.

In examining the Barriers and Incentives Model, most of the identified relationships seem to be barriers to preventing improved housing quality in rural communities. Communities with a lack of economic growth and educational opportunities, poverty, and high incidences of minority households seem to have limited housing opportunities. Creating economic development that would encourage growth and raise incomes throughout the community population are indicated as the incentives needed to improve housing quality. The utilization of the mobile home is also viewed as an incentive to improving housing quality in these communities and home repair programs could assist the elderly in older housing.

### Summary and Implications

The measures used to examine housing quality were related to age of structure and units that were crowded and lacked plumbing. The measure indicated that most of the communities had rather old housing stock, but did not experience great problems in plumbing and crowding. There were variations in these measures and they appear to be suitable as dependent measures in this analysis.

The independent measures that were found to explain variance in the two measures were related to each component in the proposed model. Among the demographic variables, age explained some of the variance in the age of housing model, while race was a contributor in the plumbing/crowded model. Previous research has shown that the elderly and blacks are more likely to experience quality problems and this supports these previous findings. The relationship between age of stock and age of households suggests that there may have been a lack of growth or a lack of retention of the younger population in these communities. The relationship of educational institutions and age of stock probably suggests something similar. The educational institution variable had been standardized according to population; therefore the more schools per population the newer the housing in the community was likely to be. Communities that are concerned about education may be better able to recruit industry and support growth. This growth will probably continue to support the development of new housing units.

The economic measure that was significant in the age of housing stock model was proportion of school children below poverty. This is a community level variable indicating the

overall economic condition of the community. The more students in poverty the more likely the community was to have poor quality housing as measured by the plumbing/crowding variable. This research supports the description of housing inadequacies and confirms previous work by McCray (1980).

The significant attitudinal variable was residents' attitudes toward mobile homes, which related to the plumbing/crowded measure indicating an awareness between alternative housing and the quality of housing in the community. Mobile homes are often the most frequently occurring type of new housing in rural communities. Recognition of the demand for this housing alternative indicates that consumers perceive that this housing type might be needed to improve housing in communities that have housing quality problems. Utilization of mobile homes at the lower income market might speed the housing filtering process and allow low-income households to live in housing that has adequate amenities and abandon the poorest quality housing.

The findings suggest that policies that encourage economic development in rural communities are important. Communities that have seen more recent additions to their housing stock had populations that were younger. They also had educational facilities that better supported the population. These suggest a need for planning to retain young families or to attract them so that the demand for new housing continues and the filtering process can be effective in these communities. In areas where this growth does not occur and elderly persons are left with older housing, maintenance and rehabilitation programs will be needed to assure the adequacy of these older units. Economic development may also address the continuing poverty problem that straps many of these communities and provides an opportunity for income growth. Otherwise, reliance on assistance or migrating out of the small town may be the only solutions families can find to solve their housing problems. Finally, the study suggests that residents of these small communities recognize that the mobile home may offer an alternative that can help to alleviate some of the poor housing conditions in their communities. Model ordinances that help communities deal with the placement and upkeep of the mobile home should be introduced to help others in the community accept the mobile home as a suitable option.

This study provided an opportunity to develop a conceptual model about housing quality within the context of small rural communities. The introduction of attitudinal variables, as well as community specific economic and housing practices and community services variables provided insight into the communities's provision of housing quality that have not been reported before. Further study might explore other causal relationships and determine interrelationships between the independent variables identified in this study.

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