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Homeowners and Home Improvements: 1987

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Homeowners and Home Improvements: 1987

INTRODUCTION

Homeownership provides more than shelter to American households. Often, their homes are the owners' largest asset. Keeping this property in good condition or increasing its value are major concerns. During the 2-year period of 1986 and 1987, homeowners spent $116 billion on their homes (Expenditures for Residential Improvements and Repairs, C50-90Q4).

This report summarizes data on selected home improvements including information on the frequency and types of work done, who did the work, and costs. Improvements are defined for this report in a broad sense. They refer not only to jobs that expand or alter the structure, for example adding rooms, but also to those that repair it, such as fixing a leaky roof. Current Construction Reports, including Expenditures for Residential Improvements and Repairs, use a more rigorous definition of the term. This as well as other differences are discussed in appendix C of this report.

The data are from the 1987 American Housing Survey (AHS) and include jobs done to all owner-occupied homes within 2 years prior to the interview date. The jobs reported in AHS were: building additions; adding or remodeling kitchens or bathrooms; repairing or replacing roofs; adding or replacing siding; adding insulation, new storm doors or windows; adding or replacing major equipment, such as heating or cooling systems; and other repairs or improvements worth $500 or more. In summarizing for this report, all jobs except additions, and kitchen and bathroom remodeling were termed "upgrades and repairs." Both do-it-yourself and contractor-completed jobs were counted.

Home improvement jobs varied widely, even among the same category of work. Roofing repairs included jobs as minor as a homeowner buying and spreading a bucket of roofing tar on a mobile home, to jobs where a contractor removed and replaced an entire roof. Jobs classified as "upgrades and repairs" were grouped together not because they were considered to be smaller jobs (see table A). Rather, this work was more likely to be aimed at maintaining the property while additions and remodeling would more likely be improvements.

HIGHLIGHTS

(Note: the figures in parentheses signify the 90-percent confidence intervals of the estimates.)

Most homeowners completed home improvements on their property during the last 2 years and the work for these jobs was frequently performed by someone outside the household unless the householder was young (under 30). As expected, wealthier households were more likely to make improvements and to make more expensive improvements than lower-income households.

Table A. **Costs of Home Improvement Jobs by Job Category**

(Dollars)

Type of work	Median spent	Most common amount spent (Mode)
Adding insulation	250	200
Adding new storm doors or windows	300	200
Adding or remodeling a bathroom	600	1,000
Repairing or replacing a roof	1,100	2,000
Other repairs or improvements	1,200	500
Adding or remodeling a kitchen	1,200	1,000
Adding or replacing siding	1,500	2,000
Adding or replacing major equipment	1,500	2,000
Building additions	2,800	*9,997

*Maximum amount that could be reported.

Homeowners who had made recent improvements realized larger increases in home values as well as the direct benefits of the improvements themselves. While home improvements were more likely to be undertaken in older homes, there is some evidence that the majority of the work took place in structures where there were no serious physical problems.

Other key findings include:

- Slightly more than half (52 percent ±0.5) of the homeowners in 1987 reported that some type of home improvement was done within the last 2 years. Most had only one type of work done but 24 percent (±0.6) reported that a combination of home improvement jobs were completed. Almost 9 in 10 (89 percent ±0.4) of the homes that had been worked on included some jobs classified as upgrades and repairs. Additions as well as remodeling of bathrooms and kitchens were much less common: approximately 10 percent (±0.4) overall and 27 percent (±0.6) of the owners with any work done mentioned these jobs (tables 1 and 4).
- Fifty-three percent (±0.7) of the households reported that their home improvement work was performed principally by someone outside the household while about 32 percent (±0.7) reported that household members had done most of the work. In the remaining 15 percent (±0.5) of the units, both household members and others performed the labor (table 7).

- Almost two-thirds (64 percent ±0.7) of the households who reported the cost of improvements spent a minimum of $1,000. Eighteen percent (±0.6) paid $5,000 or more. Generally higher income households had more expensive work done. Among owners making improvements, 29 percent (±1.5) with incomes of $60,000 or more completed jobs costing $5,000 or more compared with 19 percent (±1.0) of those with incomes between $30,000 and $59,999 (table 12).
- Home improvements were an ongoing part of homeownership. Even among owners who moved into their homes in the 1950's, about half (49 percent ±1.7) undertook some home improvement in the last 2 years (table 2).

DETAILED PATTERNS OF HOME IMPROVEMENT WORK

Householder Age

Home improvement activity varied by age. (See figure 1). Younger and older homeowners both had a smaller likelihood of making improvements with those 75 years or older being the least likely. The lower incomes of both of these groups (see table B) may have discouraged some households from undertaking projects.

Figure 1.
Percent of Owners With Recent Home Improvements by Age of Homeowner: 1986-1987

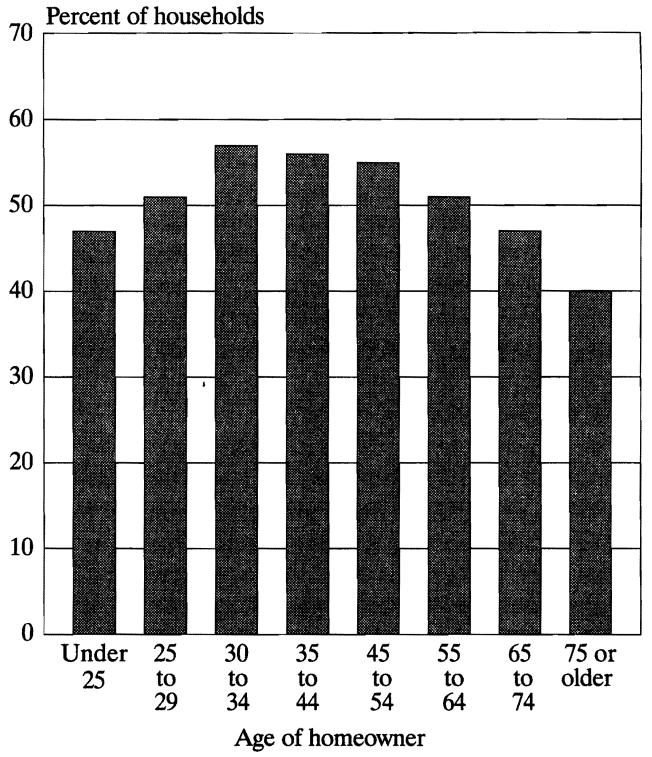


Table B. **Median Income of Homeowners by Age: 1987**

(Dollars)

Homeowner's age	Median household income
Under 25 years	$24,875
25 to 29 years	32,799
30 to 34 years	37,372
35 to 44 years	40,303
45 to 54 years	41,483
55 to 64 years	29,224
65 to 74 years	17,954
75 years or older	12,015
All	30,670

The data also suggested that elderly homeowners (householders 65 years or older) concentrated on jobs that maintained their property, rather than those like additions or remodeling which could substantially alter it. The elderly made up a disproportionate share of those with "upgrades or repairs only." Seventy-nine percent of elderly homeowners who reported any work fell in this category although overall the category accounted for just 66 percent of all jobs. In contrast, only a little more than half of owners under 30 had "upgrades or repairs, only." Thirty-three percent of these young owners had multiple job types done, although 24 percent of all households doing work reported job combinations (tables 2 and 5).

In general, younger owners did their own work; older owners contracted out (see figure 2). Householders 25 through 29 years of age were do-it-yourselfers 75 percent of the time for at least one job while they contracted out all jobs only 25 percent of the time. Householders 65 to 74 years of age were do-it-yourselfers only 28 percent of the time and those 75 years and over, only 17 percent of the time (table 8).

Spending for home improvements was lower among owners under 30 years and owners over 74 years of age. Homeowners under 25 years had the lowest expenditures of all age groups (see figure 3). However, these data should be viewed in context with the information on types of workers. Some owners substituted their households' labor for at least part of the cost of making improvements; therefore, the value of their jobs is underestimated by the data on costs. Thus, "true" costs may have been understated most for owners under than 30 years old since this group did the most do-it-yourself work (tables 8 and 11).

Household Type

Married-couple families were active in the home improvement process. More than half (54 percent) of all married-couple owners with no nonrelatives in the household

Figure 2.
Percent of Do-it-Yourself Improvements by Age of Homeowner: 1986-1987

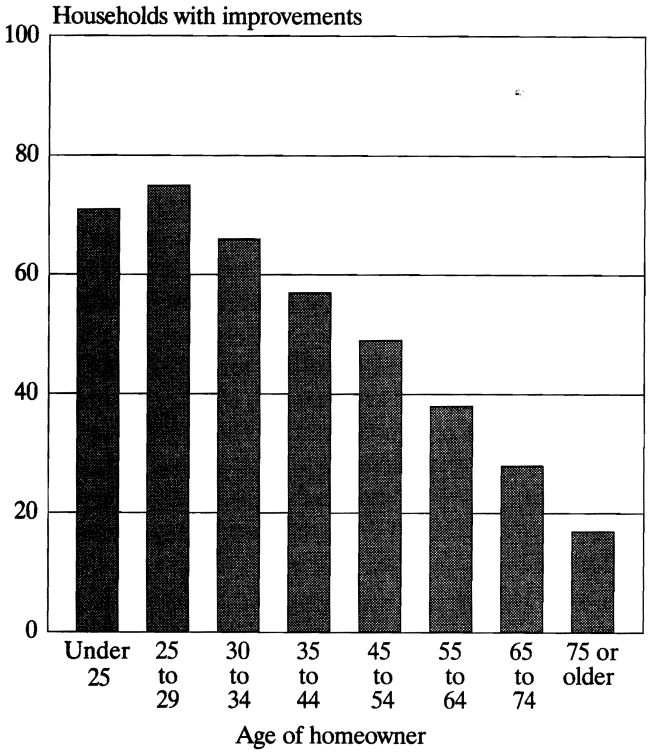
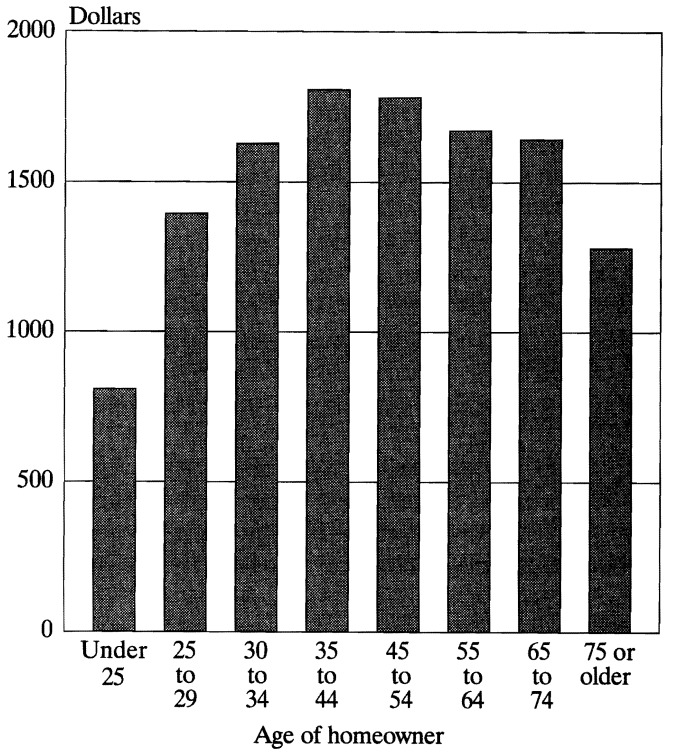


Figure 3.
Median Amount Spent For Home Improvements By Age of Homeowner: 1986-1987



reported some type of home improvement activity in the past 2 years. These households represented 72 percent of all homeowners who had work done to their homes (table 2).

Other household types had fewer improvements done. Half of two-or-more-person households maintained either by householders without spouses or married couples living with nonrelatives reported any recent activity. Only 43 percent of owners living alone had any type of work done (table 2).

Household composition was also related to the manner in which improvements were made, the amount of money spent and the types of work done. Table C shows that male householders and married-couple family households were more likely to do most of the work themselves for at least one of their home improvement jobs. One-person female households were much less likely to undertake do-it-yourself jobs. This may reflect a lack of experience with this sort of labor, but also the fact that 62 percent of all such homeowners were 65 years or older. (Only 33 percent of all one-person male homeowners were elderly.) (Table 8).

Married-couple families without nonrelatives spent the highest median amount on improvements, $1,780. Two of the lower medians were $1,100 for other male householders and $1,260 for one-person male householders (these figures were not significantly different). Since the latter groups were also apt to supply their own labor on at least one of their home improvement jobs, the value of their improvements may be significantly understated (table 11).

Table C. **Percent of Households Making Improvements by Type of Workers**

Households	All or some jobs done by household	No jobs done by household
Married-couple family with no nonrelatives..	52	48
Other two-or-more person households		
Male householder.....	60	40
Female householder	35	65
One-person households		
Male householder.....	53	47
Female householder	18	82

Households with Children

Only 14 percent of owner households with children put on an addition. However, among those who had done work, owners with children were 70 percent more likely to increase the size of their home than those without children. Households with children were also inclined to be do-it-yourself households. All household types with children were more apt to do their own work on their home than

those households without children. Even a household made up of only one adult with one-or-more children did their own work on some jobs 44 percent of the time (tables 5 and 8).

Household Size

Generally smaller households were less likely to fix-up their homes than larger ones (see figure 4). One-person households were the least likely to make improvements.

Living in a unit with more than one-person-per-room was not a common problem for homeowners; only 2 percent lived in such units. The rate of improvement activity for homes with more than one-person-per-room was not significantly different from that for the less crowded homes. However, more crowded households did show a different mix of jobs done. A larger proportion of owner households with more than one-person-per-room (16 percent compared with 10 percent) put on an addition (either as the only job or in combination with other work) than households with one-or-fewer persons per room (tables 2 and 5).

In general, units with additions were more likely to contain large households than those units where improvements were done but no rooms were added. Twenty percent of households with additions had five or more members compared with 12 percent of these whose work did not include additions. At the other end of the scale, the jobs with the highest proportion of one-person households were "upgrades and repairs only" at 17 percent (table 5).

Well over half (71 percent) of the one-person owner households with home improvements had outsiders do the work. Since these homeowners often were elderly (53 percent), this figure was not unexpected. Larger households relied on their own labor for these jobs more often than smaller ones did (see figure 5). (The differences were no longer significant once a household size of four-or-more persons was reached.) (Table 8).

Owners with the lowest persons-per-room ratio (less than .5 person-per-room) had the highest median expenditures. However this did not mean that a small number of household members corresponded to high outlays for improvements, or the reverse. The smallest median cost was for one-person households; among larger households, no significant difference in costs occurred. The relatively low cost of improvements for one-person households linked to this group's tendency to use outside labor for their jobs may indicate that their home improvement jobs were less valuable and perhaps less extensive than for other households (tables 8 and 11).

Figure 4.
Households Making Home Improvements by Size of Household: 1986-1987

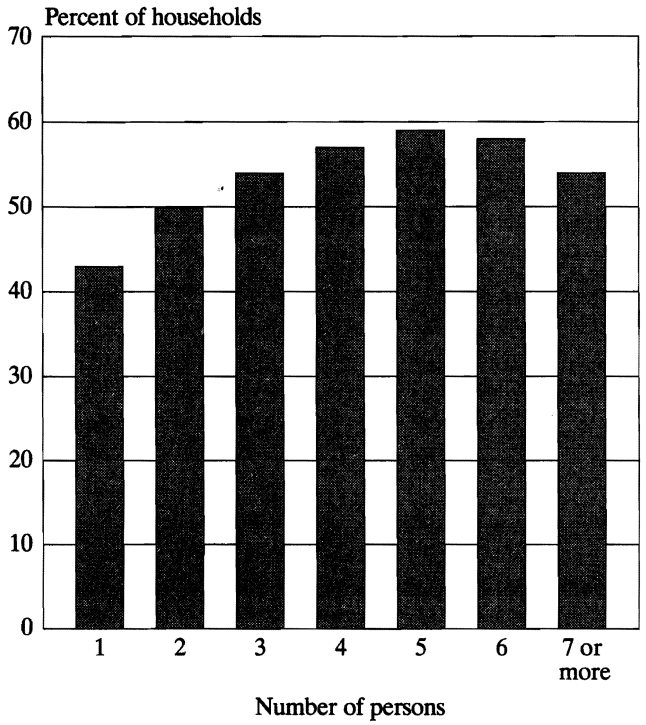
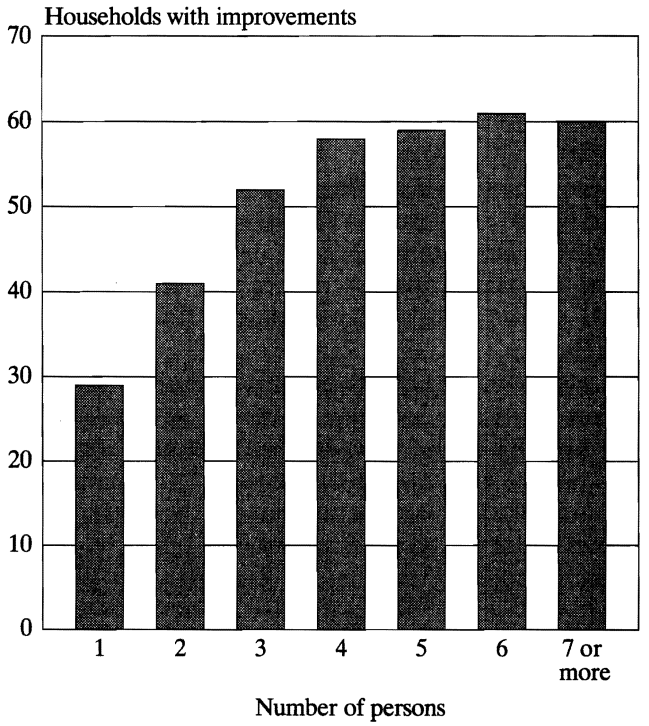


Figure 5.
Percent of Do-It-Yourself Improvements by Size of Household: 1986-1987



Race and Hispanic Origin of Householder

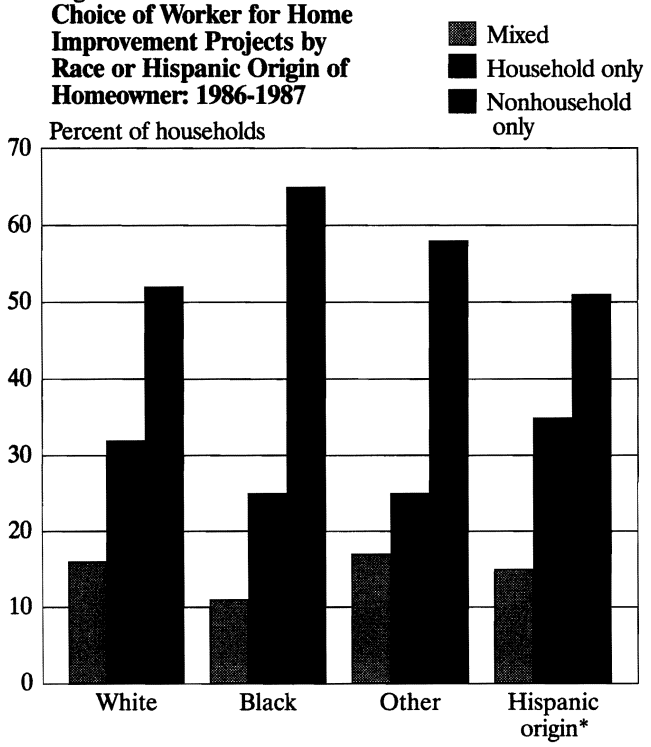
There was little variation in home improvement activity by the race and ethnicity of the householder. A slightly

higher proportion of Whites (52 percent) made such changes to their homes, but Black owners and Other Races owners—the latter group including Asians, Pacific Islanders, and American Indians—had (at about 50 percent each) similar rates of work completed. About half of Hispanic owners (who include persons of any race) had work done to their homes (table 2).

The race and Hispanic origin of the householder also did not appear to have a large impact on the types of work done. In each job category except additions only, White households accounted for about 91 percent of the jobs—the same rate as their proportion of owners having any work done. White householders accounted for 94 percent of the room additions. Black and Other Races owners, as well as Hispanic owners, did not vary their proportion of the total greatly regardless of the type of work involved, although significant differences did occur between some jobs for both Blacks and Hispanics (table 5).

Variations did occur in who performed the work on improvements. About two-thirds of Black owners making home improvements had the work chiefly done by someone outside the home (see figure 6). This contrasted with White owners who called in nonhousehold members slightly over one-half the time. White households were more likely to be do-it-yourselfers on all their jobs than Black households or Other Races households. Slightly less than 1 in 3 White owner households reported that the household did the bulk of the work for all jobs; while 1 in 4 of both Black and Other Races owner households reported doing their own work on all jobs. Hispanic households (95 percent of whom were White) were similar to White households—51 percent reported all the work done chiefly by others and 35 percent did all the work themselves (table 8).

Figure 6.
Choice of Worker for Home Improvement Projects by Race or Hispanic Origin of Homeowner: 1986-1987



*Hispanic-origin householders may be of any race.

White owners spent more than Black homeowners on home improvements. At $1,661, Whites had higher median improvement costs than Blacks, but the data for Hispanic and Other Races householders were not significantly different. Perhaps lower household incomes for Blacks help explain the difference in spending (see table D). (Table 11).

Table D. **Median Household Income of Owner-Occupied Units: 1987**

Race or Hispanic origin of householder	Income
White	$31,300
Black	$22,100
Other Races	$40,900
Hispanic origin (may be of any race)	$28,800

Duration of Residence

Homeowners continued to make improvements over the length of their occupancy of a unit (see figure 7). The recently moved (with less than 2 years of residence) and those with considerable tenure (28 or more years) in their home showed less improvement activity. New owners may have had less need for improvements if the home was in good condition when they moved in. New owners also may not have lived in their homes a full 2 years at the time of the AHS interview, hence less time was available in which to make improvements (table 2).

Homeowners who moved to their unit in 1985 or later accounted for only 21 percent of all homeowners making improvements. However, these recently moved owners completed 33 percent of the jobs which were additions only (tables 2 and 5).

The drop-off in improvements among householders who stayed in the same unit for 28 or more years may have been related to the likelihood that such owners were older (table 2).

Structure Type

One-unit detached structures were the chief recipients of home improvements. Eighty-three percent of owner-occupied units were single-family detached homes; the vast majority of home improvements (86 percent) also

Figure 7.
Homeowners With Work on TheirHomes by Length of Residence: 1986-1987

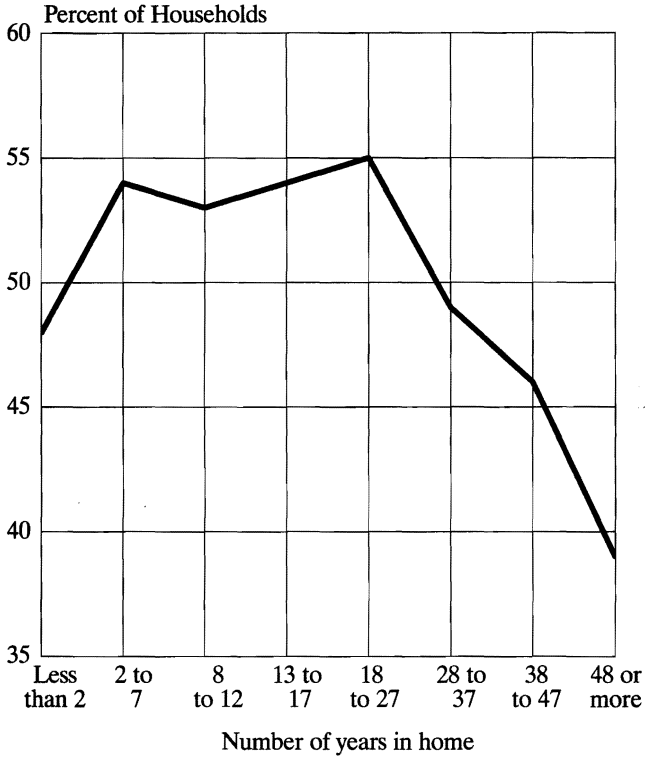
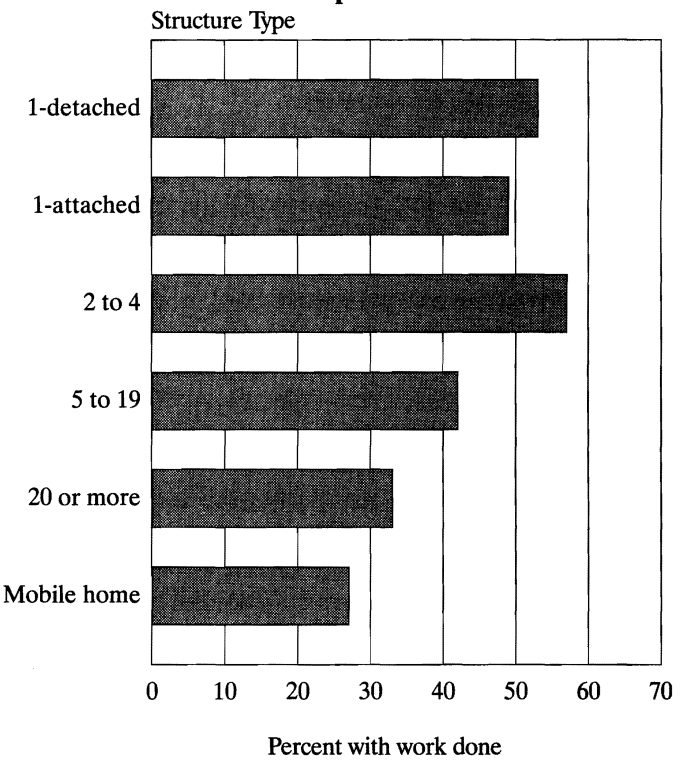


Figure 8.
Percent of Owner-Occupied Units With Recent Home Improvements: 1986-1987

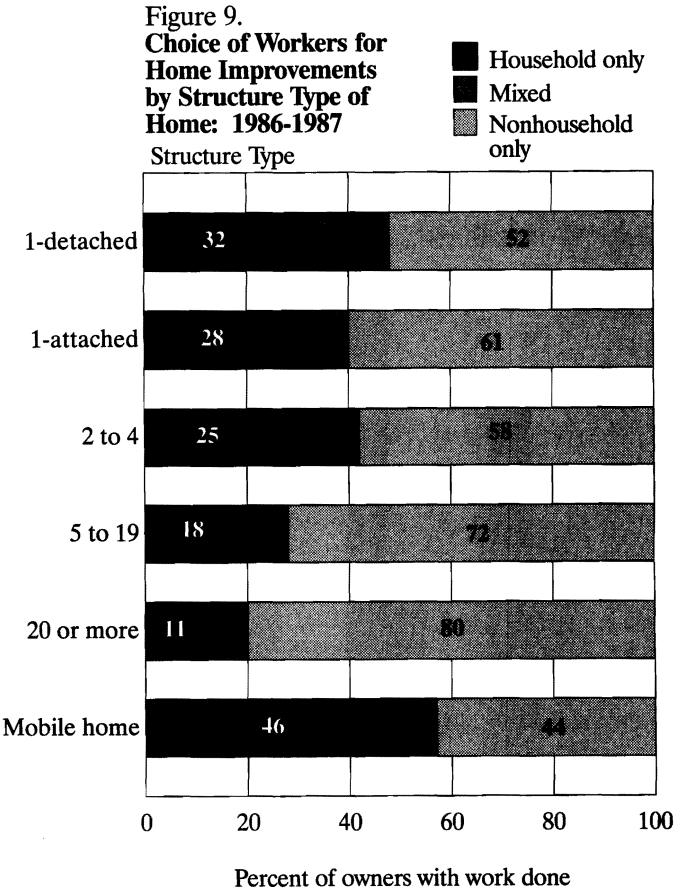


occurred in this type of structure. These single-unit structures and homes in small multi-unit structures (with fewer than five units) were more likely to have been worked on than either units in larger multi-unit buildings or mobile homes (see figure 8). Some improvements made in multi-unit buildings may have been undertaken by the management or a condominium association rather than an apartment owner. Such jobs would not be counted in AHS. This fact may distort the figures for the amount of work done in multi-unit structures (table 1).

Among mobile home owners, the relatively low rate of improvements was paralleled by low expenditures for the work that was done. Four in 10 jobs cost less than $500, compared with slightly less than 2 in 10 in one-unit detached homes. However, mobile home homeowners stretched their home improvements budgets by more frequently using household members to complete the work (see figure 9) (Tables 1, 7, and 10).

Mobile home homeowners did lead in one activity. Among single-family homes, mobile homes had the highest proportion of jobs involving room additions—17 percent compared with about 10 percent each for one-detached and one-attached units (table 4).

Figure 9.
Choice of Workers for Home Improvements by Structure Type of Home: 1986-1987



Unit Size

Owners in larger homes were generally more likely to make home improvements than those in small units: 60 percent in eight-or-more-room units versus 42 percent in

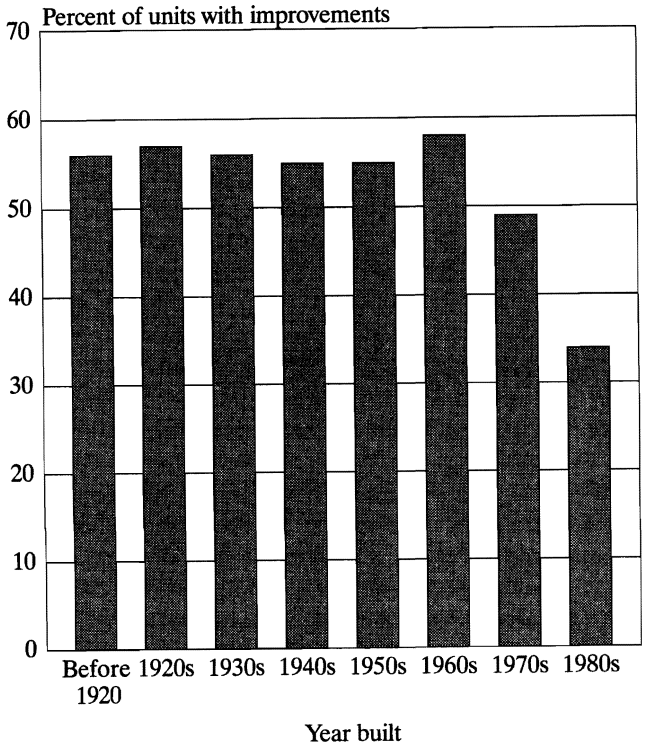
three-or-fewer-room units. One reason for the disparity was that such small units tended to be in multi-unit structures where fewer jobs were likely to be undertaken. However, even if only single-family detached homes (including mobile homes) were considered, owners in those units under 2000 square feet in size did less work than owners in homes with 2000 square feet or more (50 percent versus 56 percent, respectively). (Table 1).

Despite the space added to their homes, owners who confined their home improvements to room additions still occupied comparatively small units. The median area of single-family detached homes and mobile homes whose owners put on additions was not significantly different from the median for the same types of homes that had no work done (about 1650 square feet for each). The owners who only remodeled a kitchen or bath also lived in units with a median size not significantly different from that of homes with no changes. The median size for all single-family detached homes and mobile homes with improvements was 1793 square feet (table 4).

Year Built

Work was done more often on older housing. The median age of units with recent home improvements was 27 years compared with a median of 22 years for those units without work reported. However, if a structure was completed before 1970, it made little difference whether the year built was 1965 or 1925—the rates of improvements were not drastically different (see figure 10). (Table 1).

Figure 10.
Percent of Owner-Occupied Homes With Recent Improvements by Year Home Built: 1986-1987



Only among the newer homes did an appreciable decline in improvements occur. Since newer homes were more likely to be built to modern specifications and tastes, and were less likely to have had time to wear out or be damaged, the lower rate of home improvements for this group was not surprising. The steady rate of improvements in the face of the increasing age of structures is less easy to understand.

Householders making "additions only" were working on much newer housing than householders who were doing other kinds of jobs to their homes. This probably reflects the relatively large number of mobile homes in this category. The median structure age for those making only additions was 13 years; for those doing only remodeling or only upgrades, the median was about 27 years for each. One indication that some older units may have needed more work done to them was the fact that owners undertaking more than one type of improvement lived in homes with a median age of 29 years (table 4).

Homeowners in structures built since 1985 often made their own improvements (46 percent did all their own jobs). One reason for this high rate of do-it-yourself work was the nature of the work done. For these newer units, 7 in 10 jobs were upgrades or repairs only (jobs generally requiring less skill than additions or remodelling). As noted previously, multiple types of jobs were more likely to occur in older homes; another factor which may have reduced the do-it-yourself rate in older homes was that older people tended to own them. Thirty-seven percent of all owner-occupied units built before 1940 had a householder 65 years or older while just 25 percent of all owners were elderly (table 7).

Owners spent larger amounts on fixing-up older homes than newer ones. Generally owners in homes built since 1970 paid less for home improvements than owners in older homes. However increasing structure age did not produce steadily increasing expenditures. The medians for owners in units built in the 1940's and 1930's were lower than for owners in homes built in the 1950's (see figure 11). (table 10).

Home Value

Home improvement activities tended to increase home values. Homes with recent improvements had a higher median value in 1987—$69,900—compared to $65,800 for those with no work done. However, as shown in table E, units with home improvements between 1985 and 1987 already had somewhat higher values in 1985 than those in which no improvements were made between 1985 and 1987. But while both groups saw increases in median value between 1985 and 1987, homeowners making improvements had a greater change. Some of the increase may have been the result of the work that was done (table 3).

Homes occupied by do-it-yourself owners had a lower median value than those in which the home improvements were completed only by nonhousehold members ($64,600

Figure 11.
Median Amount Spent on Recent Improvements by Year Home Built: 1986-1987

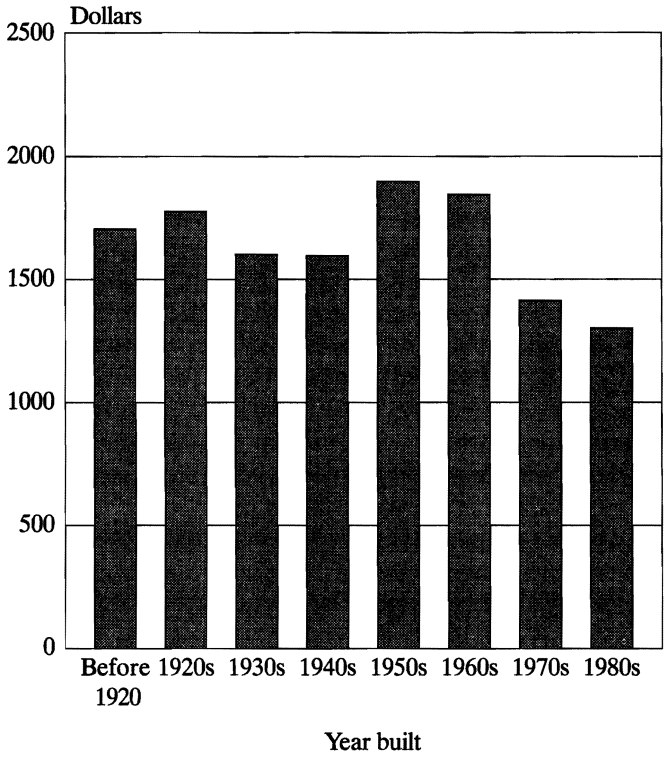
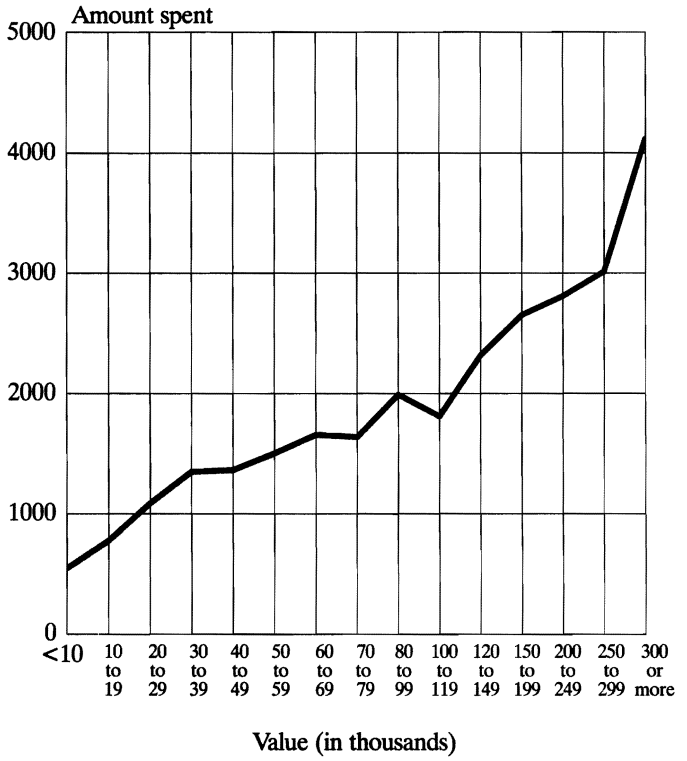


Figure 12.
Median Amount Spent on Recent Improvements by Home Value: 1986-1987



compared with $73,400). Homeowners in units with values of $200,000 or more contracted out their work three times as often as they did it themselves. Even homeowners who reported no work to their home in the last 2 years had homes with a median value not significantly different from those who did all their own work ($65,800 compared with $64,600). (Tables 3 and 9.)

Higher value homes had more expensive work done. Figure 12 shows the relationship between home values and expenses for home improvements. Householders spent at least $5,000 on home improvements in 29 percent of homes worth $100,000 or more, but paid out that much in just 6 percent of homes worth less than $40,000 (tables 9 and 12).

Table E. **Median Value of Owner-Occupied Units**

(Current dollars)

Value	With no improvements between 1985 and 1987	With improvements made between 1985 and 1987
1985 value	64,659	66,846
1987 value	68,115	72,564
Difference	3,456	5,718
Percent increase	5%	9%
Number of units reporting	20,575,000	23,214,000

Housing Condition

Homeowners had about the same rate of moderate and severe physical housing problems whether or not they had any of the home improvement jobs done to their units. About 5 percent of each group reported moderate or severe housing problems. However, there is evidence that some of the homeowners with moderate or severe housing problems made improvements to correct housing problems (see table F). Fifty-nine percent of the units that no longer had serious physical problems in 1987 after reporting one or more in 1985 underwent home improvements between the 2 years. However, any attempt to link improvements with housing quality is hampered by the fact that several of the jobs included as improvements (roof work, siding, storm doors or windows, and insulation) could not by themselves produce a change in the housing quality status of the homes. It is quite probable in any case that among homeowners in general, most home improvements were not undertaken to ameliorate serious housing deficiencies (table 1).

Table F. **Owner-Occupied Units Where Same Structure Was Interviewed in 1985**

(Numbers are in thousands)

Owner-occupied units	Improvements made between 1985 and 1987	No improvements reported
No housing problems, either year	24,250	21,001
Housing problems, both years	491	569
Housing problems in 1985 only	1,210	831
Housing problems in 1987 only	624	530

Owners in homes with moderate or severe housing problems in 1987 were more apt to do their own work than other households. Thirty-eight percent of homes with problems compared with 31 percent of those with no problems had all jobs done chiefly by household members. Since owners of units with problems had a lower median household income ($16,600 compared with $31,500) than other homeowners, cutting labor costs would help households with problems provide more improvements for their homes (table 7).

Owners in homes with physical problems in 1987 spent less for improvements than other owners. Homes without severe or moderate physical problems had a median expenditure for home improvements of $1,675, those with problems spent $947. Although overall spending was low, 1 in 10 owners with housing problems spent $5,000 or more over the 2-year period to fix-up their homes (table 10).

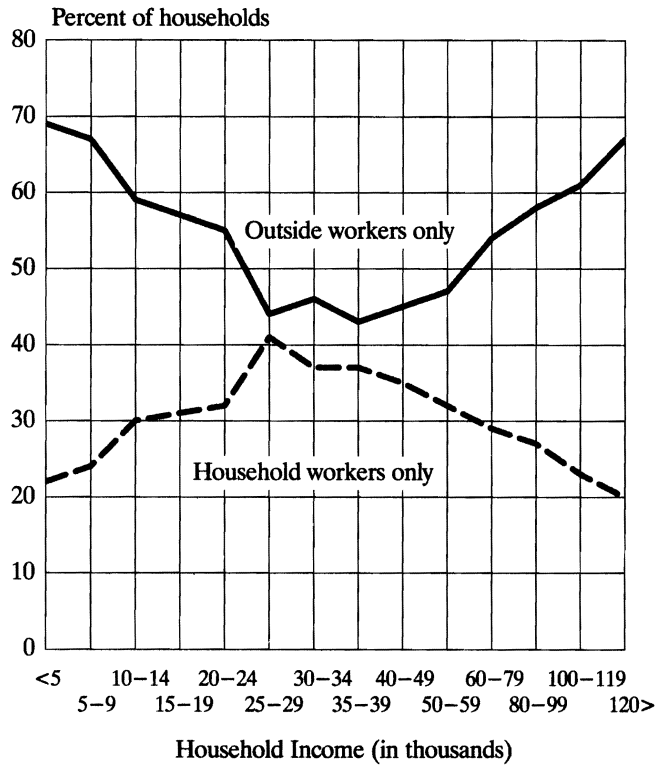
Household Income

Homeowners who made improvements had higher incomes. The median income for homeowners making improvements was 27 percent higher than for those who did not ($33,900 compared with $26,800). In lower-income households (those under $20,000) only 43 percent had work done recently; at the other end of the scale, 59 percent of households with an income of $80,000 or more had made improvements to their homes within the last 2 years. Even among households who completed the least costly type of work— upgrades and/or repairs only—the median household income was higher than in households where nothing was attempted (tables 3 and 10).

Among those with work done, higher income households spent more for home improvements. Owner households with an income of $80,000 or more made 17 percent of the home improvements costing $5,000 or more, but this income group accounted for only 9 percent of households reporting improvement costs. One in three improvements costing under $1,000 was done by the 1 in 4 households with an income under $20,000 (table 12).

While income seems to be a contributing factor in whether work was done and how much was spent, the relationship between income and do-it-yourself work was not as simple. As might be expected, higher-income households were less likely than middle-income householders to make their own improvements—however, lower-income households were also not do-it-yourselfers (see figure 13). This latter group would have benefitted more than any other by doing their own jobs thus lowering costs. The concentration of elderly (61 percent were over 65 years old) among households with incomes under $10,000 helped reduce the rate of their do-it-yourself work (table 9).

Figure 13.
Choice of Workers for Home Improvements by Household Income: 1986-1987



Among homeowners in the same income range, the age of the householder seldom made a significant difference in the amount spent on home improvements (see figure 14). The most common situation was for no significant differences in spending to occur within an income group. Most differences that did exist were a matter of younger households spending less than older households with similar incomes. However, there were a few exceptions, most notably among households with an income of $100,000 or more. The 30 to 34 year age group spent more than any other age category at this income level (householders under 30 years or over 75 years with incomes of $100,000 or more were not included in this comparison since so few existed).

Figure 14.
Median Spent for Improvements by Income and Homeowner Age: 1986–1987

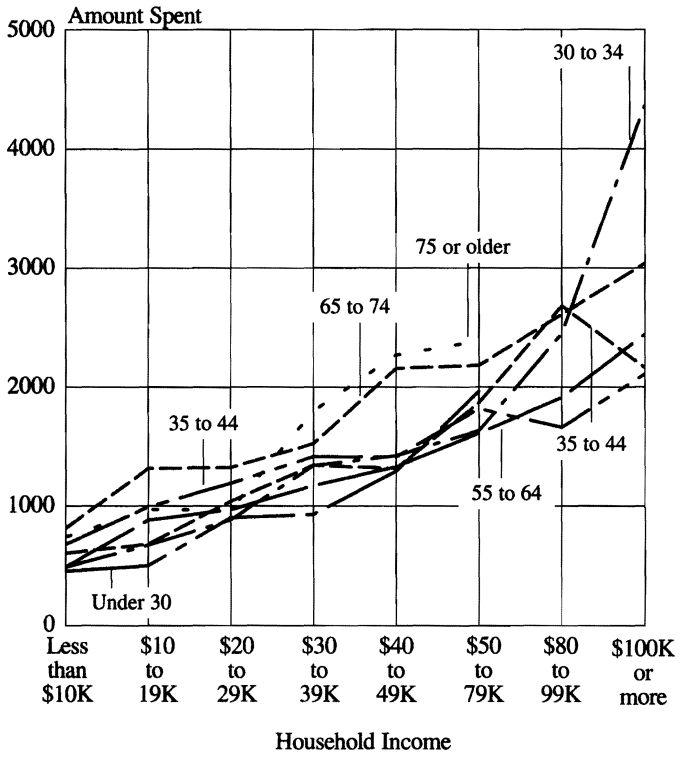
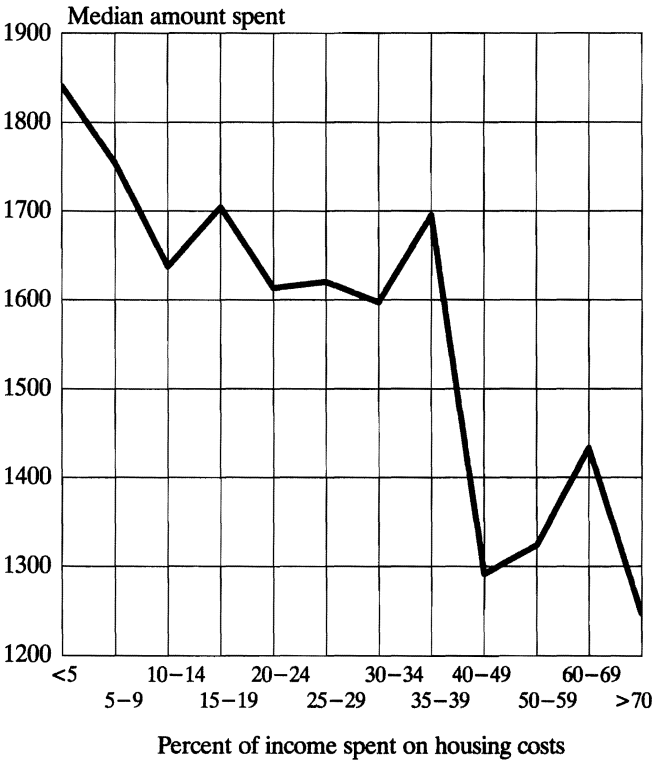


Figure 15.
Cost of Home Improvements by Housing Cost as a Percent of Income: 1986-1987



Housing Costs and Burden

Homeowners who made improvements generally had lower housing burdens than other homeowners. Although their median monthly housing costs were higher ($409 compared with $341), owners who had work done to their homes also had higher median incomes than other owners. As a consequence the median monthly housing cost as a percent of income was lower for those who had work done—17 percent compared with 19 percent for the rest. The difference in housing cost between those with and without improvements need not be related to the improvements themselves. The cost of such jobs were not included as housing costs. Only if the household took out a mortgage or home improvement loan to pay for the work did the cost of improvements appear indirectly in housing costs (table 3).

Figure 15 shows the relationship between owners' housing burden and their expenses for home improvements. Even among households paying half or more of income on regular monthly housing costs, 16 percent reported work costing $5,000 or more. This rate was not greatly different from that for owners with burdens under 10 percent—19 percent spent $5,000 or more on improvements.

User Comments

We are interested in your reaction to the usefulness and content of this report. We welcome any recommendations or comments you might have. Please send them to:

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Economic Statistics Division
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Table 1. **Physical Characteristics of Owner-Occupied Units: 1987**

(Numbers in thousands)

Characteristics	Total Owner-Occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	North-east	Midwest	South	West	Total	North-east	Midwest	South	West	
Total	58,164	27,894	5,259	6,693	10,495	5,447	29,704	6,312	8,174	10,028	5,190	566
Units in Structure												
1, detached	48,161	22,406	3,944	5,711	8,382	4,369	25,445	4,928	7,365	8,646	4,507	310
1, attached	2,456	1,236	469	195	359	213	1,185	503	136	386	159	35
2 to 4	1,872	769	376	162	120	111	1,010	542	259	123	86	93
5 to 9	325	172	36	35	41	61	130	42	17	41	30	22
10 to 19	279	150	19	46	53	32	104	19	16	47	22	25
20 to 49	256	164	33	25	70	36	78	22	14	32	11	15
50 or more	544	342	142	53	87	61	167	83	19	42	23	35
Mobile home or trailer	4,270	2,655	240	466	1,384	565	1,585	174	348	710	353	31
Year Structure Built[1]												
1985 to 1987	2,956	2,103	352	325	1,014	412	826	112	148	355	211	26
1980 to 1984	4,655	2,889	271	482	1,511	624	1,733	232	321	806	373	34
1975 to 1979	7,326	3,889	454	844	1,609	982	3,365	384	859	1,389	733	71
1970 to 1974	6,451	3,070	466	664	1,266	675	3,323	474	698	1,450	701	58
1960 to 1969	10,110	4,244	674	1,011	1,709	850	5,757	1,053	1,413	2,204	1,086	109
1950 to 1959	9,559	4,231	884	1,157	1,355	835	5,242	1,168	1,526	1,638	910	85
1940 to 1949	4,997	2,248	460	519	814	456	2,704	523	757	926	497	44
1930 to 1939	3,463	1,498	367	350	530	250	1,924	548	629	497	250	42
1920 to 1929	3,027	1,294	400	437	281	175	1,701	624	577	303	196	32
1919 or earlier	5,620	2,427	930	903	406	187	3,129	1,193	1,244	460	232	64
Median	1962	1965	1955	1960	1971	1970	1960	1952	1956	1965	1965	1961
Rooms												
1 room	29	16	9	-	1	5	11	-	2	4	5	2
2 rooms	73	48	23	4	9	13	21	9	1	6	5	4
3 rooms	963	526	110	93	171	152	390	93	99	131	67	46
4 rooms	6,800	3,928	588	951	1,658	730	2,748	512	756	1,028	451	125
5 rooms	14,264	7,495	1,163	1,902	3,032	1,397	6,622	1,150	1,829	2,469	1,174	147
6 rooms	15,016	7,104	1,431	1,653	2,702	1,318	7,803	1,667	2,206	2,655	1,275	110
7 rooms	10,402	4,563	966	1,080	1,597	919	5,779	1,372	1,535	1,871	1,001	60
8 rooms	6,106	2,515	608	578	799	529	3,556	892	1,000	1,061	603	35
9 rooms	2,704	1,074	221	281	339	233	1,614	350	433	480	351	16
10 rooms or more	1,806	626	141	151	185	150	1,160	266	312	324	258	20
Median	6.0	5.8	6.0	5.7	5.6	5.8	6.1	6.3	6.1	6.0	6.2	5.2
Bedrooms												
None	63	33	16	2	5	9	26	5	5	9	7	4
1	1,801	944	219	227	247	251	783	257	176	217	133	75
2	14,979	7,888	1,333	1,987	3,054	1,514	6,883	1,320	1,931	2,480	1,152	208
3	29,770	14,219	2,604	3,339	5,704	2,572	15,333	3,113	4,180	5,475	2,565	217
4 or more	11,551	4,810	1,087	1,137	1,484	1,102	6,679	1,617	1,882	1,847	1,333	62
Median	2.9	2.9	2.9	2.8	2.8	2.9	3.0	3.0	3.0	2.9	3.0	2.5
Complete Bathrooms												
None	213	124	15	20	79	9	88	7	27	46	8	1
1	22,398	10,995	2,415	3,025	3,943	1,611	11,102	2,684	3,532	3,492	1,394	302
1 and one-half	12,330	5,731	1,372	1,832	1,560	967	6,514	1,748	2,237	1,637	892	85
2 or more	23,222	11,045	1,457	1,816	4,912	2,860	12,000	1,872	2,379	4,852	2,897	178

Table 1. **Physical Characteristics of Owner-Occupied Units: 1987**—Continued

(Numbers in thousands)

Characteristics	Total Owner-Occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	Northeast	Midwest	South	West	Total	Northeast	Midwest	South	West	
Footage of Unit												
Single detached and mobile homes	52,420	25,052	4,182	6,178	9,766	4,926	27,028	5,100	7,713	9,356	4,859	341
Less than 500	386	205	28	34	89	54	177	25	25	83	45	3
500 to 749	1,874	1,073	123	217	548	185	794	72	240	373	109	7
750 to 999	4,579	2,454	239	573	1,193	450	2,092	302	595	867	328	32
1,000 to 1,499	12,728	6,380	622	1,342	2,990	1,425	6,242	696	1,502	2,688	1,355	106
1,500 to 1,999	11,305	5,281	770	1,184	2,054	1,272	5,963	973	1,556	2,130	1,304	61
2,000 to 2,499	8,080	3,524	768	1,000	1,090	667	4,518	991	1,497	1,261	768	37
2,500 to 2,999	4,364	1,950	537	608	543	263	2,388	601	787	609	391	25
3,000 to 3,999	3,854	1,645	421	529	451	244	2,193	608	747	560	278	16
4,000 or more	2,143	908	235	259	267	147	1,224	389	353	364	117	11
Not reported	3,108	1,631	439	432	541	219	1,436	442	410	420	164	41
Median	1,725	1,651	2,058	1,799	1,465	1,594	1,793	2,132	1,914	1,607	1,696	1,516
Selected Physical Problems												
Severe physical problems [2]	364	175	26	28	114	7	183	38	45	80	20	6
Plumbing	174	108	15	16	72	5	64	6	11	40	8	1
Heating	96	21	3	3	12	2	73	27	19	17	10	2
Electric	38	24	9	7	9	-	14	3	8	1	2	-
Upkeep	89	42	5	5	32	-	44	7	9	24	3	2
Hallways	-	-	-	-	-	-	-	-	-	-	-	-
Moderate physical problems [2]	2,353	1,177	92	121	864	100	1,154	126	180	723	125	23
Plumbing	96	37	10	4	19	5	57	10	13	23	11	2
Heating	1,271	689	8	15	649	17	581	12	13	535	21	1
Upkeep	797	308	49	66	155	38	476	89	129	183	75	12
Hallways	-	-	-	-	-	-	-	-	-	-	-	-
Kitchen	331	192	25	38	89	40	132	23	27	57	25	8

- Represents or rounds to zero.
[1]For mobile home, oldest category is 1939 or earlier.
[2] Figures may not add to total because more than one category may apply to a unit.

Table 2. **Household Characteristics of Owner-Occupied Units: 1987**

(Numbers in thousands)

Characteristics	Total owner-occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	North-east	Midwest	South	West	Total	North-east	Midwest	South	West	
Total	58,164	27,894	5,259	6,693	10,495	5,447	29,704	6,312	8,174	10,028	5,190	566
Race and Hispanic Origin												
White	52,660	25,105	4,891	6,287	9,040	4,887	27,089	5,913	7,686	8,701	4,789	467
Not Hispanic	50,524	24,068	4,821	6,230	8,608	4,410	26,028	5,810	7,608	8,268	4,344	428
Hispanic	2,136	1,037	70	57	432	477	1,060	103	78	433	446	39
Black	4,458	2,247	282	363	1,386	216	2,128	315	440	1,249	124	83
Other	1,046	542	86	43	69	344	487	84	48	78	277	16
Total Hispanic	2,260	1,097	83	57	456	502	1,123	121	90	447	466	39
Persons												
1 person	10,302	5,773	1,030	1,425	2,225	1,093	4,387	874	1,275	1,548	690	142
2 persons	19,938	9,932	1,799	2,372	3,772	1991	9,824	1,869	2,636	3,490	1,828	182
3 persons	10,891	4,995	987	1,180	1,915	914	5,812	1,284	1,519	2,032	976	83
4 persons	10,264	4,379	923	1,023	1,647	787	5,792	1,383	1,620	1,834	955	92
5 persons	4,470	1,828	350	491	613	373	2,603	623	771	746	463	39
6 persons	1,404	577	98	125	177	177	811	181	254	235	141	16
7 persons or more	895	408	72	77	147	112	475	97	98	143	137	11
Median	2.4	2.3	2.4	2.3	2.3	2.3	2.6	2.8	2.6	2.5	2.6	2.3
Persons Per Room												
0.50 or less	40,252	19,839	3,763	4,788	7,427	3,861	20,043	4,149	5,461	6,881	3,550	370
0.51 to 1.00	16,989	7,603	1,443	1,822	2,875	1,463	9,211	2,099	2,621	2,967	1,524	175
1.01 to 1.50	794	388	44	73	161	111	392	54	86	156	96	14
1.51 or more	128	63	10	10	32	11	58	9	6	24	20	7
Age of Householder												
Under 25 years	901	465	52	108	245	60	408	64	126	143	75	28
25 to 29 years	3,499	1,672	246	368	764	294	1,768	352	598	576	241	59
30 to 34 years	5,585	2,374	425	532	946	472	3,152	633	976	968	575	59
35 to 44 years	12,851	5,652	974	1,342	2,103	1,234	7,069	1,543	1,941	2,251	1,334	130
45 to 54 years	10,172	4,552	873	1,087	1,641	951	5,548	1,191	1,456	1,894	1,007	73
55 to 64 years	10,365	4,998	1,048	1,187	1,813	949	5,280	1,252	1,347	1,755	926	86
65 to 74 years	9,246	4,894	1,003	1,217	1,753	921	4,277	875	1,145	1,553	705	75
75 years and over	5,544	3,288	640	851	1,230	566	2,201	401	585	887	328	55
Median	51	53	56	54	52	52	49	50	48	51	49	46
Household Composition												
2-or-more person households	47,862	22,120	4,229	5,267	8,270	4,354	25,316	5,438	6,899	8,479	4,500	424
Married-couple families, no nonrelatives	39,651	18,094	3,423	4,388	6,745	3,538	21,261	4,522	5,965	7,009	3,764	296
Other male householder	2,782	1,404	277	278	524	325	1,339	276	299	455	309	38
Other female householder	5,429	2,623	529	601	1,001	491	2,716	640	635	1,015	427	90
1-person households	10,302	5,772	1,030	1,425	2,224	1,093	4,387	873	1,275	1,548	689	142
Male householder	3,264	1,863	324	468	704	366	1,344	270	415	412	246	57
Female householder	7,038	3,910	706	957	1,520	727	3,043	603	860	1,136	443	85
Adults and Single Children Under 18 Years Old												
Total households with children	22,131	9,681	1,701	2,344	3,688	1,948	12,231	2,623	3,464	4,024	2,119	218
Married couples	18,526	7,924	1,412	1,956	2,979	1,578	10,448	2,269	3,032	3,296	1,851	154
Other households with two or more adults	1989	917	172	196	366	183	1,041	234	196	433	178	30
Households with one adult or none	1,615	839	117	192	343	187	742	120	236	295	90	34
Total households with no children	36,034	18,287	3,558	4,423	6,807	3,499	17,472	3,688	4,709	6,003	3,071	347
Married couples	21,132	10,174	2,011	2,432	3,766	1,965	10,816	2,256	2,933	3,713	1,913	142
Other households with two or more adults	4,597	2,264	517	492	815	441	2,269	558	501	742	468	63
Households with one adult	10,304	5,774	1,030	1,425	2,226	1,093	4,387	874	1,275	1,548	690	142

Table 2. **Household Characteristics of Owner-Occupied Units: 1987**—Continued

(Numbers in thousands)

Characteristics	Total owner-occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	North-east	Midwest	South	West	Total	North-east	Midwest	South	West	
Year householder moved into unit												
1985 to 1987	13,172	6,718	1,049	1,411	2,734	1,524	6,240	1,180	1,650	2,092	1,319	213
1980 to 1984	10,973	5,004	770	1,112	2,069	1,054	5,866	1,163	1,644	2,006	1,053	103
1975 to 1979	9,939	4,644	779	1,153	1,695	1,017	5,246	993	1,512	1,743	997	50
1970 to 1974	6,695	3,063	603	769	1,120	571	3,564	727	936	1,314	586	68
1960 to 1969	8,714	3,903	808	1,023	1,417	655	4,743	1,134	1,288	1,616	706	68
1950 to 1959	5,352	2,687	694	721	848	423	2,620	675	733	830	383	45
1940 to 1949	2,130	1,149	333	314	370	132	970	283	274	297	116	11
1939 or earlier	1,188	726	223	189	242	71	455	157	137	130	31	8
Median	1978	1978	1975	1976	1979	1979	1977	1976	1977	1977	1979	1982
First-Time Owners												
First home ever owned	26,071	12,354	2,936	2,853	4,623	1,941	13,702	3,650	3,824	4,427	1,801	18
Not the first home	31,100	15,255	2,246	3,778	5,777	3,454	15,835	2,628	4,300	5,550	3,358	10
Not reported	992	285	77	62	94	52	167	33	50	51	32	540
Overall Opinion of Structure												
1 (worst)	177	97	14	16	58	8	74	15	11	38	11	5
2	122	69	14	13	25	17	47	6	16	19	6	6
3	220	113	8	27	60	18	95	11	29	33	21	12
4	325	127	22	20	60	25	196	27	53	68	48	2
5	2,913	1,499	197	366	664	272	1,387	217	393	555	223	27
6	2,050	993	179	271	353	190	1,033	189	315	351	177	24
7	5,388	2,556	436	609	968	543	2,777	537	830	911	498	55
8	13,332	5,871	1,100	1,414	2,131	1,225	7,348	1,564	2,119	2,326	1,338	113
9	8,682	3,980	773	964	1,356	887	4,614	1,049	1,265	1,436	865	88
10 (best)	24,470	12,299	2,486	2,914	4,669	2,229	11,975	2,670	3,095	4,230	1,981	196
Not reported	486	291	30	77	152	32	158	26	48	60	24	37
Overall Opinion of Neighborhood												
1 (worst)	570	269	31	72	111	55	284	31	96	111	46	17
2	342	171	43	20	66	42	158	32	49	58	19	13
3	465	176	21	40	74	41	280	42	80	84	73	10
4	694	285	34	89	109	54	396	53	117	136	89	13
5	3,922	1,866	318	464	704	380	2,019	357	544	752	365	37
6	2,543	1,190	208	279	380	323	1,334	243	399	434	258	19
7	5,461	2,383	426	599	841	518	3,021	641	871	951	559	56
8	12,175	5,571	1,018	1,320	1,976	1,257	6,508	1,398	1,826	2,054	1,230	96
9	8,344	3,788	745	945	1,271	828	4,492	999	1,289	1,367	838	65
10 (best)	22,565	11,569	2,358	2,733	4,629	1,848	10,805	2,431	2,791	3,948	1,635	192
No neighborhood	505	302	28	58	171	45	194	36	59	59	40	9
Not reported	577	324	30	75	161	57	213	49	54	73	38	40

Table 3. **Financial Characteristics of Owner-Occupied Units: 1987**

(Numbers in thousands)

Characteristics	Total owner-occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	North-east	Midwest	South	West	Total	North-east	Midwest	South	West	
Total	58,164	27,894	5,259	6,693	10,495	5,447	29,704	6,312	8,174	10,028	5,190	566
Household Income												
Less than $5,000	2,467	1,459	160	302	804	194	954	122	207	519	106	55
$5,000 to $9,999	5,105	2,987	490	730	1,293	475	2,059	362	577	857	264	58
$10,000 to $14,999	5,045	2,825	559	690	1,105	472	2,165	401	667	790	307	55
$15,000 to $19,999	5,095	2,622	488	678	1,011	445	2,431	434	717	926	354	42
$20,000 to $24,999	6,284	3,311	554	911	1,283	562	2,907	590	811	1,028	478	66
$25,000 to $29,999	4,446	2,109	353	499	853	403	2,283	433	707	815	328	54
$30,000 to $34,999	4,774	2,102	384	543	728	447	2,627	528	781	879	439	46
$35,000 to $39,999	4,119	1,780	334	404	671	371	2,319	471	710	763	374	20
$40,000 to $49,999	6,671	2,886	516	776	960	635	3,731	824	1,096	1,138	674	54
$50,000 to $59,999	4,401	1,846	382	421	605	438	2,515	644	641	714	516	40
$60,000 to $79,999	5,077	2,051	501	440	628	482	2,988	718	754	841	675	37
$80,000 to $99,999	2,018	895	266	141	250	237	1,110	342	207	289	272	12
$100,000 to $119,999	1,075	407	123	54	129	100	655	196	122	166	171	13
$120,000 or more	1,587	614	149	104	175	186	960	248	176	302	234	14
Median	30,670	26,758	30,332	25,356	24,032	31,930	33,907	38,036	32,567	30,449	39,265	25,648
Monthly Housing Cost												
Less than $100	1,829	1,108	67	127	715	199	663	44	103	402	114	57
$100 to $199	10,681	5,732	694	1,409	2,690	941	4,846	515	1,388	2,210	733	102
$200 to $249	5,217	2,610	507	737	907	460	2,570	499	782	940	349	37
$250 to $299	4,011	2,024	481	624	627	291	1,971	438	673	598	261	17
$300 to $349	3,361	1,568	337	425	562	243	1,780	405	535	578	261	14
$350 to $399	2,990	1,375	332	358	498	187	1,604	364	539	528	174	11
$400 to $449	2,667	1,239	290	317	419	214	1,419	303	457	443	216	8
$450 to $499	2,408	1,110	260	258	393	199	1,293	278	436	399	179	5
$500 to $599	4,413	1,864	340	554	644	327	2,545	571	805	806	364	4
$600 to $699	3,459	1,517	314	348	554	301	1,936	509	526	571	329	7
$700 to $799	2,793	1,245	255	266	451	273	1,548	355	372	483	337	-
$800 to $999	3,808	1,720	317	353	594	456	2,083	599	500	545	439	5
$1,000 to $1,249	2,566	1,167	251	176	345	395	1,389	350	241	380	418	10
$1,250 to $1,499	1,345	556	142	65	154	194	786	196	115	219	255	4
$1,500 or more	1,597	661	176	101	143	242	935	279	126	216	314	-
Mortgage payment not reported	5,019	2,397	497	576	799	526	2,337	608	575	709	445	285
Median (excludes mortgage payment not reported)	375	341	394	319	293	433	409	501	380	344	523	182
Monthly Housing Costs as Percent of Income												
Less than 5 percent	2,336	1,094	178	193	478	245	1,181	202	309	448	222	61
5 to 9 percent	9,099	4,121	717	970	1,647	786	4,905	849	1,393	1,855	808	73
10 to 14 percent	9,799	4,342	823	1,199	1,595	725	5,407	1,064	1,642	1,836	866	49
15 to 19 percent	8,605	4,017	729	1,033	1,512	744	4,572	1,028	1,369	1,461	714	16
20 to 24 percent	6,991	3,311	587	814	1,278	632	3,663	788	1,050	1,192	632	17
25 to 29 percent	4,786	2,396	465	508	933	491	2,377	569	551	782	476	13
30 to 34 percent	3,167	1,650	361	367	583	340	1,504	305	403	470	325	13
35 to 39 percent	2,065	1,125	212	247	403	262	936	221	242	304	170	5
40 to 49 percent	2,261	1,200	260	273	414	253	1,061	258	218	355	230	-
50 to 59 percent	1,119	621	120	144	238	118	487	132	98	157	101	11
60 to 69 percent	656	350	66	89	139	56	302	82	63	103	54	4
70 percent or more	1,983	1,113	230	235	400	248	864	186	238	308	132	6
Zero or negative income	328	187	19	53	88	27	123	22	27	53	21	17
Mortgage payment not reported	4,967	2,366	492	566	787	521	2,322	604	573	703	442	279
Median (excludes two previous lines)	18	19	19	18	19	20	17	19	17	17	18	15

Table 3. **Financial Characteristics of Owner-Occupied Units: 1987**—Continued

(Numbers in thousands)

Characteristics	Total owner-occupied	Without Home Improvements					With Home Improvements					All improvements not reported
		Total	North-east	Midwest	South	West	Total	North-east	Midwest	South	West	
Average Monthly Cost Paid for Real Estate Taxes												
Less than $25	14,744	7,885	428	1,299	5,094	1,063	6,716	336	1,349	4,184	847	144
$25 to $49	12,495	5,951	661	1,498	2,390	1,402	6,417	673	1,876	2,494	1,374	127
$50 to $74	9,112	4,349	722	1,206	1,279	1,142	4,659	802	1,487	1,320	1,051	105
$75 to $99	6,052	2,735	642	840	610	643	3,269	909	1,046	685	628	49
$100 to $149	8,077	3,576	1,190	1,014	658	714	4,435	1,581	1,366	722	766	66
$150 to $199	3,602	1,600	733	413	189	265	1,977	882	531	292	272	25
$200 or more	4,081	1,798	884	423	274	217	2,232	1,129	520	330	253	50
Median	55	51	107	61	27	56	59	114	64	33	59	53
Value												
Less than $10,000	2,453	1,413	124	354	760	175	1,017	105	296	485	130	23
$10,000 to $19,999	2,908	1,652	168	439	862	182	1,224	177	436	463	148	32
$20,000 to $29,999	3,374	1,808	278	572	753	205	1,544	239	565	615	124	22
$30,000 to $39,999	4,723	2,303	258	733	1,100	213	2,373	323	960	907	183	47
$40,000 to $49,999	5,781	2,768	339	869	1,235	326	2,949	319	1,089	1,291	249	64
$50,000 to $59,999	5,282	2,468	304	823	977	364	2,756	376	1,063	1,024	294	58
$60,000 to $69,999	5,740	2,667	376	805	1,078	408	3,038	449	972	1,136	481	35
$70,000 to $79,999	4,660	2,111	316	539	859	397	2,498	397	758	938	406	51
$80,000 to $99,999	6,620	3,085	601	635	1,085	765	3,483	631	900	1,235	717	52
$100,000 to $119,999	3,687	1,762	418	312	526	507	1,881	486	369	560	466	45
$120,000 to $149,999	4,052	1,914	483	269	493	669	2,103	671	338	514	579	35
$150,000 to $199,999	4,157	1,845	682	208	402	552	2,269	944	252	420	652	43
$200,000 to $249,999	2,036	912	385	63	164	301	1,090	540	79	178	294	34
$250,000 to $299,999	1,029	469	229	17	74	149	551	251	27	104	169	9
$300,000 or more	1,662	717	299	55	127	236	929	404	69	159	297	16
Median	67,946	65,757	95,524	54,611	55,502	91,856	69,884	105,761	56,971	62,016	96,179	70,392
Mortgage Currently on Property												
None, owned free and clear	25,097	13,131	2,702	3,347	5,071	2,010	11,715	2,417	3,456	4,340	1,502	251
With mortgage or land contract	33,067	14,763	2,557	3,346	5,423	3,437	17,989	3,894	4,718	5,688	3,689	315

- Represents or rounds to zero.

Table 4. **Physical Characteristics of Units Reporting Improvements by Type of Work Done: 1987**

(Numbers in thousands)

Characteristics	Total with work done	Addition(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Total	29,704	826	2,185	19,623	169	1,178	4,852	870
Regions								
Northeast	6,312	138	427	4,123	27	242	1,137	216
Midwest	8,174	141	590	5,450	35	287	1,484	187
South	10,028	402	709	6,700	74	464	1,360	319
West	5,190	145	460	3,350	33	185	870	148
Units in Structure								
1, detached	25,445	655	1,877	16,777	128	1,012	4,197	800
1, attached	1,184	32	63	832	5	37	193	24
2 to 4	1,010	9	52	687	12	29	201	21
5 to 9	130	-	11	108	-	-	12	-
10 to 19	104	-	7	81	-	-	17	-
20 to 49	79	-	7	50	-	-	21	-
50 or more	167	-	25	112	-	2	25	2
Mobile home or trailer	1,585	131	144	978	25	97	186	24
Year Structure Built [1]								
1985 to 1987	826	104	13	580	2	63	34	30
1980 to 1984	1,732	155	84	1,195	21	105	129	44
1975 to 1979	3,365	144	294	2,218	28	176	428	78
1970 to 1974	3,323	105	283	2,157	24	140	511	102
1960 to 1969	5,756	96	431	3,887	23	214	946	160
1950 to 1959	5,242	99	445	3,379	22	178	969	151
1940 to 1949	2,703	38	207	1,767	16	94	489	94
1930 to 1939	1,924	37	118	1,284	16	60	351	58
1920 to 1929	1,700	21	92	1,095	7	63	369	54
1919 or earlier	3,129	28	218	2,063	11	84	625	100
Median	1960	1974	1960	1961	1965	1965	1956	1959
Rooms								
1 room	11	-	-	9	-	-	2	-
2 rooms	21	-	-	17	-	1	2	1
3 rooms	390	17	32	246	-	18	61	17
4 rooms	2,747	92	264	1,793	13	88	450	49
5 rooms	6,622	178	493	4,520	17	240	1,032	144
6 rooms	7,803	231	570	5,228	39	298	1,247	191
7 rooms	5,779	153	416	3,747	38	231	976	218
8 rooms	3,556	94	244	2,333	27	146	591	119
9 rooms	1,614	27	90	1,025	26	81	289	76
10 rooms or more	1,160	34	77	705	10	76	202	55
Median	6.1	6.0	6.0	6.1	6.9	6.3	6.2	6.7
Bedrooms								
None	26	-	1	21	-	-	2	1
1	783	17	56	529	3	36	122	21
2	6,883	244	532	4,569	27	251	1,070	190
3	15,333	424	1,096	10,209	80	631	2,487	406
4 or more	6,679	141	500	4,295	60	260	1,171	252
Median	3.0	2.9	3.0	3.0	3.2	3.0	3.0	3.0
Complete Bathrooms								
None	88	6	6	61	4	7	1	3
1	11,102	278	860	7,308	49	438	1,911	258
1 and one-half	6,514	143	491	4,390	25	197	1,122	146
2 or more	12,000	399	828	7,865	91	535	1,817	464

Table 4. **Physical Characteristics of Units Reporting Improvements by Type of Work Done: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	Addition(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Footage of Unit								
Single detached and mobile homes	27,028	785	2,021	17,753	153	1,109	4,383	824
Less than 500	178	8	17	108	-	9	23	13
500 to 749	794	39	82	520	7	32	106	7
750 to 999	2,092	83	198	1,285	11	84	384	47
1,000 to 1,499	6,241	202	502	4,078	31	251	1,001	177
1,500 to 1,999	5,963	142	420	3,989	26	225	995	167
2,000 to 2,499	4,517	112	314	3,049	36	199	666	141
2,500 to 2,999	2,388	70	169	1,595	22	97	362	73
3,000 to 3,999	2,193	63	144	1,388	10	115	383	90
4,000 or more	1,223	21	63	8,14	5	50	207	65
Not reported	1,436	44	112	926	8	47	256	44
Median	1,793	1,636	1,685	1,804	1,952	1,844	1,776	1,937
Selected Physical Problems								
Severe physical problems [2]	183	6	11	119	4	16	20	6
Plumbing	65	6	4	41	4	5	1	3
Heating	73	-	4	48	-	9	12	-
Electric	14	-	-	10	-	-	2	2
Upkeep	43	1	5	26	-	3	8	1
Hallways	-	-	-	-	-	-	-	-
Moderate physical problems [2]	1,154	21	84	729	8	37	210	66
Plumbing	57	3	8	35	-	2	4	6
Heating	581	8	35	377	8	20	96	36
Upkeep	476	10	31	290	-	14	103	28
Hallways	-	-	-	-	-	-	-	-
Kitchen	132	5	10	91	-	2	19	4

- Represents or rounds to zero.
[1]For mobile home, oldest category is 1939 or earlier.
[2] Figures may not add to total because more than one category may apply to a unit.

Table 5. **Household Characteristics of Units Reporting Improvements by Type of Work Done: 1987**

(Numbers in thousands)

Characteristics	Total with work done	Addition(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Total	29,704	826	2,185	19,623	169	1,178	4,852	870
Race and Hispanic Origin								
White	27,089	775	1,995	17,883	145	1,076	4,416	799
Not Hispanic	26,028	747	1,889	17,239	139	1,031	4,223	760
Hispanic	1,060	28	106	644	6	45	193	39
Black	2,128	38	154	1,429	17	87	353	50
Other	487	13	36	312	7	15	83	22
Total Hispanic	1,123	30	108	689	6	48	201	41
Persons								
1 person	4,387	83	308	3,277	7	108	539	66
2 persons	9,823	269	680	6,925	40	341	1,362	207
3 persons	5,811	184	425	3,700	23	228	1,083	169
4 persons	5,792	188	473	3,493	48	258	1,108	225
5 persons	2,603	84	212	1,480	35	172	499	120
6 persons	811	3	43	479	7	40	185	52
7 persons or more	455	14	45	269	9	30	76	31
Median	2.6	2.8	2.7	2.4	3.8	3.1	3.0	3.5
Persons Per Room								
0.50 or less	20,041	533	1,375	13,878	89	720	2,959	489
0.51 to 1.00	9,211	281	769	5,470	73	436	1,828	353
1.01 to 1.50	392	9	36	242	7	22	59	17
1.51 or more	59	4	5	33	-	-	6	11
Age of Householder								
Under 25 years	408	16	49	210	4	6	113	10
25 to 29 years	1,767	70	169	936	9	83	436	65
30 to 34 years	3,152	84	232	1,815	20	138	706	157
35 to 44 years	7,069	186	516	4,272	61	371	1,359	305
45 to 54 years	5,548	170	452	3,556	36	265	909	160
55 to 64 years	5,280	181	394	3,721	18	165	701	102
65 to 74 years	4,278	81	243	3,274	16	108	501	54
75 years and over	2,201	37	130	1,840	6	42	128	18
Median	49	48	48	52	43	45	44	42
Household Composition								
2-or-more person households	25,316	742	1,877	16,346	162	1,070	4,314	805
Married-couple families, no nonrelatives	21,260	651	1,566	13,600	124	930	3,680	710
Other male householder	1,339	23	113	881	7	49	229	37
Other female householder	2,717	68	198	1,865	31	91	405	58
1-person households	4,385	84	308	3,277	7	107	538	66
Male householder	1,343	38	89	913	3	40	224	37
Female householder	3,042	46	219	2,364	4	67	314	29
Adults and Single Children Under 18 Years Old								
Total households with children	12,230	395	942	7,222	106	632	2,403	530
Married couples	10,448	342	798	6,088	84	560	2,102	474
Other households with two or more adults	1,041	28	97	650	12	50	165	38
Households with one adult or none	741	25	47	484	10	22	136	18
Total households with no children	17,471	430	1,243	12,401	63	546	2,449	341
Married couples	10,815	309	769	7,512	40	371	1,579	236
Other households with two or more adults	2,269	38	166	1,612	16	67	331	39
Households with one adult	4,387	83	308	3,277	7	108	539	66

Table 5. **Household Characteristics of Units Reporting Improvements by Type of Work Done: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	Addition(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Year Householder Moved Into Unit								
1985 to 1987	6,241	271	452	3,672	34	224	1,338	250
1980 to 1984	5,866	200	432	3,634	33	325	1,004	238
1975 to 1979	5,245	164	418	3,360	44	236	853	170
1970 to 1974	3,563	80	296	2,341	23	146	576	102
1960 to 1969	4,744	60	295	3,499	20	167	632	71
1950 to 1959	2,621	43	201	1,976	5	45	321	30
1940 to 1949	970	2	72	764	8	22	93	8
1939 or earlier	455	5	19	377	1	15	36	1
Median	1977	1981	1978	1976	1978	1979	1980	1981
First Time Owners								
First home ever owned	13,702	342	1,071	8,904	87	527	2,390	381
Not the first home	15,836	480	1,097	10,604	82	647	2,440	486
Not reported	166	4	17	115	-	4	22	4

- Represents or rounds to zero.

Table 6. **Financial Characteristics of Units Reporting Improvements by Type of Work Done: 1987**

(Numbers in thousands)

Characteristics	Total with work done	Additions(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Total	29,704	826	2,185	19,623	169	1,178	4,852	870
Household Income								
Less than $5,000	954	23	81	674	5	45	117	9
$5,000 to $9,999	2,060	54	138	1,567	13	47	214	26
$10,000 to $14,999	2,165	68	175	1,551	15	49	265	42
$15,000 to $19,999	2,431	70	169	1,719	13	85	316	60
$20,000 to $24,999	2,907	69	195	1,995	11	123	442	71
$25,000 to $29,999	2,283	52	193	1,439	9	95	407	88
$30,000 to $34,999	2,627	85	201	1,690	13	127	452	59
$35,000 to $39,999	2,318	72	169	1,452	6	94	455	71
$40,000 to $49,999	3,732	94	279	2,383	27	145	675	127
$50,000 to $59,999	2,515	65	159	1,570	22	113	499	86
$60,000 to $79,999	2,988	79	216	1,882	19	128	545	118
$80,000 to $99,999	1,110	28	88	721	6	52	177	39
$100,000 to $119,999	655	30	40	389	-	34	132	29
$120,000 or more	960	34	82	592	11	40	156	45
Median	33,907	34,529	33,520	32,564	39,583	35,957	37,341	40,709
Monthly Housing Cost								
Less than $100	663	35	53	467	6	24	63	16
$100 to $199	4,846	145	378	3,460	12	161	599	93
$200 to $249	2,570	57	153	1,934	15	75	307	29
$250 to $299	1,970	41	146	1,392	5	63	284	40
$300 to $349	1,779	40	137	1,222	6	65	273	37
$350 to $399	1,605	57	133	1,042	16	64	269	23
$400 to $449	1,419	37	92	894	18	63	265	50
$450 to $499	1,292	37	102	820	10	56	224	44
$500 to $599	2,546	97	203	1,511	17	90	518	111
$600 to $699	1,935	39	145	1,194	3	95	401	58
$700 to $799	1,547	34	117	952	8	64	308	65
$800 to $999	2,083	60	136	1,324	7	86	384	86
$1,000 to $1,249	1,389	47	101	854	8	65	255	58
$1,250 to $1,499	785	30	65	486	2	59	119	24
$1,500 or more	935	20	57	582	12	34	180	51
Mortgage payment not reported	2,337	50	167	1,490	24	115	405	85
Median (excludes mortgage payment not reported)	409	418	405	378	435	465	487	555
Monthly Housing Costs as Percent of Income								
Less than 5 percent	1,181	47	115	774	5	37	180	23
5 to 9 percent	4,905	147	369	3,236	28	192	805	127
10 to 14 percent	5,408	155	398	3,604	25	206	860	159
15 to 19 percent	4,572	119	326	3,048	18	184	744	133
20 to 24 percent	3,662	117	242	2,374	18	146	625	142
25 to 29 percent	2,378	63	161	1,570	18	99	388	78
30 to 34 percent	1,503	33	99	1,016	6	53	252	44
35 to 39 percent	937	28	81	589	5	44	178	11
40 to 49 percent	1,061	31	80	701	7	33	173	37
50 to 59 percent	488	14	48	325	7	16	65	13
60 to 69 percent	302	5	17	234	3	10	27	7
70 percent or more	864	15	71	587	7	40	131	13
Zero or negative income	123	2	14	81	-	4	21	2
Mortgage payment not reported	2,322	50	164	1,483	24	115	403	83
Median (excludes two previous lines)	17	17	17	17	18	19	17	18

Table 6. **Financial Characteristics of Units Reporting Improvements by Type of Work Done: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	Additions(s) only	Remodeling kitchen or bath only	Upgrades, repairs only	Additions and remodeling	Additions and upgrades	Remodeling and upgrades	Additions, remodeling and upgrades
Average Monthly Cost Paid for Real Estate Taxes								
Less than $25	6,716	245	528	4,376	53	261	1,034	219
$25 to $49	6,417	200	455	4,305	32	268	970	187
$50 to $74	4,660	128	331	3,064	14	199	791	132
$75 to $99	3,268	60	260	2,145	20	114	572	97
$100 to $149	4,435	94	332	2,926	22	179	766	117
$150 to $199	1,977	49	141	1,339	4	71	325	47
$200 or more	2,232	50	138	1,467	23	87	394	73
Median	59	46	58	59	50	58	63	56
Value								
Less than $10,000	1,016	62	108	624	8	51	139	24
$10,000 to $19,999	1,224	60	75	808	10	49	197	24
$20,000 to $29,999	1,543	46	112	1,026	15	43	253	48
$30,000 to $39,999	2,373	58	206	1,544	13	94	392	65
$40,000 to $49,999	2,948	57	204	1,953	7	111	531	86
$50,000 to $59,999	2,757	47	203	1,893	11	96	431	75
$60,000 to $69,999	3,038	83	199	2,022	17	114	523	79
$70,000 to $79,999	2,499	72	177	1,687	15	113	370	64
$80,000 to $99,999	3,483	104	230	2,324	18	129	589	88
$100,000 to $119,999	1,881	46	163	1,287	8	64	251	61
$120,000 to $149,999	2,102	50	155	1,344	13	118	356	67
$150,000 to $199,999	2,208	61	154	1,475	10	95	387	87
$200,000 to $249,999	1,091	38	93	708	9	46	166	30
$250,000 to $299,999	551	15	44	347	6	17	105	17
$300,000 or more	929	26	62	579	10	36	161	55
Median	69,884	70,000	69,271	69,711	72,333	72,743	69,235	75,313
Mortgage Currently on Property								
None, owned free and clear	11,715	317	826	8,463	47	350	1,497	215
With mortgage or land contract	17,989	509	1,359	11,160	123	828	3,355	655

- Represents or rounds to zero.

Table 7. **Physical Characteristics of Units Reporting Improvements by Type of Workers: 1987**

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs, workers not reported
Total	29,704	9,288	4,510	15,464	442
Regions					
Northeast	6,312	1,883	1,043	3,271	114
Midwest	8,174	2,750	1,387	3,964	73
South	10,028	3,004	1,346	5,499	178
West	5190	1,651	733	2,730	76
Units in Structure					
1, detached	25,445	7,944	3,991	13,159	351
1, attached	1,184	322	140	708	16
2 to 4	1,010	245	171	573	22
5 to 9	130	26	16	86	2
10 to 19	104	16	7	79	3
20 to 49	79	7	11	55	5
50 or more	167	17	9	123	18
Mobile home or trailer	1,585	712	165	682	26
Year Structure Built [1]					
1985 to 1987	826	367	78	351	31
1980 to 1984	1,732	729	176	808	19
1975 to 1979	3,365	1,184	469	1,646	66
1970 to 1974	3,323	1,084	467	1,724	47
1960 to 1969	5,756	1,590	949	3,146	72
1950 to 1959	5,242	1,512	829	2,829	72
1940 to 1949	2,703	792	396	1,475	40
1930 to 1939	1,924	569	279	1,047	28
1920 to 1929	1,700	503	304	871	22
1919 or earlier	3,129	958	562	1,566	44
Median	1960	1962	1959	1960	1962
Rooms					
1 room	11	6	-	5	-
2 rooms	21	9	-	9	3
3 rooms	390	137	47	202	4
4 rooms	2,747	895	344	1,458	51
5 rooms	6,622	2,211	894	3,421	96
6 rooms	7,803	2,453	1,165	4,072	113
7 rooms	5,779	1,891	976	2,816	97
8 rooms	3,556	994	586	1,924	51
9 rooms	1,614	435	277	878	23
10 rooms or more	1,160	257	220	679	4
Median	6.1	6.1	6.3	6.1	6.1
Bedrooms					
None	26	15	-	11	-
1	783	236	98	435	14
2	6,883	2,175	873	3,732	103
3	15,333	4,979	2,368	7,748	238
4 or more	6,679	1,884	1,170	3,538	87
Median	3.0	2.9	3.0	3.0	2.9
Complete Bathrooms					
None	88	43	5	40	-
1	11,102	3,938	1,590	5,430	143
1 and one-half	6,514	1,945	1,064	3,399	106
2 or more	12,000	3,362	1,850	6,595	192

Table 7. **Physical Characteristics of Units Reporting Improvements by Type of Workers: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs, workers not reported
Footage of Unit					
Single detached and mobile homes	27,028	8,657	4,155	13,838	376
Less than 500	178	72	16	87	2
500 to 749	794	320	80	382	12
750 to 999	2,092	810	276	971	35
1,000 to 1,499	6,241	2,200	928	3,037	76
1,500 to 1,999	5,963	1,946	921	3,004	93
2,000 to 2,499	4,717	1,357	769	2,328	64
2,500 to 2,999	2,388	687	407	1,266	28
3,000 to 3,999	2,193	552	353	1,265	24
4,000 or more	1,223	269	196	746	12
Not reported	1,436	444	209	752	30
Median	1,793	1,681	1,865	1,844	1,758
Selected Physical Problems					
Severe physical problems [2]	183	69	29	84	2
Plumbing	65	34	5	25	-
Heating	73	21	16	36	-
Electric	14	10	-	4	-
Upkeep	43	12	8	22	2
Hallways	-	-	-	-	-
Moderate physical problems [2]	1,154	438	165	526	25
Plumbing	57	21	6	30	-
Heating	581	205	70	297	9
Upkeep	476	188	91	180	18
Hallways	-	-	-	-	-
Kitchen	132	50	7	75	-

- Represents or rounds to zero.
[1]For mobile home, oldest category is 1939 or earlier.
[2] Figures may not add to total because more than one category may apply to a unit.

Table 8. **Household Characteristics of Units Reporting Improvements by Type of Workers: 1987**

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs, workers not reported
Total	29,704	9,288	4,510	15,464	442
Race and Hispanic Origin					
White	27,089	8,656	4,198	13,838	396
Not Hispanic	26,028	8,301	4,038	13,312	378
Hispanic	1,060	355	160	526	18
Black	2,128	515	231	1,356	26
Other	487	117	80	271	19
Total Hispanic	1,123	381	164	558	21
Persons					
1 person	4,387	832	396	3,077	83
2 persons	9,824	2,736	1,229	5,726	133
3 persons	5,812	1,965	1,031	2,729	86
4 persons	5,792	2,260	1,070	2,381	81
5 persons	2,603	996	515	1,050	42
6 persons	811	330	154	315	12
7 persons or more	475	169	115	186	5
Median	2.6	3.0	3.1	2.3	2.6
Persons Per Room					
0.50 or less	20,041	5,312	2,692	11,739	299
0.51 to 1.00	9,211	3,783	1,729	3,559	140
1.01 to 1.50	392	170	73	148	2
1.51 or more	59	23	16	18	-
Age of Householder					
Under 25 years	408	232	50	117	10
25 to 29 years	1,767	901	396	437	34
30 to 34 years	3,152	1,387	656	1,069	41
35 to 44 years	7,069	2,628	1,326	3,005	111
45 to 54 years	5,548	1,728	936	2,817	66
55 to 64 years	5,280	1,350	647	3,210	72
65 to 74 years	4,278	793	400	3,009	76
75 years and over	2,201	270	99	1,801	31
Median	49	43	44	56	49
Household Composition by Age of Householder					
2-or-more person households	25,316	8,456	4,114	12,387	359
Married-couple families, no nonrelatives	21,260	7,280	3,578	10,111	292
Other male householder	1,339	591	195	534	20
Other female householder	2,717	585	341	1,742	47
1-person households	4,385	832	396	3,076	83
Male householder	1,343	494	203	628	19
Female householder	3,042	338	193	2,448	64
Adults and Single Children Under 18 Years Old					
Total households with children	12,230	4,802	2,331	4,914	185
Married couples	10,448	4,224	2,074	3,999	152
Other households with two or more adults	1,041	346	167	511	17
Households with one adult or none	741	232	90	404	16
Total households with no children	17,471	4,486	2,179	10,552	257
Married couples	10,815	3,058	1,504	6,114	140
Other households with two or more adults	2,269	596	279	1,361	34
Households with one adult	4,387	832	396	3,077	83
Year Householder Moved into Unit					
1985 to 1987	6,241	2,334	1,099	2,675	132
1980 to 1984	5,866	2,270	1,044	2,458	93
1975 to 1979	5,245	1,670	839	2,672	65
1970 to 1974	3,563	1,063	469	1991	41
1960 to 1969	4,744	1,132	680	2,881	50
1950 to 1959	2,621	565	249	1,771	36
1940 to 1949	970	183	83	687	16
1939 or earlier	455	71	46	329	8
Median	1977	1980	1979	1975	1980

Table 8. **Household Characteristics of Units Reporting Improvements by Type of Workers: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs, workers not reported
First Time Owners					
First home ever owned	13,702	4,698	2,196	6,613	194
Not the first home	15,836	4,537	2,287	8,774	238
Not reported	166	53	26	77	10

- Represents or rounds to zero.

Table 9. **Financial Characteristics of Units Reporting Improvements by Type of Workers: 1987**

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs workers not reported
Total	29,704	9,288	4,510	15,464	442
Household Income					
Less than $5,000	954	207	86	651	9
$5,000 to $9,999	2,060	481	191	1,361	26
$10,000 to $14,999	2,165	629	240	1,261	35
$15,000 to $19,999	2,431	748	292	1,353	39
$20,000 to $24,999	2,907	921	352	1,564	71
$25,000 to $29,999	2,283	922	351	990	20
$30,000 to $34,999	2,627	968	428	1,196	35
$35,000 to $39,999	2,318	836	462	987	33
$40,000 to $49,999	3,732	1,288	719	1,668	56
$50,000 to $59,999	2,515	804	512	1,162	37
$60,000 to $79,999	2,988	853	490	1,600	45
$80,000 to $99,999	1,110	293	164	644	9
$100,000 to $119,999	655	147	105	393	10
$120,000 or more	960	192	116	636	16
Median	33,907	33,802	38,409	32,308	33,000
Monthly Housing Cost					
Less than $100	663	228	52	374	9
$100 to $199	4,846	1,468	500	2,811	67
$200 to $249	2,570	639	278	1,608	45
$250 to $299	1,970	555	242	1,147	26
$300 to $349	1,779	531	247	978	24
$350 to $399	1,605	553	267	772	12
$400 to $449	1,419	503	233	664	19
$450 to $499	1,292	438	242	594	18
$500 to $599	2,546	919	460	1,127	39
$600 to $699	1,935	689	371	854	22
$700 to $799	1,547	537	308	688	15
$800 to $999	2,083	630	424	990	40
$1,000 to $1,249	1,389	446	246	685	13
$1,250 to $1,499	785	197	114	459	15
$1,500 or more	935	201	122	586	26
Mortgage payment not reported	2,337	752	404	1,128	52
Median (excludes mortgage payment not reported)	409	429	498	366	432
Monthly Housing Costs as Percent of Income					
Less than 5 percent	1,181	392	151	624	14
5 to 9 percent	4,905	1,510	731	2,600	64
10 to 14 percent	5,408	1,651	800	2,875	81
15 to 19 percent	4,572	1,460	720	2,338	53
20 to 24 percent	3,662	1,242	589	1,770	62
25 to 29 percent	2,378	738	394	1,208	37
30 to 34 percent	1,503	476	211	796	20
35 to 39 percent	937	253	132	539	12
40 to 49 percent	1,061	346	125	573	16
50 to 59 percent	488	141	81	263	2
60 to 69 percent	302	75	35	183	9
70 percent or more	864	222	122	506	13
Zero or negative income	123	33	17	68	4
Mortgage payment not reported	2,322	749	401	1,121	52
Median (excludes two previous lines)	17	17	18	17	18
Average Monthly Cost Paid for Real Estate Taxes					
Less than $25	6,716	2,359	904	3,360	93
$25 to $49	6,417	2,108	964	3,264	80
$50 to $74	4,660	1,533	708	2,365	53
$75 to $99	3,268	988	539	1,680	62
$100 to $149	4,435	1,349	726	2,298	63
$150 to $199	1,977	498	343	1,107	29
$200 or more	2,232	454	326	1,391	61
Median	59	53	64	62	73

Table 9. **Financial Characteristics of Units Reporting Improvements by Type of Workers: 1987**—Continued

(Numbers in thousands)

Characteristics	Total with work done	All work done chiefly by household	Some jobs done chiefly by household	All work done chiefly by outsiders	All jobs workers not reported
Value					
Less than $10,000	1,016	467	118	424	7
$10,000 to $19,999	1,224	465	123	600	36
$20,000 to $29,999	1,543	603	203	721	17
$30,000 to $39,999	2,373	826	392	1,129	26
$40,000 to $49,999	2,948	926	463	1,534	26
$50,000 to $59,999	2,757	918	417	1,384	37
$60,000 to $69,999	3,038	949	515	1,516	58
$70,000 to $79,999	2,499	836	377	1,265	20
$80,000 to $99,999	3,483	1,067	615	1,750	50
$100,000 to $119,999	1,881	541	256	1,032	52
$120,000 to $149,999	2,102	570	329	1,178	26
$150,000 to $199,999	2,268	585	364	1,275	45
$200,000 to $249,999	1,091	258	150	668	14
$250,000 to $299,999	551	116	80	349	6
$300,000 or more	929	161	107	640	21
Median	69,884	64,626	70,637	73,352	77,000
Mortgage Currently on Property					
None, owned free and clear	11,715	3,047	1,290	7,193	184
With mortgage or land contract	17,989	6,241	3,219	8,271	257

- Represents or rounds to zero.

Table 10. **Physical Characteristics of Units Reporting Costs for Home Improvements: 1987**

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	4,000 to $4,999	$5,000 or more	Median spent
Total	25,649	5,064	4,066	3,141	2,057	3,245	2,202	1,337	4,536	1,635
Regions										
Northeast	5,467	850	766	661	397	702	479	310	1,302	2,085
Midwest	7,073	1,554	1,169	895	608	875	571	344	1,057	1,454
South	8,586	1,857	1,353	1,091	707	1,080	735	449	1,314	1,496
West	4,524	802	778	494	345	589	418	234	864	1,772
Units in Structure										
1, detached	22,020	4,022	3,395	2,689	1,798	2,904	1,935	1,205	4,072	1,751
1, attached	1,017	228	217	145	62	111	85	46	123	1,219
2 to 4	846	147	105	86	59	103	78	49	219	2,252
5 to 9	102	29	20	16	8	10	3	2	14	1,063
10 to 19	80	20	9	12	12	6	7	2	12	1,458
20 to 49	58	5	9	14	7	9	5	4	5	1,571
50 or more	116	40	16	9	5	16	7	9	14	1,111
Mobile home or trailer	1,409	572	294	170	106	86	84	19	78	725
Year Structure Built [1]										
1985 to 1987	744	174	92	99	72	101	70	22	114	1,549
1980 to 1984	1,584	413	292	219	112	152	102	47	247	1,199
1975 to 1979	2,979	659	555	355	218	347	221	132	492	1,388
1970 to 1974	2,827	635	470	349	251	338	239	139	406	1,442
1960 to 1969	4,979	825	763	603	430	684	442	291	941	1,847
1950 to 1959	4,495	755	645	546	378	598	412	315	846	1,899
1940 to 1949	2,315	480	354	290	172	307	184	114	414	1,597
1930 to 1939	1,625	348	275	163	128	224	142	63	282	1,604
1920 to 1929	1,445	258	220	189	100	170	142	74	292	1,778
1919 or earlier	2,652	518	400	328	194	324	248	139	501	1,706
Median	1961	1962	1962	1961	1961	1960	1959	1959	1959	
Rooms										
1 room	8	6	-	2	-	-	-	-	-	...
2 rooms	18	9	4	2	1	-	-	2	-	...
3 rooms	332	101	79	44	24	25	15	12	32	911
4 rooms	2,359	715	445	306	163	217	169	92	252	1,032
5 rooms	5,733	1,334	1,110	745	429	693	461	271	690	1,284
6 rooms	6,696	1,329	994	823	580	926	598	356	1,090	1,674
7 rooms	5,055	854	728	616	451	658	460	264	1,024	1,865
8 rooms	3,127	453	392	346	258	417	287	172	802	2,275
9 rooms	1,344	177	183	182	84	153	128	97	340	2,301
10 rooms or more	980	85	132	75	68	156	85	73	306	2,833
Median	6.2	5.8	5.9	6.1	6.2	6.2	6.3	6.3	6.7	
Bedrooms										
None	21	11	7	2	1	-	-	-	-	...
1	656	183	117	92	35	64	44	28	93	1,152
2	5,954	1,450	1,044	805	421	720	439	278	797	1,300
3	13,262	2,562	2,079	1,630	1,148	1,691	1,191	699	2,262	1,657
4 or more	5,754	858	819	611	451	769	529	332	1,385	2,179
Median	3.0	2.8	2.9	2.9	3.0	3.0	3.0	3.0	3.1	
Complete Bathrooms										
None	75	34	16	7	4	2	6	-	6	609
1	9,556	2,368	1,715	1,234	747	1,115	690	455	1,232	1,282
1 and one-half	5,638	1,071	851	721	463	762	499	327	944	1,690
2 or more	10,381	1,591	1,484	1,179	843	1,367	1,008	555	2,354	2,068

Table 10. **Physical Characteristics of Units Reporting Costs for Home Improvements: 1987**—Continued

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	4,000 to $4,999	$5,000 or more	Median spent
Footage of Unit										
Single detached and mobile homes	22,228	4,380	3,527	2,643	1,801	2,848	1,918	1,169	3,942	1,657
Less than 500	142	55	36	10	14	6	7	-	14	722
500 to 749	611	265	142	8	45	58	39	26	28	643
750 to 999	1,815	595	365	200	120	181	118	57	179	928
1,000 to 1,499	5,460	1,257	904	719	469	648	469	272	722	1,396
1,500 to 1,999	5,228	918	842	645	416	732	475	290	910	1,751
2,000 to 2,499	3,983	622	621	513	334	482	381	222	808	1,853
2,500 to 2,999	2,092	313	271	244	131	324	185	134	490	2,269
3,000 to 3,999	1,881	239	251	207	171	270	147	101	495	2,269
4,000 or more	1,016	116	95	97	101	147	97	67	296	2,673
Not reported	1,123	211	161	144	103	141	100	55	208	1,721
Median	1741	1465	1640	1742	1742	1815	1791	1848	2009	
Selected Physical Problems										
Severe physical problems	158	50	37	18	4	12	6	8	23	892
Moderate physical problems	966	311	188	99	68	115	47	38	100	957
Type of Jobs Reported										
Additions	2,313	190	191	164	133	242	223	126	1,044	4,107
Remodeling kitchen or bathroom	6,610	1,002	779	643	442	746	601	494	1,903	2,588
Upgrades and/or repairs	22,771	4,218	3,564	2,804	1,893	2,976	2,006	1,223	4,087	1,711

- Represents or rounds to zero. ...Not applicable or base too small.

[1]For mobile home, oldest category is 1939 or earlier.

Table 11. **Household Characteristics of Units Reporting Costs for Home Improvements: 1987**

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	$4,000 to $4,999	$5,000 or more	Median spent
Total	25,649	5,064	4,066	3,141	2,057	3,245	2,202	1,337	4,536	1,635
Race and Hispanic Origin										
White	23,538	4,586	3,692	2,880	1,900	3,011	2,043	1,235	4,191	1,661
Not Hispanic	22,612	4,393	3,538	2,761	1,837	2,882	1,954	1,197	4,050	1,667
Hispanic	926	193	154	119	63	129	89	38	141	1,487
Black	1,723	414	304	202	137	178	120	89	279	1,355
Other	388	64	69	59	20	56	40	13	67	1,550
Total Hispanic	982	206	166	121	65	134	96	38	156	1,492
Persons										
1 person	3,760	882	696	494	292	478	286	166	466	1,306
2 persons	8,572	1,589	1,287	1,120	701	1,137	797	497	1,444	1,707
3 persons	5,022	967	768	607	420	607	464	238	951	1,701
4 persons	5,027	1,002	793	563	388	586	398	259	1,038	1,700
5 persons	2,180	395	345	246	173	316	181	127	397	1,801
6 persons	686	137	112	80	52	79	52	27	147	1,635
7 persons or more	402	92	65	31	30	42	25	23	94	1,717
Median	2.6	2.6	2.6	2.5	2.6	2.5	2.5	2.5	2.9	
Persons Per Room										
0.50 or less	17,356	3,192	2,687	2,174	1,409	2,274	1,549	943	3,128	1,722
0.51 to 1.00	7,918	1,770	1,299	931	618	923	634	384	1,359	1,478
1.01 to 1.50	336	81	72	36	26	44	20	11	46	1,208
1.51 or more	38	19	8	-	3	5	-	-	3	...
Age of Householder										
Under 25 years	357	127	83	30	14	42	28	9	24	810
25 to 29 years	1,544	369	243	202	145	177	109	64	235	1,396
30 to 34 years	2,805	610	448	281	245	334	233	156	498	1,630
35 to 44 years	6,130	1,146	948	691	452	784	508	315	1,286	1,810
45 to 54 years	4,723	863	731	556	372	565	390	253	993	1,784
55 to 64 years	4,516	826	699	609	356	583	402	267	774	1,674
65 to 74 years	3,744	681	580	521	311	512	376	206	557	1,645
75 years and over	1,831	440	334	252	162	248	157	68	170	1,281
Median	49	48	49	52	50	50	51	50	47	
Household Composition										
2-or-more person households	21,987	4,181	3,471	2,647	1,764	2,767	1,917	1,170	4,070	1,697
Married-couple families, no nonrelatives	18,462	3,355	2,788	2,233	1,532	2,359	1,653	1,023	3,519	1,779
Other male householder	1,244	273	325	126	106	103	75	34	202	1,095
Other female householder	2,281	553	358	288	126	305	189	113	349	1,398
1-person households	3,762	883	696	494	292	478	286	167	466	1,306
Male householder	1,189	275	241	150	64	123	90	62	184	1,262
Female householder	2,573	608	455	344	228	355	196	105	282	1,325
Adults and Single Children Under 18 Years Old										
Total households with children	10,561	2,179	1,697	1,182	787	1,313	833	528	2,042	1,641
Married couples	9,038	1,755	1,419	1,008	722	1,140	711	464	1,819	1,733
Other households with two or more adults	883	245	156	101	41	100	74	33	133	1,200
Households with one adult or none	640	179	122	73	24	73	48	31	90	1,130
Total households with no children	15,085	2,884	2,369	1,958	1,270	1,931	1,370	809	2,494	1,631
Married couples	9,426	1,600	1,370	1,225	811	1,218	942	559	1,701	1,819
Other households with two or more adults	1,899	402	303	239	167	235	142	84	327	1,516
Households with one adult	3,760	882	696	494	292	478	286	166	466	1,306

Table 11. **Household Characteristics of Units Reporting Costs for Home Improvements: 1987**—Continued

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	$4,000 to $4,999	$5,000 or more	Median spent
Year Householder Moved into Unit										
1985 to 1987	5,387	1,110	836	642	395	656	471	278	999	1,634
1980 to 1984	5,150	1,095	829	607	405	605	392	294	923	1,554
1975 to 1979	4,587	869	742	490	376	601	384	196	929	1,756
1970 to 1974	2,995	570	528	375	236	372	258	159	497	1,552
1960 to 1969	4,053	690	587	533	374	532	394	248	695	1,789
1950 to 1959	2,272	427	335	329	179	292	224	125	361	1,626
1940 to 1949	814	207	147	107	56	132	58	21	86	1,248
1939 or earlier	391	94	62	59	36	55	23	17	45	1,335
Median	1978	1978	1978	1977	1977	1977	1977	1978	1978	
First Time Owners										
First home ever owned	11,800	2,558	1,903	1,497	943	1,460	921	575	1,943	1,481
Not the first home	13,747	2,481	2,146	1,634	1,104	1,765	1,276	758	2,583	1,777
Not reported	99	24	16	10	9	20	5	4	11	1,475

- Represents or rounds to zero. ... Not applicable or base too small.

Table 12. **Financial Characteristics of Units Reporting Costs for Home Improvements: 1987**

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	$4,000 to $4,999	$5,000 or more	Median costs
Total	25,649	5,064	4,066	3,141	2,057	3,245	2,202	1,337	4,536	1,635
Household Income										
Less than $5,000	782	266	169	91	56	66	49	17	68	870
$5,000 to $9,999	1,745	561	339	231	126	208	99	69	112	959
$10,000 to $14,999	1,871	486	319	234	135	280	143	83	191	1,279
$15,000 to $19,999	2,064	517	365	251	194	251	174	83	229	1,299
$20,000 to $24,999	2,485	563	420	320	214	318	195	128	327	1,405
$25,000 to $29,999	1,997	464	363	243	153	224	147	105	298	1,353
$30,000 to $34,999	2,320	427	394	282	180	319	223	112	383	1,658
$35,000 to $39,999	2,023	374	338	238	169	259	181	106	358	1,682
$40,000 to $49,999	3,220	531	477	455	264	382	290	186	635	1,778
$50,000 to $59,999	2,178	302	318	260	171	297	203	121	506	2,128
$60,000 to $79,999	2,627	357	309	292	214	371	263	171	650	2,381
$80,000 to $99,999	979	98	106	120	83	116	116	75	265	2,711
$100,000 to $119,999	605	97	76	52	41	58	32	31	218	2,629
$120,000 or more	806	70	72	73	58	97	87	52	297	3,379
Median	34,053	26,498	30,736	33,555	34,181	34,318	36,961	38,373	44,756	
Monthly Housing Cost										
Less than $100	562	257	104	50	46	42	18	12	33	615
$100 to $199	4,196	1,074	827	578	320	486	323	156	432	1,170
$200 to $249	2,222	451	360	327	186	298	173	132	295	1,459
$250 to $299	1,702	400	267	220	140	197	155	97	226	1,418
$300 to $349	1,534	312	223	200	121	221	133	74	250	1,632
$350 to $399	1,397	284	223	147	117	183	118	72	253	1,690
$400 to $449	1,252	238	209	110	113	162	115	77	228	1,805
$450 to $499	1,118	190	157	159	108	158	93	72	181	1,745
$500 to $599	2,218	396	341	243	204	304	221	115	394	1,816
$600 to $699	1,723	296	304	198	147	214	166	83	315	1,716
$700 to $799	1,378	210	213	163	95	188	147	91	271	2,043
$800 to $999	1,849	298	239	244	162	266	137	93	410	1,943
$1,000 to $1,249	1,220	142	147	125	99	165	128	66	348	2,588
$1,250 to $1,499	696	81	89	80	51	76	46	48	225	2,618
$1,500 or more	810	77	88	68	24	106	68	50	329	3,618
Mortgage payment not reported	1,775	358	275	231	123	178	162	100	348	1,596
Median (excludes mortgage payment not reported)	413	327	376	377	416	433	444	449	550	
Monthly Housing Costs as Percent of Income										
Less than 5 percent	996	195	113	118	106	117	73	60	214	1,840
5 to 9 percent	4,263	799	615	540	350	526	403	243	787	1,754
10 to 14 percent	4,728	853	803	602	386	603	410	254	817	1,637
15 to 19 percent	4,047	757	653	469	355	536	351	195	731	1,704
20 to 24 percent	3,260	614	550	405	270	399	281	187	554	1,613
25 to 29 percent	2,058	395	352	240	175	277	155	105	359	1,620
30 to 34 percent	1,315	296	183	162	85	180	119	57	233	1,597
35 to 39 percent	821	161	122	106	55	124	77	37	139	1,695
40 to 49 percent	943	255	156	104	66	121	72	46	123	1,291
50 to 59 percent	411	113	62	47	23	51	27	17	71	1,324
60 to 69 percent	249	54	48	26	8	37	21	18	37	1,433
70 percent or more	695	189	122	74	47	85	48	18	112	1,247
Zero or negative income	99	26	18	19	7	11	3	1	14	1,145
Mortgage payment not reported	1,763	355	271	229	123	178	162	100	345	1,608
Median (excludes two previous lines)	17	18	18	17	17	18	17	17	17	

Table 12. **Financial Characteristics of Units Reporting Costs for Home Improvements: 1987**—Continued

(Numbers in thousands)

Characteristics	Total reporting all costs	Less than $500	$500 to $999	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $3,999	$4,000 to $4,999	$5,000 or more	Median costs
Value										
Less than $10,000	887	425	191	93	61	43	28	9	37	548
$10,000 to $19,999	1,055	406	222	125	68	90	47	16	81	774
$20,000 to $29,999	1,324	386	244	184	127	149	92	44	98	1,087
$30,000 to $39,999	1,935	541	253	248	159	266	170	91	207	1,350
$40,000 to $49,999	2,557	581	455	334	235	322	182	151	297	1,363
$50,000 to $59,999	2,396	483	441	273	210	344	195	139	311	1,502
$60,000 to $69,999	2,578	505	398	323	201	347	255	152	397	1,657
$70,000 to $79,999	2,187	391	331	322	181	302	197	110	353	1,637
$80,000 to $99,999	3,046	466	423	416	223	446	319	194	559	1989
$100,000 to $119,999	1,642	244	261	229	141	184	132	95	356	1,809
$120,000 to $149,999	1,840	245	230	217	153	239	166	112	478	2,314
$150,000 to $199,999	1,917	179	266	173	170	262	208	101	558	2,651
$200,000 to $249,999	927	107	103	88	71	117	103	50	288	2,808
$250,000 to $299,999	479	53	62	41	22	61	42	39	159	3,012
$300,000 or more	778	51	87	75	34	72	66	35	358	4,114
Median	70,423	53,996	65,704	69,706	68,383	72,036	76,701	76,045	97,424	
Mortgage Currently on Property										
None, owned free and clear	9,985	2,228	1,695	1,326	829	1,247	810	460	1,390	1,403
With mortgage or land contract	15,662	2,835	2,371	1,815	1,227	1,998	1,393	877	3,146	1,831

Appendix A.

Area Classifications, Definitions and Explanations of Subject Characteristics

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AREA CLASSIFICATIONS

Regions. Regions are large groups of States that form the first-order subdivisions of the United States for census purposes. The four regions are as follows: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania. Midwest: Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas. West: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington. Data for the regions are shown in tables 1 through 3.

DEFINITIONS AND EXPLANATIONS OF SUBJECT CHARACTERISTICS

Housing units. A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with any other persons in the structure and which have direct access from the outside of the building or through a common hall which is used or intended for use by the occupants of another unit or by the general public. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.

Race. The classification of "race" refers to the race of the householder occupying the housing unit. The concept of race as used by the Census Bureau does not denote a clear-cut scientific definition of biological stock. Race was determined on the basis of a question that asked for self-identification of a person's race. Figures are given separately for White, Black, and other householders. The last category includes Asian, Pacific Islander, American Indian, Aleut, Eskimo, and any other race reported.

Hispanic. The classification "Hispanic" refers to the origin of the householder occupying the housing unit. Hispanic origin was determined on the basis of a question that asked for self-identification of persons living in the unit who were Hispanic or Spanish American. Hispanic persons may be of any race.

Tenure. A housing unit is owner occupied if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. Also, a cooperative or condominium unit is owner occupied only if the owner or co-owner lives in it.

Year householder moved into unit. The data are based on the information reported for the householder and refer to the year of latest move. Thus, if the householder moved back into a housing unit he/she previously occupied, the year of the latest move was to be reported; if the householder moved from one apartment to another in the same building, the year the householder moved into the present unit was to be reported. The intent is to establish the year the present occupancy by the householder began. The year the householder moves is not necessarily the same year

other members of the household move; although, in the great majority of cases the entire household moves at the same time. The median year householder moved into unit is rounded to the nearest year.

Utilization Characteristics

Persons. All persons occupying the housing unit are counted. These persons include not only occupants related to the householder but also any lodgers, roomers, boarders, partners, wards, foster children, and resident employees who share the living quarters of the householder. The data on persons show categories of the number of one-person through seven-or-more-person households. The median for persons is rounded to the nearest tenth.

A person is counted at the usual place of residence for that person. This refers to the place where the person lives and sleeps most of the time. This place is not necessarily the same as a legal residence, voting residence, or domicile.

Rooms. The statistics on rooms are for the number of housing units with a specified number of rooms. Rooms counted include whole rooms used for living purposes, such as bedrooms, living rooms, dining rooms, kitchens, recreation rooms, permanently enclosed porches that are suitable for year-round use, lodgers' rooms and other finished and unfinished rooms. Also included are rooms used for offices by a person living in the unit. The median for rooms is rounded to the nearest tenth.

A dining room, to be counted, must be a separate room. It must be separated from adjoining rooms by built-in floor-to-ceiling walls extending at least a few inches from the intersecting walls. Movable or collapsible partitions or partitions consisting solely of shelves or cabinets are not considered built-in-walls. Bathrooms are not counted as rooms.

Persons per room. Persons per room is computed for each occupied housing unit by dividing the number of persons in the unit by the number of rooms in the unit. The figures shown refer, therefore, to the number of housing units having the specified ratio of persons per room.

Bedrooms. The number of bedrooms in the housing unit is the count of rooms used mainly for sleeping, even if also used for other purposes. Rooms reserved for sleeping, such as guest rooms, even though used infrequently, are counted as bedrooms. On the other hand, rooms used mainly for other purposes, even though used also for sleeping, such as a living room with a hideaway bed, are not considered bedrooms. A housing unit consisting of only one room, such as a one-room efficiency apartment, is classified by definition as having no bedroom.

Square footage of unit. Housing size is shown for single detached housing units and mobile homes. Excluded from the calculation of square footage are unfinished attics, carports, attached garages, porches that are not protected from the elements (i.e. screened porches), and mobile home hitches. Both finished and unfinished basements are included. Median square footage is rounded to the nearest foot. Square footage is based on the respondent's estimate of the size of the unit. If the respondent did not know the square footage, the interviewer measured the outside dimensions of the unit. Preliminary evaluation indicates that this item is somewhat unreliable.

Structural Characteristics

Year structure built. Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted. The figures refer to the number of housing units in structures built during the specified periods and in existence at the time of the interview. For mobile homes and trailers, the manufacturer's model year was assumed to be the year built. Median year built is rounded to the nearest year.

Units in structure. In determining the number of housing units in a structure, all units, both occupied and vacant, were counted. The statistics are presented for the number of housing units in structures of specified type and size, not for the number of residential structures.

A structure is a separate building if it has either open space on all sides or is separated from other structures by dividing walls that extend from ground to roof. Structures containing only one housing unit are further classified as detached or attached.

A one-unit structure is detached if it has open space on all four sides even though it has an adjoining shed or garage. A one-unit structure is attached if it has one or more walls extending from ground to roof which divide it from other adjoining structures and does not share a furnace or boiler with adjoining structures such as in rowhouses, townhouses, etc.

Mobile homes and trailers are shown as a separate category. When one or more rooms have been added to a mobile home or trailer, it is still classified as a mobile home.

Complete bathrooms. A housing unit is classified as having a complete bathroom if it has a room with a flush toilet, bathtub or shower, a sink, and hot and cold piped water. All facilities must be in the same room to be a complete bathroom. A half bathroom has either a flush toilet or a bathtub or shower but does not have all the facilities for a complete bathroom.

Housing Quality

Severe physical problems. A unit has severe physical problems if it has any of the following five problems:

Plumbing. Lacking hot or cold piped water or a flush toilet, or lacking both bathtub and shower, all inside the structure for the exclusive use of the unit.

Heating. Having been uncomfortably cold last winter for 24 hours or more because the heating equipment broke down, and it broke down at least three times last winter for at least 6 hours each time.

Electric. Having no electricity, or all of the following three electric problems: exposed wiring; a room with no working wall outlet; and three blown fuses or tripped circuit breakers in the last 90 days.

Upkeep. Having any five of the following six maintenance problems: water leaks from the outside, such as from the roof, basement, windows, or doors; leaks from inside structure such as pipes or plumbing fixtures; holes in the floors; holes or open cracks in the walls or ceilings; more than 8 inches by 11 inches of peeling paint or broken plaster; or signs of rats in the last 90 days.

Hallways. Having all of the following four problems in public areas: no working light fixtures; loose or missing steps; loose or missing railings; and no elevator.

Moderate physical problems. A unit has moderate physical problems if it has any of the following five problems, but none of the severe problems.

Plumbing. On at least three occasions during the last 3 months or while the household was living in the unit if less than 3 months, all the flush toilets were broken down at the same time for 6 hours or more.

Heating. Having unvented gas, oil, or kerosene heaters as the primary heating equipment.

Upkeep. Having any three of the overall list of six upkeep problems mentioned above under severe physical problems.

Hallways. Having any three of the four hallway problems mentioned above under severe physical problems.

Kitchen. Lacking a kitchen sink, refrigerator, or burners inside the structure for the exclusive use of the unit.

Overall opinion of structure. The data presented are based on the respondent's overall opinion of the house or apartment as a place to live. The respondent was asked to rate the structure based on a scale from 1 to 10, where 10 is the best and 1 is the worst.

Overall opinion of neighborhood. The data presented are based on the respondent's overall opinion of the neighborhood. The respondent defines neighborhood. The respondent was asked to rate the neighborhood based on a scale from 1 to 10, where 10 is the best and 1 is the worst.

Financial Characteristics

Value. Value is the respondent's estimate of how much the property (house and lot) would sell for if it were for sale. Any nonresidential portions of the property are excluded from the cost. Medians for value are rounded to the nearest dollar.

Income. The statistics on income in the American Housing Survey are based on the respondent's reply to questions on income for the 12 months prior to the interview and are the sum of the amounts reported for wage and salary income, self-employment income, interest or dividends, Social Security or railroad retirement income, public assistance or welfare payments, alimony or child support, and all other money income. The figure represents the amount of income received before deductions for personal income taxes, Social Security, union dues, bond purchases, health insurance premiums, Medicare deductions, etc. Medians for income are rounded to the nearest hundred dollars.

The income statistics and the characteristics of the household refer to different periods in time. Income data refer to the 12 months prior to the interview, whereas the household characteristics refer to the date of interview. Thus, family or household income does not include amounts received by persons who were members of the family during all or part of the income period if these persons no longer resided with the family at the time of the interview. On the other hand, family or household income includes income reported by persons who did not reside with the household during the income period but who were members at the time of the interview. For most households, however, the income reported was received by persons who were members of the household throughout the income period.

There may be significant differences in the income data between the American Housing Survey and other Bureau surveys and censuses. For example, the time period for income data in the American Housing Survey refers to the 12 months prior to the interview while other income data generally refer to the calendar year prior to the date of the interview. Additional differences in the income data may be attributed to factors such as the various ways income questions are asked, the sampling variability and nonsampling errors between the American Housing Survey and other Bureau surveys and censuses, survey procedures and techniques, and processing procedures.

First-time owners. If both the owner and any co-owners have never owned or co-owned another home as a usual place of residence, then the housing unit was reported as

the first home ever owned. Previous homes purchased solely as vacation homes or homes purchased for commercial rental purposes are not to be considered usual residences. However, if a previously owned home was originally purchased as a usual residence and later used as a vacation home or for commercial or rental purposes, the home is considered as being owned as a usual residence.

Mortgages currently on property. The owner or the owner's spouse was asked the number of mortgages or similar loans currently in effect on the home. For mobile homes, if there was a separate loan for the mobile home and for the land, two mortgages were recorded. A mortgage or similar debt refers to all forms of debt where the property is pledged as security for payment of the debt. It includes such debt instruments as deeds of trust, trust deeds, mortgage bonds, and vendors' liens. In the first three arrangements, usually a third party, known as the trustee, holds the title to the property until the debt is paid. In the vendor lien arrangement, the title is kept by the buyer but the seller (vendor) reserves, in the deed to the buyer, a lien on the property to secure payment of the balance of the purchase price. Also included as a mortgage or similar debt are contracts to purchase, land contracts, and lease-purchase agreements where the title to the property remains with the seller until the agreed upon payments have been made by the buyer.

Monthly housing costs. Monthly housing costs for owner-occupied units are the sum of monthly payments for all mortgages or installment loans or contracts, real estate taxes (including taxes on mobile homes or trailer sites if the site is owned), property insurance, homeowners association fee, cooperative or condominium fee, mobile home park fee, land rent, utilities (electricity, gas, water, and sewage disposal), fuels (oil, coal, kerosene, wood, etc.), and garbage and trash collection. Monthly housing costs are not computed for households with a mortgage or similar debt that failed to report the amount of their loan or contract payment. Medians for monthly housing costs are rounded to the nearest dollar.

Monthly housing costs as percent of income. The yearly housing costs (monthly housing costs multiplied by 12) are expressed as a percentage of the total income of the family or primary individual. This percentage is calculated for the same owner-occupied housing units for which "monthly housing costs" were computed (for exclusions, see "Monthly housing costs"). The percentage was computed separately for each unit and rounded to the nearest percent. The measure was not computed for units where occupants reported no income or a net loss.

Real estate taxes. This item includes special assessments, school taxes, county taxes, and any other real estate taxes. Excluded are payments on delinquent taxes due from prior years. Rebates are subtracted from the total. When the real estate taxes are included with the mortgage, a separate amount for the taxes is obtained. To determine average monthly cost, yearly cost was divided by 12. Medians for real estate taxes are rounded to the nearest dollar.

Repairs, improvements, alterations in last 2 years. The statistics refer to the 24 months prior to the date of the interview and are restricted to owner-occupied housing units. The total cost of the labor and materials was to be reported. However, if the labor was performed by the occupants or provided without charge, only the cost of the materials was obtained. The cost pertains to the sum of the costs of the jobs if there were more than one job within the 2-year period.

Repairs

Roofs. Work begun, but never completed, was not counted unless the work was currently in progress. All jobs were included no matter how small.

Additions. An addition is floor space built onto, above, or below an existing house in order to increase the enclosed space within the house. All work must have been done after the original construction.

Kitchens. Kitchens added to space already enclosed within the structure were counted. Remodeling a kitchen could include replacing or adding installed equipment such as a garbage disposal, trash compactor, stove, or refrigerator; or it could include replacing or adding cabinets, counter tops, floors or lighting.

Bathrooms. Bathrooms added to space already enclosed within the structure were counted. Remodeling a bathroom could include replacing or adding installed equipment such as a shower door and fixtures, or vanity; or replacing or adding cabinets, counter tops, floors or lighting.

Siding. Work begun, but never completed, was not counted unless the work was currently in progress. All jobs were included no matter how small.

Storm doors/windows. Used storm doors/windows were counted if new to the unit. Windows or doors which were purchased but not yet installed were counted as long as the intentions were to install them.

Major equipment. Only installed equipment was counted. Dehumidifiers, heating equipment, portable dishwashers, or any other equipment which simply plugged in was not counted. Water heaters and heat pumps were counted as major equipment.

Insulation. Insulation included all forms of materials (foam, weather stripping, caulking) which are to remain in place. Plastic taped over windows in winter, but removed in summer was not counted.

Other major work. This category includes other major repairs, alterations, or improvements totaling over $500 each.

Household Characteristics

Household. A household consists of all the persons who occupy a housing unit. By definition, the count of households is the same as the count of occupied housing units.

Householder. The householder is the first household member who is 18 years old and over and is the owner. In cases where no household member listed is 18 years or older, the first household member listed is the householder.

Household composition. Statistics are presented separately for two-or-more-person households and for one-person households. Households having two or more persons are further subdivided as follows:

Married-couple families, no nonrelatives. Each household in this group consists of the householder and spouse, and other persons, if any, all of whom are related to the householder.

Other male householder. This category includes households with male householders who are married, but with wife absent because of separation or other reason where husband and wife maintain separate residences; and male householders who are widowed, divorced, or single. Also included are households with male householder, wife present and nonrelatives living with them.

Other female householder. This category includes households with female householders who are married, but with husband absent because of separation or other reason where husband and wife maintain separate residences; and female householders who are widowed, divorced, or single. Also included are households with female householder, husband present, and nonrelatives living with them.

Households consisting of only one person are shown separately for male householder and female householder under the category "one-person households."

Family or primary individual. Housing units are occupied by either families or primary individuals. The term "family" refers to the householder and all (one or more) other persons living in the same household who are related to the householder by blood, marriage or adoption. If the householder lives alone or with nonrelatives only, then the householder is considered a primary individual.

Married couples related to the householder of a family are included in the family and are not considered as separate families unless they reside in separate living quarters. A lodger, servant, or other person unrelated to the householder is considered a member of the household but not of the family.

In the statistics on household composition, families are always included in one of the three major groups of two-or-more-person households. Primary individuals with nonrelatives living with them are tabulated as two-or-more-person households and further subdivided as other male householder or female householder. Primary individuals living alone are always tabulated as one-person households.

Age of householder. The age classification refers to the age reported for the householder as of that person's last birthday.

Single children under 18 years old. Single children include all persons under 18 years of age, who may or may not be related to the householder and who are not married (i.e., widowed, divorced, separated, or never been married) at the time of the interview.

Adults and single children under 18 years old. Data are shown for all single children whether related to the householder or not. The data are further divided by households headed by a married couple, other households with 2 or more adults, and households with one adult or none.

Appendix B. Source and Accuracy of the Estimates

SOURCE OF THE DATA

All of the estimates in this report are based on data from the 1987 American Housing Survey - National Sample (AHS-N). The Bureau of the Census conducts this survey biennially, acting as collection agent for the Department of Housing and Urban Development. The current sample for the AHS-N survey was spread over 394 sample areas (called primary sampling units) comprising 878 counties and independent cities with coverage in each of the 50 states and the District of Columbia. About 55,800 sample housing units (HUs) were selected for interview in 1987. For more details about the sample design of AHS-N, refer to appendix B of the report "American Housing Survey for the United States in 1987" (Current Housing Reports, series H-150-87).

ESTIMATION PROCEDURES

The AHS-N sample estimation procedure adjusted weighted sample estimates of the United States housing inventory by tenure, race of household head, household status and geographic region. These independent estimates were based on statistics from the decennial census and the Current Population Survey (CPS), a monthly survey conducted by the Bureau of the Census for the Bureau of Labor Statistics to provide monthly labor force data. For a more detailed description of the estimation procedure, refer to appendix B of the report "American Housing Survey for the United States in 1987" (Current Housing Reports, series H-150-87).

ACCURACY OF THE ESTIMATES

Since estimates in this report are based on samples, they may differ somewhat from the results that would have been obtained if a complete census had been taken under the same interviewing conditions. Estimates from sample surveys have two possible types of errors: sampling and nonsampling errors. The accuracy of survey estimates depends upon the net effect of sampling and nonsampling errors.

SAMPLING ERRORS

The sample that is chosen for a survey is one of many possible samples that could have been selected under the same sample design. Even if all interviewing conditions were the same, estimates from each of the samples would differ from one another. The deviation of a particular sample estimate from the average value from all possible samples is called sampling error. The standard error of an estimate is commonly used to measure sampling error. It reflects the chance variations that occur because a sample was surveyed rather than the entire population.

NONSAMPLING ERRORS

Nonsampling errors may be attributed to many sources and occur during all stages of the survey process. They include: inability to obtain information about all cases; definitional difficulties; differences in interpretation of questions among respondents; inability or unwillingness to provide correct information on the part of respondents; mistakes in recording or coding the data; and other errors of collection, response, processing, coverage, and missing data estimation.

For selected characteristics, missing data were allocated. However, data regarding the types of home improvements, the types of workers for the jobs, and the amount spent on home improvements were not allocated. Households who did not or could not answer one or more of these series of questions did not have a response imputed to them. Tables 1 - 3 of this report show separate characteristics for households whose responses for all nine types of home improvements were "not reported." Tables 7 - 9 present analogous information for the type of worker questions. Only tables 10 - 12, which deal with costs for home improvements, are based on a universe where all pertinent information (that is, job costs) must be recorded for each job undertaken by the household. The tables below summarize the nonresponse rates for individual items.

Nonresponse Rates for Selected Data Items

(Universe levels are in thousands)

Universe	Characteristic	Percent which were nonresponses
All Owners	**Presence/absence of work**	
58,164	all jobs	1.0
	replace/repair roof	1.1
	room addition	1.1
	add/remodel kitchen	1.2
	add/replace bathroom	1.1
	add/replace siding	1.2
	add storm doors/windows	1.2
	add/replace major equipment	0.9
	add insulation	1.4
	other major repairs/improvements	1.3
Owners with specific improvements	**Type of worker on job**	
29,704	any job	1.5
9,021	replace/repair roof	2.8
3,043	room addition	2.4
4,532	add/remodel kitchen	1.9
5,346	add/remodel bathroom	2.8
3,222	add/replace siding	2.5
8,366	add storm doors/windows	2.4
5,468	add/replace major equipment	2.6
5,135	add insulation	4.2
11,037	other major repairs/improvements	4.4
	Amount spent on job	
29,704	any job	13.7
9,021	replace/repair roof	12.9
3,043	room addition	12.0
4,532	add/remodel kitchen	11.1
5,346	add/remodel bathroom	12.7
3,222	add/replace siding	17.2
8,366	add storm doors/windows	10.7
5,468	add/replace major equipment	9.1
5,135	add insulation	20.2
11,037	other major repairs/improvements	N/A*

*Only improvements worth $500 or more are included in this category.

STANDARD ERRORS

The sample estimate and the estimated standard error permit the construction of intervals such that the average result from all possible samples lies within the interval with a known level of confidence. For example, if all possible samples were selected and surveyed under the same general conditions and the estimate and estimated standard error were computed for all the samples, then approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result from all possible samples.

For intervals computed using estimates and estimated standard errors from this report, the average result from all possible samples either is or is not contained within the interval. However, it can be said that there is only a one in ten chance that the sample selected will have a 90-percent confidence interval which does not contain the average result from all possible samples.

Tests may be performed at various levels of significance, where a significance level is the probability of concluding that the characteristics are different when, in fact, they are the same. All statements of comparison in the text have passed a hypothesis test at least at the 0.10 level of significance. This means that the absolute value of the estimated difference between characteristics is greater than or equal to 1.6 times the standard error of the difference.

STANDARD ERRORS FOR AHS-N

The figures presented in the standard error tables are approximations to the standard errors for the estimates in this report. These approximations were necessary in order to produce standard errors applicable to a wide range of characteristics at a reasonable cost. The standard error tables provide an indication of the order of magnitude of the standard errors rather than the actual standard errors for any specific characteristic.

To determine the estimated standard error of a sample estimate from AHS-N data, use tables 1-4. Use the "a" tables for estimates of levels and the "b" tables for percentage estimates. For example, for general characteristics of the national housing inventory, table 1a should be used for estimating standard errors of estimates of levels; Table 1b should be used for estimating standard errors of estimated percentages of these HUs.

Use the standard error table of the corresponding population group for the estimates of all characteristics except overall opinion of neighborhood, no complete bathrooms, and single detached units and mobile homes with less than 1,500 square feet, which have separate standard error tables. For characteristics of multiple population groups (e.g., Blacks in the Northeast or mobile homes in the South), use the standard error table with the larger estimated standard error for the given estimate.

STANDARD ERROR OF ESTIMATES OF LEVELS

Tables 1a-4a present estimated standard errors for estimates of national and regional housing characteristics

for AHS-N. Linear interpolation should be used to determine estimated standard errors for estimates not specifically shown in tables 1a-4a. The following is an illustration of the use of table 4a.

Table 1 of this report shows that in the U.S. there were 88,000 owner-occupied HUs with home improvements and no complete bathrooms in 1987. Table 4a should be used for this type of characteristic. Interpolation in standard error Table 4a shows that the estimated standard error of an estimate of this size multiplied by a factor of 1.6 is 32,000 owner-occupied HUs.

The 90-percent confidence interval for the estimated number of owner-occupied HUs with home improvements and no complete bathrooms is from 56,000 to 120,000. Thus, the average estimate from all possible samples of these types of HUs will be within an interval computed in this way for approximately 90 percent of all possible samples.

STANDARD ERRORS OF ESTIMATES OF PERCENTAGES

Estimated percentages from this report are computed using sample data for both the numerator and denominator. The numerator is a subclass of the denominator. The reliability of an estimated percentage depends on both the size of the percentage and the total upon which the percentage is based (i.e., the denominator). Estimated percentages are more reliable than the corresponding estimates of the numerator of the percentages, particularly if the estimated percentages are 50 percent or more. Tables 1b-4b present estimated standard errors of national and regional estimated percentages of HUs for 1987 AHS-N. Two-way interpolation should be used for estimated standard errors of estimated percentages not specifically shown in tables 1b-4b. The following is an illustration of the use of table 3b.

Table 2 of this report shows that of the 2,247,000 Black owner-occupied HUs in the U.S. in 1987 with no home improvements, 1,386,000 or 61.7 percent were in the South. Table 3b should be used for this characteristic.

Table 3b (i.e., interpolation on both the denominator and the percent) shows that the estimated standard error on the above percent is 1.64. The 90-percent confidence interval for this estimated percentage is between 59 and 64 percent.

STANDARD ERRORS OF RATIOS

For ratios of the form (100) (x/y), where x is not a subclass of y, the standard error tables for estimated percentages underestimate the standard error of the ratio when there is little or no correlation between x and y. For this type of ratio, a better approximation of the standard error may be obtained by letting the estimated standard error of the ratio be approximately equal to the following:

$$(100)\left(\frac{x}{y}\right)\sqrt{\left(\frac{s_x}{x}\right)^2+\left(\frac{s_y}{y}\right)^2}$$

where x = numerator of the ratio
y = denominator of the ratio
s_x = estimated standard error of the numerator
s_y = estimated standard error of the denominator

s_x and s_y are computed according to the method used for estimated standard errors of levels. The following is an illustration of how to compute the estimated standard error of a ratio.

Table 4 of this report shows that there were 826,000 owner-occupied HUs in the U.S. in 1987 where the only improvement was adding a room. The estimated standard error of this estimate is determined to be 43,100 HUs using linear interpolation in standard error table 1a. Table 4 also shows that there were 2,185,000 owner-occupied HUs in the U.S. in 1987 where the only improvement was remodeling a kitchen or bathroom. The estimated standard error of this estimate is 69,300 HUs. The ratio of owner-occupied HUs only adding a room to those HUs remodeling a kitchen or bathroom is 37.8. The estimated standard error of this ratio is 2.3. The 90-percent confidence interval for this estimated ratio is from 34.1 to 41.5.

STANDARD ERRORS OF DIFFERENCES

The estimated standard errors shown in Tables 1a-4a are not directly applicable to the difference between estimates. The estimated standard error of a difference can be computed using the following formula:

$$s_{x-y}=\sqrt{s_x^2+s_y^2}$$

where s_x and s_y are the estimated standard errors for the two estimates x and y, respectively. Compute the estimated standard errors in the same manner as for estimated standard errors of levels or percentages. This formula is quite accurate for the difference between estimates of the same characteristic in two different areas or the difference between separate and uncorrelated characteristics in the same area. If a high positive correlation exists between the two characteristics, the formula will overestimate the true error. If there is a high negative correlation, the formula will underestimate the true standard error. The following illustration shows how to compute the estimated standard error of a difference.

Table 7 of this report shows that in the U.S. in 1987 there were 7,944,000 single-unit, detached owner-occupied HUs where all work was completed by household members. The estimated standard error on this estimate is determined to be 128,000 owner-occupied HUs using linear interpolation in standard error table 1a. Table 7 also

shows that in the U.S. in 1987 there were 13,159,000 single-unit, detached owner-occupied HUs where all work was completed by non-household members. The estimated standard error on this estimate is 160,000 owner-occupied HUs.

The estimated difference between 1987 single-unit, detached owner-occupied HUs with no work completed versus all work completed by household members is 5,215,000 HUs. The estimated standard error of this difference multiplied by a factor of 1.6 is 328,000 HUs. The 90-percent confidence interval for this difference is from 4,887,000 to 5,543,000 HUs. It can be concluded that the average estimate of this difference, derived from all possible samples, lies within an interval computed in this way for 90 percent of all possible samples.

STANDARD ERRORS OF MEDIANS

For medians presented in this report, the estimated standard error depends on the distribution of the characteristic and the total number of HUs which comprise the distribution. A common method for approximating the reliability of the estimated median is to construct an interval about the estimated median such that the average median from all possible samples lies within the interval with a known level of confidence. For medians, the following procedure should be used to estimate the upper and lower limits of a 90-percent confidence interval of a median.

1. From the appropriate standard error table for estimated percentages, determine the estimated standard error of a 50-percent characteristic based on the total number of HUs from the distribution.
2. Add to and subtract from 50 percent 1.6 times the estimated standard error determined in step one to obtain the upper and lower limits from which the confidence interval will be determined.
3. Determine the lower endpoint of the confidence interval by linearly interpolating within the category of the distribution which contains the lower percentage limit determined in step 2. The upper endpoint of the confidence interval is determined in the same manner using the upper percentage limit determined in step 2.

For about 90 out of 100 possible samples the average median from all possible samples will lie within this 90-percent confidence interval. The following example illustrates how to compute a 90-percent confidence interval for a median.

Table 2 of this report shows the median age of householders in homes with improvements in 1987 was 49. The total number of HUs upon which the distribution is based is 29,704,000 HUs.

1. From table 1b, the standard error of a 50-percent characteristic based on 29,704,000 HUs is 0.5 percentage points.
2. To obtain a 90-percent confidence interval, add to and subtract from 50 percent 1.6 times the estimated standard error from step one. This provides the upper and lower percentage limits of 49.2 and 50.8.
3. From table 2, the interval for owner-occupied HUs with householder age of 45 to 54 years (for the purpose of calculating the median, the category of 45 to 54 years of age of householder is considered to be from 44.5 to 54.5 years) contains the 49. 2 percent derived in step 2. About 12,397,000 persons or 41.7 percent fall below this interval, and 5,548,000 persons or 18.7 percent fall within this interval.

By linear interpolation, the lower endpoint of the 90-percent confidence interval is found to be about 48.5 years.

$$44.5 + (54.5\text{-}44.5)\frac{49.2\text{-}41.7}{18.7} = 48.5$$

Similarly, the interval for owner-occupied HUs with householder age of 45 to 54 years contains the 50.8 percent derived in step 2. About 12,397,000 persons or 41.7 percent fall below this interval, and 5,548,000 persons or 18.7 percent fall within this interval. The upper limit of the 90-percent confidence interval is found to be about 49.4 years.

$$44.5 + (54.5 - 44.5)\frac{50.8\text{-}41.7}{18.7} = 49.4$$

Thus, the 90-percent confidence interval ranges from 48.5 to 49.4 years of age.

Table 1a. **Standard Errors of Estimated Numbers of Housing Units for General Population Groups**[1]

Size of estimate (000)	Standard error				Size of estimate (000)	Standard error		
	US, Elderly, MH, or NC[2] (000)	Midwest Region (000)	West Region (000)	Black[3] (000)		US, Elderly, MH, or NC[2] (000)	Midwest Region (000)	West Region (000)
0	2	2	3	3	7,500	125	107	108
5	3	3	4	4	10,000	142	112	108
10	5	5	5	5	12,500	157	112	98
25	8	8	8	8	15,000	169	105	-
50	11	11	12	12	17,500	179	-	-
100	15	15	16	16	20,000	188	-	-
250	24	24	26	26	22,500	196	-	-
500	34	33	36	37	25,000	203	-	-
1,000	48	47	51	52	50,000	223	-	-
2,500	75	71	76	81	60,000	210	-	-
5,000	104	94	98	113				

[1]The general population groups include: total, Black, elderly, mobile home (MH), new construction (NC), and the Midwest and West regions. Total includes total owner-occupied housing units (HUs), total owner-occupied HUs with home improvements, and total owner-occupied HUs without home improvements, as well as specific type of home improvement categories.

[2]For estimates pertaining to MH, the standard errors are to be multiplied by a factor of 0.95.

[3]There is only one column of standard error estimates for Black because estimates cannot exceed 5,000,000 for Black owner-occupied HUs.

Table 1b. **Standard Errors of Estimated Percentages of Housing Units for General Population Groups**[1]

Base of percentage (000)	Estimated Percentage[2 3]							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	31.4	31.4	31.4	31.4	31.4	31.4	31.4	33.8
10	18.6	18.6	18.6	18.6	18.6	18.6	20.7	23.9
25	8.4	8.4	8.4	8.4	9.1	10.8	13.1	15.1
50	4.4	4.4	4.4	4.7	6.4	7.6	9.3	10.7
100	2.2	2.2	2.2	3.3	4.5	5.4	6.5	7.6
250	0.9	1.0	1.3	2.1	2.9	3.4	4.1	4.8
500	0.5	0.7	0.9	1.5	2.0	2.4	2.9	3.4
1,000	0.2	0.5	0.7	1.0	1.4	1.7	2.1	2.4
2,500	0.09	0.3	0.4	0.7	0.9	1.1	1.3	1.5
5,000	0.05	0.2	0.3	0.5	0.6	0.8	0.9	1.1
7,500	0.03	0.2	0.2	0.4	0.5	0.6	0.8	0.9
10,000	0.02	0.2	0.2	0.3	0.5	0.5	0.7	0.8
12,500	0.02	0.13	0.2	0.3	0.4	0.5	0.6	0.7
15,000	0.02	0.12	0.2	0.3	0.4	0.4	0.5	0.6
17,500	0.01	0.11	0.2	0.2	0.3	0.4	0.5	0.6
20,000	0.01	0.11	0.15	0.2	0.3	0.4	0.5	0.5
22,500	0.01	0.10	0.14	0.2	0.3	0.4	0.4	0.5
25,000	0.01	0.10	0.13	0.2	0.3	0.3	0.4	0.5
50,000	0.01	0.07	0.09	0.15	0.2	0.2	0.3	0.3
60,000	0.01	0.06	0.09	0.13	0.2	0.2	0.3	0.3

[1]The general population groups include: total, Black, elderly, mobile home (MH), new construction (NC) and the Midwest and West regions. Total includes total owner-occupied housing units (HUs), total owner-occupied HUs with home improvements, and total owner-occupied HUs without home improvements, as well as specific type of home improvement categories.

[2]For estimates pertaining to the West region or Black, the standard errors are to be multiplied by a factor of 1.09.

[3]For estimates pertaining to MH, the standard errors are to be multiplied by a factor of 0.95.

Table 2a. **Standard Errors of Estimated Numbers of Housing Units for the Northeast Region and Hispanic Origin**

Size of estimate (000)	Standard error		Size of estimate (000)	Standard error	
	North-east region (000)	His-panic origin (000)		North-east region (000)	His-panic origin (000)
0	2	2	500	31	34
5	3	3	1,000	44	48
10	4	5	2,500	66	76
25	7	8	5,000	86	-
50	10	11	7,500	95	-
100	14	15	10,000	97	-
250	22	24	12,500	91	-

Table 2b. **Standard Errors of Estimated Percentages of Housing Units for the Northeast Region and Hispanic Origin**

Base of percentage (000)	Estimated percentage[1]							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	28.6	28.6	28.6	28.6	28.6	28.6	28.6	31.6
10	16.7	16.7	16.7	16.7	16.7	16.7	19.4	22.4
25	7.4	7.4	7.4	7.4	8.5	10.1	12.2	14.1
50	3.8	3.8	3.8	4.4	6.0	7.1	8.7	10.0
100	2.0	2.0	2.0	3.1	4.2	5.0	6.1	7.1
250	0.8	0.9	1.3	1.9	2.7	3.2	3.9	4.5
500	0.4	0.6	0.9	1.4	1.9	2.3	2.7	3.2
1,000	0.2	0.4	0.6	1.0	1.3	1.6	1.9	2.2
2,500	0.08	0.3	0.4	0.6	0.8	1.0	1.2	1.4
5,000	0.04	0.2	0.3	0.4	0.6	0.7	0.9	1.0
7,500	0.03	0.2	0.2	0.4	0.5	0.6	0.7	0.8
10,000	0.02	0.14	0.2	0.3	0.4	0.5	0.6	0.7
12,500	0.02	0.13	0.2	0.3	0.4	0.5	0.5	0.6

[1]For estimates pertaining to Hispanic origin, the standard errors are to be multiplied by a factor of 1.09.

Table 3a. **Standard Errors of Estimated Number of Housing Units for the South Region**

Size of estimate (000)	Standard error (000)	Size of estimate (000)	Standard error (000)
0	2	1,000	49
5	3	2,500	75
10	5	5,000	101
25	8	7,500	117
50	11	10,000	127
100	16	15,000	135
250	25	20,000	128
500	35	25,000	101

Table 3b. **Standard Errors of Estimated Percentages of Housing Units for the South Region**

Base of percentage (000)	Estimated percentage							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	32.8	32.8	32.8	32.8	32.8	32.8	32.8	34.9
10	19.6	19.6	19.6	19.6	19.6	19.6	21.4	24.7
25	8.9	8.9	8.9	8.9	9.4	11.1	13.5	15.6
50	4.6	4.6	4.6	4.8	6.6	7.9	9.6	11.0
100	2.4	2.4	2.4	3.4	4.7	5.6	6.8	7.8
250	1.0	1.0	1.4	2.2	3.0	3.5	4.3	4.9
500	0.5	0.7	1.0	1.5	2.1	2.5	3.0	3.5
1,000	0.2	0.5	0.7	1.1	1.5	1.8	2.1	2.5
2,500	0.10	0.3	0.4	0.7	0.9	1.1	1.4	1.6
5,000	0.05	0.2	0.3	0.5	0.7	0.8	1.0	1.1
7,500	0.03	0.2	0.3	0.4	0.5	0.6	0.8	0.9
10,000	0.02	0.2	0.2	0.3	0.5	0.6	0.7	0.8
15,000	0.02	0.13	0.2	0.3	0.4	0.5	0.6	0.6
20,000	0.01	0.11	0.2	0.2	0.3	0.4	0.5	0.6
25,000	0.01	0.10	0.14	0.2	0.3	0.4	0.4	0.5

Table 4a. **Standard Errors of Estimated Numbers of Housing Units for Special Items**[1]

Size of estimate (000)	Standard error: Overall neighborhood opinion (000)	Standard error: Other special items[2] (000)	Size of estimate (000)	standard error: Overall neighborhood opinion (000)	standard error: Other special items[2] (000)
0	3	5	2,500	83	108
5	4	5	5,000	116	151
10	5	7	7,500	139	182
25	8	11	10,000	158	206
50	12	15	15,000	188	-
100	17	22	20,000	209	-
175	22	29	25,000	225	-
250	27	35	50,000	248	-
500	38	49	60,000	234	-
1,000	53	69	-	-	-

[1]Special items include overall opinion of neighborhood, no complete bathrooms, and single detached units and mobile homes with less than 1,500 square feet.

[2]Other special items include no complete bathrooms and single detached units and mobile homes with less than 1,500 square feet.

Table 4b. **Standard Errors of Estimated Percentages of Housing Units for Special Items**[1]

Base of percentage (000)	Estimated Percentage[2]: 0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	37.6
10	22.1	22.1	22.1	22.1	22.1	22.1	23.0	26.6
25	10.2	10.2	10.2	10.2	10.2	12.0	14.6	16.8
50	5.4	5.4	5.4	5.4	7.1	8.5	10.3	11.9
100	2.8	2.8	2.8	3.7	5.0	6.0	7.3	8.4
250	1.1	1.1	1.5	2.3	3.2	3.8	4.6	5.3
500	0.6	0.7	1.1	1.6	2.3	2.7	3.3	3.8
1,000	0.3	0.5	0.7	1.2	1.6	1.9	2.3	2.7
2,500	0.11	0.3	0.5	0.7	1.0	1.2	1.5	1.7
5,000	0.06	0.2	0.3	0.5	0.7	0.8	1.0	1.2
7,500	0.04	0.2	0.3	0.4	0.6	0.7	0.8	1.0
10,000	0.03	0.2	0.2	0.4	0.5	0.6	0.7	0.8
12,500	0.02	0.15	0.2	0.3	0.5	0.5	0.7	0.8
15,000	0.02	0.14	0.2	0.3	0.4	0.5	0.6	0.7
17,500	0.02	0.13	0.2	0.3	0.4	0.5	0.6	0.6
20,000	0.01	0.12	0.2	0.3	0.4	0.4	0.5	0.6
22,500	0.01	0.11	0.2	0.2	0.3	0.4	0.5	0.6
25,000	0.01	0.11	0.15	0.2	0.3	0.4	0.5	0.5
50,000	0.01	0.07	0.11	0.2	0.2	0.3	0.3	0.4
60,000	0.01	0.07	0.10	0.15	0.2	0.2	0.3	0.3

[1]Special items include overall opinion of neighborhood, no complete bathrooms, and single detached units and mobile homes with less than 1,500 square feet.

[2]For estimates pertaining to no complete bathrooms and single detached units and mobile homes with less than 1,500 square feet, the standard errors are to be multiplied by a factor of 1.30.

Appendix C. Comparability With The Consumer Expenditure Survey Data on Home Improvements

The Census Bureau publishes another report series, Expenditures for Residential Improvements and Repairs (C50) which details costs for residential improvements. This series draws its data chiefly from the Consumer Expenditures Survey (CE). Both the AHS and the C50 publications address the questions of: what work was done; who did the work; and the cost of jobs. However differences between the two data sets limit direct comparison of their results.

The AHS restricts its questions to owner-occupied units, including mobile homes; the C50 publishes data for owner-occupied, renter-occupied, and vacant housing units, but excludes mobile homes. Furthermore, the AHS requires a 2 year recall period for jobs and costs while CE uses a 3 month recall period. Differences in collecting job costs prevent AHS data from producing complete summary figures on costs. Due to the specifications for entering data in AHS, the largest job cost that can be recorded is $9,997. Thus a $15,000 addition would be shown as costing $9,997. About 5 percent of the units reporting home improvements in 1987 AHS had costs of $9,997 or greater for a single job. The CE survey allows job costs up to $99,999. Most information in the C50 report appears as the sum of costs crosstabulated by characteristics. Because AHS does not know the actual cost of the more expensive jobs, it cannot produce useful summary data on costs.

A further source of difference between the two data sets is the classification of jobs. Both AHS and CE show what type of work was reported, for example, roofing or siding. But CE collects information on a more detailed list of jobs and includes jobs to the property and outbuildings which would not be counted in AHS. Furthermore, in the C50 publication, jobs are defined not only by where the work occurred—the heating system—but also by whether that job was: maintenance and repairs (e.g. changing a filter); additions and alterations; or major replacements (e.g. installing a new furnace). The AHS data only show, for example, that the roof was worked on, not whether it was patched (the C50 maintenance and repairs category) or a new roof installed (the C50 major replacements category). Therefore, AHS data in this report on "upgrades and repairs" may include work that would be considered major replacements under the C50 classifications.

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