# Components of Inventory Change: 1997-1999

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## Results for the 1997-1999 CINCH

### Introduction

The Components of Inventory Change (CINCH) report measures changes in the characteristics of the housing stock of the United States. Using data collected from the national American Housing Survey (AHS), conducted every two years, the characteristics of individual housing units are compared across time. This comparison allows researchers to see not only changes in the characteristics of housing units, but also in the characteristics of occupants. Information is available on the characteristics of units added and removed from the housing stock.

First-time users of this publication are advised to refer to the Appendices for explanations of the columns and how to interpret the results. The Appendices also contain the definitions of all of the characteristics, cautions, and explanations about some of the results.

This document is one of a series of reports covering two-year intervals. All of the reports are based on the American Housing Survey. The results presented here are not directly comparable to "Components of Inventory Change: 1980-1991," or "Components of Inventory Change: 1980-1993." They are consistent with the previous series of two year reports, starting with the 1987 AHS.

## **Findings**

Here are some highlights of the findings in this CINCH report. See the tables for details and additional information.

### Table 1:

Units in Structure. Between 1997 and 1999, the number of units of all types increased, with single-family, detached units experiencing the greatest increase in absolute terms. Most of these units were added through new construction.

Removal of Units. In absolute terms, units built between 1960 and 1979 were lost more than other time periods.

Metro/Nonmetropolitan Areas. Most of the new construction occurred in the suburbs. During this period, the suburbs grew at a faster rate than did central cities, indicating a gradual shift from central cities toward the suburbs.

Tenure. The number of owner-occupied units increased from 1997 to 1999 by more than a million units. The proportion of owner-occupied units versus renter-occupied units also increased over this time period – from about 66 percent owner-occupied in 1997 to 68 percent in 1999. This increase can be partially attributed to new construction. The homeownership rate in new construction is approximately 84%.

### Table 2:

Stories in Structure. The number of three-story multiunit structures increased between 1997 and 1999. A majority of these new three-story units were added through new construction.

External Building Conditions. Between 1997 and 1999, the number of housing units in multiunit buildings reporting undesirable external building conditions decreased. Most of the units reporting such conditions in 1999 did not report the same conditions in 1997.

Rooms. The median number of rooms for a unit lost from the housing stock was 4.8 rooms. In contrast, the median number of rooms for a unit added to the housing stock was 5.8 rooms. This size increase is driven primarily by newly constructed units, which had a median size of 5.9 rooms.

Square Footage of Units. The change in the square footage of units is similar to the change in number of rooms. Units added to the stock tended to be slightly larger with more square footage than units removed from the housing stock. Units added to the stock had a median square footage of 1,650 square feet, while units removed from the stock had a median size of 989 square feet. Units present and unchanged in both years had a median size of approximately 1,700 square feet.

### Table 3:

Equipment. Between 1997 and 1999, the number of housing units lacking complete kitchen facilities declined by approximately 500,000 units. Units reporting no kitchen facilities in 1999 were lost over this two-year period to demolition or disaster, were condemned or badly damaged, or were changed to a non-residential use. However, approximately 1.4 million units remained with incomplete kitchen facilities.

Air Conditioning. Units lost from the housing stock between 1997 and 1999 tended to lack any type of air conditioning, while the majority of units added to the housing stock had central air conditioning built into the unit during this same period.

Main Heating Equipment. By 1999, most of newly constructed units used warm-air furnaces. During this same period, electric heat pumps were used in new construction at a rate exceeding their proportion in existing units in 1999. This indicates an increasing share of units with electric heat pumps.

Main Housing Heating Fuel. More units using fuel oil, kerosene, or wood were removed from the housing stock than added to it. There were overall net declines in the number of units using these sources as their primary fuel.

### Table 4:

Selected Amenities. Of units added through new construction, the majority included porches, garages (or carports), and approximately one-half included working fireplaces. In contrast, only about one third of existing units had fireplaces. Of the units lost, however, less than half had porches, and less than one-tenth had working fireplaces.

Selected Deficiencies. Most of the units with deficiencies in 1997 were still in the housing stock in 1999, but without the deficiency, indicating that the deficiency was corrected. Overall, there were declines in every category of deficiency between 1997 and 1999. The most common deficiency between 1997 and 1999 was open cracks or interior holes.

Bars on Windows of Buildings. In 1997, there was a decrease in the number of housing units

reporting bars on the windows of buildings within 300 feet of their homes.

Water Supply Stoppage. Occupied households reporting water supply stoppages decreased from 1999 to 1997. Those units reporting a water supply stoppage in 1999 did not also report a stoppage in 1997.

Selected Physical Problems. Overall, the number of units with moderate physical problems remained approximately constant over the two year period. However, most units that had physical problems in 1999 were fixed by 1997, but some units which had been in adequate shape in 1997 had deteriorated in quality by 1999.

### Table 5:

Number of Single Children Under 18 Years Old. Between 1997 and 1999, the number of housing units reporting children under 18 years old remained approximately the same. Units added to the housing stock through new construction over this time were generally occupied by families with none, one, or two children under 18 years old.

Number of Persons in Household. Households in units added to the housing stock had a median number of people of 2.6. Most households consisted of one, two, or three persons, remaining unchanged between 1997 and 1999.

Years of School Completed by Householder. Householders of units added to the stock tended to have higher levels of education than the universe of householders as a whole. The median householder in 1997 has just less than one year of post-secondary education. In contrast, the median householder of a unit added to the housing stock had over two years of post-secondary education.

## Table 6:

Please see the Appendix for cautions about interpreting financial information.

Monthly Housing Costs. Overall, housing units reported higher monthly housing costs in 1999 than in 1997. Units lost from the housing stock generally had lower than average monthly housing costs while those added reported higher

costs. The median monthly housing cost was \$509 in 1997 and \$575 in 1999.

Property Value. The median property value increased dramatically between 1997 and 1999. The median value in 1997 was approximately \$99,000 while the median value in 1999 was approximately \$115,000. Part of this change may be due to general inflation and house price appreciation. The contrast in value between units gained and lost to the housing stock is also dramatic. The median value of a unit removed from the stock was approximately \$31,000, while the median value of a unit added to the housing stock was just over 115,000.

Household Income. Between 1997 and 1999, the number of housing units reporting relatively high household incomes increased while the number of units reporting relatively low incomes decreased. Units added to the housing stock were generally occupied by households with moderate to higher incomes.

## **Data Availability**

The CINCH reports and the underlying American Housing Survey national sample data are available from:

HUD USER (Phone: 1-800-245-2691)

Box 23268

Washington, DC 20026-3268

Web: http://www.huduser.org/

### Acknowledgements

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At ICF, Gregory J. Watson managed the production of the reports. ICF staff assisting in the development of the reports include: Caroline McCarthy and Mark Sanford. Opinions expressed are those of the contractor and do not necessarily reflect the views of HUD.

# Components of Inventory Change: 1997-1999

**Tables** 

Losses from the housing stock

**Table 1- Introductory Characteristics - All Housing Units (Losses)** 

	(Numbers in thousands means not applicable, sample too small, zero, or rounds:  Characteristics	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	
1	Total, 1997	112 357	110 377	-	614	566	1
	Occupancy Status, 1997						
2	Vacant	11 027	4 769	5 508	65	60	2
3	Occupied	99 018	91 666	6 222	89	81	3
4	Type B Interview	2 312	928	1 284	460	425	4
	Units in Structure, 1997 <sup>1</sup>						
5	1, detached	68 785	68 147	-	46	45	5
6	1, attached	6 859	6 786	-	17	15	6
7	2 to 4	9 890	9 736	-	70	65	7
8	5 to 9	5 609	5 537	-	14	10	8
9	10 to 19	5 053	4 997	-	9	9	9
10	20 to 49	3 780	3 755	-	6	6	10
11	50 or more	3 837	3 781	-	-	-	11
12	Mobile home or trailer	7 821	6 950	-	-	-	12
13	Not reported	723	688	-	452	417	13
	Year Structure Built, 1997 <sup>2</sup>						
14	1995 to 1999	4 587	4 433	-	6	6	14
15	1990 to 1994	7 092	6 985	-	10	10	15
16	1985 to 1989	8 877	8 747	-	14	14	16
17	1980 to 1984	7 791	7 657	-	36	36	17
18	1975 to 1979	11 735	11 533	-	43	40	18
19	1970 to 1974	11 584	11 354	-	32	30	19
20	1960 to 1969	15 928	15 694	-	56	56	20
21	1950 to 1959	13 829	13 651	-	53	46	21
22	1940 to 1949	8 381	8 241	-	61	58	22
23	1930 to 1939	6 734	6 584	-	104	91	23
24	1920 to 1929	5 626	5 529	-	44	41	24
25	1919 or earlier	10 186	9 965	-	148	132	25
26	Median	1 963	1 963		1 948	1 947	26
	Duration of Vacancy, 1997						
27	Less than 1 month vacant	2 598	390	2 139	7	7	27
28	1 month up to 2 months	1 104	22	1 022	5	4	28
29	2 months up to 6 months	2 411	272	2 014	14	13	29
30	6 months up to 1 year	1 349	64	1 178	6	6	30
31	1 year up to 2 years	870	30	751	9	9	31
32	2 years or more	2 164	726	1 165	24	21	32
33	Never occupied as a permanent home	502	59	418	-	-	33
34	Don't know	28	4	24	-	-	34
	Metro/Nonmetropolitan Area, 1997						
35	Inside metropolitan statistical areas	84 828	83 664	-	470	422	35
36	In central cities	33 774	33 340	-	286	248	36
37	Suburbs	51 054	50 324	-	184	173	37
38	Outside metropolitan statistical areas	27 528	26 714	-	145	145	38

	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
1	701	199	431	341	259	566	2 545	- 1 979	1
2 3 4	240 443 17	82 107 11	144 284 3	191 144 6	88 143 27	60 81 425	810 1 211 525	- 749 - 1 130 - 99	2 3 4
5 6 7 8 9 10 11 12 13	46  10 2  - 642	83 10 42 13 7 2 18 23	231 24 49 25 16 14 11	166 30 37 18 25 4 8 54	111 6 11 10 8 4 18 91	45 15 65 10 9 6	683 88 219 82 65 31 55 871 452	- 638 - 73 - 154 - 72 - 56 - 25 - 55 - 871 - 35	5 6 7 8 9 10 11 12 13
14 15 16 17 18 19 20 21 22 23 24 25 26	104 67 74 80 101 118 105 14 17 11 4 6	2 2 9 21 20 24 26 17 28 15 35 1 957	7 13 12 12 23 43 58 61 47 41 38 76 1 957	5 16 6 25 15 25 54 41 45 33 76 1 945	38 26 26 27 29 31 22 16 16 12 4 11 1 977	6 10 14 36 40 30 56 46 58 91 41 132 1 947	160 118 144 169 242 259 290 225 198 241 138 353 1 965	- 154 - 108 - 130 - 134 - 202 - 229 - 234 - 179 - 141 - 150 - 97 - 221 1 961	14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34	33 21 44 51 44 46	7 5 9 6 5 42 9	11 12 28 12 13 65 2	16 12 24 18 22 99	2 9 19 20 6 19	7 4 13 6 9 21	76 63 139 114 98 294 26	- 69 - 59 - 125 - 108 - 89 - 273 - 26	27 28 29 30 31 32 33 34
35 36 37 38	320 30 290 380	127 66 61 72	280 136 144 151	241 127 114 100	147 38 110 111	422 248 173 145	1 586 683 903 959	- 1 164 - 435 - 730 - 815	35 36 37 38

**Table 1- Introductory Characteristics - All Housing Units (Losses)** 

	(Numbers in thousands means not applicable, sample too small, zero, or rounds	to zero- For add	ditional informa	tion on column hea	dings, see Appe		
						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
	Regions, 1997						
39	Northeast	21 402	21 164	-	185	169	39
40	Midwest	26 821	26 441	-	165	145	40
41	South	40 670	39 656	_	187	185	41
42	West	23 464	23 117	-	78	68	42
	Urbanized Areas, 1997						
43	Inside Urbanized Areas	78 441	77 548		491	444	43
43 44		33 774	33 340	-	286	248	43
	In central cities of P(MSA)s			-		_	
45	Urban Fringe	35 573	35 259	-	128	118	45
46	Other urban	9 094	8 949	-	77	77	46
47	Outside Urbanized Areas	33 916	32 830	-	124	123	47
	Heating and Cooling Degree Day Zone, 1997						
	Coldest: Over 7,000 heating degree days and under						
48	2,000 cooling degree days	11 783	11 616	-	59	59	48
	Cold: 5,500-7,000 heating degree days and under						
49	2,000 cooling degree days	30 628	30 178	-	177	158	49
	Cool: 4,000-5,500 heating degree days and under						
50	2,000 cooling degree days	25 190	24 767	-	188	171	50
	Mild: Under 4,000 heating degree days and under						
51	2,000 cooling degree days	22 062	21 651	_	98	86	51
•	Mixed: 2,000-4,000 heating degree days and over						
52	2,000 cooling degree days	13 966	13 664	_	50	50	52
	Hot: Under 2,000 heating degree days and over						
53	2,000 cooling degree days	8 727	8 503	-	42	42	53
	Tenure, 1997						
54	Owner occupied	65 396	60 292	4 434	30	26	54
55	Percent of all occupied	66%	69%	41%		33%	55
56	Renter occupied	33 622	26 691	6 472	59	54	56
	Race and Origin, 1997						
	NA/L:t-	04.044	70.070	7.004	07	0.4	
57	White	81 811	73 678	7 264	67	64	57
58	Non-Hispanic	75 047	67 179	7 076	50	48	58
59	Hispanic	6 763	5 125	1 561	17	16	59
60	Black	11 997	9 628	2 159	13	12	60
61	Other	5 210	3 818	1 342	9	6	61
62	Total Hispanic	8 516	6 701	1 725	26	21	62

-	ı				ı			1	
	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
39 40 41 42	56 112 395 138	43 37 70 49	40 123 198 71	55 67 173 46	27 22 176 34	169 145 185 68	406 525 1 198 416	- 238 - 380 -1 014 - 348	39 40 41 42
43 44 45 46 47	157 30 72 55 544	117 66 32 19 82	268 136 95 38 163	221 127 65 30 120	82 38 41 3 177	444 248 118 77 123	1 337 683 432 221 1 209	-893 -435 -314 -145 -1086	43 44 45 46 47
48	75	13	33	29	18	59	226	- 167	48
49	143	60	118	78	32	158	607	- 450	49
50	119	55	113	68	51	171	595	- 424	50
51	164	26	86	66	58	86	498	- 411	51
52	102	28	51	57	65	50	352	- 303	52
53	98	17	31	45	35	42	267	- 225	53
54 55 56	361 81% 82	35 33% 72	135 48% 149	52 36% 91	83 58% 60	26 33% 54	697 58% 514	- 670 59% - 460	54 55 56
57 58 59 60 61 62	391 362 29 48 4	85 74 11 20 2 11	185 167 19 71 28 21	81 74 7 56 6 13	123 113 10 13 7 10	64 48 16 12 6 21	933 840 93 222 56 111	- 869 - 793 - 77 - 210 - 50 - 89	57 58 59 60 61 62

Table 2. Size and Condition of Building and Unit - All Housing Units (Losses)

	(Numbers in thousands means not applicable, sample too sma  Characteristics	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	Appendi
1	Total, 1997	112 357	110 377	-	614	566	1
2	MULTI-UNIT STRUCTURES Total, 1997	28 729	25 803	2 564	95	86	2
	Stories in Structure, 1997 <sup>3,4</sup>						
3	1	3 386	3 353	_	23	22	3
4	2	12 180	12 031	_	43	39	4
5	3	7 106	7 017	-	21	20	5
6	4 to 6	3 528	3 437	-	12	10	6
7	7 or more	1 969	1 969	-	-	-	7
	External Building Conditions, 1997 4,5,6						
8	Sagging roof	517	54	437	2	2	8
9	Missing roofing material	1 201	102	1 060	2	2	9
10	Hole in roof	619	44	549	_	_	10
11	Missing bricks, siding, other outside wall material	831	112	675	4	3	11
12	Sloping outside walls	392	35	345	_	-	12
13	Broken windows	1 069	190	832	6	6	13
14	Bars on windows	2 412	932	1 442	2	2	14
15	Foundation crumbling or has open crack or hole	611	84	491	2	2	15
16	None of the Above	21 098	14 731	6 160	80	73	16
	Rooms, 1997						
17	1 room	470	207	222	7	3	17
18	2 rooms	1 443	423	928	19	18	18
19	3 rooms	11 504	7 870	3 345	32	29	19
20	4 rooms	23 378	15 690	7 045	35	35	20
21	5 rooms	24 443	14 246	9 714	35	32	21
22	6 rooms	21 274	11 221	9 843	11	11	22
23	7 rooms	13 743	5 925	7 739	12	11	23
24	8 rooms	8 459	3 450	4 931	4	3	24
25	9 rooms	4 177	1 331	2 829	2	2	25
26	10 rooms or more	3 014	1 302	1 701	6	6	26
27	Not Applicable	452	417	-	452	417	27
28	Median	5.8	5.5	6.3	4.7	4.7	28
	Bedrooms, 1997						
29	None	612	266	303	7	3	29
30	1	14 835	11 669	2 800	55	51	30
31	2	34 618	27 733	6 062	48	45	31
32	3	43 613	36 991	6 035	41	39	32
33	4 or more	18 227	14 359	3 744	12	11	33
34	Not Applicable	452	417	_	452	417	34
35	Median	3.1	3.2	3.1	2.4	2.5	35
	Complete Bathrooms, 1997						
36	None	1 666	618	918	14	10	36
37	1	51 558	44 275	6 086	107	101	37
38	1 and one-half	14 964	10 219	4 599	4	4	38
39	2 or more	43 716	38 467	4 779	37	35	39
39 40	Not applicable	45 7 16	417	4119	452	417	40
41	Median	1.6	1.6	1.6	1.3	1.3	41
<del>+</del> 1	moutur	1.0	1.0	1.0	1.0	1.3	41

	ix.								
	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
1	701	199	431	341	259	566	2 545	- 1 979	1
2	12	82	116	92	51	86	448	- 362	2
3 4 5 6 7	4 7 - - -	8 26 23 26	5 60 29 21	4 40 29 20	10 12 7 22	22 39 20 10	54 188 109 101	- 33 - 150 - 89 - 91	3 4 5 6 7
8 9 10 11 12 13 14 15	- - - - - - - 12	3 10 3 5 3 5 13 2 54	12 12 8 18 7 16 12 13 65	9 16 11 16 3 21 9 19 35	2 4 3 5 4 2 34	2 2 3 6 2 2 73	29 41 26 46 12 53 41 38 280	- 26 - 39 - 26 - 43 - 12 - 47 - 38 - 35 - 207	8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28	2 36 102 267 223 52 2 17	10 9 53 49 27 24 9 11 - 7	3 19 49 137 113 54 32 13 12	10 17 47 115 74 43 19 12 2 2 2	11 11 36 76 42 36 15 24 4 2 -	3 18 29 35 32 11 11 3 2 6 417 4.7	44 110 318 678 515 220 90 82 20 18 452 4.8	- 41 - 92 - 289 - 644 - 483 - 209 - 79 - 79 - 17 - 11 - 35 - 4.9	17 18 19 20 21 22 23 24 25 26 27 28
29 30 31 32 33 34 35	2 131 293 256 19 - 2.7	10 57 77 41 14 - 2.4	6 70 192 127 36 - 2.7	10 72 145 95 20 -	11 33 114 66 35 - 2.8	3 51 45 39 11 417 2.5	46 418 869 627 135 452 2.7	- 43 - 366 - 823 - 587 - 124 - 35 2.7	29 30 31 32 33 34 35
36 37 38 39 40 41	28 394 45 234 -	20 138 9 33 -	32 302 28 69 -	19 269 16 38 - 1.3	28 88 48 95 - 1.6	10 101 4 35 417 1.3	141 1 298 150 505 452 1.3	- 131 - 1 197 - 145 - 471 - 35 1.4	36 37 38 39 40 41

Table 2. Size and Condition of Building and Unit - All Housing Units (Losses)

42	Characteristics  SINGLE DETACHED AND MOBILE HOMES Total, 1997	Present in 97 76 512	Present in 99 74 146	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	42
43	Less than 500	1 424	730	508	4	4	43
44	500 to 749	3 230	1 632	1 422	2	1	44
45	750 to 999	6 622	3 563	2 769	11	11	45
46	1,000 to 1,499	17 142	11 149	5 640	11	11	46
47	1,500 to 1,999	14 978	9 503	5 364	5	5	47
48	2,000 to 2,499	10 725	5 910	4 748	4	4	48
49	2,500 to 2,999	5 960	2 921	3 005	6	6	49
50	3,000 to 3,999	5 479	2 751	2 703	-	-	50
51	4,000 or more	3 208	1 914	1 258	-	-	51
52	Median	1 699	1 656	1 813	1 204	1 227	52
	Lot Size, 1997 <sup>7,8</sup>						
53	Less than one-eighth acre	10 043	9 700	-	7	6	53
54	one-eighth up to one-quarter acre	23 143	22 818	-	15	15	54
55	one-quarter up to one-half acre	11 961	11 778	-	13	13	55
56	one-half up to one acre	10 934	10 769	-	4	4	56
57	1 to 4 acres	14 292	13 991	-	6	6	57
58	5-9 acres	2 508	2 452	-	-	-	58
59	10 acres or more	3 392	3 315	-	-	-	59
60	Median	0.4	0.3		0.3	0.3	60

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	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
42	689	106	291	220	202	49	1 558	- 1 509	42
43	118	13	20	14	21	4	190	- 186	43
44	94	17	30	20	12	1	176	- 175	44
45	154	12	49	44	30	11	300	- 289	45
46	156	19	68	52	59	11	364	- 354	46
47	40	7	40	16	8	5	116	- 111	47
48	6	5	18	16	21	4	71	- 66	48
49	4	-	11	9	10	6	41	- 34	49
50	5	8	2	5	7	-	26	- 26	50
51	8	2	17	5	5		36	- 36	51
52	880	989	1 209	1 120	1 199	1 227	994	989	
50	045	44	44	24	44	0	240	242	50
53 54	215 127	14 27	41 80	31 57	41 34	6 15	349 340	- 343 - 325	53 54
54 55	66	27 25	51	32	3 <del>4</del> 8	13	195	- 325 - 183	54 55
56	75	10	36	17	28	4	170	- 165 - 165	56
57	138	17	48	34	64	6	308	- 301	57
58	29	1	15	8	4	ا۔"	55	- 55	58
59	26	5	16	25	5	_	77	- 77	59
60	0.2	0.3	0.4	0.4	0.7	0.3	0.3	0.3	60

Table 3. Selected Equipment, Plumbing, and Fuel - All Housing Units (Losses)

	(Numbers in thousands means not applicable, sample too small, zero, or rounds to zero. For additional information on column headings, see Appendix.)							
						99 units		
					97 units	resulting		
	Characteristics				affected by	from		
		Present	Present	Changed in	conversion	conversion		
		in 97	in 99	characteristic	/merger	/merger		
		07	00	Charactoriotic	7 morgon	, morgo		
1	Total, 1997	112 357	110 377		614	566	1	
1	Total, 1997	112 337	110 377	-	014	300	'	
	6.0							
	Equipment, 1997 <sup>6,9</sup>							
2	Lacking complete kitchen facilities	5 615	1 481	3 688	35	26	2	
3	With complete kitchen	106 290	101 497	3 295	128	123	3	
4	Not Applicable	452	417	-	452	417	4	
5	Kitchen Sink	110 726	108 315	603	149	140	5	
6	Refrigerator	108 894	105 264	2 029	141	133	6	
7	Burners and oven	108 362	104 709	2 083	132	125	7	
8	Oven only	476	78	387	2	2	8	
9							9	
	Neither burners nor oven	2 811	872	1 583	27	20	-	
10	Dishwasher	57 218	53 821	2 977	38	35	10	
11	Washing machine	79 987	73 982	5 097	65	61	11	
12	Clothes dryer	76 270	70 573	4 837	67	62	12	
13	Disposal in kitchen sink	45 615	42 271	3 095	33	30	13	
14	Air Conditioning	82 655	76 684	4 828	88	82	14	
15	Central	54 298	51 111	2 562	35	31	15	
16	1 room unit	20 257	11 244	8 597	38	35	16	
17	2 room units	7 680	3 844	3 713	5	4	17	
18		2 973	1 710	1 244	11	11	18	
10	3 room units or more	2913	1710	1 244	11	11	10	
	Main Hasting Equipment 1007							
	Main Heating Equipment, 1997							
19	Warm-air furnace	66 560	58 039	7 284	97	91	19	
					-			
20	Steam or hot water system	13 731	11 925	1 670	20	18	20	
21	Electric heat pump	12 663	9 570	2 948	2	2	21	
22	Built-in electric units	5 077	3 717	1 326	4	4	22	
23	Floor, wall, or other built-in hot air	6 100	3 882	2 097	13	12	23	
24	Room heaters with flue	1 776	1 121	596	2	2	24	
25	Room heaters without flue	2 049	1 429	532	13	13	25	
26	Portable electric heaters	829	400	375	2	2	26	
27	Stoves	1 414	1 048	337	-	_	27	
28	Fireplaces with inserts	164	93	70	-	_	28	
29	Fireplaces without inserts	120	32	84	_	<u>-</u>	29	
30	Cooking Stove	138	72	62			30	
					2			
31	Other	6/0	50	605	2	2	31	
32	None	613	350	246	6	4	32	
33	Non-Interview	452	417	-	452	417	33	
	40							
	Plumbing, 1997 <sup>10</sup>							
34	With all plumbing facilities	108 991	105 428	1 848	151	142	34	
35	Lacking some plumbing facilities	2 914	722	1 963	12	8	35	
36	No hot piped water	1 280	514	557	12	8	36	
37	No bathtub nor shower	973	490	365	12	8	37	
38	No flush toilet	856	438	304	12	8	38	

	97 mobile homes	97 units changed to nonresidential	Units lost through demolition	Units badly damaged or	Units lost in other	Total	Total	Net	
1	moved out 701	use 199	or disaster 431	condemned 341	ways 259	additions 566	loss 2 545	change - 1 979	1
2 3 4 5 6 7 8 9 10	82 619 - 686 643 638 - 60 132 388	49 150 177 158 163 4 33 53 63	99 332 - 394 341 337 4 86 79 192	165 176 302 224 200 4 137 36 93	42 217 - 241 228 226 - 33 117 168	26 123 417 140 133 125 2 20 35 61	472 1 622 452 1 948 1 735 1 696 14 376 455 969	- 446 -1 498 - 35 -1 809 -1 602 -1 571 - 12 - 356 - 420 - 907	2 3 4 5 6 7 8 9 10
12 13	370 47	61 35	177 62	90 20	157 82	62 30	922 279	- 859 - 249	12 13
14 15 16 17 18	486 278 167 47 6	88 51 36 4 4	244 99 120 31 2	130 52 65 20 3	189 143 26 19 3	82 31 35 4 11	1 225 657 451 127 29	- 1 144 - 625 - 416 - 123 - 18	14 15 16 17 18
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	479 2 85 8 42 6 29 29 9	104 36 12 7 7 14 15 2 2	261 43 11 8 30 21 23 14 9	210 38 10 3 18 17 14 9 6 - 4	176 16 27 7 22 2 6 - 3 -	91 18 2 4 12 2 13 2 - - - - 2 4 417	1 328 154 147 38 133 61 101 57 29 4 4 18 21 452	- 1 237 - 136 - 145 - 34 - 121 - 59 - 88 - 55 - 29 - 4 - 4 - 15 - 18 - 35	19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
34 35 36 37 38	660 41 39 15 16	172 27 25 15 14	371 60 50 39 32	269 72 70 27 29	233 25 21 19 19	142 8 8 8 8	1 857 237 217 126 122	- 1 715 - 229 - 209 - 118 - 114	34 35 36 37 38

Table 3. Selected Equipment, Plumbing, and Fuel - All Housing Units (Losses)

						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
	Main House Heating Fuel, 1997						
39	Housing units with heating fuel	104 803	99 223	4 148	111	104	39
40	Electricity	33 801	28 713	4 474	31	30	40
41	Piped gas	50 789	43 826	6 576	51	45	41
42	Bottled gas	5 508	3 749	1 609	11	11	42
43	Fuel oil	10 799	9 235	1 417	12	12	43
44	Kerosene or other liquid fuel	889	497	334	2	2	44
45	Coal or coke	232	151	77	-	-	45
46	Wood	2 302	1 626	622	-	-	46
47	Solar energy	31	7	23	-	-	47
48	Other	451	35	401	4	4	48

	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
39	572	143	318	196	196	104	1 535	- 1 431	39
40	316	42	101	57	99	30	645	- 615	40
41	82	60	129	68	43	45	432	- 387	41
42	93	10	18	5	25	11	161	- 150	42
43	39	25	33	35	15	12	159	- 147	43
44	25	3	20	4	6	2	60	- 58	44
45	-	-	2	2	_	-	4	- 4	45
46	17	2	12	14	9	-	53	- 53	46
47	-	-	_	-	_	-	-	-	47
48	=	1	3	12	-	4	20	- 16	48

Table 4. Housing and Neighborhood Quality - Occupied Units (Losses)

	(Numbers in thousands means not applicable, sample too small, zero, or rounds to zero. Fo	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	
1	Total, 1997  Selected Amenities, 1997 <sup>6</sup>	112 357	110 377	-	614	566	1
	·	04.000	70.000	4.000	0.4	00	
2	Porch, deck, balcony, or patio	84 393 33 964	78 380 29 363	4 863 4 336	94 15	88 14	2
4	Separate dining room	41 675	31 136	10 095	43	38	4
5	With 2 or more living rooms or recreatio	12 756	4 939	7 729	19	18	5
6	Garage or carport included with home	62 184	56 421	5 371	38	35	6
7	Not included	49 466	42 192	5 743	125	115	7
8	Offstreet Parking included	40 261	31 892	7 197	78	76	8
	Owners or Manager on Property, 1997						
9	Rental, multiunit	21 180	17 445	3 538	39	34	9
10 11	Owner or manager lives on property	5 775 15 405	3 175 9 256	2 540 6 012	13 26	11 24	10 11
"		13 403	9 230	0.012	20	24	''
	Selected Deficiencies, 1997 <sup>6</sup>						
12	Holes in floors	1 633	176	1 265	4	4	12
13	Open cracks or holes (interior)	6 879	1 486	5 057	4	4	13
14 15	Broken plaster or peeling paint (interior)	3 626 934	639 31	2 775 829	4 2	2	14 15
16	No electrical wiring	164	64	65	_		16
17	Rooms without electrical outlets	2 569	245	2 167	2	2	17
	Description of Area Within 300 Feet, 1997 <sup>6</sup>						
18	Single family detached houses	17 096	11 458	5 459	71	67	18
19	Single family attached or 1 to 3 story	6 909	2 573	4 261	20	17	19
20	4 to 6 story multiunit	17 815	12 180	5 428	41	37	20
21	7 stories or more multiunit	3 001	1 635	1 318	2	2	21
22 23	Mobil Homes Residential parking lots	815 16 381	289 10 719	513 5 462	4 17	16	22 23
24	Commercial, institutional, or industrial	15 225	9 868	5 111	35	32	24
25	Body of water	4 414	2 151	2 217	6	6	25
26	Open space, park, farm, or ranch	9 293	4 264	4 916	27	26	26
27	4+ lane highway, railroad, or airport	6 378	2 659	3 599	13	12	27
	Other Buildings Vandalized or With Interior Exposed, 1997						
28	None	25 143	20 194	4 698	67	63	28
29	1 building	873	132	726	4	4	29
30	More than 1 building	1 208	288	853	16	12	30
31 32	No buildings within 300 feet	623 44	47	570 44	6 -	5 -	31
	Bars on Windows of Buildings, 1997						
33	With other buildings within 300 ft	26 488	21 604	4 557	87	79	33
34	No bars on windows	22 068	16 446	5 383	75	70	34
35	1 building with bars	554	24	524	2	2	35
36	2 or more buildings with bars	3 849	1 601	2 169	10	7	36
37	OCCUPIED UNITS Total, 1997	99 018	91 666	6 222	89	81	37
	Water Supply Stoppage, 1997						
38	With hot and cold piped water	98 636	91 304	6 235	85	79	38
39	No stoppage in last 3 months	93 391	82 246	10 165	81	75	39
40	With stoppage in last 3 months	4 306	573	3 638	2	2	40
41	No stoppage lasting 6 hours or more	1 623	90	1 514	2	2	41
42	1 time lasting 6 hours or more	1 642 533	87 7	1 516	-	-	42
43 44	2 times	533 196	2	512 188		_	43
45	4 times or more	146	2	132	]	_	45
46	Number of times not reported	140	2	133	_	_	46
47	Stoppage not reported	388	9	367	_	_	47

	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disasterr	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
1	701	199	431	341	259	566	2 545	- 1 979	1
2 3 4 5 6 7 8	366 73 72 15 77 619 511	108 28 48 20 32 161 115	291 69 157 11 122 303 237	192 29 102 17 67 274 196	188 67 60 23 90 164 111	88 14 38 18 35 115 76	1 238 280 482 106 427 1 646 1 248	- 1 150 - 266 - 444 - 88 - 392 - 1 531 - 1 172	2 3 4 5 6 7 8
9 10 11	7 - 7	42 8 34	71 22 49	42 12 30	31 18 13	34 11 24	232 71 160	- 197 - 61 - 137	9 10 11
12 13 14 15 16 17	37 72 26 11 10 29	18 34 14 15 1 25	59 103 76 34 10 51	61 111 81 11 4 46	16 17 15 2 10 6	4 4 4 2 - 2	196 341 216 76 35 159	- 192 - 337 - 212 - 74 - 35 - 157	12 13 14 15 16 17
18 19 20 21 22 23 24 25 26 27	9 2 7 2 5 7 - 2 8	35 13 43 21 - 43 61 21 29 19	67 26 68 11 71 179 2 29 46	41 19 62 7 3 47 61 12 31 33	23 13 24 10 7 32 35 10 21	67 17 37 2 4 16 32 6 26	246 93 244 51 17 216 278 52 139 132	- 179 - 76 - 207 - 49 - 13 - 200 - 246 - 46 - 114 - 120	18 19 20 21 22 23 24 25 26 27
28 29 30 31 32	10 2 - -	62 - 12 4 -	81 3 25 -	52 6 24 1	41 5 2 -	63 4 12 5	313 20 78 12	- 250 - 16 - 67 - 7	28 29 30 31 32
33 34 35 36	13 7 2 2	67 48 - 19	109 78 4 26	81 58 - 23	48 41 - 6	79 70 2 7	405 309 9 86	- 326 - 239 - 7 - 80	33 34 35 36
37	443	107	284	144	143	81	1 211	- 1 130	37
38 39 40 41 42 43 44 45 46 47	443 389 42 5 22 - 12 4 9	101 93 8 - 2 5 -	273 258 10 - 3 3 7 - -	136 118 16 9 7 - -	138 116 20 6 5 3 6	79 75 2 2 - - -	1 176 1 055 97 22 40 14 6 12 4	- 1 097 - 980 - 95 - 20 - 40 - 14 - 6 - 12 - 4 - 13	38 39 40 41 42 43 44 45 46 47

Table 4. Housing and Neighborhood Quality - Occupied Units (Losses)

	Characteristics	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	
	Sewage Disposal Breakdowns, 1997						
48	AMP de control of the	75.000	00.054	0.004	75	07	40
48 49	With public sewer  No breakdowns in last 3 months	75 920 75 079	69 251 67 346	6 034 7 114	75 75	67 67	48 49
50	With breakdowns in last 3 months	75 079 841	51	7714	75	07	50
51	No breakdowns lasting 6 hours or more	356	11	340	-	_	51
52	1 time lasting 6 hours or more	383	9	363	-	-	52
53	2 times	50	-	50	-	-	53
54	3 times	8	-	8	-	-	54
55	4 times or more	17	-	17	-	-	55
56	Number of times not reported	28	-	28	-	-	56
57	With septic tank or cesspool	22 994	19 705	2 800	15	14	57
58	No breakdowns in last 3 months	22 584	19 062	3 049	15	14	58
59	With breakdowns in last 3 months	410	21	373	-	-	59
60	No breakdowns lasting 6 hours or more	114	5	108	-	-	60
61	1 time lasting 6 hours or more	248	4	230	-	-	61
62 63	2 times	14 5	-	14 5	1	-	62 63
64	4 times or more	14		15	_	-	64
65	Number of times not reported	14	3	11	-	-	65
	Heating Problems, 1997						
	With heating equipment and						
66	occupied last winter	86 226	73 569	11 726	74	68	66
67	Not uncomfortably cold for 24 hours or	78 586	64 003	13 786	57	54	67
67	more last winter	78 586	64 003	13 /80	5/	54	67
68	more last winter	7 639	1 355	6 151	17	15	68
69	Equipment breakdowns	86 226	73 569	11 726	74	68	69
70	No breakdowns lasting 6 hours or more	162	5	154	-	-	70
71	1 time lasting 6 hours or more	1 098	38	1 041	-	-	71
72	2 times	406	22	381	2	2	72
73	3 times	173	5	163	-	-	73
74 75	4 times or more	129 177	9	117 168	2	1	74 75
	Overall Opinion of Structure, 1997						
76	1 (worst)	564	50	487	9	7	76
77	2	334	25	292	2	2	77
78	3	897	27	831	1	1	78
79	4	1 293	63	1 208	-		79
80 81	5	6 834 5 746	1 151 661	5 517 4 988	9	7 2	80 81
82	7	13 908	3 121	10 617	9	7	82
83	8	26 325	9 225	16 934	19	19	83
84	9	13 559	3 328	10 128	10	9	84
85	10 (best)	26 804	12 779	13 770	22	21	85
	Selected Physical Problems, 1997 <sup>6</sup>						
86	Selected physical problems	1 566	230	1 273	4	2	86
87	Plumbing	1 159	189	922	4	2	87
88	Heating	302	22	272	-	-	88
89	Electric	12	2	7	-	-	89
90 91	Upkeep Hallways	122 12	6 -	109 10	-	-	90 91
92	Moderate physical problems	5 060	1 619	3 310	19	17	92
93	Plumbing	174	1	169	-	-	93
94	Heating	1 705	1 217	432	11	11	94
95	Upkeep	1 407	138	1 222	4	4	95
96	Hallways	55	2	48	-	-	96
97	Kitchen	1 929	177	1 715	4	2	97

		97 units	Units lost						
	97 mobile homes moved out	changed to nonresidential use	through demolition or disasterr	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
48 49 50 51 52 53 54 55 56	174 168 6 - 6 - -	80 80 - - - - - -	192 188 4 2 2 -	105 103 2 - 2 - -	76 73 3 3 - -	67 67 - - - - -	702 686 16 5 10	- 635 - 619 - 16 - 5 - 10 -	48 49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64 65	269 256 14 2 12	27 27 - - - - - - -	86 86 - - - - - - -	39 39 - - - - - -	67 65 3 - 3 - -	14 14 - - - - - -	502 486 16 2 14 -	- 489 - 473 - 16 - 2 - 14 	57 58 59 60 61 62 63 64 65
66	377	87	228	110	123	68	999	- 931	66
67	343	79	173	79	121	54	851	- 798	67
68	35	8	55	31	3	15	148	- 133	68
69 70 71 72 73 74 75	377 - 4 2 2 - 3	87 - 2 - - -	228 3 10 - 3 3	110 - 2 - - - 3	123 - - - - - 3	68 - - 2 - - 1	999 3 18 5 5 3 10	- 931 - 3 - 18 - 3 - 5 - 3 - 9	69 70 71 72 73 74 75
76 77 78 79 80 81 82 83 84 85	9 3 13 3 67 39 79 60 39 104	2 3 2 2 9 12 14 15 16 25	7 9 13 5 31 27 43 47 26 53	2 9 8 28 12 30 18 15 12	5 2 2 4 29 5 4 26 7 60	7 2 1 7 2 7 19 9 21	35 19 40 22 173 99 178 185 113 276	- 28 - 17 - 39 - 22 - 166 - 97 - 170 - 166 - 104 - 255	76 77 78 79 80 81 82 83 84 85
86 87 88 89 90	4 2 2 2 -	6 6 - -	27 17 5 - 2 2	13 10 - - 5	10 10 - -	2 2 - - -	64 50 8 2 7 2	- 63 - 48 - 8 - 2 - 7 - 2	86 87 88 89 90
92 93 94 95 96 97	43 3 22 17 - 6	13 - 7 2 2 2	34 - 20 5 - 10	26 - 4 17 3 13	12 - 2 5 - 5	17 - 11 4 - 2	149 3 66 50 5 40	- 132 - 3 - 56 - 46 - 5 - 38	92 93 94 95 96 97

Table 5. Household Composition - Occupied Units (Losses)

	Characteristics				97 units affected by	99 units resulting from	
		Present in 97	Present in 99	Changed in characteristic	conversion /merger	conversion /merger	
1	Total, 1997	255 859	150 783	102 298	100	2	1
2	Population in housing units	99 018	62 451	35 437	89	81	2
	Persons, 1997 <sup>11</sup>						
3	1 person	25 088	17 613	7 144	32	28	3
4	2 persons	32 187	22 260	9 555	34	29	4
5	3 persons	16 438	8 595	7 651	7	7	5
6	4 persons	14 875	8 889	5 854	9	9	6
7	5 persons	6 514	3 665	2 797	5	5	7
8	6 persons	2 392	1 012	1 355	2	2	8
9	7 persons or more	1 523	416	1 080	-	-	9
10	Median	2.8	2.6	3.1	2.4	2.4	10
	Number of Single Children Under 18 Years Old, 1997						
11	None	68 369	57 726	9 875	67	59	11
12	1	14 273	6 920	7 189	9	9	12
13	2	11 063	5 735	5 199	11	11	13
14	3	3 866	1 683	2 146	3	3	14
15	4	1 037	335	681	-	-	15
16	5	288	68	215	-	-	16
17	6 or more	123	42	75	-	-	17
18	Median	0.7	0.6	1.4	0.7	0.7	18
	Age of Household, 1997						
19	Under 25 years	5 290	176	4 952	10	9	19
20	25 to 29	8 271	188	7 976	7	7	20
21	30 to 34	10 289	173	9 956	9	7	21
22	35 to 44	22 973	342	22 364	30	27	22
23	45 to 54	18 644	187	18 272	9	6	23
24	55 to 64	12 421	64	12 275	13	13	24
25	65 to 74	11 104	78	10 912	6	5	25
26	75 years and older	10 027	64	9 910	6	6	26
27	Median	46	38	47	41	41	27
	Years of School Completed by Householder, 1997						
28	No school years completed	380	226	150	-	-	28
29	less than 8 years	2 771	1 959	778	2	1	29
30	8 years	4 297	2 985	1 252	13	10	30
30	High School	4 231	2 903	1 232	13	10	30
31	1 to 3 years	11 252	7 627	3 393	21	20	31
32	The state of the s	32 695	24 752	7 474	29	27	32
32	4 years	32 093	24 / 32	7 474	29	21	32
33	College 1 to 3 years	23 433	16 728	6 499	9	7	33
34	4 years or more	24 191	19 417	4 648	16	15	34
35	Median	12.9	13.0	12.9	12.3	12.3	35
	Year Householder Moved Into Unit, 1997						
36	1995 to 1999	8 879	5 646	3 115	10	9	36
37	1990 to 1994	23 876	17 986	5 608	19	18	37
38	1985 to 1989	12 517	10 255	2 127	9	7	38
39	1980 to 1984	6 412	5 476	885	6	6	39
40	1975 to 1979	6 763	6 005	727	2	2	40
41	1970 to 1974	4 664	4 175	465	4	3	41
42	1960 to 1969	5 901	5 313	558	4	4	42
43	1950 to 1959	3 478	3 048	408	-	-	43
44	1940 to 1949	1 159	971	179	-	-	44
45	1939 or earlier	492	358	134	-	-	45
46	Not applicable	24 876	21 455	2 993	34	30	46
47	Median	1 986	1 987	1 993	1 994	1 993	47

	97 mobile homes moved out	97 units changed to nonresidential use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
1	1 081	205	733	362		180	2 956	- 2 776	1
2	443	107	284	144	143	81	1 211	- 1 130	2
3 4 5 6 7 8 9 10	130 137 76 70 13 15 2	52 34 10 3 5 3 -	72 89 60 41 5 5 12 <b>2.8</b>	39 54 20 11 14 1 5 <b>2.6</b>	33 54 25 7 15 2 8 <b>2.7</b>	28 29 7 9 5 2 <b>2.4</b>	359 401 200 140 57 28 26 2.6	- 330 - 372 - 192 - 132 - 52 - 26 - 26 <b>2.6</b>	3 4 5 6 7 8 9 10
11 12 13 14 15 16 17	288 71 56 19 9 - -	91 5 8 3 - - - 0.6	189 44 37 3 3 2 6 <b>0.8</b>	101 16 9 13 5 -	91 28 18 - 5 2 - 0.8	59 9 11 3 - - - 0.7	826 172 139 40 21 5 6	- 768 - 164 - 129 - 38 - 21 - 5 - 6 <b>0.7</b>	11 12 13 14 15 16 17
19 20 21 22 23 24 25 26 27	71 52 78 108 65 26 32 11	22 14 5 20 13 8 12 13 41	34 25 37 72 48 20 31 17 41	11 8 30 29 34 11 14 7	24 8 10 35 21 17 24 5	9 7 7 27 6 13 5 6 <b>41</b>	171 113 168 294 190 95 119 60 <b>40</b>	- 163 - 106 - 161 - 267 - 184 - 82 - 114 - 53	19 20 21 22 23 24 25 26 27
28	-	-	2	-	2	-	4	- 4	28
29 30	8 26	3 2	11 15	11 7	6	1 10	34 70	- 33 - 60	29 30
31 32	82 223	27 19	72 106	19 66	30 54	20 27	252 497	- 232 - 469	31 32
33 34 35	74 30 <b>12.5</b>	23 33 <b>13.2</b>	52 26 <b>12.4</b>	36 5 <b>12.5</b>	20 31 <b>12.6</b>	7 15 <b>12.3</b>	213 141 <b>12.5</b>	- 206 - 126 <b>12.5</b>	33 34 35
36 37 38 39 40 41 42 43 44	44 114 49 28 13 10 2	13 31 12 5 - 2 5 2	40 68 38 7 9 5 11	15 31 14 5 2 - 9 3 5	5 38 21 6 7 5 2	9 18 7 6 2 3 4	127 301 142 57 33 27 34 21	- 118 - 283 - 135 - 51 - 31 - 24 - 30 - 21 - 9	36 37 38 39 40 41 42 43 44
46 47	183 <b>1 993</b>	33 <b>1 993</b>	91 <b>1 993</b>	59 <b>1 993</b>	59 <b>1 994</b>	30 <b>1 993</b>	459 <b>1 993</b>	- 428 <b>1 993</b>	46 47

Table 6- Financial Characteristics - All Housing Units (Losses)

300.000 or more.....

43

44

Median...

3 603

98 538

2 704

96 694

870

69 999

91 440

43

44

68 333

						I	J	1	1	
	97 mobile homes moved out	97 units changed to nonresidential use	99 units derived from nonresidentia use	Units lost through demolition or disaster	Units badly damaged or condemned	Units lost in other ways	Total additions	Total loss	Net change	
1	701	199	-	431	341	259	566	2 545	- 1 979	1
2 3	26 74	7	-	10 29	- 11	- 12	1 2	38 136	- 37 - 134	2 3
4 5	48 28	3	-	7 17	9 -	2 3	- 2	66 53	- 66 - 50	4 5
6 7	19 19	2 6	-	11 11	5 8	8 9	3 4	49 57	- 46 - 52	6 7
8 9	32 23	2 -	-	6 4	2	14 -	-	53 30	- 53 - 30	8 9
10 11	23 29	2 10	-	11 9	- 7	4 -	-	41 55	- 41 - 55	10 11
12 13	14 22	2	-	2	3 2	2 6	6	28 33	- 22 - 33	12 13
14 15	- 4	-	-	7	- 5	3 3	2 2	12 14	- 10 - 12	14 15
16 17	3	2	-	9 11	- 8	17 7	3 5	32 34	- 29 - 29	16 17
18 19	206 <b>312</b>	20 <b>399</b>	-	81 <b>316</b>	24 <b>356</b>	51 <b>426</b>	16 <b>708</b>	404 <b>356</b>	- 387 <b>352</b>	18 19
	0.1				555	0				
20	328	396		379	375	421	391	375	373	20
21	312	399		316	356	425	708	356	352	21
22	108	11	-	37	6	16	5	185	- 179	22
23 24	52 61	12	-	13 24	21 8	32 13	2 5	125 124	- 123 - 119	23 24
25 26	30 5	4 -	-	17 5	7	8 3	3	71 21	- 68 - 12	25 26
27 28	83 <b>11</b>	10	-	26 <b>12</b>	5 <b>8</b>	12 <b>8</b>	2 <b>16</b>	128 <b>11</b>	- 126 <b>10</b>	27 28
29	143	-	-	32	7	8	-	190	- 190	29
30 31	57 62	6	-	16 2	7	-	-	73 77	- 73 - 77	30 31
32 33	39 14	-	-	14 11	8 7	9	4	64 45	- 60 - 41	32 33
34 35	6 6	9 -	-	5 -	7 1	6 3	2 3	34 14	- 31 - 11	34 35
36 37	3 18	3 2	-	11 16	4	9 9	1 -	28 50	- 27 - 50	36 37
38 39	2 7	5 2	-	6 6	4 3	2 11	2 -	22 30	- 20 - 30	38 39
40 41	4 -	2	-	2	5 -	5 5	4 2	19 11	- 15 - 9	40 41
42 43	-	2 4	-	3 9	- -	- 16	3 -	10 30	- 7 - 30	42 43
44	16 578	78 333		42 273	46 428	94 444	68 333	31 328	29 415	44

**Table 6- Financial Characteristics - All Housing Units (Losses)** 

	(Numbers in thousands means not applicable, sample too small, zero, of	Tourius to Zero-	rui auuiliuliai	illioilliation on c	olullil Headille		IX)
						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
		•			,ger	,ger	
	OCCUPIED UNITS						
45	Total, 1997	99 018	91 666	6 222	89	81	45
45	Total, 1997	99 016	91 000	0 222	09	01	45
	Household Income, 1997						
	nousenoid income, 1997						
46	Less than \$5,000	6 310	960	5 227	9	7	46
47	\$5,000 to \$9,999.	8 066	2 212	5 654	20	18	47
	* - /				20	-	
48	\$10,000 to \$14,999	8 090	1 703	6 256		2	48
49	\$15,000 to \$19,999	7 207	1 128	5 984	11	11	49
50	\$20,000 to \$24,999	7 349	1 124	6 134	6	5	50
51	\$25,000 to \$29,999	6 502	840	5 586	6	6	51
52	\$30,000 to \$34,999	6 369	862	5 433	11	11	52
53	\$35,000 to \$39,999	5 736	578	5 098	6	5	53
54	\$40,000 to \$49,999	9 948	1 841	8 012	3	2	54
55	\$50,000 to \$59,999	7 985	1 404	6 509	6	5	55
56	\$60,000 to \$79,999	11 052	3 006	7 990	_		56
57	\$80,000 to \$99,999.	5 739	1 210	4 508	4	4	57
58	\$100,000 to \$119,999	4 342	534	3 795	2	2	58
					2	2	
59	\$120,000 or more	4 322	1 895	2 405	_	_	59
60	Median	34 697	34 257	32 992	20 833	21 000	60
	Income Sources of Families and Primary Individuals, 1997						
61	Wages and salaries	68 096	55 569	11 762	59	55	61
62	Wages and salaries were majority of income	49 234	33 436	15 223	46	44	62
63	2 or more people each earned over 20% of wages and salaries	33 642	20 003	13 327	22	21	63
64	Business, farm or ranch	10 564	4 364	6 093	6	6	64
65	Social security or pensions	27 558	20 773	6 511	15	14	65
66	Interest or dividend(s)	35 818	19 786	15 808	17	15	66
67	Rental income	6 425	2 784	3 592	4	4	67
68	With lodgers	84	5	79	-	1	68
	ŭ	-	-	-	20	16	
69	Welfare or SSI	5 634	2 012	3 492	20	-	69
70	Alimony or child support	4 200	1 467	2 689	2	2	70
71	Other	5 238	734	4 450	6	6	71
	Amount of Savings and Investments, 1997					i l	
					_	i l	
72	Income of \$25,000 or less	40 650	23 944	16 010	53	48	72
73	No savings or investments	26 969	12 819	13 589	40	35	73
74	\$20,000 or less	8 709	1 858	6 745	11	11	74
75	More than \$20,000	3 868	816	3 032	2	2	75
	Food Stamps, 1997						
						i l	
76	Income of \$25,000 or less	40 650	23 944	16 010	53	48	76
77	Family members received food stamps	5 656	2 159	3 332	13	12	77
78	· ·	34 994	17 219	17 244	40	36	78
10	Did not receive food stamps	34 994	17 219	17 244	40	30	70

	1	ı					1			
ļ		97 units	99 units	Units lost						
	97 mobile	changed to	derived from	through	Units badly	Units lost				
ļ	homes		nonresidentia	demolition	damaged or	in other	Total	Total	Net	
	moved out	use	use	or disaster	condemned	ways	additions	loss	change	
ļ										
45	443	107		284	144	143	81	1 211	1 120	45
45	443	107	]	204	144	143	01	1211	- 1 130	45
l										
Į.										
46	32	9	-	33	30	17	7	130	- 123	46
47	76	21	-	59	30	12	18	218	- 200	47
48	36	14	-	39	24	17	2	132	- 130	48
49	43	9	-	26	12	5	11	106	- 95	49
50 51	46 38	7 8	-	24 16	4 9	8	5 6	97 81	- 91 - 75	50 51
51 52	50	6		9	2	8	11	86	- 75 - 75	52
53	26	2	]	20	3	7	5	65	- 73 - 59	53
54	36	18	_	28	1	12	2	97	- 95	54
55	33	-	-	2	18	19	5	78	- 73	55
56	22	4	-	9	8	12	-	55	- 55	56
57	-	4	-	5	2	11	4	26	- 22	57
58	-	2	-	6	-	6	2	16	- 14	58
59	5	1	-	8	-	7	2	25	- 22	59
60	23 478	19 444		16 346	12 395	34 062	21 000	20 387	20 302	60
Į.										
ļ										
61	331	66	-	183	78	105	55	821	- 765	61
62	258	54	-	130	52	79	44	618	- 575	62
63	155	17	-	70	32	38	21	335	- 313	63
64	42	13	-	24	5	23	6	113	- 107	64
65	84	33	-	78	37	41	14	287	- 273	65
66 67	68 8	34 15	-	45 12	26 3	47 12	15 4	239 54	- 224 - 49	66 67
68	0	15		12	3	12	4	54	- 49	68
69	42	5	]	31	37	11	16	146	- 130	69
70	33	2	-	-	6	2	2	46	- 44	70
71	23	6	-	9	8	9	6	61	- 54	71
l										
ļ										
	***					25				
72 73	269	64 41	-	186	108	63	48 35	743 597	- 696	72
73 74	220 47	16	-	158 21	91 7	46 16	35 11	116	- 562 - 106	73 74
74 75	2	7	]	4	7	16	2	22	- 106	74 75
73	_	,		_	,		2	22	20	/3
ļ										
ļ										
76	269	64	-	186	108	63	48	743	- 696	76
77	52	7	-	47	49	8	12	176	- 164	77
78	218	57		138	59	55	36	567	- 531	78

## Components of Inventory Change: 1997-1999

Tables
Additions to the housing stock

Table 1- Introductory Characteristics - All Housing Units (Additions)

e Appendix

	e Appendix						1	
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
1	54	143	1 175	-	1 939	614	1 325	1
2 3 4	7 39 9	82 53 8	288 850 38	- - -	379 964 596	2 25 587	377 940 8	2 3 4
5 6 7 8 9 10 11 12 13	- - - - - - 54	66 18 22 4 3 1 2 28	484 115 18 28 61 70 36 364	- - - - - - -	595 148 105 42 72 77 38 446 417	46 17 70 14 9 6	549 131 35 28 63 71 38 446 - 35	5 6 7 8 9 10 11 12 13
14 15 16 17 18 19 20 21 22 23 24 25 26	10 8 3 9 15 6 4	2 5 4 11 22 13 11 11 22 9 9 25 1 953	979 27 24 28 39 32 44 3		997 50 44 83 117 81 115 59 80 100 50 157 1 999	6 10 14 36 43 32 56 53 61 104 44 148 1 948	991 39 30 48 74 49 59 6 19 - 4 5 9	14 15 16 17 18 19 20 21 22 23 24 25 26
27 28 29 30 31 32 33 34	1 3 - - - 3	7 1 8 - 12 40 - 14	63 10 62 20 - 2 90 40	- - - - - -	71 11 73 20 12 44 90 56	- - - - 2 -	71 11 73 20 12 42 90 56	27 28 29 30 31 32 33 34
35 36 37 38	33 8 24 21	79 33 46 64	849 211 639 326	- - - -	1 383 500 883 556	469 285 184 145	913 215 699 412	35 36 37 38
39 40 41 42	17 33 4	32 23 64 25	90 203 639 244	- - -	290 388 921 340	185 165 186 78	105 223 735 262	39 40 41 42

**Table 1- Introductory Characteristics - All Housing Units (Additions)** 

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, se-99 units 97 units resulting affected by from Present Present Changed in conversion conversion in 97 in 99 characteristic Category /merger /merger Urbanized Areas, 1999 43 Inside Urbanized Areas..... 80 598 81 272 490 444 43 In central cities of P(MSA)s..... 34 708 34 923 285 248 44 37 197 45 Urban Fringe..... 36 821 128 118 45 46 Other urban..... 9 068 9 152 77 46 77 47 Outside Urbanized Areas..... 33 331 33 982 124 123 47 Heating and Cooling Degree Day Zone, 1999 Coldest: Over 7,000 heating degree days and under 48 2,000 cooling degree days..... 11 764 11 904 59 48 59 Cold: 5,500-7,000 heating degree days and under 49 2,000 cooling degree days..... 31 141 31 349 177 158 49 Cool: 4,000-5,500 heating degree days and under 50 2,000 cooling degree days..... 25 890 26 188 188 171 50 Mild: Under 4,000 heating degree days and under 51 2,000 cooling degree days..... 22 348 22 646 98 86 51 Mixed: 2,000-4,000 heating degree days and over 52 2,000 cooling degree days..... 13 998 14 191 50 50 52 Hot: Under 2,000 heating degree days and over 2,000 cooling degree days..... 8 787 8 977 53 42 42 53 Tenure, 1999 7 463 54 Owner occupied..... 60 219 68 455 15 14 54 55 Percent of all occupied..... 69% 67% 53% 60% 58% 55 Renter occupied..... 26 631 33 477 56 6 678 10 10 56 Race and Origin, 1999 73 570 83 472 9 111 16 16 57 58 67 080 76 549 8 706 12 12 58 4 5 59 6 923 1 784 59 5 111 4 6 60 9 6 1 5 12 327 2 617 60 61 3 809 6 132 2 269 2 2 61 6 679 9 132 2 312 62 Total Hispanic...... 62

e Appendix

	e Appendix							
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
43 44 45 46 47	30 8 21 24	67 33 20 14 77	624 211 345 69 551	- - - -	1 164 500 504 160 775	490 285 128 77 124	674 215 376 83 651	43 44 45 46 47
48	2	13	126	-	199	59	140	48
49	13	38	176	-	385	177	207	49
50	17	52	246	-	485	188	297	50
51	7	21	282		396	98	298	51
52	14	9	170	•	243	50	193	52
53	2	12	175	-	232	42	189	53
54 55 56	31 82% 7	27 52% 25	715 84% 135	- - -	787 82% 177	15 60% 10	772 82% 167	54 56
57 58 59 60 61	23 23 - 13 2	39 37 2 3 10	728 702 26 80 42	- - -	807 774 32 102 56	16 12 4 6 2	791 762 28 95 54	57 58 59 60 61
62	-	9	32	-	45	4	41	62

Table 2. Size and Condition of Building and Unit - All Housing Units (Additions)

adings, see Appendix)

	adings, see A	ppendix)			T			
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
1	54	143	1 175	-	1 939	614	1 325	1
2	-	31	213	-	248	4	244	2
3 4 5 6 7	- - - -	3 15 11 2 -	5 67 118 6 17	- - - - -	30 121 149 17 17	23 43 21 12	7 78 128 5 17	3 4 5 6 7
8 9 10 11 12 13 14 15	-	1 2 - 2 - 2 1 - 24	2 2 4 - - - 189	- - - - - -	1 5 2 6 - 2 1 - 217	- - - - - - - 4	1 5 2 6 - 2 1 - 212	8 9 10 11 12 13 14 15
17 18 19 20 21 22 23 24 25 26 27 28	- 4 21 24 4 2 - - - 6.1	5 11 35 38 27 7 7 - 7 5 - 4.5	4 117 176 309 235 139 90 68 38	- - - - - - - -	5 159 236 372 247 155 90 75 43 541 5.8	- 2 2 13 2 7 - - 587 5.7	5 157 234 360 245 147 90 75 43 - 47 5.8	17 18 19 20 21 22 23 24 25 26 27 28
29 30 31 32 33 34 35	22 28 - 3.0	13 43 49 23 15 - 2.3	- 137 244 555 240 - 3.4	- - - - -	13 187 316 621 261 541 3.3	2 2 17 5 587 3.5	13 184 314 604 256 - 47 3.3	29 30 31 32 33 34 35
36 37 38 39 40 41	3 13 7 31 - 2.1	35 75 13 21 -	8 227 52 888 - 2.2	- - - -	48 328 74 948 541 2.1	2 13 2 10 587 1.4	46 315 72 938 - 47 2.1	36 37 38 39 40 41

Table 2. Size and Condition of Building and Unit - All Housing Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column he 99 units resulting 97 units Characteristics affected by from Present Present Changed in conversion conversion in 97 in 99 characteristic /merger /merger SINGLE DETACHED AND MOBILE HOMES 73 326 4 092 78 415 42 Single detached and mobile homes..... 18 18 42 Square Footage of Unit, 1999 7 43 Less than 500..... 672 1 338 626 2 2 43 44 1 571 3 188 1 589 44 500 to 749..... 750 to 999..... 45 3 518 6 534 2 908 2 2 45 46 1,000 to 1,499..... 11 042 19 410 8 150 4 4 46 47 1,500 to 1,999..... 9 435 17 493 7 899 4 4 47 11 470 48 2.000 to 2.499..... 5 870 5 490 4 4 48 2,500 to 2,999..... 49 2 906 5 896 2 915 49 2 403 50 3,000 to 3,999..... 2 739 5 224 50 51 4,000 or more..... 1 898 3 408 1 447 51 Median..... 1 660 1 686 1 717 1 562 1 562 52 Lot Size, 1999 7,8 9 953 53 53 Less than one-eighth acre..... 10 123 6 54 one-eighth up to one-quarter acre..... 23 484 23 742 15 15 54 one-quarter up to one-half acre..... 55 55 12 268 12 434 13 13 56 one-half up to one acre..... 11 068 11 177 4 4 56 57 1 to 4 acres..... 14 398 14 610 6 6 57 58 5-9 acres..... 2 547 2 582 58 59 3 372 3 408 59 10 acres or more......

0.4

0.4

60

Median.

0.3

**0.3** 60

adings, see Appendix)

adings, see Appendix)								
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
42	54	94	848	-	1 014	18	996	42
43 44 45 46 47 48 49 50 51 52	6 2 10 4 2 - 2 - 2 899	12 14 15 4 6 4 - 5 3 <b>841</b>	21 13 84 210 150 107 73 78 59	- - - - - -	41 28 111 222 163 115 75 82 64 1 648	2 2 4 4 4 - 1 1 <b>1 562</b>	39 28 108 218 158 110 75 82 63 <b>1 650</b>	43 44 45 46 47 48 49 50 51
53 54 55 56 57 58 59 60	22 21 7 1 2 2	6 32 12 13 15 7 6	143 205 147 94 195 26 30 <b>0.4</b>	- - - - -	177 273 179 113 218 35 36 <b>0.3</b>	7 15 13 4 6 - -	170 258 166 109 212 35 36 <b>0.3</b>	53 54 55 56 57 58 59 60

Table 3. Selected Equipment, Plumbing, and Fuel - All Housing Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headin

	(Numbers in thousands means not applicable	, sample too sii	iali, zero, or rou	1	additional inioi		III IICauii
						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
1	Total, 1999	113 928	115 253	-	614	566	-
	Equipment, 1999 <sup>6,9</sup>						
2	Lacking complete kitchen facilities	1 405	5 098	3 541	2	2	2
3	With complete kitchen	100 347	109 615	8 049	25	23	3
4	· · · · · · · · · · · · · · · · · · ·	587	541	0 049	587	541	4
	Not Applicable			- - -			
5	Kitchen Sink	107 036	113 771	5 403	25	23	5
6	Refrigerator	104 043	111 732	6 424	27	26	6
7	Burners and oven	103 517	111 339	6 542	27	26	7
8	Oven only	74	374	298	-	-	8
9	Neither burners nor oven	826	2 845	1 935	-	-	9
10	Dishwasher	53 355	61 635	7 261	6	5	10
11	Washing machine	73 446	84 295	9 835	22	21	11
12	Clothes dryer	70 026	80 715	9 678	22	21	12
13	Disposal in kitchen sink	41 908	48 978	6 372	11	9	13
14	Air Conditioning	76 001	88 868	11 699	22	21	14
15	Central	50 652	59 286	7 583	17	16	15
16	1 room unit	11 125	20 573	9 347			16
17	2 room units	3 823	8 629	4 787	5	5	17
18	3 room units or more	1 690	3 542	1 844	-	-	18
	Main Heating Equipment, 1999						
19	Warm-air furnace	57 550	67 821	9 345	18	17	19
20	Steam or hot water system	11 855	14 360	2 445	2	2	20
21	Electric heat pump	9 460	12 387	2 655	2	2	21
22	Built-in electric units.	3 659	5 758	2 068	2	2	22
23		3 859	6 125	2 237	2	2	23
	Floor, wall, or other built-in hot air			783	-	-	_
24	Room heaters with flue	1 115	1 904		-	-	24
25	Room heaters without flue	1 411	2 102	680	-	-	25
26	Portable electric heaters	396	871	474	-	-	26
27	Stoves	1 016	1 477	458	-	-	27
28	Fireplaces with inserts	93	143	49	-	-	28
29	Fireplaces without inserts	29	103	74	-	-	29
30	Cooking Stove	72	152	80	-	-	30
31	Other	45	434	384	-	-	31
32	None	346	1 077	698	2	2	32
33	Non-Interview	587	541	-	587	541	33

ngs, see Appendix)

	igs, see Appeni	ant)						
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
1	54	143	1 175	-	1 939	614	1 325	1
2 3 4 5 6 7 8 9 10 11 12 13	6 49 - 54 54 49 - 6 20 42 41	55 88 - 117 94 98 2 43 31 50 47 21	91 1 084 - 1 162 1 119 1 134 - 35 970 924 924 677		154 1 244 541 1 357 1 292 1 307 2 83 1 027 1 037 1 033 708	2 25 587 25 27 27 - 6 22 22 21	152 1 220 - 47 1 332 1 265 1 280 2 83 1 020 1 014 1 010 697	2 3 4 5 6 7 8 9 10 11 12
14 15 16 17 18	50 43 4 3 2	63 43 21 - -	1 056 965 77 16 6	- - - - -	1 190 1 068 102 25 8	22 17 - 5 -	1 168 1 050 102 19 8	14 15 16 17 18
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	46 3 3 1 - - -	66 13 15 5 9 2 4 - 3 - - - - - - - - -	814 46 253 26 18 2 6 - -	-	943 62 273 33 30 5 10 - 3 - 4 36 541	18 2 2 2 - - - - - - 2 587	925 59 271 31 30 5 10 - 3 - 4 4 33 - 47	19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33

Table 3. Selected Equipment, Plumbing, and Fuel - All Housing Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headin

					07	99 units	
	Characteristics				97 units affected by	resulting from	
	Characteristics	Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
		111 37	111 33	Characteristic	/merger	/illelgel	
	Plumbing, 1999						
34	With all plumbing facilities	104 231	112 232	6 671	25	23	34
35	Lacking some plumbing facilities	641	2 480	1 798	2	2	35
36	No hot piped water	446	1 161	679	2	2	36
37	No bathtub nor shower	421	915	465	2	2	37
38	No flush toilet	377	857	449	-	-	38
	Main House Heating Fuel, 1999						
39	Housing units with heating fuel	98 460	107 874	8 259	22	21	39
40	Electricity	28 282	35 312	6 385	6	6	40
41	Piped gas	43 768	52 495	8 349	12	11	41
42	Bottled gas	3 737	5 681	1 861	2	2	42
43	Fuel oil	9 144	10 923	1 746	2	2	43
44	Kerosene or other liquid fuel	493	801	298	-	-	44
45	Coal or coke	149	203	52	-	-	45
46	Wood	1 567	2 144	572	-	-	46
47	Solar energy	7	19	12	-	-	47
48	Other	30	296	266	-	-	48

ngs, see Appendix)

	.9-,							
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
34	52	112	1 168	_	1 355	25	1 330	34
35	3	31	8	-	44	2	41	35
36	-	30	6	-	38	2	36	36
37	-	26	3	-	31	2	29	37
38	-	26	6	-	32	-	32	38
39	44	74	1 039	-	1 179	22	1 156	39
40	30	37	578	-	651	6	645	40
41	10	18	352	-	390	12	378	41
42	4	4	76	-	86	2	84	42
43	-	10	22	-	35	2	32	43
44	-	-	9	-	9	-	9	44
45	-	-	3	-	3	-	3	45
46	-	5	-	-	5	-	5	46
47	-	-	-	-	-	-	-	47
48	-	-	-	-	-	-	-	48

Table 4. Housing and Neighborhood Quality - Occupied Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, see Appendix)

	(Numbers in thousands means not applicable, sample too small, zero,	or rounds to zero- F	or additional inform	ation on column nea	adings, see Appendi		
	Characteristics	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	
1	Total, 1999	113 928	115 253	-	614	566	-
	Selected Amenities, 1997 <sup>6</sup>						
2	Porch, deck, balcony, or patio	77 456	92 165	13 662	18	17	2
3	Usable fireplace	29 115	35 412	5 762	9	9	3
4	Separate dining room	30 910	49 058	17 599	7	6	4
5	With 2 or more living rooms or recreatio	4 898	11 868	6 817		٠.	5
6	Garage or carport included with home	56 046	64 990	8 263	15	14	6
7	Not included	41 376	49 527	7 460	12	12	7
8	Offstreet Parking included	31 264	40 720	8 839	10	10	8
	Owners or Manager on Property, 1999						
9	Rental, multiunit	17 403	21 315	3 822	2	2	9
10	Owner or manager lives on property	3 153	7 880	4 688	-	-	10
11	Neither owner nor manager lives on property	9 236	13 435	4 148	2	2	11
	Selected Deficiencies, 1999 <sup>6</sup>						
12	Holes in floors	170	1 647	1 446	_	_	12
13	Open cracks or holes (interior)	1 468	6 715	5 183	2	2	13
14	Broken plaster or peeling paint (interior)	625	3 473	2 821	2	2	14
15	Exposed wiring	30	696	657	-	·	15
					1	-	
16	No electrical wiring	53	223	157	-	-	16
17	Rooms without electrical outlets	240	1 941	1 680	-	-	17
	Description of Area Within 300 Feet, 1999 <sup>6</sup>						
18	Single family detached houses	11 287	17 325	5 957	4	4	18
19	Single family attached or 1 to 3 story	2 526	6 909	4 342	-	-	19
20	4 to 6 story multiunit	12 004	18 084	5 927	2	2	20
21	7 stories or more multiunit	1 603	2 807	1 187	_	_	21
22	Mobil Homes.	285	793	499	2	2	22
23	Residential parking lots	10 572	16 206	5 464	2	2	23
24	Commercial, institutional, or industrial	9 709	15 275	5 475	2	2	24
25	Body of water	2 107	4 170	1 998	-	-	25
26	Open space, park, farm, or ranch	4 193	9 020	4 710	2	2	26
27	4+ lane highway, railroad, or airport	2 605	6 576	3 902	-	-	27
	Other Buildings Vandalized or With Interior Exposed, 1999						
28	None	19 906	25 055	4 935	2	2	28
29	1 building	124	919	791	-	-	29
30	More than 1 building	278	1 099	817	2	2	30
31	No buildings within 300 feet	40	701	648	- 1		31
32	Not reported	-	31	27	-	-	32
	Bars on Wondows of Buildings, 1999						
33	With other buildings within 300 ft	21 291	26.004	4 501	4	1	33
33	With other buildings within 300 ft	21 281	26 094	4 591 5 465	4	4	33
34	No bars on windows	16 173	21 853	5 465	4 4	4 4	34

	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
1	54	143	1 175	-	1 939	614	1 325	1
2 3 4 5 6 7 8	37 6 5 1 1 5 49 42	64 21 35 14 37 106 76	947 507 510 138 639 536 499	- - - - -	1 065 543 557 153 695 703 626	18 9 7 - 15 12 10	1 047 534 549 153 680 691	2 3 4 5 6 7 8
9 10 11	- - -	11 6 5	80 34 46	- - -	93 40 53	2 - 2	91 40 51	9 10 11
12 13 14 15 16	- 4 - - -	11 21 17 2 11 5	21 38 9 7 2 15	- - - - - -	32 66 27 9 13 21	- 2 - - -	32 64 27 9 13 21	12 13 14 15 16
18 19 20 21 22 23 24 25 26 27		19 6 20 2 22 21 10 15 12	63 35 133 17 7 148 70 54 103 57	-	86 41 155 17 11 172 94 64 120	4 - 2 - 2 2 2 2 -	81 41 153 17 9 170 92 64 118	18 19 20 21 22 23 24 25 26 27
28 29 30 31 32	- - - -	28 3 -	185 4 2 13 4	- - - - -	215 4 7 13 4	2 - 2 -	213 4 5 13 4	28 29 30 31 32
33 34 35 36	-	31 27 - 4	191 189 - 2	- - - -	226 220 7	4 4 - -	222 215 - 7	33 34 35 36

Table 4. Housing and Neighborhood Quality - Occupied Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, see Appendix)

	(Numbers in thousands means not applicable, sample too small, zero,	or rounds to zero-	For additional inform	nation on column he	adings, see Append		
	Characteristics	Present in 97	Present in 99	Changed in characteristic	97 units affected by conversion /merger	99 units resulting from conversion /merger	
	OCCUPIED UNITS						
37	Total, 1999	91 537	101 931	9 454	25	23	37
	Water Supply Stoppage, 1999						
38	With hot and cold piped water	91 175	101 650	9 536	22	21	38
39	No stoppage in last 3 months	82 117	95 950	12 921	18	17	39
40	With stoppage in last 3 months		4 441	3 841	4	4	40
41	No stoppage lasting 6 hours or more		1 811	1 716	2	2	41
42	1 time lasting 6 hours or more		443	436	-	-	42
43	2 times	2	215	209	-	-	43
44	3 times	4	121	113	2	2	44
45	4 times or more	2	169	167	-	-	45
46	Number of times not reported	8	474	466	-	-	46
47	Stoppage not reported	90	1 645	1 547	-	-	47
	Sewage Disposal Breakdowns, 1999						
48	With public sewer	69 151	79 224	9 453	20	19	48
49	No breakdowns in last 3 months	67 249	77 815	9 953	20	19	49
50	With breakdowns in last 3 months	48	1 409	1 354			50
51	No breakdowns lasting 6 hours or more		485	476	_	_	51
52	1 time lasting 6 hours or more		633	621	_	_	52
53	2 times	٠.	140	138	_	_	53
54	3 times	_	49	49	_	_	54
55	4 times or more	_	43	43	_	_	55
56	Number of times not reported	-	59	59	-	-	56
57	With septic tank or cesspool	19 673	22 636	2 643	4	4	57
58	No breakdowns in last 3 months		22 242	2 899	·	4	58
59	With breakdowns in last 3 months	21	393	367	`_	· _	59
60	No breakdowns lasting 6 hours or more		118	108	_	_	60
61	1 time lasting 6 hours or more	4	224	220	_	_	61
62	2 times.	` <u>.</u>	14	14	_	_	62
63	3 times.	_	9	9	_	_	63
64	4 times or more	_	8	8	_	_	64
65	Number of times not reported	2	19	17	_	_	65
	Heating Problems, 1999						
66	With heating equipment and occupied last winter	73 443	88 491	14 737	18	18	66
00	Not uncomfortably cold for 24 hours or	13 443	00 491	14 / 3/	10	10	00
67	more last winter	63 887	82 380	18 191	16	16	67
07	Uncomfortably cold for 24 hours or	03 007	02 300	10 191	10	10	07
68	more last winter	1 346	6 110	4 756	2	2	68
00	more last winter	1 340	6110	4 730	2	2	00
69	Equipment breakdowns	73 443	88 491	14 737	18	18	69
70	No breakdowns lasting 6 hours or more	5	129	123	-	-	70
71	1 time lasting 6 hours or more	38	1 083	1 045	-	-	71
72	2 times	20	329	309	-	-	72
73	3 times	5	151	146	-	-	73
74	4 times or more	9	137	128	-	-	74
75	Number of times not reported	- 1	193	193	-	-	75

	1				1		1	1
	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
37	39	53	850	-	964	25	940	37
38 39 40 41 42 43 44 45 46 47	38 36 2 - - 2 - -	53 53 - - - - - - -	850 824 22 8 1 3 3 3	- - - - - - - -	962 930 29 10 1 5 6	22 18 4 2 - - 2	939 912 25 8 1 5 3	38 39 40 41 42 43 44 45 46 47
48 49 50 51 52 53 54 55 56	33 33 - - - - - -	36 36 - - - - - -	552 546 6 - 4 3 -	- - - - - - -	641 634 7 - 4 3	20 20 - - - - -	620 614 7 - 4 3	48 49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64 65	5 5	16 16 - - - - - - -	298 292 6 6 - - -	- - - - - - - -	324 318 6 6 - - - -	4 4	319 314 6 6 - - - -	57 58 59 60 61 62 63 64 65
66	25	42	243	-	329	18	311	66
67	25	39	237	-	318	16	302	67
68	-	3	6	-	11	2	9	68
69 70 71 72 73 74 75	25 - - - - -	42 - - - - -	243 - - - - -	- - - - -	329 - - - - -	18 - - - - -	311 - - - - -	69 70 71 72 73 74 75

Table 4. Housing and Neighborhood Quality - Occupied Units (Additions)

(Numbers in thousands--means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, see Appendix)

						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in		conversion	
		in 97	in 99		/merger	/merger	
	Overall Opinion of Structure, 1999				Ü	Ü	
76	1 (worst)	42	529	483	-	_	76
77	2	23	373	349	-	-	77
78	3	26	724	698	-	-	78
79	4	63	1 246	1 180	-	-	79
80	5	1 145	6 374	5 196	2	2	80
81	6	660	5 507	4 833	2	2	81
82	7	3 096	13 868	10 707	4	4	82
83	8	9 205	28 020	18 640	14	13	83
84	9	3 312	14 558	11 069	2	2	84
85	10 (best)	12 740	26 707	13 544	-	-	85
	Selected Physical Problems, 1999 <sup>6</sup>						
86	Selected physical problems	229	1 778	1 545	2	2	86
87	Plumbing	188	1 414	1 222	2	2	87
88	Heating	22	288	266	-	-	88
89	Electric	2	6	4	-	-	89
90	Upkeep	6	87	81	-	-	90
91	Hallways	-	22	22	-	-	91
92	Moderate physical problems	1 601	4 631	3 000	_	_	92
93	Plumbing	2	116	115	-	-	93
94	Heating	1 205	1 758	549	-	-	94
95	Upkeep	133	1 476	1 339	-	-	95
96	Hallways	2	78	76	-	-	96
97	Kitchen	176	1 409	1 210	-	-	97

77	
Nomes   nonresidential   through new   construction   sources   additions   Total   not   loss   change	
Total Contraction   Tota	
76 3 - 3 - 3 - 3 - 2 - 2 - 2 - 2 - 2 -	
77 78	
77 78	
78	76
79         2         1         1         -         4         -         4           80         4         6         22         -         35         2         33           81         -         1         14         -         17         2         15           82         2         11         52         -         69         4         65           83         13         6         156         -         189         14         175	77
80     4     6     22     -     35     2     33       81     -     1     14     -     17     2     15       82     2     11     52     -     69     4     65       83     13     6     156     -     189     14     175	78
81 - 1 1 14 - 17 2 15 82 2 11 52 - 69 4 65 83 13 6 156 - 189 14 175	79
82     2     11     52     -     69     4     65       83     13     6     156     -     189     14     175	80
83 13 6 156 - 189 14 175	81
	82
	83
84 2 9 167 - 179 2 177	84
	85
86 3 2 - 6 2 4	86
	87
	88
	89
	90
	91
92 - 3 28 - 30 - 30	92
	93
	94
	95
	96
	97

Table 5. Household Composition - Occupied Units (Additions)

1 987

Median.....

1 987

1 987

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46

====	ndix)	99 units		Units added				
	99 mobile homes moved in	derived from nonresidential use	Units added through new construction	through other sources	Total additions	Total loss	Net change	
1	90	113		-	2 298	75	2 476	1
2	39	53	850	-	964	25	940	2
3 4 5 6 7 8 9	15 7 9 6 2 -	21 16 7 6 3 3	186 275 167 120 64 23 15 <b>2.9</b>		226 304 186 134 74 25 15	4 6 3 2 6 2 3.5	222 297 183 132 68 23 15 <b>2.8</b>	3 4 5 6 7 8 9
10 11 12 13 14 15 16 17	25 7 5 2 - - - 0.8	42 8 1 1 - - -	509 172 115 35 15 3 -	-	591 193 124 39 15 3	14 6 2 2 - - - 0.9	577 187 122 37 15 3 -	10 11 12 13 14 15 16
18 19 20 21 22 23 24 25 26	6 5 6 10 5 5 1	7 3 	97 95 158 231 133 68 59 8 37.9	-	113 107 167 260 147 88 70 12 38.3	3 4 2 6 4 4 	110 103 164 254 143 84 70 12 38.3	18 19 20 21 22 23 24 25 26
27	-	-	-	-	-	-	-	27
28 29	2	7	6 17	-	8 25	2 -	6 25	28 29
30 31	12 15	4 22	90 247	- -	117 291	11 9	107 282	30 31
32 33 34	8 2 <b>12.4</b>	13 7 <b>12.7</b>	226 264 <b>13.6</b>	-	249 273 <b>13.3</b>	2 1 10.9	247 272 <b>13.4</b>	32 33 34
35 36 37 38 39 40 41 42 43	4 - 5 - 1 - - -	5 - 11 - - 1 4	2 19 24 6 10 5 2		6 23 33 17 13 5 3 4	- 4 - 2	6 23 29 17 11 5 3 4	35 36 37 38 39 40 41 42 43
44 45 46	28 <b>1 986</b>	32 1 <b>982</b>	- 782 <b>1 987</b>	- -	859 <b>1 988</b>	- 18 <b>1 988</b>	- 841 <b>1 988</b>	44 45 46

Table 6- Financial Characteristics - All Housing Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, see Appendix)

-						99 units	
					97 units	resulting	
	Characteristics				affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
1	Total, 1999	113 928	115 253	-	614	566	-
	Monthly Housing Costs, 1000						
	Monthly Housing Costs, 1999						
2	Less than \$100	156	911	727	_	-	2
3	\$100 to \$199	2 396	6 311	3 865	4	4	3
4	\$200 to \$249	968	4 682	3 692	-	-	4
5	\$250 to \$299	854	4 565	3 684	-	-	5
6	\$300 to \$349	684	3 790	3 069	-	-	6
7	\$350 to \$399	455	3 249	2 750	-	-	7
8	\$400 to \$449	383	2 961	2 564	-	-	8
9	\$450 to \$499	325	2 593	2 235	-	-	9
10	\$500 to \$599	1 105	4 782	3 587	-	-	10
11	\$600 to \$699	914	4 398	3 423	2	2	11
12	\$700 to \$799	951	4 020	3 039	-	-	12
13	\$800 to \$999	2 413	7 153	4 649	6	5	13
14	\$1,000 to \$1,249	2 109	6 393	4 234	2	2	14
15	\$1,250 to \$1,499	1 271	4 230	2 903	-	-	15
16	\$1,500 or more	4 082	8 415	4 193	-	-	16
17	No cash rent	847	1 838	983	-	-	17
18	Mortgage payment not reported	21 741	30 085	8 177	4	4	18
19	Meidan	828	609	547	817	810	19
	Monthly costs including all mortgages plus						
20	maintenance costs	656	584	555	587	574	20
	Monthly and avaluation 2nd and autonomical						
0.4	Monthly costs excluding 2nd and subsequent	000	040		000	000	04
21	mortgages and maintenance costs	833	613	553	833	820	21
	Annual Taxes Paid Per \$1000 Value, 1999						
	Annual raxes raid for \$1000 value, 1000						
22	Less than \$5	4 921	10 798	5 520	2	2	22
23	\$5 to \$9	7 471	18 103	10 478	4	4	23
24	\$10 to \$14	5 770	15 065	9 180	2	2	24
25	\$15 to \$19	2 638	8 100	5 420	-	-	25
26	\$20 to \$24	1 141	4 315	3 145	2	2	26
27	\$25 or more	2 987	8 062	5 027	-	-	27
28	Median	10	11	11	8	8	28
	Property Value, 1999 12						
29	Less than \$10,000	933	1 886	894	-	-	29
30	10,000 to \$19,999	754	1 758	931	2	2	30
31	20,000 to 29,999	690	1 662	915	-	-	31
32	30,000 to 39,999	747	2 085	1 302	-	-	32
33	40,000 to 49,999	845	2 765	1 888	4	4	33
34	50,000 to 59,999	822	3 249	2 413	-	-	34
35	60,000 to 69,999	1 047	4 153	3 074	2	1	35
36	70,000 to 70,000	1 184	4 496	3 294	-	-	36
37	80,000 to 99,999	3 809	9 231	5 388	-	-	37
38	100,000 to 119,000	2 140	6 626	4 448	2	2	38
39	120,000 to 149,999	3 410	8 723	5 245	2	2	39
40	150,000 to 199,999	3 939	9 164	5 113	2	2	40
41	200,000 to 249,000	1 484	4 610	3 051	-	-	41
42	250,000 to 299,999	706	2 710	1 956	-	-	42
43	300,000 or more	2 696	5 339	2 565	64.500	C4 F00	43
44	Median	115 733	108 440	104 867	64 500	64 500	44

	99 mobile homes moved in	99 units derived from nonresidential use	Units added through new construction	Units added through other sources	Total additions	Total loss	Net change	
1	54	143	1 175	-	1 939	614	1 325	1
2 3	3	5 1	22 46	-	27 55	- 4	27 50	2
3 4	6	2	14	_	22	4 -	22	4
5	-	2	25	-	27	-	27	5
6	-	2	35	-	37	-	37	6
7 8	2	4	41 12	_	44 13	_	44 13	7 8
9	6	-	28	-	33	-	33	9
10	5	3	83	-	90	-	90	10
11 12	5 2	-	56 27	-	63 30	2	61 30	11 12
13	3	3	86	_	98	6	92	13
14	-	-	51	-	53	2	51	14
15	-	4	52	-	55	-	55	15
16 17	2	2 5	137 1	]	139 8	_	139 8	16 17
18	13	15	138	_	170	4	166	18
19	491	375	691		671	833	669	19
20	495	425	707		673	587	676	20
21	491	375	695		674	833	672	21
22 23	17 5	5 5	333 145	-	358 159	2 4	356 154	22 23
24	5	6	105	-	118	2	116	24
25	2	3	37	-	41	-	41	25
26 27	2	1 2	25 44	-	30 47	2	28 47	26 27
28	5	11	5		5	8	5	28
29	3	3	53	-	59	-	59	29
30 31	8 10	-	65 47	-	75 57	2	73 57	30 31
32	7		30	]	37	-	37	32
33	2	-	30	-	36	4	32	33
34	-	1	12	-	14	-	14	34
35 36	-	4 5	29 13		34 18	2	32 18	35 36
37	-	2	32		34	-	34	37
38	-	-	39	-	41	2	39	38
39	-	1	67	-	70	2	68	39
40 41	2	6	104 75		114 75	2	112 75	40 41
42	-	5	42		47	-	47	42
43	-	-	78	-	78	-	78	43
44	24 500	82 250	123 463		114 134	64 500	115 346	44

Table 6- Financial Characteristics - All Housing Units (Additions)

(Numbers in thousands- - means not applicable, sample too small, zero, or rounds to zero- For additional information on column headings, see Appendix)

		,		antona miomat		99 units	
					97 units	resulting	
	Characteristics					U	
	Characteristics	D	D	01	affected by	from	
		Present	Present	Changed in	conversion	conversion	
		in 97	in 99	characteristic	/merger	/merger	
	OCCUPIED UNITS						
45	Total, 1999	91 537	101 931	9 454	25	23	45
	Household Income, 1999						
46	Less than \$5,000	955	5 755	4 765	-	-	46
47	\$5,000 to \$9,999	2 197	6 622	4 383	-	-	47
48	\$10,000 to \$14,999	1 705	7 740	5 980	6	6	48
49	\$15,000 to \$19,999	1 103	6 908	5 758	-	-	49
50	\$20,000 to \$24,999	1 115	7 223	6 036	2	2	50
51	\$25,000 to \$29,999	831	6 792	5 906	-	-	51
52	\$30,000 to \$34,999	839	7 392	6 490	2	2	52
53	\$35,000 to \$39,999	574	5 929	5 288	4	4	53
54	\$40,000 to \$49,999	1 840	9 652	7 711	3	3	54
55	\$50,000 to \$59,999	1 394	8 304	6 851	_	_	55
56	\$60,000 to \$79,999	3 003	11 868	8 763	4	3	56
57	\$80,000 to \$99,999	1 200	6 487	5 186			57
58	\$100,000 to \$119,999	532	3 786	3 199	_	_	58
59	\$120,000 or more	1 882	7 474	5 507	2	2	59
60	Median	41 301	37 137	36 506	36 875	36 250	60
	Income Sources of Families and Primary Individuals, 1999						
61	Wages and salaries	55 476	72 243	16 001	20	19	61
62	Wages and salaries were majority of inc	33 369	51 590	17 631	16	16	62
63	2 or more people each earned over 20% of wages and salaries	19 973	34 298	13 963	14	13	63
64	Business, farm or ranch	4 359	10 031	5 596	2	2	64
65	Social security or pensions	20 731	28 363	7 502	6	6	65
66	Interest or dividend(s)	19 759	34 239	14 240	5	5	66
67	Rental income	2 778	6 179	3 345	-	-	67
68	With lodgers	5	109	104	-	-	68
69	Welfare or SSI	1 996	5 006	2 985	-	-	69
70	Alimony or child support	1 462	4 362	2 847	-	-	70
71	Other	725	5 499	4 720	4	4	71
	Amount of Savings and Investments, 1999						
72	Income of \$25,000 or less	23 890	37 287	13 123	9	9	72
73	No savings or investments	12 787	25 417	12 419	9	9	73
74	\$20,000 or less	1 833	7 599	5 715	-	-	74
75	More than \$20,000	814	3 400	2 573	-	-	75
	Food Stamps, 1999						
76	Family members received food stamps	2 148	4 784	2 612	-	-	76
77	Did not receive food stamps	17 178	32 504	15 075	9	9	77

				1				
	99 mobile homes	99 units derived from nonresidential	Units added through new	Units added through other	Total	Total	Net	
	moved in	use	construction	sources	additions	loss	change	
-							3	
45	39	53	850	-	964	25	940	45
46	6	6	22	-	34	-	34	46
47	5	3	35	-	42	-	42	47
48	2	5	48	-	61	6	55	48
49	2	5	41	-	47	-	47	49
50	-	-	72	-	74	2	72	50
51 52	1	5 2	49 61	-	55 65	2	55 63	51 52
53	12	7	48	_	71	4	63 67	53
54	3	4	93	_	104	3	101	54
55	6	2	52	_	60	-	60	55
56	1	2	101	-	107	4	103	56
57	-	2	98	-	100	-	100	57
58	-	3	51	-	54	-	54	58
59	-	6	80	-	88	2	86	59
60	36 250	34 999	45 322		43 077	36 875	43 416	60
61	32	35	700	_	786	20	765	61
62	25	24	541	_	606	16	590	62
63	17	14	332	_	376	14	362	63
64	-	14	62	-	78	2	76	64
65	1	12	118	-	137	6	131	65
66	-	6	233	-	244	5	239	66
67	-	6	50	-	56	-	56	67
68	-	-	-	-	-	-	-	68
69	2	2	20 51	-	25 53	-	25	69 70
70 71	2	3	53	_	53 59	4	53 55	70 71
, ,	2	_	55		39	4	33	7 1
70	4.5	6.4	202		202		075	70
72 73	16 16	21 18	238 177	-	283 219	9	275 211	72 73
	16	18	177 49	-	219 50	9		73 74
74 75	-	1	49 12	-	50 14	-	50 14	74 75
73	-	'	12	_	14	-	14	75
76	2	4	18	-	24	-	24	76
77	14	17	220	-	260	9	251	77

# Components of Inventory Change: 1997-1999

**Appendices** 

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### **Appendix: Endnotes**

- 1. By definition, an existing structure cannot change the number of units present without conversions, mergers or a change in the structure. As a result, there are no changes in characteristic possible for this item, and any changes will be captured by other columns.
- 2. When comparing the numbers for "Year Structure Built" with other CINCH reports, the user may find apparent inconsistencies in the number of units built in a given time period. Although such differences are expected for time periods that include the survey years, they occur in past years as well. These differences are a result of the method used to weight the AHS data. The algorithm that generates the CINCH tables uses the greater of the weight values in the PWT (Pure Weight) variable for each of the two years in the comparison. This method ensures that numbers are consistent within any given CINCH report, but it is possible for minor differences to occur when comparing reports.
- 3. Due to the small likelihood that the number of stories in a structure would change between the two comparison years, a decision was made to prohibit the number of stories in structure from changing. Therefore, the units in each Stories in Structure category do not sum to the universe line. The difference, however, is small.
- Limited to multiunit structures.
- 5. The numbers presented for external building conditions that could not be observed or were not reported are higher than previously published in AHS reports. We believe it is possible that the data have been updated since the AHS publications.
- 6. More than one item may apply to the housing unit.
- 7. Limited to single detached and mobile homes.
- 8. Due to the prevalence of respondents who do not know their housing unit's exact lot size, a decision was made to prohibit lot size from changing between the two comparison years. Therefore, the units in each Lot Size category do not sum to the universe line for the first year. The difference, however, is small.
- 9. The numbers presented for housing units that have neither burners nor ovens are higher than previously published in AHS reports. It is possible that the data have been updated since the AHS publications.
- Census believes these data are less reliable than other data in the AHS. As a result, they
  have suppressed this item on some AHS reports. Caution should be exercised in using this
  data.
- 11. A change in the number of people living in the sample unit will result in a change in characteristic here.
- 12. Values at the extreme upper range do not appear due to top-coding on the public use file released by the Census Bureau.

Components of Inventory Change: 1997-1999

### Appendix: Endnotes -- Changes from the 1985-1997 reports

- 1. Certain data is no longer present on the AHS, this includes whether or not equipment is more than 5 years old, and the household income as a percentage of poverty.
- 2. "Other additions" was computed as a residual in the earlier years. With the data improvement starting in 1997, this column was no longer needed. However, for consistency in being able to line things up, the column was left in and is blank.

### **Appendix: Cautions**

### Notes on the items described in the text

This text comments on only some of the changes that occurred in the housing stock over this two-year period covered by this CINCH report. While the text reflects changes that the authors noted and thought interesting, the items included for discussion were not selected according to any rigid definition or policy. Inclusion or exclusion of an item should not be taken as an explicit or implicit commentary on the value placed on that data.

These findings are based solely on the two-year period covered by this report and have not been analyzed in relation to other pairs of years.

### **Cautions**

As with most publications reporting aggregate figures from a sample survey, users should exercise care when citing these numbers. Because of collection and reporting restrictions implicit in the American Housing Survey (AHS), each CINCH report also has certain limitations that cannot be overcome.

The raw data comes from the American Housing Survey National Sample (AHS), a survey of over 40,000 housing units in the United States that is conducted every two years. Each survey year, the same units are interviewed, and new housing units are added to reflect additions to the housing stock. Further details about the AHS can be found in all AHS publications and codebooks.

### General Data Issues

While the CINCH reports reflect the quality control used for each AHS dataset, some data quality issues arose in these two-year analyses that are not relevant to single-year analyses. For each data quality issue that arose, we developed and implemented a workable solution to preserve the integrity of the data and the reports. While this method can be called into question because it alters the data, we think that it adds to the legitimacy to the CINCH reports. For example, while most respondents report identical data for items that should not change from year to year, some do mistakenly report different answers. The BUILT variable (year the structure was built), for example, should not change. However, respondents do at times misreport this item. Through several iterations, we changed the data as minimally and justifiably as possible to reflect a more accurate depiction of the year the structure was built.

### Number of units estimates

Although the figures reported in the CINCH reports are derived from the American Housing Survey, these figures will not match those published AHS reports in the same year. This is because the publications use different weighting variables. The published AHS reports use the WEIGHT variable which is the "adjusted weight variable." This is the weight representing the number of units that Census has determined the sample case represents. This weight can vary from year to year because of changes in the nonresponse rate and because Census tries to match control totals derived from other surveys. In contrast, the CINCH report uses the PWT or "pure weight variable." The pure weight represents the inverse of the probability of selection for the sample case. This variable is invariant over time and is thus more appropriate for comparing changes between survey years. As a result, the figures reported in the CINCH reports will be similar to the corresponding numbers in the published AHS reports, but they will not match exactly. Both AHS and CINCH should track each other over time. All numbers should therefore be viewed as approximations and not precise figures. Although the numbers of units may not be exact, they

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will be approximately correct. Relative changes in numbers, such as increases and decreases in the housing stock, should be generally reliable but not exactly precise.

### Financial information

While the CINCH reports attempt to capture changes in the housing stock, the accurate reporting of legitimate changes in characteristics involving dollar values can present significant problems. Both respondent-reporting errors and data reporting constraints can lead to inaccurate conclusions. For example, respondents may lack the knowledge to report their household incomes accurately or may be reluctant to provide this information to the government. Further complicating the CINCH comparative reports, all financial information collected through the AHS is reported in nominal dollars with no conversion to a constant dollar base. As a result, inflation will naturally cause a gradual shifting in all characteristics involving dollars, and reported changes in these items may reflect inflationary effects rather than a significant change in household characteristic.

**Appendix: Definitions** 

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

Amount of savings and investments. These data are restricted to families and primary individuals with total incomes of \$25,000 per year or less. Savings includes savings in the bank or other financial institution. It also includes savings in money market accounts. Investments in a farm or business must be owned shares in a business or farm, owned percentage of the capital or æsets, investment in a farm or business for which the investor holds a promissory note, or membership in a partnership that has any of the above. Other investments include stocks, bonds, rental property, real estate, antiques, art, certificates of deposit, IRA or KEOGH accounts, commodities, etc.

Annual taxes paid per \$1,000 value. The annual real estate taxes paid per \$1,000 value of the property (house and lot) are presented. 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. Medians for taxes per \$1,000 value are rounded to the nearest dollar.

Bars on windows of buildings. The statistics presented are based on the interviewer's personal observation for pre-1997 data. In 1997, the respondent was asked. The condition of the windows has no bearing on this item. The windows might be in perfect condition, but the bars might be there to protect against vandalism. Windows that are boarded up or covered with tin are not included.

Bedrooms. The number of bedrooms in the housing unit is the count of room used mainly for sleeping, 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 purposed, 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.

Central cities. Every metropolitan statistical area has at least one central city, which is usually its largest city. Smaller cities are also identified as central cities if they have at least 25,000 population and meet the following two commuting requirements. First, the city must have at least 75 jobs for each 100 residents who are employed. Second, no more than 60 percent of the city's resident workers may commute to jobs outside the city limits. In addition, any city with at least 250,000 population or at least 100,000 persons working within its corporate limits qualifies as a central city even if it fails to meet the above two commuting requirements. Finally, in certain smaller metropolitan statistical areas, there are places with between 15,000 and 25,000 population that also qualify as central cities, because they are at least one-third the size of the metropolitan statistical area's largest city and meet the two commuting requirements.

**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.

Cooling degree day. Each degree that the average temperature for a day is above 65 degrees Fahrenheit produces one cooling degree day (CDD). For example, if the maximum temperature is 80 degrees F and the minimum temperature is 62 degrees F, the average temperature for the day is 71 degrees, resulting in six cooling degree days. A day when the average temperature is 65 or less has zero cooling days.

This information on degree days was provided by the National Oceanic and Atmospheric Administration (NOAA). Each sample unit was assigned heating and cooling degree days using average NOAA data for counties. The categories represent the total heating and cooling degree days for the entire year.

### Description of area within 300 feet.

Prior to 1997, the interviewer, through personal observation, marked all of the following categories that describe the area within 300 feet of the building in which the sample unit is located. The interviewer's best estimate of the distance was considered to be acceptable. In 1997, the respondent was asked. The categories include

single-family detached houses; single-family atached houses or low-rise (1-3 story) multiunit buildings; mid-rise (4-6 story) multiunit buildings; high-rise (7-or-more story) multiunit buildings; and mobile homes, excluding campers. The cate-"Commercial, institutional, industrial building(s)" includes all varieties of nonresidential structures in offices, hospitals, prisons, water treatment plants, factories, parking garages, churches, barns, junkyards, etc. "Residential parking lots" excludes driveways of singlefamily homes and parking garages where parking is on more than one level. "Body of water" refers to lakes, streams, reservoirs, etc. Swimming pools, temporary pools of water, etc., are excluded. "Open space, park, farm, or ranch" includes cemeteries, golf courses, forest preserves, vacant lots, undeveloped land, airport land, school fields, etc. The category "4+ lanes highway, railroad, or airport" refers to highways of four lanes or more, railroad tracks, and airports.

**Dividends.** a sum of money paid to shareholders of a corporation out of earnings, or monies received as a bonus.

**Duration of Vacancy.** The statistics on duration of vacancy refer to the length of time (in months) from the date the last occupants moved from the housing unit to the date of the interview. The data, therefore, do not provide a direct measure of the total length of time that units remained vacant. For newly constructed units that have never been occupied, the duration of vacancy is counted from the date construction was completed. For recently converted or merged units, the time is reported from the date that the conversion or merger was completed.

### **Equipment**

This item refers to selected equipment that is in working order and for the household's exclusive use. If there are two or more of the specified appliances in the housing unit, the age of the newest is reported. There was a questionnaire change in 1997, and so 1997 figures may not be comparable to previous years.

Complete kitchen facilities. A housing unit is considered to have complete kitchen facilities when it has all of the following for the exclusive use of the occupants of the unit: (1) an installed kitchen sink, (2) burners and (3) a mechanical refrigerator. Quarters with only portable cooking equipment are not considered as having a range

or cookstove. An icebox is not included as a mechanical refrigerator. The kitchen facilities are for the exclusive use of the occupants when they are used only by the occupants of one housing unit, including lodgers or other unrelated persons living in the unit.

Vacant units are counted as lacking complete kitchen facilities if one or more of the facilities is absent regardless of what will be present when new occupants move in.

Kitchen sink. The sink must be in the unit or on an enclosed porch, but does not have to be in the kitchen. A bathroom sink does not count as a kitchen sink.

Refrigerator. The refrigerator must be a working mechanical refrigerator. Iceboxes are not counted. The data show whether the equipment is less than 5 years old.

Burners and Oven. The cookstove or range does not have to be mechanical. For example, it can be a wood-burning stove. Microwaves are included in the count of ovens, although toaster ovens are not. Portable burners are excluded from the count of cooking burners. The data show whether the equipment is less than 5 years old.

Burners only. These units have burners but no oven. Portable burners are excluded from the count of cooking burners. The data show whether the equipment is less than 5 years old.

Oven only. These units have an oven but no burners. The cookstove or range does not have to be mechanical. For example, it can be a woodburning stove. Microwaves are included in the count of ovens, although toaster ovens are not. The data show whether the equipment is less than 5 years old.

Neither burners nor oven. These units have neither burners nor an oven, meaning that they have neither a mechanical nor non-mechanical cookstove or range, microwave, or cooking burners. They may, however, have a toaster oven or portable burners, as these items are not included in the count of burners or ovens.

Dishwasher. All mechanical dishwashers are included except counter-top dishwashers. The data show whether the equipment is less than five years old.

Washing machine. The washing machine must be mechanical. A wringer washing machine that must be plugged in to run is included in this count. The data show whether the equipment is less than five years old.

Disposal in kitchen sink. Only garbage disposals in working order or only temporarily out of service are included. The data show whether the equipment is less than five years old.

Clothes dryer. Clothes dryer must be mechanical. Excluded from the count are hand-operated wringers, hand-turned open dryers, and other hand-operated devices. The data show whether the equipment is less than five years old.

Air conditioning. Air conditioning is defined as the cooling of air by a refrigeration unit. Excluded are evaporative coolers, fans, or blowers that are not connected to a refrigeration unit. A room airconditioning unit is an individual air conditioner that is installed in a window or an outside wall and generally intended to cool one room, although it may sometimes be used to cool several rooms. A central system is a central installation that airconditions the entire housing unit. In an apartment building, a central system may cool all apartments in the building; each apartment may have its own central system; or there may be several systems each providing central air conditioning for a group of apartments. A central installation with individual room controls is a central air-conditioning system.

**External building conditions.** The statistics presented are restricted to multiunits. The external condition of the building that contains the sample unit was determined by interviewer observation, as visible from the front of the building or the roadway. The categories were grouped as follows: roof, walls, windows, and foundation.

Roof. A "sagging roof" is a defect indicating continuous neglect, or deep or serious damage to the structure. Only roofs with substantial sagging were included. "Missing roofing material" includes rotted, broken, loose, or missing shingles, tiles, slate, shake, tin, etc., caused by extensive damage from fire, storm, or serious neglect. "Hole in roof" occurs when the missing roof materials expose the interior of the unit directly to the elements. Holes caused by construction activity were not counted unless the construction had been abandoned. "Could not see roof" occurs when possible situations such as a high tree,

evening interviews, or a flat roof prevent the roof from being visible.

Walls. "Missing bricks, siding, or other outside wall material" applies to the exterior walls (including chimney) of the structure. Those defects may have been caused by storm, fire, flood, extensive neglect, vandalism, and so forth. Materials may include clapboard, siding, shingles, boards, brick, concrete, stucco, etc. The missing materials do not necessarily expose the interior of the unit openly to the elements. Missing materials resulting from construction activity were not counted unless construction had been abandoned. "Sloping outside walls" are a critical defect indicating continuous neglect or serious damage to the structure. Only walls with substantial sagging were included.

Windows. "Boarded-up windows" have been sealed off to protect against weather or entry and include windows and/or doors covered by board, brick, metal, or some other material. "Broken windows" indicate several broken or missing window panes. "Bars on windows" are to protect against unlawful entry. The condition of the windows has no bearing on this item. The bars can be vertical, horizontal, a metal grating, etc. Windows completely covered with metal sheeting are not included in this category.

Foundation crumbling or has open cracks or holes. This category includes large cracks, holes, and rotted, loose, or missing foundation material.

Could not see foundation. This occurs when landscaping, night interviewing, or some other reason prevents visibility for observation.

Family or primary individual. Housing units are occupied by either families or primary individuals. The term "family" refers to 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. **Food stamps.** These data are restricted to families and primary individuals with total incomes of \$25,000 per year or less. Food stamps are government-issued coupons that can be used to purchase food. The food stamp program is a joint Federal-State program that is administered by State and local governments.

Heating degree day. Each degree that the average temperature for a day is below 65 degrees Fahrenheit produces one heating degree day (HDD). For example, if the maximum temperature is 70 degrees F and the minimum temperature is 52 degrees F, the average temperature for the day is 61 degrees, resulting in four heating degree days. A day when the average temperature is 65 or more has zero heating days.

This information on degree days was provided by the National Oceanic and Atmospheric Administration (NOAA). Each sample unit was assigned heating and cooling degree days using average NOAA data for counties. The categories represent the total heating and cooling degree days for the entire year.

Heating equipment. Data shown are for the main heating equipment. Only one type of equipment was reported as the "main heating equipment." Warm-air furnace refers to a central system that provides warm air through ducts leading to various rooms. Steam or hot water system refers to a central heating system in which heat from steam or hot water is delivered through radiators or other outlets. It also includes solarheated hot water that is circulated throughout the home. An electric heat pump refers to a heatingcooling system that uses indoor and outdoor coils, a compressor, and a refrigerant to pump heat in during the winter and pump out heat during the summer. Only heat pumps that are centrally installed with ducts to the rooms are included in the category. Built-in electric units refers to units permanently installed in floors, walls, ceilings, or baseboards. A floor, wall, or other built-in hot-air unit without ducts delivers warm air to the room right above the furnace or to the room(s) on one or both sides of the wall in which the furnace is installed.

Room heaters with flue include non-portable room heaters in the wall or free standing heaters that burn liquid fuel, and which are connected to a flue, vent, or chimney to remove smoke and fumes. Room heaters without flue include any room heater that burns kerosene, gas, or oil, which does not connect to a flue, vent, or chimney. Portable electric heaters include heat-

ers that receive current from an electrical wall outlet. Stoves refer to ranges, stoves, or Franklin stoves that burn wood, coal, or other solid fuel. Fireplaces with inserts have a fan-forced air circulation system to force the heat into the room. A fireplace without inserts or with only glass door fire screens or fire backs inserted in the back of the fireplace to passively reflect heat is included in the category "fireplace without inserts."

For vacant housing units from which the heating equipment had been removed, the equipment used by the last occupants was to be reported.

Heating equipment breakdowns. For breakdowns of heating equipment, statistics are shown for housing units occupied by the householder during the winter prior to the interview. The data are classified by whether the housing unit was uncomfortably cold for 24 hours or more, the number of times equipment breakdowns occurred lasting 6 hours or more, and causes for the breakdowns.

The heating equipment is broken down if it is not providing heat at its normal heating capacity through some fault in the equipment. Utility interruptions occur when there is a cut off in the gas, electricity, or other fuel supplying the heat. Inadequate heating capacity refers to heating equipment that is providing heat at its normal capacity, but the housing unit is still too cold for its occupants. Inadequate insulation refers to air drafts through window frames, electrical outlets, or walls that are cold.

Householder. The householder is the first household member 18 years old or over and is the owner or renter of the sample unit. If no household member occupying the sample unit owns or rents the unit, the householder is the first household member listed who is 18 years old or older. In cases where no household member listed owns or rents the unit or is 18 years or older, the first household member listed is the householder.

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. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. If the information cannot be obtained, the criteria are applied to the previous occupants. Both occupied and vacant housing units are included in the housing inventory, except that tents, caves, boats, railroad cars, and the like are included only if they are occupied.

**Income.** The statistics on income in the Components of Inventory Change are based on the respondent's reply to questions on income for the 12 months prior to the interview and represent 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. This figure represents the amount of income received before deductions or 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.

In this report, amounts are shown for the money income of the household (the sum of the income of the householder and all household members 14 years and over).

Income Sources of Families and Primary Individuals. In this report, statistics are shown for the income sources of families and primary individuals occupying the housing unit (the sum of the income of the householder and all other related members 14 years old and over, or the income of the primary individual). Wage or salary income is defined as the total money earnings received for work performed as an employee at any time during the 12-month period prior to the interview. It includes wages, salary, piece-rate payments, commissions, tips, cash bonuses, and Armed Forces pay.

Wages and salaries were majority of income. More than 50 percent of the total income reported by the family/primary individual was in the form of wages or salaries as defined above.

2 or more people each earned over 20% of wages and salaries. At least two persons in the family (defined as the householder and all other related members 14 years old and over) individu-

ally earned more than 20 percent of the total wages and salaries earned by the entire family.

Business, farm, or ranch income is defined as money income received from a business, professional practice, partnership, farm, or ranch. Social Security or pensions include cash receipts of Social Security pensions; survivors' benefits; disability insurance programs for retired persons, dependents of deceased insured workers, or disabled workers; and deductions for Medicare and health insurance premiums. Cash receipts of retirement, disability, and survivors' benefit payments made by the U.S. Government under the Railroad Retirement Act are also included. Separate payments received for hospital or other medical care are not included.

Also included on the table are periodic payments from interest or dividends; net rental income (or loss) from property rentals and net receipts from roomers or boarders; public assistance or welfare payments that include cash receipts received from public assistance programs, such as old age assistance, aid to families with dependent children, and aid to the blind or totally disabled; unemployment insurance benefits, workmen's compensation, cash benefits, and periodic payments by the Veteran's Administration to disabled veterans. The table also includes alimony or child support from persons who are not members of the household and income from other sources, including money income received from sources such as net royalties, net gambling gains, public or private pensions, periodic receipts from insurance policies or annuities, and non-service scholarships and fellowships.

Receipts from the following sources were not included as income: Value of income "in kind," such as free living quarters, housing subsidies, food stamps, or food produced and consumed in the home; money received from the sale of property (unless the recipient was engaged in the business of selling such property); money borrowed; tax refund; withdrawal of bank deposits; accrued interest on uncased savings bonds; exchange of money between relatives living in the same household; gifts of money; and lump-sum payments for inheritances, insurance policies, estates, trusts, gifts, etc.

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 charac-

teristics 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 Census 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 contributed to factors such as the various ways income questions are asked, the sampling variability and nonsampling errors between the American Housing Survey and other Census Bureau surveys and censuses, survey procedures and techniques, and processing procedures.

**Interest.** Payments made in return for investment or loan. In this case, interest is money received by the respondent, not paid by the respondent.

**Lodgers.** Counts of lodgers are restricted to households with members unrelated to the householder, and who are 14 years of age and over and are not co-owners, co-renters, or children of co-owners or co-renters who pay rent to another household member.

Lot size. These numbers include all connecting land that is owned or rented with the home. Excluded are two-or-more-unit buildings and two-or-more-unit mobile homes. Median lot size is shown to hundredths of an acre.

Main House Heating Fuel. Electricity is generally supplied by means of above or underground electric power lines. Piped gas is gas transported through underground pipes from a central system to serve the neighborhood. Bottled gas is pressurized gas stored in tanks or bottles that are filled or exchanged when empty. Fuel oil is heating oil normally supplied by truck to a storage tank for use by the heating system. Kerosene or

other liquid fuel includes kerosene, gasoline, acohol, and other similar combustible liquids. Coal or coke refers to coal or any coal derivative usually delivered by means of truck. Wood refers to the use of wood or wood charcoal, etc., as a fuel. Solar energy refers to the use of energy available from sunlight as a heating fuel source. Other includes briquettes made of pitch and sawdust, coal dust, waste material such as corncobs, purchased steam, or any other fuel not listed.

**Mobile homes**. A mobile home is defined as a housing unit that was originally constructed to be towed on its own chassis. It may also have permanent rooms attached at its present site, or other structural modifications. The term does not include prefabricated buildings, modular homes, travel campers, boats, or self-propelled vehicles such as motor homes. Some people use the terms trailer or manufactured housing in the same sense as mobile homes.

Metropolitan statistical areas. Metropolitan statistical areas (MSAs) shown in the American Housing Survey are defined by the Office of Management and Budget. By current standards, as published in the Federal Register on January 3, 1980, an area qualifies for recognition as an MSA in one of two ways: If there is a city of at least 50,000 population, or a Census Bureaudefined urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (75,000 in New England). Except in the New England States, an MSA is defined in terms of entire counties. In New England, MSAs are composed of cities and towns. In addition to the county containing the main city, additional counties are included in an MSA if they are socially and economically integrated with the central county. An MSA may contain more than one city of 50,000 population and may cross state lines.

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; homeowner's 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.

Monthly housing costs for renters include the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water, and sewage disposal); fuels (oil, coal, kerosene, wood, etc.); property insurance; mobile home land rent; and garbage and trash collection if these items are paid for by the renter (or paid for by someone else, such as a relative, welfare agency, or friend) in addition to rent. Renter housing units occupied without payment of cash rent are shown separately as no cash rent. Monthly housing costs for vacant for-rent housing units include rent asked.

**Mortgage payment.** One of a series of payments, including principal and interest, to a loan agency holding the note on a real property.

**Multiunit structure.** A building or mobile home containing two or more units, such as an apartment building. In determining the number of housing units in a structure, all units, both occupied and vacant, are counted.

**No cash rent.** These are units that are occupied without payment of cash rent.

**Number of 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 married) at the time of the interview.

Occupied Housing Units. A housing unit is classified as occupied if there is at least one person who lives in the unit at the time of the interview and usually lives in it, or if the occupants are only temporarily absent, for example on vacation. However, if the unit is occupied entirely by persons with a usual residence elsewhere, the unit is classified as vacant. By definition, the count of occupied housing units is the same as the count of households.

Other buildings vandalized or with interior exposed. Prior to 1997, the statistics presented are based on the interviewer's personal observation. In 1997, the respondent was asked. A unit is considered to be vandalized if it has most of the visible windows broken, doors pulled off, been badly burned, words or symbols written on it, portions of the roof missing or gone, or in some other way has the interior exposed to the elements.

**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.

Owner or manager lives on property. These statistics are based on the number of rental housing units in structures of two or more units with the owner or resident manager living on the property.

**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 the number of housing units occupied by the specified number of persons. 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 legal residence, voting residence, or domicile.

**Plumbing.** Respondents were asked how many bathrooms they had. If they answered one or more, questions on plumbing facilities were not asked; the unit was assumed to have complete plumbing facilities for exclusive use.

Although since 1993 the definition of a bathroom has required hot and cold piped water, a sink, a flush toilet, and a bathtub or shower, this definition was not read to the respondent. Also, nothing in the guestion required the bathroom to be only for the use of the occupants of the sample unit (exclusive use). It is probable that since 1993 the AHS counted a significant number of units as having complete plumbing for exclusive use that did not, because respondents for these units reported having a bathroom when, in fact, either the bathroom did not contain all plumbing facilities or they were shared by persons living in another unit. Based on previous years' AHS data, it is likely that "completeness" was more of a problem than "exclusive use."

With all plumbing facilities. A bathroom with both hot and cold piped water, a sink, flush toilet, and bathtub or shower for the exclusive use of the occupants of the sample unit.

Lacking some plumbing facilities. The unit lacks one or more of the requisite items for complete plumbing facilities or has all of these items, but the occupants share them with occupants of another unit.

No hot piped water. The unit lacks either hot or cold piped water.

No bathtub nor shower. The unit has neither a bathtub nor a shower for the exclusive use of its occupants.

No flush toilet. The unit lacks a flush toilet for the exclusive use of its occupants. A privy or chemical toilet is not considered a flush toilet. Flush toilets outside the unit were not counted.

No plumbing facilities for exclusive use. The unit meets none of the requirements for complete plumbing facilities. It lacks a bathroom with both hot and cold piped water, a sink, flush toilet, and bathtub or shower for the exclusive use of its occupants.

**Property Value.** Property 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. For vacant units, property value represents the sale price asked for the property at the time of the interview, and may differ from the price at which the property is sold. Medians for property value are rounded to the nearest dollar.

Race and Origin. 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. For respondents who refused to answer, the interviewer decided on a race only for people she or he saw; others are imputed by computer. For mixed race answers, respondents are asked for the race most closely identified with, for the mother's race, or the first race mentioned is used, in that order of priority.

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 selfidentification of person living in the unit who were Hispanic or Spanish American. Hispanic persons may be of any race. Hispanic is considered an ethnic origin rather than a race and is tallied separately. Most Hispanics counted themselves as White, but some counted themselves as Blacks or other categories.

### Regions

Northeast. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, and New Jersey;

*Midwest.* Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, North Dakota, and South Dakota;

South. Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky, Arkansas, Louisiana, Oklahoma, and Texas;

West. Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, Alaska, Washington, Oregon, Nevada, California, and Hawaii.

Rent reductions. Respondents reporting no subsidy or income reporting do not receive any type of housing subsidy, nor are they required to report their income as a condition of determining rent amount. These units may, however, be subject to rent control, meaning that the amount of increase in rent is regulated by law. The jurisdiction, State or local, mandates that percentage rent increases are set and must be approved by a board, agency, department, division, office, etc. If a unit is not subject to rent control, the owner may voluntarily reduce the rent.

A housing unit is classified as being in a public housing project if the structure in which the unit is located is owned by any local or State government agency, such as a housing and redevelopment authority or a housing development agency, and operated as public housing. These organizations may receive subsidies from the Federal or State government, but the local agency owns the property.

A housing unit is classified as being subsidized if under certain programs the respondent pays a lower rent because a Federal, State, or local government program pays part of the cost of construction, building mortgage, or operating expenses. These programs include (1) the rental assistance program where part of the rent for low-income families occupying the rental housing units is paid by the Department of Housing and

Urban Development (HUD), (2) the FHA interest subsidy programs for rental and cooperative housing for low-income families, (3) the rent supplement program where part of the rent for low-income families occupying certain types of HUD-assisted rental housing projects is paid by the FHA, and (4) the direct loan program of HUD for housing the elderly. Units requiring income verification as a condition of determining rent are subsidized units.

Rooms. Respondents were asked for a count of each specific type of room. The answers to these questions are then added together in the tabulations to provide a total count of 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.

### Selected amenities:

Porch, deck, balcony, or patio. The porch, deck, balcony, or patio must be attached to the sample unit, not just to the building or free standing. Porches may be enclosed or open.

Usable fireplace. Excluded are the following: fireplaces that have been blocked off or whose chimney or flue have been filled, decorative or artificial fireplaces, and Franklin stoves. Freestanding fireplaces are included in this item.

Separate dining room. A separate dining room is an area separated from adjoining rooms by a built-in, floor-to-ceiling wall extending at least a few inches from its intersecting wall. Built-in walls do not include movable or collapsible partitions or partitions consisting solely of shelves and cabinets.

With two or more living rooms, recreation rooms, etc. It includes family rooms, dens, recreation rooms, and/or libraries.

Garage or carport. The garage or carport must be on the same property, but does not have to be attached to the house. Off-street parking applies to both owners and renters and is considered to be a driveway or parking area, or for renters, lot privileges that are paid for as part of the rent.

### Selected deficiencies:

Signs of rats. The statistics on signs of rats refer to respondents who reported seeing rats or signs of rats inside the house or building during the last 3 months or while the household was living in the unit if less than 3 months. Signs of rats includes droppings, holes in the wall, or ripped or torn food containers.

Holes in floors. Data are shown on whether there are holes in the interior floors of a housing unit. The holes do not have to go all the way through to a lower floor or to the exterior of the unit. The holes must be large enough to cause someone to trip.

Open cracks or holes (interior). Statistics are presented on whether or not there are open cracks or holes in the interior walls or ceilings of the housing unit. Included are cracks or holes that do not go all the way through to the next room or to the exterior of the housing unit. Hairline cracks, or cracks that appear in the walls or ceilings but are not large enough to insert the edge of a dime, or very small holes caused by nails or other similar objects are not considered to be open cracks or holes.

Broken plaster or peeling paint (interior). The area of peeling paint or broken plaster must be on the inside walls or ceilings, and at least one area of broken plaster or peeling paint must be larger than 8 inches by 11 inches.

Electric wiring. A housing unit is classified as having exposed electrical wiring if the unit has any wiring that is not enclosed either in the walls or in metal coverings, or if the unit has any wiring outside the walls enclosed in some material other than metal. Only finished areas of the unit are included. Excluded from the tabulations are appliance cords, extension cords, chandelier cords, and telephone antenna or cable TV wires.

Electric wall outlets. A housing unit is classified as having rooms without electric wall outlets if there is not at least one working electric wall outlet in each room of the unit. A working electric wall outlet is one that is in operating condition; i.e., can be used when needed. If a room does not have an electric wall outlet, an extension cord used in place of a wall outlet is not considered to be an electric wall outlet.

### **Selected Physical Problems:**

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. Units reporting problems with their plumbing facilities were counted for this category if 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 or four of the overall list of six upkeep problems mentioned under severe physical problems.

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

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

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. Occupants 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.

Electrical. 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 or mice in the last 90 days.

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

Sewage disposal. A public sewer is connected to a city, county, sanitary district, neighborhood, or subdivision sewer system. Included are only systems operated by a government body or private organization, with a sewage treatment system serving six or more units. Small sewage treatment plants, which in some localities are called neighborhood septic tanks, are classified as public sewers. A septic tank or cesspool is an underground tank or pit used for disposal of sewage (serving five or fewer units). Since 1993, a chemical toilet, which may be inside or outside the unit, uses chemicals to break down or dissolve the sewage. Housing units for which sewage is disposed of in some other way are included in the "other" category.

Sewage disposal breakdowns. The data on breakdowns in the means of sewage disposal are limited to housing units in which the means of sewage disposal was a public sewer, septic tank, or cesspool. Breakdowns refer to situations in which the system was completely unusable. Examples include septic tank being pumped because it no longer perked, tank collapsed, tank exploded, sewer main broken, sewer treatment plant not operating as a result of electrical failure or water service interruptions, etc.

Data on breakdowns are shown if they occurred in the 3 months prior to the interview or while the household was living in the unit if less than 3 months, and if the breakdown lasted 6 consecutive hours or more. Housing units with a

breakdown in sewage disposal are also classified according to the number of breakdowns.

**Site Placement**. This item is collected for mobile homes. "Site" refers to location (other than the manufacturer's or dealer's lot) and not necessarily a mobile home park site. The mobile home was not necessarily occupied at each site, as long as it was set up for occupancy.

Square footage of unit. Housing size is shown for single-family 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.

**Stories in structure.** The statistics presented are restricted to multiunits. Finished attics are included in the number of stories. Unfinished attics are not. For split levels and bi-levels, the number of stories is determined by the highest number of floors that are physically over each other.

**Suburbs**. Suburbs are defined in the AHS as the portion of each metropolitan area that is not in any central city.

Suitability for year-round use. For vacant housing units that were not intended for year-round use (i.e., seasonal and migratory), the respondent was asked whether the construction and heating of the housing unit made it suitable for the unit to be occupied on a year-round basis. A housing unit is suitable for year-round use if it is built as a permanent structure, properly equipped and insulated for heating as necessitated by the climate, and if it has a heating system that would be adequate during extended cold periods.

**Supplemental Security Income (SSI).** A federal welfare cash benefit for disabled low income individuals.

**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. All other occupied housing units are classified as renter-occupied, including housing units rented for cash rent and those occupied without payment of cash.

Time Shared Units. This item is restricted to vacant housing units, including UREs. Time sharing is a form of ownership in which a single property is owned by multiple owners. Each is entitled to occupy the unit for a limited period of time during a specific time of the year. The number of years of ownership may vary depending on the terms of the contract. Participants in timesharing ownership usually, but not always, receive a deed of ownership.

Type B non-interview. These units are not eligible for an interview at present but could become eligible for an interview in the future (e.g., unit currently is for nonresidential use, unoccupied site for mobile home, unit under construction, unit severely damaged by fire). Note that vacant units and units occupied entirely by people with URE are not considered non-interviews. Type B non-interviews will be revisited each survey year, and if they become housing units again, they will be interviewed.

**Units in structure.** In determining the number of housing units in a structure, all units, occupied or vacant, were counted. The statistics are presented for the number of housing units, not the number of residential structures.

A structure either has 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 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 that divide it from other adjoining structures and does not share a furnace or boiler with adjoining structures, such as in row houses, 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 classified as a mobile home. Urban and rural residences. As defined for the 1980 census, urban housing comprises all housing units in urbanized areas and in places of 2,500 or more inhabitants outside urbanized areas. More specifically, urban housing consists of all housing units in (a) places of 2,500 or more inhabitants incorporated as cities, villages, boroughs (except in New England States, New York, and Wisconsin), but excluding those housing units in the rural portions of extended cities; (b) census designated places of 2,500 or more inhabitants; and (c) other territory, incorporated or unincorporated, included in urbanized areas. Housing units not classified as urban constitute rural housing. Information on the historical development of the urban-rural residence definition appears in the 1980 Census of Population report. Characteristics of the Population, Number of Inhabitants. PC80-1-A.

**Urbanized areas**. The major objective of the Census Bureau in delineating urbanized areas is to provide a better separation of urban and rural housing in the vicinity of large cities. In the 1980 census, an urbanized area comprised an incorporated place and adjacent densely settled (1.6 or more people per acre), surrounding area that together had a minimum population of 50,000. For more information on urbanized areas, refer to the 1980 Population Census PC(1)-A reports.

*Urban fringe.* These units are located in areas that are classified as either urbanized suburbs or non-metropolitan urbanized areas.

Other urban. These units are located in areas that are classified as either other urban suburbs or other non-metropolitan urban areas.

**URE.** Units for which present occupants have a Usual Residence Elsewhere. These units would include, for example, a temporary or seasonal home.

Vacant housing units. A housing unit is vacant if no one is living in it at the time of the interview, unless its occupants are only temporarily absent. In addition, a vacant housing unit may be one that is occupied entirely by persons who have a usual residence elsewhere (URE).

New housing units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded if unfit for human habitation; that is, if the roof, walls, win-

dows, and/or doors no longer protect the interior from the elements, or if there is positive evidence (such as a sign on the house  $\alpha$  block) that the unit is to be demolished or is condemned. Also excluded are quarters being used entirely for nonresidential purposes, such as a store, or an office, or quarters used for storing business supplies or inventory, machinery, or agricultural products.

Water supply stoppage. Water supply stoppage means the housing unit was completely without running water from its regular source. Completely without running water means that the water system servicing the unit supplied no water at all, that is, no equipment or facility using running water (in kitchen and bathroom sinks, shower, bathtub, flush toilet, dishwasher, and other similar items) had water supplied to it, or all were inoperable. The reasons could vary from a stoppage because of a flood or storm, to a broken pipe, to a shutdown of the water system, to a failure to pay the bill, or other reasons.

Data on water supply stoppage are shown if they occurred in the 3 months prior to the interview or while the household was living in the unit if less than 3 months, and if the breakdown or failure lasted 6 consecutive hours or more. Housing units with water supply stoppage are also classified according to the number of times the stoppages occurred.

Year householder moved into unit. The data are based on the information reported for the householder and refer to the year of the latest move. Thus, if the householder moved back into a housing unit he or 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.

Year structure built. This item 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. The data are obtained from the respondents' answers, rather than from public records and are, therefore, subject to reporting variability. Median year built is rounded to the nearest year.

### Years of school completed by householder.

The statistics refer to the highest grade of school completed, not to the highest grade attended. For persons still attending school, the highest grade completed is one less than the one in which they are currently enrolled. Regular school refers to formal education obtained in graded public, private, or parochial schools, colleges, universities, or professional schools, whether day or night school, and whether attendance was full or part time. That is, regular schooling is formal education, which may advance a person toward an elementary or high school diploma, college, university, or professional school degree. Schooling or tutoring in other than regular schools is counted only if the credits obtained are regarded as transferable to a school in the regular school system. Householders whose highest grade completed was in a foreign school system or in an ungraded school were instructed to report the approximate equivalent grade (or years) in the regular United States school system. Householders were not reported as having completed a given grade if they dropped out or failed to pass the last grade attended. Education received in the following types of schools is not counted as regular schooling: vocational schools, trade schools, business schools, and noncredit adult education classes.

### Appendix: Algorithm

### Introduction

The Components of Inventory Change (CINCH) report measures changes in the housing stock of the United States. These changes are across two different dimensions. One dimension is the physical change in the unit, such as a unit being added or removed from the housing supply. In the discussion below, this is called the *status* of the unit. The second dimension is a change in the characteristic of the unit or the occupant of the unit, such as the unit being occupied by an owner in one year and by a renter in another year. In the discussion below, this is called the *characteristic* of the unit. These two perspectives give the analyst a picture of what the housing stock looked like at a particular moment as well as how the stock changed through time.

This series of CINCH reports differs from previously constructed reports. This series uses twoyear pairs of the national American Housing Survey (AHS) to track changes in the stock. In comparison, previous versions of the CINCH compared 1993 and 1991 AHS data with the 1980 Decennial Census.

The goal for this series of reports is to allow the reader to see how the housing stock in the U.S. is evolving over relatively short periods of time. Throughout this description, examples will be given to help illustrate how the results can be interpreted. These examples will be shown in *italics*.

### The Base Year Concept

When measuring any sort of change across years, one year must be defined to be the "base" year, and the other year as the "comparison" year. For example, this allows the reader to see that there was an increase of X number of units from the base year to the comparison year.

As these reports track both gains and losses to the housing stock, both the early year and the later year of a pair of years must be used as the "base year." The early year is used as a basis to measure losses: what units were in existence at the start but not at the end of the pair of years. The later year is used as a basis to measure additions or gains: What units were in existence at the end but not at the beginning of a pair of years. In addition, the reports provide information on units that have remained unchanged.

### FIRST YEAR AS BASE YEAR -- Losses

When the earlier, or first, year of the two survey years is used as the base year, the report refers to an estimate of housing units that had a particular characteristic in the earlier year and measures how those units changed, if at all. The following descriptions explain how to read the tables when the first year is the base year. These tables usually shows losses from the housing stock.

**Present in [early year]:** This column indicates the number of housing units with a particular characteristic that were present in the earlier survey year. This provides a "snap-shot" of how many units were present in the earlier year. For example, of the housing units surveyed in the earlier year, how many were "renter-occupied?"

**Present in [later year]:** This column indicates the number of housing units present in the later survey year that still have the characteristic they had in the earlier year. In other words, this column shows how many units are unchanged in both status and characteristic between the two years. *Example: A unit that was renter-occupied in the later year was also renter-occupied in* 

the earlier year. Because this group is a subset of "Present in [early year]," this number will be less than the "Present in [earlier year]" total.

**Changed in Characteristic:** A unit is considered to have changed in characteristic if the unit is present in both years of the survey and a given characteristic has changed between the two years. *Example: A unit will be listed as changed in characteristic if it was owner-occupied in the base year, but renter-occupied in the comparison year.* A change in characteristic means that the unit is physically still present, but a given characteristic of the unit has changed. This change could be in the structure of the unit, such as a change in the number of bedrooms, or in a characteristic of the occupant of the unit, such as tenure (owned vs. rented) status.

**Units affected by conversion or merger:** This column indicates how many units were affected by a conversion or merger. This number indicates how many units in the earlier year were changed by conversion or merger by the time of the later year. Note that this does not distinguish between units that are converted from one unit to multiple units or units that are merged from multiple units into one unit. *Example: How many units were in the building before the building was rehabbed if the total number of units changed?* 

**Units resulting from conversion or merger:** Of housing units with a particular characteristic in the early year, this column indicates how many units with that characteristic in the later year resulted from a conversion or merger. *Example: How many units were in the building after the building was rehabbed if the total number of units changed?* 

**Early Year Mobile Homes Moved Out:** Of mobile home units with a particular characteristic, this column indicates how many were moved away from their sites. Due to responses in the survey, this column includes all mobile homes moved away from the original home site, regardless of reason, and does not distinguish whether the mobile home was demolished or merely moved to another location.

Early Year Units Changed to Nonresidential Use: This column shows how many units with a particular characteristic were converted to non-residential use between the earlier and later survey years. These units are detected as a housing inventory loss, yet not as a demolition/ disaster, and not as a mobile home that has moved out of the survey site. In the later survey year the unit is reported as used for "business or storage." These structures have not been permanently removed from the stock and could, theoretically, be reconverted to housing. Example: A structure is a housing unit in the early year, but has been converted to offices by the later year. This structure would count as a change to nonresidential use.

**Units Lost Through Demolition or Disaster:** Early year housing units with a specific characteristic that were lost through demolition or disaster before the second survey are counted in this column. *Example: early year renter-occupied units that were lost through demolition or disaster before the later year survey.* 

**Units Badly Damaged or Condemned:** This column reports how many early year units were lost because they were badly damaged or condemned. To qualify as damaged or condemned, a unit must be detected as a loss, but not as a loss due to demolition/disaster, a mobile home moved out, nor as a nonresidential loss. These are units in which occupancy was prohibited in the later year, or where the interior was exposed to elements.

**Units Lost in Other Ways:** These are early year units with a particular characteristic that were lost from the housing inventory for reasons other than: a demolition/disaster, a mobile home that moved out of a survey site, a nonresidential loss, or a unit lost because it was damaged or condemned. In most of these cases, we do not know how precisely the unit was lost.

**Total Additions:** This column adds together all of the ways that a unit is considered an addition to the housing inventory. The elements of this column are described later in the formula summary section. These are later year units results from conversions/mergers.

**Total Loss:** This column is the sum of all the "loss" columns. The elements of this column are described below in the formula summary section.

**Net change:** This is the result of subtracting the total loss column from the total additions column. The elements of this column are described below in the formula summary section.

### Formula summary

How columns total for losses:

Present in early year =	Present in later year		
	+ Changed in characteristic		
	+ Net change		
Net change =	Total additions		
	- Total loss		
Total additions =	Later year units resulting from		
	conversion/merger		
Total losses =	Early year units affected by		
	conversion/merger		
	+ early year mobile homes moved out		
	+ early year units changed to non-residential		
	use		
	+ Units lost through demolition or disaster		
	+ Units badly damaged or condemned		
	+ Units lost in other ways		

### SECOND YEAR AS BASE YEAR -- Additions

When the later year is used as the base year, the report refers to housing units with a particular characteristic in the later year. These are usually additions, as the housing unit did not exist in the early year, but rather entered the housing stock later. In addition, units that did not change are also measured here. Although the later year is the base year, there is general symmetry in the column meanings as when the early year is the base year. These tables are usually measuring additions to the housing stock.

**Present in [early year]:** This column indicates the number of housing units with a particular characteristic in the later survey year that were also present in the early year with the same characteristic. *Example: Of the renter-occupied housing units surveyed in the later year, the number that were renter-occupied in the early year.* 

**Present in [later year]:** This column indicates the number of housing units present in the later survey. These units did not necessarily have that same characteristic in the earlier year. This column includes all of the units with a particular characteristic.

**Changed in Characteristic:** A unit is considered to have changed in characteristic if the unit is present in both years of the survey, and a given characteristic has changed between the two years. *Example: A unit will be listed as changing in characteristic if it was owner-occupied in the base year, but renter-occupied in the comparison year.* A change in characteristic means that the unit is physically still present, but a characteristic of the unit has changed. This change could be in the structure of the unit, such as a change in the number of bedrooms, or in a characteristic of the occupant of the unit, such as tenure (owned vs. rented) status.

**Early Year Units affected by conversion or merger:** This column indicates how many units in the earlier year were then changed by conversion or merger by the later year. Note that this column does not distinguish between units that are converted from one unit to multiple units or units that are merged from multiple units into one unit.

**Later Year Units resulting from conversion or merger:** Of housing units with a particular characteristic in the early year, this column indicates how many units with that same characteristic in the later year resulted from a conversion or merger.

**Later Year Mobile Homes Moved In:** For mobile home units with a particular characteristic, this column counts how many existed elsewhere for the early year interview but had been moved to a survey site by the later year. Newly constructed mobile homes are counted as new construction and are *not* included in this column.

Later Year Units Derived from Nonresidential Use: This column indicates how many units with a particular characteristic were derived from non-residential use in the early year. For example, the column captures how many renter-occupied units surveyed in the later year were used for business or storage during the first interview year. These units are detected as additions to the housing stock, built before the earlier interview year and thus are not detected as new construction. Example: A unit which had been office space is returned to use as a dwelling. This unit would be counted as an addition, being converted from non-residential use.

**Units Added Through New Construction:** This column identifies how many later year housing units with a particular characteristic were added through new construction. These are new units built since the early year. A new mobile home will be counted here and not in the column for mobile homes moved in.

**Units Added Through Other Sources:** These are later year units with a particular characteristic that were added to the housing inventory but are not considered new construction and were not previously nonresidential. These are units that are additions to the housing stock, but the source is unclear.

**Total Additions:** This column is the total of all of the additions to the housing stock. The exact elements of this column can be found in the formula summary below.

**Total Loss:** This column is the sum of all the "loss" columns. The exact elements of this column can be found in the formula summary below. When the later year is the base year, this column will equal the "Early Year Units affected by conversion or merger."

**Net change:** This is the result of subtracting the total loss column from the total additions column.

## Formula summary

How columns total for additions:

Present in early year =	Present in later year		
	+ Changed in characteristic		
	+ Net change		
Net change =	Total additions		
	- Total loss		
Total additions =	Later year units resulting from		
	conversion/merger		
	+ later year mobile homes moved in		
	+ later year units resulting derived from non-		
	residential use		
	+ units added through new construction		
	+ units added through other sources		
Total losses =	Early year units affected by		
	conversion/merger		

### **Appendix: Weighting**

### Introduction

In the American Housing Survey, each observation is assigned two weights, the pure weight (PWT variable) and the adjusted weight (WEIGHT variable) which is also known as the "final weight." These weights can be used to create universe level estimates. These weights are used in the creation of the CINCH reports. This appendix provides a brief overview of the procedure used to adjust the weighting.

### Pure Weight

Theoretically, the pure weight is the inverse of the probability of selection and is invariant over time. In reality, the pure weight does vary in the data set, such as when there was the rural oversampling in certain years, and the extra metro sample in 1995. In addition, there are a small number of cases where, for unknown reasons, the pure weight changes. Generally, the pure weight reverts to its previous value in the following year. The pure weight is present on all observations in the AHS.

### Adjusted weight

The adjusted weight is refined by Census each year to account for non-response, overand undersampling, etc. This is the "final" weight used by Census and is used to for the standard AHS reporting on the housing stock. These weights are adjusted and vary in successive AHS data files. This final weight is present only for observations representing units in the housing stock. The weight is not present for a unit that has been removed from the stock.

### Weighting procedure

In this appendix, "base year" is defined as the early year of a pair of years, while "current year" is defined as the later year of a pair of year (e.g. for the 1985-1987 report, 1985 is the base year and 1987 is the current year).

The procedure for adjusting weights is approximately as follows. This is a simplification. The programs can be provided to interested parties.

From the base year perspective, for tables measuring losses:

- 1. <u>Take the maximum of the pure weights</u>. This step takes the maximum of the pure weights for the pair of years. This primarily addresses the situations where the pure weight changes due to changes in the sample.
- 2. <u>Sum the base year final weights</u>. This step computes the total number of housing units expected to be present in the base year using the adjusted weight.
- 3. <u>Remove observations present in only one year.</u> Observations present in only one year, such as the rural oversample, are removed from the data.
- 4. <u>Compute the ratio of pure weight</u>. To address some of the change in the pure weight, a ratio of the final weight in the base year divided by the pure weight in the base year. This ratio is then applied to the maximum of the pure weights created in Step 1. This new weight is called "pwta."
- 5. <u>Categorize observations.</u> Observations representing units are categorized in three ways: same (or unchanged) units, changed units that <u>were</u> current year non-interview losses, and changed units that <u>were not</u> current year non-interview losses.
- 6. <u>Compute second stage ratio</u>. A ratio of:

# <u>Total adjusted weight – total number of current year losses</u> Total number of same units + changed units NOT non-interview losses

is computed. This ratio is used to create CINCH weights that are close to the total adjusted pure weight.

7. <u>Application of second stage ratio to create final CINCH weights.</u> The ratio computed in step 6 is applied to the pwta for same units and changed units that were NOT non-interview losses to create a CINCH weight. All other observations have pwta as their CINCH weight.

From the current year perspective, the computation of a CINCH weight is similar. "Sames" have the same weight as from the base year perspective, new construction is given CINCH weights equal to the final adjusted weights for those observations, and the non-sames are ratio-adjusted to make up the difference. This is described briefly below.

From the current or later year perspective for tables measuring additions, the following occurs:

- 1. <u>Take the maximum of the pure weights</u>. This step takes the maximum of the pure weights for the pair of years. This primarily addresses the situations where the pure weight changes due to changes in the sample.
- 2. <u>Sum the current year final weights</u>. This step computes the total number of housing units expected to be present in the current year using the final adjusted weight.
- 3. Remove observations present in only one year. Observations present in only one year, such as the rural oversample, are removed from the data.
- 4. <u>Compute total same and new construction.</u> The units that are unchanged (or "same") are held to have the weight as used with the base year being the early year. Their total is computed. Then also the total for new construction is computed based on the final adjusted weight for the observations representing new construction. These weights will be used as the CINCH weight for these observations.
- 5. Compute the ratio of pure weight. To address some of the change in the pure weight, a ratio of the final weight in the base year divided by the pure weight in the base year. This ratio is then applied to the maximum of the pure weights created in Step 1. This new weight is called "pwtc1." This is only applied to units that are changed in some way.
- 6. Compute second stage ratio. A ratio of:

# <u>Total adjusted weight – (total number of sames and new construction)</u> Total number of changed units

is computed. This ratio is used to create CINCH weights that are close to the total adjusted pure weight.

7. <u>Application of second stage ratio to create final CINCH weights.</u> The ratio computed in step 6 is applied to the pwtc1 for non-same units to create a CINCH weight. All other observations have the weights used in Step 4 and their CINCH weight.

The estimated number of units on CINCH tables is slightly different from those listed in other publications.