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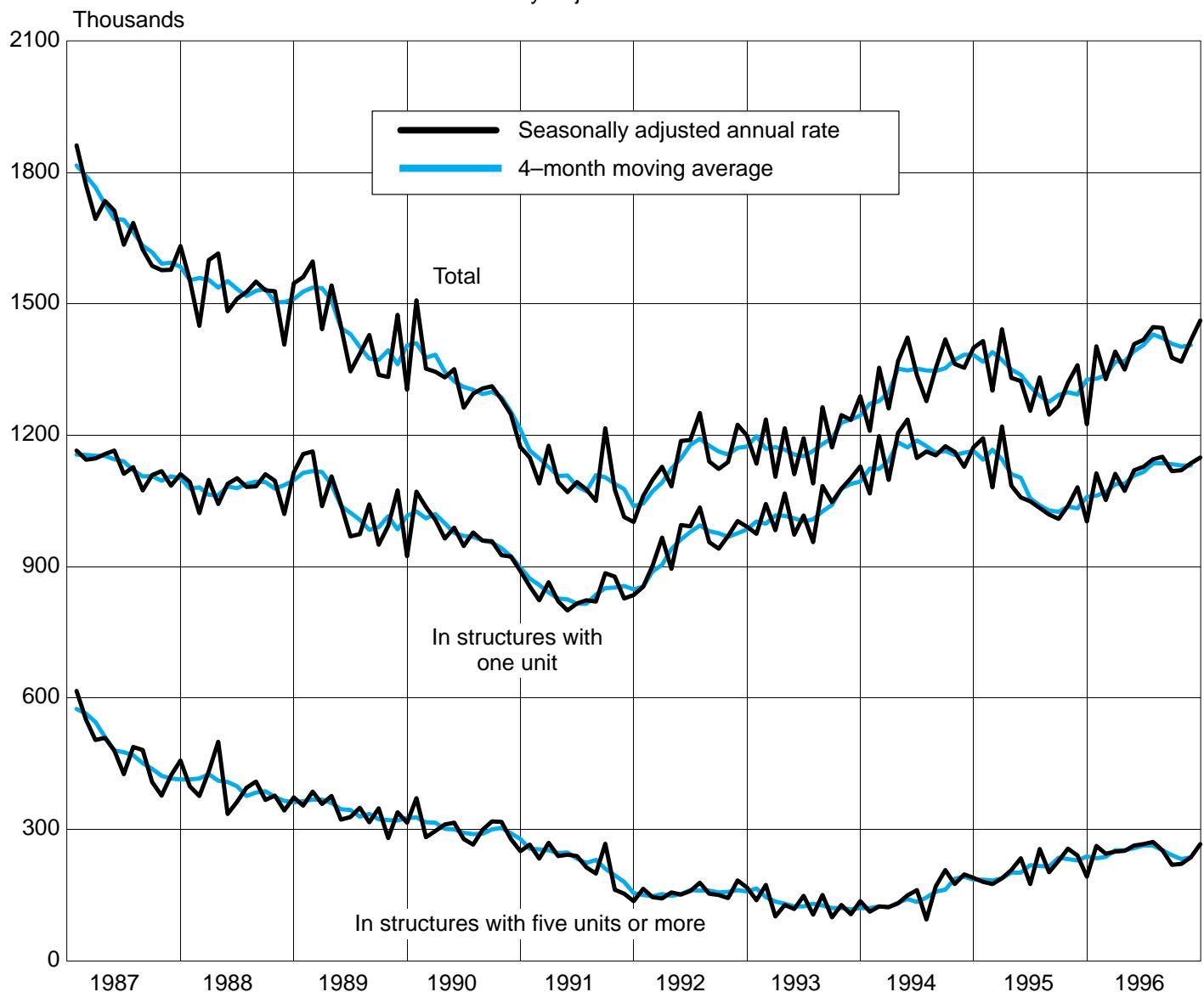
# Housing Completions

DECEMBER 1996

C22/96-12

Issued February 1997

**New Privately Owned Housing Units Completed**  
 Seasonally Adjusted Annual Rate



Note: Total includes units in structures with two to four units.

Source: U.S. Bureau of the Census, *Housing Completions*.

## SUMMARY OF FINDINGS

This report provides monthly statistics on the number of new privately owned housing units completed and under construction. This report is released jointly by the Bureau of the Census and the U.S. Department of Housing and Urban Development.

Privately owned housing units were completed in December 1996 at a seasonally adjusted annual rate of 1,462,000. This is 3 ( $\pm 6$ ) percent above the revised November rate of 1,417,000 and 19 ( $\pm 8$ ) percent above the December 1995 rate of 1,225,000.

The December 1996 rate of single-family housing completions was 1,149,000; this is 1 ( $\pm 6$ ) percent above the revised November rate of 1,136,000. The December rate for units in buildings with five units or more was 266,000. The December rate for units in buildings with two to four units was 47,000.

The preliminary estimate of privately owned housing units completed in 1996 was 1,409,800. This is an increase of 7 ( $\pm 2$ ) percent above the 1995 figure of 1,312,600.

The seasonally adjusted estimate of housing units under construction at the end of December was 820,000; this is 1 ( $\pm 1$ ) percent below the revised November figure of 828,000. Of the housing units under construction at the end of December, 577,000 were single-family structures, 215,000 were in buildings with five units or more, and 28,000 were in buildings with two to four units.

In interpreting changes in the seasonally adjusted rates of housing completions, note that month-to-month changes may reflect movements which may be irregular. It may take 3 months to establish an underlying trend for total completions.

The statistics in this release are estimated from sample surveys and are subject to sampling variability as well as nonsampling error including bias and variance from response, nonreporting and undercoverage. Estimated average relative standard errors of preliminary data are shown in the tables. Whenever a statement such as "2 ( $\pm 3$ ) percent above" appears in the text, this indicates the range (-1 to +5 percent) in which the actual percent change is likely to have occurred. All ranges given for percent changes are 90-percent confidence intervals and account only for sampling variability. If a range contains zero, it is unclear whether there was an increase or decrease; that is, the change is not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. The appendix to this report includes explanations of confidence intervals and sampling variability. On average, the preliminary seasonally adjusted estimates of total housing completions are revised about  $\pm 1$  percent.

Housing completions and under construction statistics do not include mobile home units.

## HISTORICAL DATA

Housing completions data have been collected only since 1968; however housing starts are available from 1889 to the present date. Historical data on housing starts and residential permit authorizations are available from Residential Construction Branch, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233. Telephone 301-457-4666.









**Table 5. Seasonal Indexes Used to Adjust Housing Units Completed**

Period	United States implicit index <sup>1</sup>	In structures with—						All units			
		1 unit				2 to 4 units	5 units or more	North-east	Midwest	South	West
		North-east	Midwest	South	West						
<b>1996</b>											
September.....	106.4	104.4	114.8	103.5	107.3	106.4	103.9	107.5	117.0	104.8	109.6
October <sup>r</sup> .....	114.0	122.8	124.4	112.0	114.4	91.8	105.5	121.0	121.2	112.6	109.3
November <sup>r</sup> .....	103.0	117.4	113.6	97.8	99.8	122.4	96.4	111.7	109.8	97.2	100.5
December <sup>P</sup> .....	114.8	126.4	116.8	114.3	115.3	101.9	111.0	117.1	109.3	112.8	116.2

<sup>P</sup>Preliminary. <sup>r</sup>Revised.<sup>1</sup>The implicit seasonal index is the ratio of the unadjusted number of housing units completed in the United States to the seasonally adjusted national total of housing units completed. It provides an indication of the overall seasonality for the particular month.

Note: These seasonal indexes include trading-day adjustment factors.

**Table 6. Seasonal Indexes Used to Adjust Housing Units Under Construction**

Period	United States implicit index <sup>1</sup>	In structures with—						All units			
		1 unit				2 to 4 units	5 units or more	North-east	Midwest	South	West
		North-east	Midwest	South	West						
<b>1996</b>											
September.....	104.0	104.8	107.9	104.1	105.8	103.5	99.9	104.5	105.6	102.8	105.2
October <sup>r</sup> .....	103.9	105.7	108.3	102.5	104.3	103.0	101.9	104.8	106.6	101.5	104.7
November <sup>r</sup> .....	101.9	104.7	104.8	100.4	101.3	102.3	100.7	103.5	105.2	99.9	100.5
December <sup>P</sup> .....	97.2	99.8	98.0	95.2	95.8	98.7	99.0	98.2	99.1	96.2	96.1

<sup>P</sup>Preliminary. <sup>r</sup>Revised.<sup>1</sup>The implicit seasonal index is the ratio of the unadjusted number of housing units under construction in the United States to the seasonally adjusted national total of housing units under construction. It provides an indication of the overall seasonality for the particular month.

Note: These seasonal indexes include trading-day adjustment factors.

**Table 7A. Selected Characteristics of New One-Family Houses Completed**

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[Detail may not add to total because of rounding. Percents computed from unrounded figures]

Period	Total	Central air-conditioning		Heating fuel				Heating system				Fireplaces			
		Installed	Not installed	Gas	Electric	Oil	Other or none	Warm-air furnace	Heat pump <sup>1</sup>	Hot water or steam	Other or none <sup>2</sup>	None	1 <sup>3</sup>	2 or more	
Number of units (thousands)															
<b>ANNUAL DATA</b>															
1993.....	1,039	806	234	682	303	34	20	691	246	55	48	381	605	53	
1994.....	1,160	912	248	772	333	39	16	778	281	60	41	417	680	63	
1995.....	1,066	846	219	708	305	37	16	706	264	55	39	394	615	56	
1996 <sup>p</sup> .....	1,125	914	211	776	298	39	12	785	258	54	28	418	661	46	
<b>QUARTERLY DATA</b>															
1993: 1st quarter .....	212	167	45	136	67	7	3	139	54	10	9	77	125	11	
2nd quarter .....	247	187	60	162	71	8	5	164	58	13	12	91	141	14	
3rd quarter .....	275	214	61	184	77	9	5	185	63	15	12	100	162	14	
4th quarter .....	305	236	69	200	89	11	6	203	72	17	14	113	178	15	
1994: 1st quarter .....	238	189	49	156	72	8	3	160	60	11	8	86	140	12	
2nd quarter .....	291	226	64	195	83	9	3	196	69	15	11	102	169	19	
3rd quarter .....	308	243	65	208	85	11	5	208	74	17	10	108	184	16	
4th quarter .....	323	254	69	214	93	11	5	215	78	18	12	119	188	16	
1995: 1st quarter .....	246	192	54	160	72	11	3	159	63	15	9	92	141	13	
2nd quarter .....	258	209	49	176	71	8	4	174	63	12	9	86	157	15	
3rd quarter .....	272	214	58	179	80	9	4	180	68	14	10	105	154	13	
4th quarter .....	289	231	58	194	81	10	4	193	70	15	11	111	164	14	
1996: 1st quarter .....	235	190	45	160	65	8	3	164	54	12	6	86	137	12	
2nd quarter .....	270	220	50	186	74	7	3	186	63	14	7	95	161	14	
3rd quarter <sup>r</sup> .....	301	246	56	207	80	10	3	212	68	14	7	112	176	13	
4th quarter <sup>p</sup> .....	318	259	60	223	79	13	4	222	73	15	8	121	182	15	
<b>AVERAGE RSE's<sup>4</sup></b>															
Annual..... (percent) .....	1	2	7	2	6	14	21	1	5	13	15	3	2	6	
Quarterly..... (percent) .....	2	3	9	2	7	17	24	2	6	14	19	4	3	8	
Percent distribution															
<b>ANNUAL DATA</b>															
1993.....	100	78	22	66	29	3	2	67	24	5	5	37	58	5	
1994.....	100	79	21	67	29	3	1	67	24	5	4	36	59	5	
1995.....	100	80	20	67	28	3	1	67	25	5	4	37	58	5	
1996 <sup>p</sup> .....	100	81	19	69	26	3	1	70	23	5	3	37	59	4	
<b>QUARTERLY DATA</b>															
1993: 1st quarter .....	100	79	21	64	31	3	1	66	25	5	4	36	59	5	
2nd quarter .....	100	76	24	66	29	3	2	67	23	5	5	37	57	6	
3rd quarter .....	100	78	22	67	28	3	2	67	23	5	5	36	59	5	
4th quarter .....	100	78	22	66	29	4	2	67	23	5	5	37	58	5	
1994: 1st quarter .....	100	79	21	66	30	3	1	67	25	5	3	36	59	5	
2nd quarter .....	100	78	22	67	28	3	1	68	24	5	4	35	58	7	
3rd quarter .....	100	79	21	68	28	3	2	68	24	5	3	35	60	5	
4th quarter .....	100	79	21	66	29	3	1	67	24	5	4	37	58	5	
1995: 1st quarter .....	100	78	22	65	29	4	1	65	26	6	4	37	57	5	
2nd quarter .....	100	81	19	68	27	3	2	67	24	4	4	33	61	6	
3rd quarter .....	100	79	21	66	29	3	2	66	25	5	4	38	57	5	
4th quarter .....	100	80	20	67	28	3	1	67	24	5	4	38	57	5	
1996: 1st quarter .....	100	81	19	68	28	3	1	70	23	5	3	37	58	5	
2nd quarter .....	100	82	18	69	27	3	1	69	23	5	3	35	60	5	
3rd quarter <sup>r</sup> .....	100	82	18	69	27	3	1	71	22	4	2	37	58	4	
4th quarter <sup>p</sup> .....	100	81	19	70	25	4	1	70	23	5	3	38	57	5	

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data prior to 1992 exclude small number of gas heat pumps. <sup>2</sup>Includes electric baseboard, panel, radiant heat, room or space heater, floor or wall furnace, solar heating, other types of heating systems or none. <sup>3</sup>Quarterly data prior to 1992 include 2 or more fireplaces. <sup>4</sup>Average RSE's (Avg. RSE): Annual-Avg. RSE for the last 2 years; Quarterly-Avg. RSE for the latest 2-quarter period (quarter 1-quarter 2 or quarter 3-quarter 4).







**Table 9. Selected Characteristics of New Privately Owned Buildings Completed with 2 Units or More**

[Detail may not add to total because of rounding. Percents computed from unrounded figures]

Period	Total	Number of units per building						Number of floors per building		
		2 to 4	5 to 9	10 to 19	20 to 29	30 to 49	50 or more	1 to 3	4 or more	
Number of buildings (thousands)										
<b>ANNUAL DATA</b>										
1993 .....	19	9	5	3	1	(Z)	(Z)	19	(Z)	
1994 .....	23	11	6	4	1	1	(Z)	23	(Z)	
1995 .....	27	13	6	5	2	1	(Z)	27	(Z)	
1996 <sup>P</sup> .....	29	12	7	7	3	1	(Z)	29	(Z)	
<b>QUARTERLY DATA</b>										
1993: 1st quarter .....	3	2	1	1	(Z)	(Z)	(Z)	3	(Z)	
2nd quarter .....	5	2	1	1	(Z)	(Z)	(Z)	5	(Z)	
3rd quarter .....	5	3	1	1	(Z)	(Z)	(Z)	5	(Z)	
4th quarter .....	5	3	1	1	(Z)	(Z)	(Z)	5	(Z)	
1994: 1st quarter .....	4	2	1	1	(Z)	(Z)	(Z)	4	(Z)	
2nd quarter .....	6	3	1	1	(Z)	(Z)	(Z)	6	(Z)	
3rd quarter .....	6	3	2	1	(Z)	(Z)	(Z)	6	(Z)	
4th quarter .....	7	3	2	1	(Z)	(Z)	(Z)	7	(Z)	
1995: 1st quarter .....	6	3	1	1	(Z)	(Z)	(Z)	6	(Z)	
2nd quarter .....	7	3	2	1	1	(Z)	(Z)	7	(Z)	
3rd quarter .....	8	3	2	2	1	(Z)	(Z)	7	(Z)	
4th quarter .....	7	3	2	1	1	(Z)	(Z)	7	(Z)	
1996: 1st quarter .....	6	2	2	1	1	(Z)	(Z)	6	(Z)	
2nd quarter .....	7	2	2	2	1	(Z)	(Z)	7	(Z)	
3rd quarter <sup>R</sup> .....	8	4	2	2	1	(Z)	(Z)	8	(Z)	
4th quarter <sup>P</sup> .....	9	4	2	2	1	(Z)	(Z)	8	(Z)	
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>1</sup></b>										
Annual .....	(percent) .....	4	7	6	6	6	12	10	4	
Quarterly .....	(percent) .....	5	9	9	7	7	25	21	5	
Percent distribution										
<b>ANNUAL DATA</b>										
1993 .....	100	49	28	15	5	2	1	98	2	
1994 .....	100	50	25	16	5	3	1	98	2	
1995 .....	100	47	23	19	9	2	1	98	2	
1996 <sup>P</sup> .....	100	41	23	23	9	3	1	99	1	
<b>QUARTERLY DATA</b>										
1993: 1st quarter .....	100	43	28	16	8	3	1	96	4	
2nd quarter .....	100	46	27	21	5	1	1	99	1	
3rd quarter .....	100	51	28	14	4	2	1	99	1	
4th quarter .....	100	54	27	11	5	2	1	99	1	
1994: 1st quarter .....	100	57	22	15	4	2	(Z)	99	1	
2nd quarter .....	100	56	20	15	4	4	1	99	1	
3rd quarter .....	100	46	28	17	5	2	1	98	2	
4th quarter .....	100	44	31	16	7	2	(Z)	99	1	
1995: 1st quarter .....	100	54	23	14	6	2	(Z)	99	1	
2nd quarter .....	100	47	24	20	7	2	1	99	1	
3rd quarter .....	100	43	22	21	10	4	(Z)	98	2	
4th quarter .....	100	45	23	19	11	2	1	98	2	
1996: 1st quarter .....	100	38	27	21	11	2	1	99	1	
2nd quarter .....	100	34	24	28	9	4	1	99	1	
3rd quarter <sup>R</sup> .....	100	45	19	24	8	3	1	98	2	
4th quarter <sup>P</sup> .....	100	47	25	18	7	2	1	99	1	

<sup>P</sup>Preliminary. <sup>R</sup>Revised. <sup>Z</sup>Fewer than 500 buildings or less than 0.5 percent.<sup>1</sup>Average Relative Standard Errors (Avg. RSE): Annual—Avg. RSE for the last 2 years; Quarterly—Avg. RSE for the latest 2-quarter period (quarter 1-quarter 2 or quarter 3-quarter 4).