

# Housing Starts

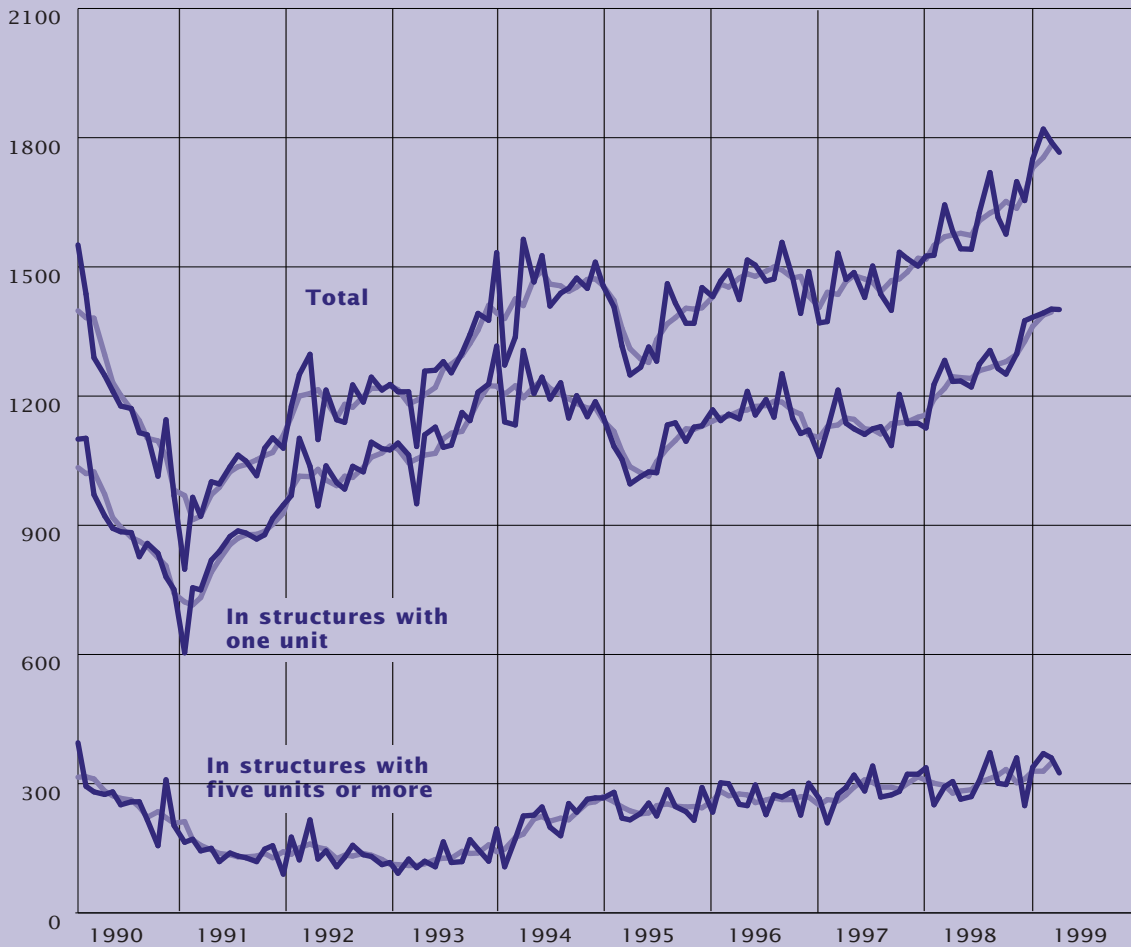
## Current Construction Reports

This issue contains supplements on the total time from authorization of construction to start and from start of construction to completion of private residential buildings.

### New Privately Owned Housing Units Started

Seasonally adjusted annual rate in thousands

— Seasonally adjusted annual rate  
— 4-month moving average



Note: Total includes units started in structures with two to four units.  
Source: U.S. Census Bureau, Housing Starts.

Questions regarding these data may be directed to Residential Construction Branch, Manufacturing and Construction Division, telephone: 301-457-1321.  
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## HOUSING STARTS AND BUILDING PERMITS

Privately owned housing starts in March were at a seasonally adjusted annual rate of 1,766,000. This is 1 ( $\pm 6$ ) percent below the revised February rate of 1,790,000, but 12 ( $\pm 7$ ) percent above the March 1999 rate of 1,583,000.

Single-family housing starts in March 1999 were at a rate of 1,401,000; this is virtually unchanged ( $\pm 6$ ) percent from the February figure of 1,402,000. The March rate for units in buildings with five units or more was 325,000. The March rate for units in buildings with two to four units was 40,000.

During the first 3 months of this year, 372,000 housing units were started compared with 324,900 units for the same period in 1998. This is an increase of 14 ( $\pm 4$ ) percent.

New privately owned housing construction was authorized in March in the 19,000 permit-issuing places at a seasonally adjusted annual rate of 1,636,000 units; this is 6 ( $\pm 1$ ) percent below the revised February rate of 1,741,000, but 4 ( $\pm 1$ ) percent above the March 1999 rate of 1,569,000.

Single-family authorizations in March 1999 were at a rate of 1,239,000; this is 5 ( $\pm 1$ ) percent below the February figure of 1,303,000. Authorizations of units in buildings with five units or more were at a rate of 328,000 in March; this is 10 percent below the February figure of 364,000. The March rate of permit-authorized units in buildings with two to four units was 69,000.

During the first 3 months of this year, 370,400 housing units were authorized by permits in the 19,000 places compared with 337,900 units for the same period in 1998. This is an increase of 10 ( $\pm 1$ ) percent.

In interpreting changes in housing starts and building permits, note that month-to-month changes in seasonally adjusted statistics often show movements

which may be irregular. It may take 5 months to establish an underlying trend for total starts, 3 months for building permit authorizations, and 2 months for manufactured home shipments.

Except for those on manufactured home shipments, the statistics in this report 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 are 90-percent confidence intervals and account for only sampling variability. If a range contains zero, it is uncertain 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. Explanations of confidence intervals and sampling variability appear in the appendix to the January 1999 Current Construction Reports, C20/99-1. On average, the preliminary seasonally adjusted estimates of total housing starts and building permits are revised about  $\pm 1$  percent.

Housing starts and building permits data do not include manufactured home units. Manufactured home statistics are shown in Table 5.

## HISTORICAL DATA

Historical data on housing starts and residential permit authorizations are available from Construction Starts Branch, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233-6900. Telephone 301-457-1321.

A list of tables and special supplements is shown below:

Title	C20 issues				
New privately owned housing units started, by purpose of construction (quarterly and annual data).....	99-1	98-10	98-7	98-4	98-1
Total time from start of construction to completion of private residential buildings (annual data) .....	99-3	98-3	97-3	96-3	95-3
Total time from authorization of construction to start for private residential buildings (annual data) .....	99-3	98-3	97-3	96-3	95-3
New privately owned housing units, by intended use and design at time of start (annual data) .....	99-2	98-2	97-2	96-2	95-2
New manufactured homes (quarterly and annual data)...	99-3	98-12	98-9	97-6	98-5

**Table 1. New Privately Owned Housing Units Started**

[Thousands of units. Detail may not add to total because of rounding]

Period	Total	In structures with—				Inside MSAs <sup>1</sup>	Outside MSAs <sup>1</sup>	North-east	Midwest	South	West
		1 unit	2 units	3 and 4 units	5 units or more						
<b>ANNUAL DATA</b>											
1989	1,376.1	1,003.3	19.9	35.3	317.6	1,128.1	248.0	178.5	265.8	536.2	395.7
1990	1,192.7	894.8	16.1	21.4	260.4	946.9	245.7	131.3	253.2	479.3	328.9
1991	1,013.9	840.4	15.5	20.1	137.9	789.2	224.7	112.9	233.0	414.1	254.0
1992	1,199.7	1,029.9	12.4	18.3	139.0	931.5	268.2	126.7	287.8	496.9	288.3
1993	1,287.6	1,125.7	11.1	18.3	132.6	1,031.9	255.8	126.5	297.7	561.8	301.7
1994	1,457.0	1,198.4	14.8	20.2	223.5	1,183.1	273.9	138.2	328.9	639.1	350.8
1995	1,354.1	1,076.2	14.3	19.4	244.1	1,106.4	247.6	117.7	290.1	615.0	331.3
1996	1,476.8	1,160.9	16.4	28.8	270.8	1,211.4	265.5	132.1	321.5	661.9	361.4
1997	1,474.0	1,133.7	18.1	26.4	295.8	1,221.3	252.7	136.8	303.6	670.3	363.3
1998	1,616.9	1,271.4	15.7	26.9	302.9	1,349.9	267.0	148.5	330.5	743.0	394.9
<b>MONTHLY DATA</b>											
<b>Not Seasonally Adjusted</b>											
1998: January	91.2	72.3	0.8	1.5	16.5	78.1	13.1	8.0	14.4	42.9	25.9
February	101.1	78.9	0.8	3.2	18.1	87.0	14.0	9.4	17.3	51.2	23.2
March	132.6	107.2	1.6	1.9	21.9	113.6	19.0	11.0	23.3	63.2	35.0
April	144.9	117.3	1.8	2.2	23.7	119.0	25.9	11.9	33.2	65.4	34.4
May	143.3	114.4	1.9	2.6	24.3	117.6	25.7	14.1	29.7	64.5	34.9
June	159.6	128.7	1.7	3.0	26.1	129.2	30.4	14.0	33.7	70.4	41.5
July	156.0	120.5	1.5	2.3	31.7	130.2	25.7	15.3	31.2	70.6	38.8
August	147.5	115.1	1.4	3.2	27.8	122.3	25.2	12.9	31.3	67.7	35.5
September	141.5	112.4	1.0	1.3	26.9	116.7	24.8	13.1	29.8	62.3	36.3
October	155.5	113.5	1.2	3.0	37.7	131.6	23.9	16.0	36.4	71.9	31.3
November	124.2	101.3	0.9	1.9	20.1	102.8	21.4	12.0	25.1	58.8	28.3
December	119.6	89.8	0.9	0.8	28.0	101.8	17.8	10.7	25.0	54.0	29.9
1999: January <sup>f</sup>	108.0	82.1	0.7	2.0	23.3	95.6	12.4	7.9	13.5	57.3	29.2
February <sup>f</sup>	114.1	90.0	0.8	0.9	22.4	99.2	14.9	9.7	16.7	63.2	24.4
March <sup>p</sup>	149.9	122.9	1.5	2.1	23.4	125.0	24.9	12.3	30.7	71.8	35.2
Year to date: 1998	324.9	258.4	3.3	6.7	56.6	278.7	46.2	28.4	55.0	157.4	84.1
1999	372.0	295.0	2.9	5.0	69.1	319.8	52.2	29.9	60.9	192.3	88.9
<b>Seasonally Adjusted Annual Rate</b>											
1998: January	1,527	1,227	49		251	(NA)	(NA)	158	330	663	376
February	1,644	1,283	68		293	(NA)	(NA)	209	367	721	347
March	1,583	1,234	44		305	(NA)	(NA)	140	320	728	395
April	1,542	1,235	43		264	(NA)	(NA)	127	345	688	382
May	1,541	1,221	50		270	(NA)	(NA)	151	299	708	383
June	1,626	1,274	45		307	(NA)	(NA)	139	315	756	416
July	1,719	1,306	41		372	(NA)	(NA)	154	314	818	433
August	1,615	1,264	50		301	(NA)	(NA)	142	316	770	387
September	1,576	1,251	27		298	(NA)	(NA)	135	316	717	408
October	1,698	1,298	40		360	(NA)	(NA)	155	350	835	358
November	1,654	1,375	30		249	(NA)	(NA)	153	324	759	418
December	1,750	1,383	29		338	(NA)	(NA)	157	416	747	430
1999: January <sup>f</sup>	1,820	1,393	57		370	(NA)	(NA)	150	335	901	434
February <sup>f</sup>	1,790	1,402	28		360	(NA)	(NA)	211	355	858	366
March <sup>p</sup>	1,766	1,401	40		325	(NA)	(NA)	150	400	821	395
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>2</sup></b>											
Annual	(percent)	1	7	11	3	1	3	3	2	1	1
Monthly	(percent)	3	15	20	9	3	8	7	7	4	3
Year to date	(percent)	2	8	18	8	2	5	13	4	2	2

NA Not available. <sup>p</sup>Preliminary. <sup>f</sup>Revised.

<sup>1</sup>Metropolitan statistical areas.

<sup>2</sup>Average Relative Standard Errors (Avg. RSE): Annual—Avg. RSE for the last 2 years; Year to date—Avg. RSE for the current period and the same period last year; Monthly—Avg. RSE for the latest 6-month period (January through June or July through December).

Table 2. New Privately Owned Housing Units Authorized in Permit-Issuing Places

[Thousands of units. Detail may not add to total because of rounding]

Period	United States							Northeast			Midwest			South			West		
	Total	In structures with—				Inside MSAs <sup>1</sup>	Outside MSAs <sup>1</sup>	Total	In structures with—		Total	In structures with—		Total	In structures with—		Total	In structures with—	
		1 unit	2 units	3 and 4 units	5 units or more				1 unit	2 units or more		1 unit	2 units or more		1 unit	2 units or more		1 unit	2 units or more
<b>ANNUAL DATA</b>																			
<b>19,000-Place Series</b>																			
1994	1,371.6	1,068.5	31.4	30.8	241.0	1,144.1	227.5	138.5	119.1	19.4	305.2	233.6	71.6	585.5	453.0	132.5	342.4	262.8	79.7
1995	1,332.5	997.3	32.2	31.5	271.5	1,116.8	215.8	124.2	104.5	19.7	296.6	220.5	76.1	583.2	430.3	152.9	328.5	241.9	86.5
1996	1,425.6	1,069.5	33.6	32.2	290.3	1,200.0	225.6	136.9	108.8	28.1	317.8	236.6	81.3	623.4	468.5	155.0	347.4	255.6	91.8
1997	1,441.1	1,062.4	34.9	33.6	310.3	1,220.2	220.9	141.9	111.2	30.7	299.8	220.0	79.8	635.9	464.2	171.7	363.5	267.1	96.5
1998 <sup>2</sup>	1,604.3	1,183.7	32.1	36.4	352.1	1,369.9	234.4	157.2	122.3	34.9	323.2	244.1	79.0	727.1	525.2	202.0	396.8	292.1	104.6
<b>MONTHLY DATA</b>																			
<b>Not Seasonally Adjusted</b>																			
1996:																			
January	88.3	66.0	2.0	1.8	18.5	77.1	11.1	5.5	4.5	1.0	14.3	10.4	3.9	44.0	33.7	10.3	24.5	17.4	7.1
February	96.0	74.4	2.2	1.9	17.6	83.7	12.3	6.1	5.4	0.7	17.1	13.7	3.4	46.4	37.2	9.2	26.4	18.1	8.4
March	120.4	95.7	2.6	2.3	19.8	101.6	18.8	10.8	8.9	1.9	26.6	20.2	6.3	52.0	43.3	8.7	31.1	23.3	7.8
April	140.1	109.9	3.7	3.2	23.3	116.2	23.8	14.0	10.9	3.1	33.9	26.7	7.2	60.3	47.1	13.1	31.9	25.1	6.8
May	140.5	109.2	3.1	3.0	25.1	116.5	24.0	14.2	11.8	2.4	32.8	26.1	6.6	61.8	46.0	15.8	31.8	25.4	6.4
June	131.4	100.7	2.9	3.1	24.7	109.1	22.3	13.1	10.7	2.4	29.4	23.4	5.9	55.6	42.2	13.4	33.4	24.4	9.0
July	135.1	101.9	2.9	2.8	27.5	111.2	23.9	13.4	11.1	2.4	33.1	24.6	8.5	54.7	41.6	13.1	33.8	24.5	9.3
August	129.1	97.6	3.0	2.5	26.0	108.0	21.1	14.0	10.6	3.4	30.3	22.6	7.8	55.4	41.3	14.2	29.4	23.2	6.2
September	121.1	85.9	3.0	3.1	29.1	101.0	20.1	12.2	9.6	2.5	27.8	20.1	7.7	51.4	35.7	15.7	29.8	20.5	9.3
October	123.7	90.8	3.3	3.7	25.9	103.6	20.1	13.4	10.0	3.4	30.8	21.4	9.4	49.6	38.1	11.5	29.9	21.3	8.6
November	100.7	71.5	2.7	2.6	23.9	86.1	14.7	10.8	8.3	2.4	23.1	15.3	7.9	44.9	31.7	13.2	21.9	16.3	5.7
December	99.2	66.0	2.2	2.0	29.1	86.0	13.2	9.4	7.0	2.5	18.7	12.1	6.6	47.4	30.7	16.8	23.6	16.2	7.3
1997:																			
January	88.1	65.8	2.4	1.5	18.5	77.5	10.6	9.1	6.5	2.6	13.2	9.2	4.0	43.3	33.6	9.8	22.5	16.4	6.1
February	94.1	70.3	2.3	1.8	19.7	81.6	12.5	9.1	5.8	3.3	15.7	11.4	4.3	44.6	34.3	10.4	24.6	18.8	5.9
March	120.1	88.7	2.9	2.5	26.0	102.5	17.6	11.8	8.7	3.0	24.3	18.0	6.3	55.4	39.7	15.7	28.7	22.3	6.4
April	137.2	104.4	3.5	3.1	26.2	113.1	24.2	12.6	10.4	2.2	32.0	24.3	7.7	61.5	45.0	16.5	31.2	24.8	6.4
May	131.6	101.3	3.0	2.8	24.6	108.3	23.3	12.8	11.0	1.9	29.4	22.9	6.5	55.8	42.3	13.5	32.5	25.1	8.4
June	133.6	100.9	3.2	3.4	26.2	111.9	21.7	14.0	11.0	3.0	29.2	22.3	6.9	57.1	42.4	14.8	33.3	25.2	8.1
July	133.7	99.8	3.3	3.3	27.2	113.0	20.7	13.5	11.1	2.4	27.8	21.6	6.2	58.7	41.8	16.9	33.7	25.3	8.5
August	126.0	91.8	2.5	2.9	28.7	105.9	20.1	12.9	9.8	3.1	28.3	20.0	8.3	53.4	38.9	14.4	31.4	23.1	8.4
September	134.4	95.6	3.0	3.2	32.7	113.8	20.6	12.4	10.1	2.3	28.8	20.7	8.2	57.4	40.0	17.5	35.7	24.8	10.9
October	135.5	97.5	3.7	3.9	30.4	114.5	21.0	12.5	10.7	1.8	29.5	20.7	8.8	58.0	41.4	16.6	35.5	24.8	10.7
November	100.4	72.5	2.3	2.2	23.3	85.8	14.6	10.6	8.1	2.5	21.3	14.8	6.5	44.0	32.0	12.1	24.5	17.7	6.8
December	106.4	73.9	2.8	2.9	26.8	92.3	14.1	10.7	8.0	2.7	20.3	14.1	6.2	46.5	32.9	13.6	28.9	18.9	10.0
1998:																			
January	93.5	68.3	2.0	2.0	21.1	82.0	11.5	9.6	6.7	2.9	14.6	10.4	4.1	45.5	34.1	11.5	23.8	17.1	6.7
February	105.6	76.6	2.2	2.6	24.3	92.1	13.6	8.7	6.9	1.8	18.5	13.9	4.7	51.7	37.3	14.4	26.7	18.5	8.2
March	138.0	103.8	2.8	3.4	28.0	119.5	18.5	11.7	9.8	1.9	25.7	20.1	5.7	67.5	47.5	20.1	33.1	26.5	6.6
April	144.7	112.9	2.7	2.7	26.4	121.5	23.2	12.9	11.3	1.6	30.8	24.8	5.9	62.4	47.9	14.5	38.7	28.9	9.7
May	137.5	105.9	2.5	3.1	26.0	115.5	21.9	12.7	10.7	2.0	30.7	24.1	6.6	62.2	45.6	16.6	31.8	25.5	6.4
June	151.8	115.2	3.1	4.4	29.0	128.4	23.4	16.1	12.6	3.4	31.4	25.0	6.4	64.3	48.8	15.5	40.0	28.7	11.2
July	146.8	109.9	3.1	3.5	30.3	123.9	22.9	14.9	11.3	3.6	29.6	23.0	6.6	65.3	47.6	17.7	37.0	28.1	8.9
August	142.2	103.3	3.0	3.1	32.7	120.8	21.3	13.2	10.4	2.7	28.7	21.5	7.1	66.3	46.6	19.7	34.0	24.6	9.3
September	140.2	102.1	2.9	3.3	31.9	118.9	21.3	14.4	10.7	3.7	29.8	21.7	8.1	62.1	44.6	17.5	33.9	25.0	8.9
October	147.6	103.4	2.8	3.5	37.9	124.9	22.7	15.5	10.9	4.6	32.6	23.3	9.3	65.3	44.4	20.9	34.1	24.8	9.3
November	118.2	85.6	2.4	2.3	28.0	102.0	16.3	12.8	9.4	3.5	24.7	18.4	6.3	51.9	37.2	14.7	28.8	20.6	8.2
December	125.3	89.1	2.8	2.8	30.5	108.8	16.4	12.2	9.3	2.9	26.9	17.4	9.6	56.1	41.2	14.8	30.1	21.2	8.8
1999:																			
January	105.3	73.7	2.2	2.3	27.1	93.7	11.6	9.0	6.6	2.3	13.3	10.3	3.1	55.9	37.6	18.3	27.1	19.2	7.8
February <sup>3</sup>	113.3	85.8	2.2	2.4	22.9	99.5	13.8	9.5	7.6	1.9	18.6	14.6	4.0	58.6	43.1	15.5	26.6	20.5	6.1
March <sup>3</sup>	150.6	117.5	3.0	3.2	27.0	128.8	21.8	13.9	10.2	3.7	32.3	23.9	8.4	68.8	54.3	14.5	35.6	29.0	6.5
Year to date:																			
1998 <sup>2</sup>	337.9	249.7	7.0	7.9	73.3	294.3	43.6	30.0	23.6	6.4	59.0	44.6	14.5	164.7	119.0	45.6	84.1	62.4	21.7
1999 <sup>2</sup>	370.4	277.8	7.3	7.8	77.4	323.2	47.2	32.3	24.8	7.5	64.3	48.8	15.4	184.6	135.6	49.0	89.3	68.7	20.6

See footnotes at end of table.

**Table 2. New Privately Owned Housing Units Authorized in Permit-Issuing Places—Con.**

[Thousands of units. Detail may not add to total because of rounding]

Period	United States							Northeast			Midwest			South			West		
	Total	In structures with—				Inside MSAs <sup>1</sup>	Outside MSAs <sup>1</sup>	Total	In structures with—		Total	In structures with—		Total	In structures with—		Total	In structures with—	
		1 unit	2 units	3 and 4 units	5 units or more				1 unit	2 units or more		1 unit	2 units or more		1 unit	2 units or more		1 unit	2 units or more
<b>MONTHLY DATA—Con.</b>																			
<b>Seasonally Adjusted Annual Rate</b>																			
1996: January	1,387	1,051	63	273	(NA)	(NA)	97	87	10	313	240	73	610	461	149	367	263	104	
February	1,420	1,085	60	275	(NA)	(NA)	116	105	11	318	246	72	615	477	138	371	257	114	
March	1,437	1,108	60	269	(NA)	(NA)	137	111	26	335	244	91	596	484	112	369	269	100	
April	1,463	1,108	74	281	(NA)	(NA)	145	108	37	333	251	82	636	485	151	349	264	85	
May	1,457	1,096	66	295	(NA)	(NA)	139	109	30	314	243	71	663	485	178	341	259	82	
June	1,429	1,089	64	276	(NA)	(NA)	132	109	23	307	239	68	640	482	158	350	259	91	
July	1,450	1,074	67	309	(NA)	(NA)	137	110	27	338	243	95	617	461	156	358	260	98	
August	1,413	1,061	63	289	(NA)	(NA)	147	113	34	312	234	78	627	459	168	327	255	72	
September	1,392	1,037	70	285	(NA)	(NA)	143	113	30	303	229	74	598	447	151	348	248	100	
October	1,358	1,010	68	280	(NA)	(NA)	142	106	36	305	222	83	581	443	138	330	239	91	
November	1,412	1,031	68	313	(NA)	(NA)	140	111	29	313	220	93	636	454	182	323	246	77	
December	1,411	1,015	62	334	(NA)	(NA)	142	111	31	309	212	97	629	455	174	331	237	94	
1997: January	1,399	1,061	65	273	(NA)	(NA)	161	126	35	295	216	79	603	465	138	340	254	86	
February	1,450	1,074	64	312	(NA)	(NA)	176	117	59	300	213	87	618	463	155	356	281	75	
March	1,438	1,020	65	353	(NA)	(NA)	153	112	41	304	216	88	643	440	203	338	252	86	
April	1,423	1,052	69	302	(NA)	(NA)	126	101	25	313	229	84	648	465	183	336	257	79	
May	1,422	1,046	65	311	(NA)	(NA)	129	105	24	293	219	74	624	455	169	376	267	109	
June	1,398	1,051	68	279	(NA)	(NA)	141	109	32	299	220	79	619	464	155	339	258	81	
July	1,441	1,052	77	312	(NA)	(NA)	138	111	27	285	213	72	657	461	196	361	267	94	
August	1,445	1,059	64	322	(NA)	(NA)	141	108	33	304	219	85	630	463	167	370	269	101	
September	1,475	1,084	67	324	(NA)	(NA)	136	112	24	299	221	78	646	467	179	394	284	110	
October	1,502	1,106	74	322	(NA)	(NA)	134	114	20	295	218	77	682	490	192	391	284	107	
November	1,475	1,102	58	315	(NA)	(NA)	144	113	31	299	226	73	651	485	166	381	278	103	
December	1,467	1,094	82	291	(NA)	(NA)	153	121	32	321	238	83	612	473	139	381	262	119	
1998: January	1,553	1,142	70	341	(NA)	(NA)	174	134	40	336	249	87	667	484	183	376	275	101	
February	1,635	1,176	74	385	(NA)	(NA)	169	138	31	356	259	97	721	502	219	389	277	112	
March	1,569	1,136	71	362	(NA)	(NA)	146	119	27	311	228	83	733	501	232	379	288	91	
April	1,517	1,145	55	317	(NA)	(NA)	133	117	16	305	234	71	664	496	168	415	298	117	
May	1,543	1,152	66	325	(NA)	(NA)	133	109	24	318	238	80	715	519	196	377	286	91	
June	1,517	1,128	74	315	(NA)	(NA)	151	119	32	307	231	76	675	499	176	384	279	105	
July	1,581	1,173	74	334	(NA)	(NA)	154	113	41	310	231	79	724	529	195	393	300	93	
August	1,618	1,180	72	366	(NA)	(NA)	144	116	28	302	235	67	784	548	236	388	281	107	
September	1,544	1,164	69	311	(NA)	(NA)	154	117	37	309	235	74	710	527	183	371	285	86	
October	1,690	1,198	65	427	(NA)	(NA)	169	119	50	335	251	84	789	533	256	397	295	102	
November	1,656	1,238	62	356	(NA)	(NA)	171	126	45	332	262	70	728	543	185	425	307	118	
December	1,729	1,306	77	346	(NA)	(NA)	172	134	38	413	293	120	743	580	163	401	299	102	
1999: January	1,778	1,275	79	424	(NA)	(NA)	169	132	37	322	257	65	838	566	272	449	320	129	
February <sup>P</sup>	1,741	1,303	74	364	(NA)	(NA)	186	149	37	354	272	82	811	577	234	390	305	85	
March <sup>P</sup>	1,636	1,239	69	328	(NA)	(NA)	166	121	45	364	261	103	724	558	166	382	299	83	
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>3</sup></b>																			
Annual . . . . . (percent) . . . . .	(Z)	(Z)	2	4	(Z)	(Z)	2	1	1	5	1	1	3	1	1	1	1	1	1
Monthly . . . . . (percent) . . . . .	1	1	4	3	1	(Z)	3	2	2	3	2	1	4	1	1	1	1	1	1
Year to date . . . . . (percent) . . . . .	(Z)	(Z)	2	7	(Z)	(Z)	3	3	2	10	1	1	3	1	2	1	1	1	1

NA Not available. <sup>P</sup>Preliminary. <sup>R</sup>Revised. X Not applicable. Z Less than 0.5 percent.

<sup>1</sup>Metropolitan statistical areas.

<sup>2</sup>Reflects revisions not distributed to months.

<sup>3</sup>Average Relative Standard Errors (Avg. RSE): Annual—RSE for the latest year; Year to date—Avg. RSE for the current period and the same period last year; Monthly—Avg. RSE for the latest 6-month period (January through June or July through December).

Table 3. **New Privately Owned Housing Units Authorized, but Not Started, in Permit-Issuing Places at End of Period**

[Thousands of units. Detail may not add to total because of rounding]

Authorized, but not started at end of period	United States				Northeast				Midwest				South				West			
	Total	In structures with—			Total	In structures with—			Total	In structures with—			Total	In structures with—			Total	In structures with—		
		1 unit	2 to 4 units	5 units or more		1 unit	2 to 4 units	5 units or more		1 unit	2 to 4 units	5 units or more		1 unit	2 to 4 units	5 units or more		1 unit	2 to 4 units	5 units or more
<b>END OF YEAR</b>																				
<b>16,000-Place Series</b>																				
1979	184.1	77.3	14.4	92.4	32.6	12.3	1.1	19.3	19.6	7.7	2.7	9.2	85.3	32.9	5.1	47.4	46.4	24.4	5.5	16.6
1980	173.6	70.1	15.3	88.2	26.0	12.3	1.2	12.6	17.5	6.8	2.9	7.8	88.5	32.9	6.5	49.1	41.6	18.1	4.8	18.7
1981	145.5	60.1	10.7	74.7	23.3	11.5	0.9	10.8	10.0	5.0	1.7	3.2	77.5	29.8	4.9	42.8	34.7	13.8	3.1	17.9
1982	167.8	66.9	11.6	89.3	19.4	9.4	1.0	9.0	10.4	4.5	1.7	4.2	100.3	38.5	5.9	55.9	37.7	14.5	2.9	20.2
1983	178.0	68.9	13.0	96.1	21.9	12.6	1.1	8.2	12.2	5.2	1.8	5.1	104.2	33.6	6.8	63.8	39.8	17.4	3.3	19.0
1984	192.5	66.2	10.2	116.1	23.2	10.8	1.2	11.2	14.0	5.1	1.5	7.5	109.4	34.5	4.8	70.1	45.8	15.7	2.7	27.4
<b>17,000-Place Series</b>																				
1985	223.3	80.6	13.7	129.0	36.9	19.2	2.1	15.7	20.4	5.8	2.2	12.4	120.6	43.3	5.7	71.6	45.4	12.3	3.8	29.3
1986	205.2	92.8	12.3	100.2	34.4	21.2	2.4	10.8	21.1	6.4	2.3	12.4	91.3	43.5	3.8	43.9	58.4	21.7	3.7	33.0
1987	155.0	79.3	11.1	64.6	36.8	23.3	2.1	11.4	11.9	6.5	2.2	3.2	68.6	33.8	3.5	31.4	37.7	15.7	3.3	18.6
1988	156.4	76.4	9.9	70.1	32.9	20.0	1.9	11.0	15.5	5.9	2.3	7.3	64.0	30.4	2.9	30.7	44.0	20.1	2.7	21.1
1989	173.9	93.1	8.4	72.5	34.1	25.1	1.6	7.4	18.0	7.5	1.8	8.7	73.5	34.3	2.1	37.1	48.3	26.2	2.8	19.2
1990	131.6	75.0	8.5	48.1	25.8	20.0	1.3	4.5	14.2	5.7	2.2	6.3	55.1	27.3	2.1	25.7	36.5	22.0	2.9	11.6
1991	126.3	71.1	4.7	50.6	24.4	17.3	0.7	6.4	16.9	6.4	1.4	9.1	51.3	26.0	1.3	24.0	33.8	21.4	1.4	11.1
1992	108.7	71.9	5.1	31.7	18.6	13.5	0.7	4.5	13.4	8.8	1.7	2.9	49.8	33.3	1.3	15.2	26.9	16.3	1.5	9.1
1993	118.9	72.5	3.7	42.8	22.3	15.4	0.5	6.4	14.3	8.6	1.2	4.5	58.5	35.2	1.0	22.3	23.8	13.2	1.0	9.6
1994	115.6	66.0	3.6	46.1	17.1	12.2	0.4	4.5	13.1	8.3	1.2	3.7	58.1	31.2	1.1	25.8	27.3	14.2	1.0	12.1
<b>19,000-Place Series</b>																				
1995	142.2	80.1	4.5	57.6	18.3	13.5	0.5	4.3	18.7	12.8	1.4	4.5	71.6	36.7	1.3	33.6	33.5	17.1	1.2	15.2
1996	126.4	67.5	4.8	54.2	16.0	9.0	0.6	6.4	16.6	10.6	1.7	4.2	68.1	32.3	1.3	34.4	25.8	15.5	1.2	9.2
1997	111.1	63.6	3.7	43.8	11.3	7.1	0.4	3.8	14.1	9.2	1.3	3.6	58.7	32.0	1.2	25.5	26.9	15.2	0.8	10.8
1998	137.1	79.5	3.1	54.5	16.0	10.2	0.5	5.3	18.2	11.8	1.1	5.3	75.9	41.4	0.8	33.7	27.1	16.2	0.7	10.2
<b>END OF MONTH</b>																				
1998: January	114.1	65.4	5.5	43.2	12.4	7.4	0.6	4.4	15.0	8.4	1.6	5.0	63.0	35.6	2.0	25.4	23.7	13.9	1.3	8.5
February	120.5	68.4	4.3	47.8	11.1	7.7	0.5	2.9	16.7	9.8	1.4	5.5	65.1	36.0	1.4	27.7	27.7	14.9	0.9	11.9
March	128.9	73.7	4.9	50.3	11.9	8.4	0.6	3.0	18.9	12.1	1.4	5.4	71.0	38.4	1.8	30.7	27.1	14.8	1.1	11.3
April	135.1	78.4	4.1	52.6	11.9	7.9	0.5	3.5	19.5	13.4	1.3	4.8	72.1	40.0	1.5	30.6	31.7	17.1	0.9	13.7
May	134.2	77.5	4.5	52.2	10.7	7.6	0.5	2.6	21.1	12.6	1.4	7.1	73.2	38.5	1.5	33.2	29.2	18.7	1.1	9.3
June	135.3	78.7	4.7	51.9	12.5	9.1	0.6	2.8	22.0	14.0	1.4	6.6	72.3	39.0	1.6	31.7	28.4	16.6	1.1	10.7
July	130.0	77.2	5.4	47.4	12.0	7.8	0.6	3.6	22.0	13.4	1.7	7.0	70.0	40.2	1.8	28.0	25.9	15.9	1.2	8.8
August	128.4	78.1	3.5	46.8	12.1	7.5	0.5	4.2	20.2	14.4	1.1	4.7	71.4	41.0	1.2	29.3	24.6	15.2	0.8	8.7
September	131.8	78.0	3.3	50.5	13.5	8.4	0.4	4.7	21.5	15.0	1.2	5.3	74.9	41.1	1.0	32.9	21.8	13.5	0.8	7.6
October	129.7	76.6	3.3	49.9	13.0	8.1	0.4	4.5	19.0	12.6	1.0	5.4	72.8	41.2	1.0	30.6	24.9	14.7	0.8	9.5
November	127.2	70.0	3.1	54.1	13.6	6.9	0.5	6.3	17.9	11.4	1.1	5.4	69.7	36.5	1.0	32.3	26.0	15.2	0.6	10.1
December	137.1	79.5	3.1	54.5	16.0	10.2	0.5	5.3	18.2	11.8	1.1	5.3	75.9	41.4	0.8	33.7	27.1	16.2	0.7	10.2
1999: January <sup>r</sup>	135.3	76.1	2.8	56.4	16.6	10.9	0.5	5.2	18.1	11.0	0.8	6.2	75.3	38.4	0.8	36.0	25.3	15.7	0.6	9.0
February <sup>r</sup>	136.3	78.5	3.0	54.8	16.0	11.3	0.5	4.2	20.4	12.3	0.9	7.2	73.2	37.8	0.9	34.4	26.7	17.1	0.7	9.0
March <sup>p</sup>	142.0	84.5	3.3	54.2	17.6	11.4	0.5	5.7	22.8	14.8	1.0	6.9	73.5	40.1	1.0	32.4	28.1	18.2	0.7	9.1
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>1</sup></b>																				
End of period . (percent) . .	4	3	9	8	10	12	24	13	10	10	17	30	5	3	18	11	6	7	11	8

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

<sup>1</sup>Average Relative Standard Errors: Average for the latest 6-month period (January through June or July through December).

Note: These backlog data represent the number of housing units authorized in all months up to and including the last day of the reporting period and not started as of that date without regard to the months of original permit issuance. Cancelled, abandoned, expired, and revoked permits are excluded from the backlog.

**Table 4. New Privately Owned Housing Units Started by Location and Type of Structure**

[Thousands of units. Detail may not add to total because of rounding]

Period	United States			Inside MSAs <sup>1</sup>			Outside MSAs <sup>1</sup>			Northeast			Midwest			South			West		
	Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—		Total <sup>2</sup>	In structures with—	
		1 unit	5 units or more		1 unit	5 units or more		1 unit	5 units or more		1 unit	5 units or more		1 unit	5 units or more		1 unit	5 units or more		1 unit	5 units or more
<b>ANNUAL DATA</b>																					
1979	1,745	1,194	429	1,241	790	362	505	405	67	178	123	46	349	243	80	748	522	184	470	306	119
1980	1,292	852	331	914	563	271	379	289	59	125	87	30	218	142	56	643	428	165	306	196	80
1981	1,084	705	288	760	458	236	324	247	52	117	84	25	165	110	40	562	363	153	240	148	69
1982	1,062	663	320	785	452	274	277	211	46	117	79	31	149	99	38	591	357	189	205	127	61
1983	1,703	1,068	522	1,351	795	464	352	272	58	168	123	35	218	153	48	935	557	317	382	234	121
1984	1,750	1,084	544	1,415	830	491	335	254	53	204	158	35	243	167	60	866	528	274	436	230	175
1985	1,742	1,072	576	1,494	882	535	248	190	41	252	182	55	240	148	77	782	504	240	468	239	204
1986	1,805	1,179	542	1,546	970	508	259	209	34	294	228	50	296	188	91	733	504	201	483	261	200
1987	1,620	1,146	409	1,372	934	385	248	212	24	269	204	50	298	203	81	634	485	129	420	255	148
1988	1,488	1,081	348	1,243	874	323	245	207	25	235	181	42	274	194	66	575	443	115	404	264	125
1989	1,376	1,003	318	1,128	798	289	248	205	29	178	132	37	266	190	62	536	409	109	396	272	108
1990	1,193	895	260	947	685	233	246	210	27	131	104	21	253	193	50	479	371	99	329	226	91
1991	1,014	840	138	789	648	117	225	193	21	113	99	8	233	191	31	414	353	51	254	197	47
1992	1,200	1,030	139	932	793	117	268	237	22	127	112	11	288	236	42	497	438	50	288	244	36
1993	1,288	1,126	133	1,032	897	114	256	229	19	126	116	8	298	251	37	562	498	55	302	261	33
1994	1,457	1,198	224	1,183	958	200	274	241	23	138	123	12	329	268	50	639	522	107	351	286	54
1995	1,354	1,076	244	1,106	861	221	248	215	23	118	102	12	290	234	46	615	485	119	331	256	67
1996	1,477	1,161	271	1,211	936	242	265	225	29	132	112	15	321	254	51	662	524	125	361	271	79
1997	1,474	1,134	296	1,221	923	267	253	211	29	137	111	21	304	238	48	670	507	151	363	278	76
1998	1,617	1,271	303	1,350	1,036	280	267	235	23	148	122	21	330	273	45	743	574	155	395	303	83
<b>QUARTERLY DATA</b>																					
1995: 1st quarter	270	214	48	226	177	44	44	37	4	22	19	2	45	36	8	134	106	24	69	54	14
1995: 2nd quarter	371	297	65	298	232	59	73	65	6	36	29	5	85	70	12	160	127	30	91	70	19
1995: 3rd quarter	387	308	69	314	245	62	73	63	7	33	30	2	89	72	14	170	133	35	95	73	19
1995: 4th quarter	326	257	62	268	207	56	58	50	6	27	24	3	71	57	13	152	118	31	76	59	15
1996: 1st quarter	303	240	57	253	198	52	49	42	6	21	18	2	53	43	8	145	117	27	84	62	20
1996: 2nd quarter	428	344	69	348	275	62	80	69	7	39	33	4	96	78	13	188	154	30	105	79	22
1996: 3rd quarter	410	324	75	332	257	66	78	67	9	38	33	4	99	78	17	176	139	34	97	74	20
1996: 4th quarter	335	252	69	278	206	62	58	47	8	34	27	5	74	55	14	152	115	34	76	55	17
1997: 1st quarter	297	238	51	255	202	47	42	36	4	26	20	5	49	40	6	143	115	26	80	63	15
1997: 2nd quarter	419	325	83	342	260	74	77	65	9	36	31	5	92	74	14	190	143	43	101	77	21
1997: 3rd quarter	400	315	75	328	252	68	72	62	7	40	33	6	88	72	12	177	134	39	96	75	18
1997: 4th quarter	357	257	86	296	209	78	62	48	8	35	28	6	75	52	16	161	115	43	87	62	22
1998: 1st quarter	325	258	57	279	219	52	46	39	5	28	22	5	55	45	7	157	125	29	84	66	16
1998: 2nd quarter	448	360	74	366	287	68	82	73	6	40	34	4	97	83	9	200	158	38	111	85	23
1998: 3rd quarter	445	348	86	369	281	80	76	67	7	41	35	5	92	76	13	201	153	44	111	84	24
1998: 4th quarter	399	305	86	336	250	79	63	55	6	39	31	7	86	68	15	185	138	44	89	68	20
1999: 1st quarter <sup>P</sup>	372	295	69	320	249	65	52	46	4	30	24	5	61	53	6	192	148	41	89	70	17
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>3</sup></b>																					
Annual . . . . . (percent) . .	1	1	3	1	1	3	3	4	9	3	2	17	2	3	5	1	2	4	1	1	2
Quarterly . . . . . (percent) . .	1	1	5	1	1	5	4	5	26	4	3	20	3	4	15	2	2	7	1	1	5

<sup>P</sup>Preliminary.

<sup>1</sup>Metropolitan statistical areas.

<sup>2</sup>Includes units started in structures with two to four units.

<sup>3</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 through quarter 2 or quarter 3 through quarter 4).



**Table 5. New Manufactured Homes: Placements, Average Sales Price, Dealers' Inventories, and Manufacturers' Shipments**

[Placements and inventory figures may not add to total because of rounding]

Period	Placed for residential use										Number on dealer lots at end of period (thousands)					Manufactured home shipments (thous)
	Number (thousands)					Average sales price (dollars)					United States	North-east	Mid-west	South	West	
	United States	North-east	Mid-west	South	West	United States	North-east	Mid-west	South	West						
<b>ANNUAL DATA</b>																
1994	286.1	16.2	53.0	174.4	42.5	33,500	33,900	34,600	30,500	44,600	72.3	3.9	12.4	47.4	8.6	303.9
1995	310.7	14.6	56.0	198.3	41.8	36,300	37,600	36,600	34,000	46,800	91.0	4.6	15.9	58.0	12.5	339.9
1996	319.7	15.4	56.6	205.1	42.6	38,400	40,200	39,600	36,100	47,700	110.2	4.8	16.3	75.5	13.6	363.3
1997	296.5	13.7	50.9	188.8	43.1	41,100	43,900	41,600	38,700	50,900	143.4	4.8	19.2	105.1	14.4	353.7
1998	332.7	13.5	53.7	218.5	47.0	43,900	46,000	44,200	41,600	53,600	155.7	4.7	20.3	117.4	13.2	373.1
<b>MONTHLY DATA</b>																
<b>Not Seasonally Adjusted</b>																
1998: January	18.7	0.7	2.4	12.4	3.2	42,500	44,300	41,000	40,500	51,900	127.2	4.1	17.2	93.3	12.6	26.7
February	21.1	0.4	2.8	15.0	2.9	40,900	49,600	42,500	39,300	47,400	133.1	4.4	18.4	96.5	13.8	27.7
March	27.5	0.8	2.9	19.5	4.3	41,500	44,100	40,600	39,100	53,000	135.9	4.7	19.5	98.1	13.5	31.7
April	27.2	0.7	3.9	18.9	3.7	42,800	47,000	41,900	40,700	53,800	138.8	4.8	20.0	100.6	13.4	33.2
May	29.6	1.1	4.6	20.0	4.0	42,500	44,600	44,900	39,800	53,200	139.9	5.2	20.3	101.1	13.3	31.3
June	31.6	1.4	4.8	21.0	4.4	43,700	42,500	44,100	41,300	55,600	140.3	5.3	20.6	100.9	13.5	33.3
July	29.4	1.5	5.1	18.6	4.1	45,400	51,400	43,100	44,200	51,900	142.2	4.9	20.5	103.5	13.2	30.9
August	31.8	1.2	5.5	20.8	4.2	44,600	47,800	45,600	42,000	55,000	142.9	5.1	20.3	104.2	13.4	32.4
September	33.0	1.6	6.2	20.7	4.6	44,500	44,100	43,700	42,700	53,800	143.7	5.0	20.4	104.8	13.5	33.1
October	29.7	1.7	5.6	17.6	4.7	46,300	45,800	46,300	44,400	53,900	147.8	4.6	20.0	110.7	12.5	35.4
November	27.2	1.1	5.1	17.8	3.3	44,600	47,600	46,500	41,900	55,800	152.2	5.1	20.0	114.4	12.7	30.1
December	25.8	1.3	4.7	16.3	3.5	45,600	44,500	44,900	43,600	56,300	155.7	4.7	20.3	117.4	13.2	27.3
1999: January <sup>P</sup>	16.0	0.7	2.1	11.3	1.9	44,300	44,400	40,200	42,800	58,500	166.3	4.8	21.4	125.5	14.6	27.5
February	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	28.6
<b>Seasonally Adjusted<sup>1</sup></b>																
1996: January	309	17	50	203	39	(X)	(X)	(X)	(X)	(X)	89	5	17	56	11	355
February	375	22	79	225	49	(X)	(X)	(X)	(X)	(X)	84	5	16	52	11	344
March	333	14	59	216	44	(X)	(X)	(X)	(X)	(X)	87	5	16	55	11	365
April	254	9	45	163	37	(X)	(X)	(X)	(X)	(X)	94	5	17	61	12	369
May	324	18	59	205	42	(X)	(X)	(X)	(X)	(X)	95	5	17	62	11	363
June	334	16	59	209	50	(X)	(X)	(X)	(X)	(X)	99	5	17	66	11	371
July	289	16	52	178	43	(X)	(X)	(X)	(X)	(X)	105	5	18	70	12	364
August	315	18	59	193	45	(X)	(X)	(X)	(X)	(X)	108	5	18	73	12	369
September	304	15	54	188	46	(X)	(X)	(X)	(X)	(X)	112	5	17	77	12	372
October	394	13	59	281	40	(X)	(X)	(X)	(X)	(X)	110	5	18	73	13	367
November	311	15	47	212	38	(X)	(X)	(X)	(X)	(X)	108	5	18	72	13	358
December	294	16	63	179	37	(X)	(X)	(X)	(X)	(X)	113	5	18	76	14	341
1997: January	375	14	55	256	51	(X)	(X)	(X)	(X)	(X)	100	5	16	65	13	347
February	315	11	44	209	52	(X)	(X)	(X)	(X)	(X)	103	5	17	69	13	350
March	358	13	58	240	47	(X)	(X)	(X)	(X)	(X)	102	5	17	68	12	351
April	295	12	54	181	48	(X)	(X)	(X)	(X)	(X)	106	5	17	72	12	365
May	272	14	47	172	39	(X)	(X)	(X)	(X)	(X)	112	5	18	77	12	353
June	254	12	48	155	39	(X)	(X)	(X)	(X)	(X)	119	5	18	83	13	355
July	296	20	53	181	43	(X)	(X)	(X)	(X)	(X)	124	5	19	87	13	356
August	262	12	46	164	39	(X)	(X)	(X)	(X)	(X)	128	5	19	90	13	356
September	286	18	48	181	39	(X)	(X)	(X)	(X)	(X)	135	5	20	96	14	354
October	289	13	54	176	45	(X)	(X)	(X)	(X)	(X)	138	5	20	99	14	351
November	293	10	59	182	42	(X)	(X)	(X)	(X)	(X)	140	5	20	101	14	352
December	300	15	47	199	39	(X)	(X)	(X)	(X)	(X)	145	5	21	105	14	354
1998: January	319	17	57	191	54	(X)	(X)	(X)	(X)	(X)	126	4	18	91	13	361
February	318	9	61	206	42	(X)	(X)	(X)	(X)	(X)	131	5	18	95	13	370
March	326	13	47	216	50	(X)	(X)	(X)	(X)	(X)	134	5	19	98	13	370
April	319	9	52	213	45	(X)	(X)	(X)	(X)	(X)	135	5	19	99	13	369
May	333	12	48	229	44	(X)	(X)	(X)	(X)	(X)	137	5	19	100	13	372
June	323	14	47	216	47	(X)	(X)	(X)	(X)	(X)	139	5	20	101	13	366
July	325	15	50	213	47	(X)	(X)	(X)	(X)	(X)	144	5	20	105	13	380
August	333	11	50	229	43	(X)	(X)	(X)	(X)	(X)	147	5	21	107	14	371
September	372	15	59	246	51	(X)	(X)	(X)	(X)	(X)	147	5	21	107	14	373
October	325	16	52	208	48	(X)	(X)	(X)	(X)	(X)	150	5	21	111	13	379
November	339	13	59	224	44	(X)	(X)	(X)	(X)	(X)	153	5	21	114	13	389
December	360	19	69	225	48	(X)	(X)	(X)	(X)	(X)	157	5	22	117	13	382
1999: January <sup>P</sup>	278	17	50	179	32	(X)	(X)	(X)	(X)	(X)	166	5	22	124	15	390
February	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	(X)	(X)	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	381
<b>AVERAGE RELATIVE STANDARD ERRORS<sup>2</sup></b>																
Annual . . . . . (percent)	4	17	9	5	9	3	13	6	4	7	(X)	(X)	(X)	(X)	(X)	(X)
Monthly . . . . . (percent)	4	16	8	5	10	3	11	5	4	6	1	8	4	2	4	(X)

NA Not available. <sup>P</sup>Preliminary (does not apply to shipments). X Not applicable.

<sup>1</sup>Data for placements and shipments of manufactured homes are seasonally adjusted at an annual rate.

<sup>2</sup>Average Relative Standard Errors (Avg. RSE): Annual—Avg. RSE for the last 2 years; Monthly—Avg. RSE for the latest 6-month period (January through June or July through December).

Note: Sales prices of new manufactured homes shown in this report are reported by dealers who are instructed to include dealer setup costs. In some cases, there may be additional costs to prepare units for occupancy not included in the sales prices reported.

Source: Except for manufacturers' shipments, these data are produced by the Commerce Department's Bureau of the Census from a survey sponsored by the Department of Housing and Urban Development. Statistics on shipments are compiled from manufacturers' reports to the National Conference of States on Building Codes and Standards (NCSBCS).



**Table 6. Seasonal Indexes Used to Adjust Housing Units Started**

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>1998</b>											
December .....	82.0	82.4	69.6	80.1	80.4	74.4	99.2	81.1	71.4	86.2	82.6
<b>1999</b>											
January <sup>f</sup> .....	71.2	57.7	50.2	76.8	81.3	55.5	75.5	63.4	48.5	76.6	81.1
February <sup>f</sup> .....	76.5	62.9	59.9	87.6	78.4	70.5	74.7	53.9	54.9	86.4	78.3
March <sup>p</sup> .....	101.9	93.5	94.4	109.8	112.6	107.2	86.2	99.7	93.1	106.2	108.6

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

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

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

**Table 7. Seasonal Indexes Used to Adjust Housing Units Authorized in Permit-Issuing Places**

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>1998</b>											
December .....	86.9	82.8	71.2	85.3	85.3	88.0	105.7	85.5	78.6	90.9	90.4
<b>1999</b>											
January .....	71.0	60.6	47.9	79.8	72.0	67.5	76.8	63.8	49.6	79.9	72.1
February <sup>f</sup> .....	78.1	61.0	64.6	89.7	80.7	75.2	75.5	61.6	63.2	87.0	82.2
March <sup>p</sup> .....	110.4	101.6	109.7	116.7	116.7	106.7	98.8	101.3	106.9	114.6	112.5

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

<sup>1</sup>The implicit seasonal index is the ratio of the unadjusted number of housing units authorized by building permits in the United States to the seasonally adjusted national total of housing units authorized. It provides an indication of the overall seasonality for the particular month.

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

**Table 8. Seasonal Indexes Used to Adjust New Manufactured Home Placements, Dealers' Inventories, and Manufacturers' Shipments**

Period	New manufactured homes placed for residential use					New manufactured homes on dealer lots at end of period					Manufactured home shipments
	United States implicit index <sup>1</sup>	North-east	Midwest	South	West	United States implicit index <sup>1</sup>	North-east	Midwest	South	West	
<b>1998</b>											
October .....	109.6	128.2	128.2	101.6	116.3	98.6	98.9	95.5	99.4	95.2	112.1
November .....	96.2	104.1	104.1	95.2	90.8	99.4	98.2	94.3	100.3	97.6	92.8
December .....	86.0	81.8	81.8	87.1	88.0	99.2	93.8	93.3	100.4	100.2	85.7
<b>1999</b>											
January <sup>p</sup> .....	69.0	50.4	50.4	75.8	70.5	100.2	91.7	96.4	101.5	99.7	84.6
February .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	90.1

NA Not available. <sup>p</sup>Preliminary (does not apply to shipments).

<sup>1</sup>The implicit seasonal index is the ratio of the unadjusted United States estimate to the seasonally adjusted United States estimate. It provides an indication of the overall seasonality for the particular month.

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

# Supplement 1.

## Total Time From Authorization of Construction to Start of Private Residential Buildings

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This supplement contains annual statistics on the length of time from authorization of construction to start of new private residential buildings in permit-issuing places. Data are obtained from the Bureau of the Census' Survey of Construction.

For the purpose of this survey, a housing unit is considered authorized when a building permit is issued for construction of the unit. A housing unit is considered started when excavation begins for the footings or foundation. In a multifamily building, all housing units are defined as being started when excavation for the building has begun.

Table S1-1 shows the estimated average number of months it takes to start construction on a residential building once the permit has been issued. Table S1-2 shows a percentage distribution for 1998 of buildings started by the number of months from authorization. Data for Tables S1-1 and S1-2 are shown for the United States and the four census regions by the number of housing units in the building.

Since the Survey of Construction is designed to collect data on a monthly basis, it can only be determined in what month a building was authorized or started rather than the precise day. For example, buildings started on August 1 or August 31 would be counted as starting in August. Because of this, it is assumed for this supplement that a building authorized and started in the same month

was started immediately after the permit was issued. Buildings started in the first month after authorization took the full month to begin; those started in the second month after authorization took 2 months; those started in the third month after authorization took 3 months, and so on.

These estimates are based on a sample survey and may differ from the results that would have been obtained from a complete census using the same schedules and procedures. An estimate based on a sample survey is subject to both sampling error and nonsampling error. The accuracy of a survey result is determined by the joint effects of these errors. Estimates of the standard errors have been computed from the sample data. They are presented in the tables in the form of relative standard errors. The relative standard error equals the standard error divided by the estimated value to which it refers. The average relative standard errors shown in Table S1-1 are averages of the estimated relative standard errors for the most recent two years. The relative standard errors of estimated percentages in Table S1-2 are shown in Table S1-3. Where estimates involve small numbers of units, the relative standard errors may be very large, indicating that extra care should be taken when interpreting the results. For a more detailed description of sampling variability, see the appendix to Current Construction Reports, C20/99-1.

**Table S1-1. Average Number of Months From Authorization to Start of New Buildings Started, by Location and Type of Structure**

Year	United States			Northeast			Midwest			South			West		
	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more
1989 .....	0.8	1.5	2.0	1.2	2.7	2.2	0.4	0.6	1.0	0.8	0.8	2.6	0.8	1.8	1.8
1990 .....	0.8	1.5	2.2	1.4	2.7	3.7	0.4	0.5	1.1	0.9	2.0	2.7	0.9	1.6	2.0
1991 .....	0.8	1.5	1.8	1.3	2.1	3.2	0.4	0.9	1.0	0.9	0.8	2.2	0.9	1.9	2.0
1992 .....	0.8	0.9	2.0	1.3	1.5	2.4	0.4	0.5	1.6	0.8	1.0	2.1	0.9	0.8	2.2
1993 .....	0.8	1.2	1.6	1.3	2.6	1.9	0.5	0.7	0.8	0.9	0.9	1.9	0.7	1.1	1.5
1994 .....	0.7	1.1	1.8	1.2	1.7	2.4	0.4	0.7	1.1	0.9	0.8	2.2	0.6	1.0	1.5
1995 .....	0.7	1.1	1.6	1.0	2.2	2.2	0.5	0.7	0.4	0.8	0.7	2.0	0.5	1.0	1.8
1996 .....	0.7	1.3	1.8	1.0	1.8	1.2	0.6	0.5	1.3	0.9	1.0	2.3	0.6	1.2	1.4
1997 .....	0.7	0.8	1.9	0.9	1.2	2.2	0.5	0.6	0.7	0.8	0.8	2.7	0.5	0.9	0.9
1998 .....	0.6	1.0	1.5	0.7	1.0	1.0	0.5	0.6	0.8	0.8	1.3	2.0	0.5	0.8	1.2
Average relative standard errors ..... (percent) ..	3	18	5	17	7	20	9	(A)	21	4	11	7	7	15	6

**Table S1-2. Percentage Distribution of New Buildings Started in 1998, by Number of Months From Authorization and by Location and Type of Structure**

[Percents may not add to 100 because of rounding]

Period	United States			Northeast			Midwest			South			West		
	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more
Prior to authorization or same month as authorization .....	58	51	41	60	39	43	63	66	55	53	41	34	61	51	47
1 month .....	31	28	25	27	35	40	30	21	27	34	31	22	29	27	27
2 months .....	6	11	12	7	13	10	4	6	9	8	12	14	6	17	12
3 months .....	2	3	9	2	4	3	1	2	2	3	3	14	2	2	6
4 months .....	1	4	4	1	5	1	1	2	2	1	7	5	1	1	2
5 or 6 months .....	1	1	4	1	3	(Z)	(Z)	(Z)	1	1	2	6	1	1	3
7 months or more .....	1	2	4	2	1	3	1	1	3	1	3	5	1	1	3

Z Less than 0.5 percent.

**Table S1-3. Relative Standard Errors of Percentage Distribution of New Buildings Started in 1998, by Number of Months From Authorization and by Location and Type of Structure**

Period	United States			Northeast			Midwest			South			West		
	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more	1 unit	2 to 4 units	5 units or more
Prior to authorization or same month as authorization .....	1	6	6	4	5	26	3	8	10	2	16	12	3	11	5
1 month .....	2	11	6	6	8	25	7	13	20	3	30	7	5	17	4
2 months .....	4	12	9	10	18	39	11	44	26	6	17	13	8	20	8
3 months .....	5	20	12	20	34	29	19	49	31	6	32	15	10	53	10
4 months .....	9	15	10	28	26	32	24	23	61	11	24	12	19	47	14
5 or 6 months .....	9	37	17	32	56	41	32	(X)	61	12	58	22	18	72	16
7 months or more .....	12	26	11	54	62	48	21	(A)	29	11	23	15	12	35	16

A Relative standard error of 100 percent or more. The estimate should be used with caution because a high standard indicates lack of precision in the estimate.  
X Not applicable.

## Supplement 2.

# Total Time From Start of Construction to Completion of Private Residential Buildings

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This supplement contains annual statistics on the length of time from start of construction to completion of new private residential buildings. Data are obtained from the Bureau of the Census' Survey of Construction.

For the purpose of this survey, a housing unit is considered started when excavation begins for the footings or foundation. In a multifamily building, all housing units are defined as being started when excavation for the building has begun. One-family houses are classified as completed either when all finish flooring has been installed (or carpeting, if used in place of finish flooring) or when occupied. All of the units in a multifamily building are considered as completed when 50 percent or more of the units are occupied or available for occupancy.

Table S2-1 shows the estimated average number of months it takes to build a one-family house in the United States, by the four census regions, and by purpose of construction. By "purpose of construction," we mean that one-family houses are classified as either *built for sale* (houses built where the house and lot are both to be included in the sales transaction), *contractor-built* (houses built on the owner's land under the supervision of a single general contractor), or *owner-built* (houses built on the owner's land under the supervision of the owner). The United States and regional data include a small number of houses built for rent.

Table S2-2 shows the estimated average number of months it takes to build multifamily buildings by the number of units in the building; data are shown for buildings with five units or more for the United States and the four census regions in Table S2-3. Table S2-4 shows a percentage distribution for 1998 of buildings completed by the number of months from start and the number of units in the building.

Since the Survey of Construction is designed to collect data on a monthly basis, it can only be determined in what month a building was started or completed rather than the precise day. For example, buildings started on June 1 or June 30 would both be counted as starting in June. Because of this, it is assumed for this supplement that a building started and completed in the same month took the full month to build. Buildings completed in the first month after start took 1.5 months; those completed in the second month after start took 2.5 months; those completed in the third month after start took 3.0 months; those completed in the fourth month after start took 4.0 months, and so on.

These estimates are based on a sample survey and may differ from the results that would have been obtained from a complete census using the same schedules and procedures. An estimate based on a sample survey is subject to both sampling error and nonsampling error. The accuracy of a survey result is determined by the joint effects of these errors. Estimates of the standard errors have been computed from the sample data. They are presented in the tables in the form of relative standard errors. The relative standard error equals the standard error divided by the estimated value to which it refers. The average relative standard errors shown in Tables S2-1, S2-2, and S2-3 are averages of the estimated relative standard errors for the most recent two years. The relative standard errors of estimated percentages in Table S2-4 are shown in Table S2-5. Where estimates involve small numbers of units, the relative standard errors may be very large, indicating that extra care should be taken when interpreting the results. For a more detailed description of sampling variability, see the appendix to Current Construction Reports, C20/99-1.

**Table S2-1. Average Number of Months From Start to Completion of New One-Family Houses Completed, by Region and Purpose of Construction**

Year	United States	Region				Construction purpose		
		Northeast	Midwest	South	West	Built for sale	Contractor built	Owner built
1989.....	6.4	9.3	5.8	5.6	6.5	5.9	5.3	10.2
1990.....	6.4	9.3	5.6	5.7	6.9	5.9	5.3	10.3
1991.....	6.3	8.9	5.6	5.5	6.9	5.6	5.1	10.2
1992.....	5.8	7.6	5.6	5.1	6.1	5.0	5.0	9.5
1993.....	5.6	7.2	5.5	5.2	6.0	4.9	5.4	9.0
1994.....	5.6	7.1	5.7	5.3	5.6	4.9	5.3	9.1
1995.....	5.9	7.4	6.0	5.4	6.0	5.2	5.8	9.5
1996.....	6.0	8.2	6.1	5.6	5.6	5.2	5.8	9.9
1997.....	6.0	7.3	6.2	5.6	5.8	5.2	5.9	9.8
1998.....	6.0	7.1	6.2	5.5	6.1	5.4	6.0	9.5
Average relative standard errors .....(percent) . .	1	3	3	2	2	1	3	4

**Table S2-2. Average Number of Months From Start to Completion of New Multifamily Buildings Completed, by Number of Units in the Building**

Year	Buildings with 2 to 4 units	Buildings with 5 units or more					
		Total	5 to 9 units	10 to 19 units	20 to 29 units	30 to 49 units	50 units or more
1989.....	8.0	9.3	8.9	9.3	9.4	10.3	13.7
1990.....	7.6	9.4	9.2	9.3	9.1	11.4	15.6
1991.....	8.5	9.7	9.2	10.4	8.8	10.5	14.2
1992.....	7.1	9.1	8.6	8.8	11.0	9.7	15.2
1993.....	7.4	8.6	7.6	9.5	9.3	11.0	14.7
1994.....	7.3	9.3	8.2	11.0	8.8	9.8	13.3
1995.....	6.8	9.1	8.6	9.5	9.4	9.8	12.9
1996.....	7.5	8.9	8.6	8.9	10.4	9.8	10.8
1997.....	7.5	9.2	8.5	9.3	10.1	11.2	12.7
1998.....	7.7	9.6	8.6	9.6	10.9	10.0	12.7
Average relative standard errors .....(percent) . .	5	2	2	3	3	6	3

**Table S2-3. Average Number of Months From Start to Completion of New Buildings Completed with 5 Units or More, by Region**

Year	United States	Region			
		Northeast	Midwest	South	West
1989.....	9.3	11.4	8.0	8.4	10.0
1990.....	9.4	11.4	8.2	7.9	10.7
1991.....	9.7	12.8	8.0	8.4	11.3
1992.....	9.1	20.2	6.8	7.7	10.4
1993.....	8.6	8.0	8.0	7.8	10.1
1994.....	9.3	26.6	7.9	7.6	8.6
1995.....	9.1	19.9	8.2	8.4	8.9
1996.....	8.9	8.9	8.1	9.1	9.1
1997.....	9.2	8.7	8.8	9.1	9.6
1998.....	9.6	9.7	9.2	9.2	10.6
Average relative standard errors .....(percent) . .	2	10	7	3	2

**Table S2-4. Percentage Distribution of New Buildings Completed in 1998, by Number of Months From Start and by Number of Units in the Building**

[Percents may not add to 100 because of rounding]

Period	Buildings with 1 unit	Buildings with 2 to 4 units	Buildings with 5 units or more					
			Total	5 to 9 units	10 to 19 units	20 to 29 units	30 to 49 units	50 units or more
2 months or less .....	8	1	1	1	1	(Z)	(Z)	(Z)
3 months.....	16	8	3	4	2	(Z)	2	(Z)
4 months.....	20	13	3	4	4	(Z)	4	(Z)
5 months.....	17	13	8	10	5	2	4	(Z)
6 months.....	12	15	11	12	13	6	8	6
7 months.....	8	11	10	12	10	12	10	2
8 months.....	5	8	12	12	9	14	9	4
9 months.....	3	7	12	12	11	13	13	15
10 months.....	2	5	11	8	11	8	8	12
11 months.....	2	3	7	8	8	8	9	4
12 months.....	1	4	5	5	7	5	7	12
13 to 18 months .....	4	9	15	9	17	23	22	35
19 to 24 months .....	1	1	2	2	3	5	2	7
25 months or more.....	1	2	1	1	(Z)	1	1	2

Z Less than 0.5 percent.

**Table S2-5. Relative Standard Errors of Percentage Distribution of New Buildings Completed in 1998, by Number of Months From Start and by Number of Units in the Building**

Period	Buildings with 1 unit	Buildings with 2 to 4 units	Buildings with 5 units or more					
			Total	5 to 9 units	10 to 19 units	20 to 29 units	30 to 49 units	50 units or more
2 months or less .....	6	36	39	42	56	11	(X)	(X)
3 months.....	4	26	27	34	47	31	70	(X)
4 months.....	2	19	13	17	24	15	62	(X)
5 months.....	2	27	12	19	18	19	42	34
6 months.....	3	20	13	13	20	16	29	54
7 months.....	4	21	8	12	13	13	22	34
8 months.....	4	19	8	16	12	13	25	35
9 months.....	4	17	7	11	10	18	14	47
10 months.....	6	15	9	19	10	10	18	16
11 months.....	7	24	7	12	11	9	19	24
12 months.....	7	20	8	16	11	11	19	21
13 to 18 months .....	6	37	6	13	9	10	13	12
19 to 24 months .....	9	38	19	22	20	39	32	13
25 months or more.....	11	48	17	(A)	42	(A)	(X)	94

A Relative standard error of 100 percent or more. The estimate should be used with caution because a high standard indicates lack of precision in the estimate.  
X Not applicable.