

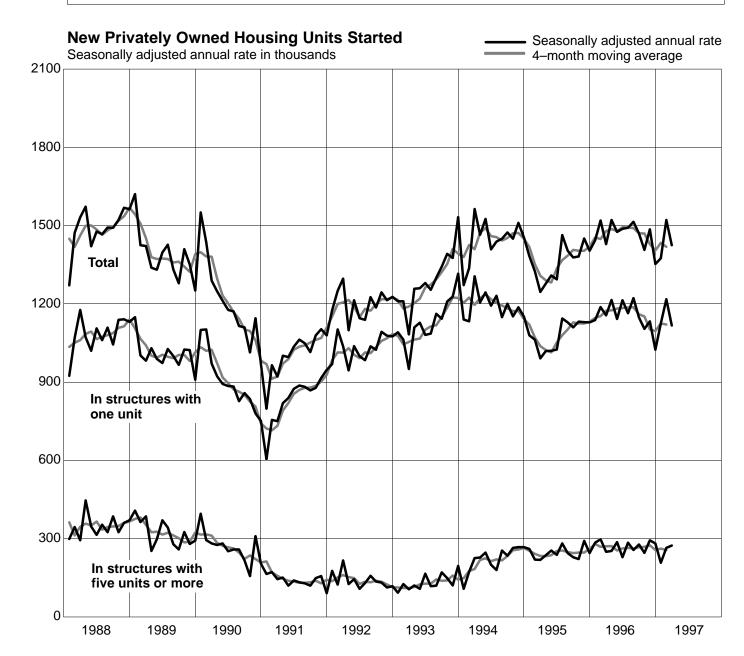
## **Housing Starts**

**MARCH 1997** 

U.S. Department of Commerce Economics and Statistics Administration BUREAU OF THE CENSUS

C20/97-3 Issued April 1997

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



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

Source: U.S. Bureau of the Census, Housing Starts.

#### HOUSING STARTS AND BUILDING PERMITS

Privately owned housing starts in March were at a seasonally adjusted annual rate of 1,425,000. This is 6 ( $\pm$ 6) percent below the revised February rate of 1,522,000, but virtually the same ( $\pm$ 6 percent) as the March 1996 rate of 1,429,000.

Single-family housing starts in March 1997 were at a rate of 1,117,000; this is 8 ( $\pm$ 5) percent below the February figure of 1,218,000. The March rate for units in buildings with five units or more was 273,000. The March rate for units in buildings with two to four units was 35,000.

During the first 3 months of this year, 290,100 housing units were started compared with 302,600 units for the same period in 1996. This is a decrease of 4  $(\pm 3)$  percent.

New privately owned housing construction was authorized in March in the 19,000 permit-issuing places at a seasonally adjusted annual rate of 1,423,000; this is 1  $(\pm 1)$  percent below the revised February rate of 1,444,000, but the same  $(\pm 2)$  percent as the March 1996 figure.

Single-family authorizations in March 1997 were at a rate of 1,015,000; this is 6 ( $\pm$ 1) percent below the February figure of 1,077,000. Authorizations of units in buildings with five units or more were at a rate of 338,000 in March; this is 13 ( $\pm$ 8) percent above the February rate of 299,000. The March rate of permitauthorized units in buildings with two to four units was 70,000.

During the first 3 months of this year, 299,200 housing units were authorized by permits in the 19,000 places compared with 302,100 units for the same period in 1996. This is an decrease of 1  $(\pm 1)$  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 4 months to establish an underlying trend for total starts and 3 months for building permit authorizations.

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 (±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 1997 Current Construction Reports, C20/97-1. On average, the preliminary seasonally adjusted estimates of total housing starts and building permits are revised about ±1 percent.

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

#### HISTORICAL DATA

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 301-457-4703.

A list of tables and special supplements is shown below:

Title			C20 issues	3	
New privately owned housing units started, by purpose of construction (quarterly and annual data)	97-1	96-10	96-7	96-4	96-1
private residential buildings (annual data)	97-3	96-3	95-3	94-3	93-3
Total time from authorization of construction to start for private residential buildings (annual data)	97-3	96-3	95-3	94-3	93-3
New privately owned housing units, by intended use and design at time of start (annual data)	97-2 96-12		95-2 96-7		

Table 1. New Privately Owned Housing Units Started

			In structur	es with—							
Period	Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSA's <sup>1</sup>	Outside MSA's <sup>1</sup>	North- east	Midwest	South	West
ANNUAL DATA											
1987 1988 1989 1990 1991 1992 1993 1994 1995	1,620.5 1,488.1 1,376.1 1,192.7 1,013.9 1,199.7 1,287.6 1,457.0 1,354.1 1,476.8	1,146.4 1,081.3 1,003.3 894.8 840.4 1,029.9 1,125.7 1,198.4 1,076.2 1,160.9	27.8 23.4 19.9 16.1 15.5 12.4 11.1 14.8 14.3	37.5 35.4 35.3 21.4 20.1 18.3 18.3 20.2 19.4 28.8	408.7 348.0 317.6 260.4 137.9 139.0 132.6 223.5 244.1 270.8	1,372.2 1,243.0 1,128.1 946.9 789.2 931.5 1,031.9 1,183.1 1,106.4 1,211.4	248.2 245.1 248.0 245.7 2245.7 2268.2 255.8 273.9 247.6 265.5	269.0 235.3 178.5 131.3 112.9 126.7 126.5 138.2 117.7 132.1	297.9 274.0 265.8 253.2 233.0 287.8 297.7 328.9 290.1 321.5	633.9 574.9 536.2 479.3 414.1 496.9 561.8 639.1 615.0 661.9	419.8 403.9 395.7 328.9 254.0 288.3 301.7 350.8 331.3 361.4
MONTHLY DATA											
Not Seasonally Adjusted  1996: January February March April May June	90.7 95.9 116.0 146.6 143.9 138.0	68.9 74.2 96.9 117.9 111.6 115.0	0.3 0.9 1.0 2.0 1.6 1.6	0.8 1.1 1.0 3.4 3.0 3.3	20.6 19.7 17.1 23.3 27.7 18.2	77.5 83.0 92.9 121.1 117.3 109.7	13.1 13.0 23.1 25.4 26.5 28.2	5.0 6.1 10.0 13.1 12.6 13.4	14.7 13.8 24.0 31.8 33.6 30.9	43.8 46.9 54.5 64.3 65.2 58.6	27.2 29.0 27.4 37.3 32.5 35.1
July August September October November. December.	137.5 144.2 128.7 130.8 111.5 93.1	109.1 115.6 99.3 101.0 82.6 68.8	1.2 1.2 1.9 2.1 1.6 1.1	3.1 2.0 1.9 2.9 4.3 1.9	24.2 25.4 25.6 24.8 23.0 21.3	110.7 117.5 104.0 106.5 93.1 78.0	26.8 26.7 24.7 24.3 18.4 15.1	12.3 12.9 13.0 13.9 10.1 9.7	34.9 35.3 28.6 29.8 26.6 17.4	59.2 59.2 57.6 54.0 51.0 47.4	31.1 36.7 29.5 33.0 23.9 18.6
1997: January <sup>r</sup> February <sup>r</sup> March <sup>p</sup>	82.2 92.8 115.1	66.6 73.9 93.2	0.6 1.3 0.7	1.5 1.0 1.8	13.5 16.6 19.4	72.1 79.9 97.3	10.1 12.9 17.8	8.5 5.9 10.7	10.5 15.8 21.5	39.8 46.7 52.6	23.3 24.4 30.3
Year to date: 1996	302.6 290.1	240.0 233.6	2.2 2.6	3.0 4.3	57.4 49.5	253.4 249.3	49.2 40.8	21.1 25.2	52.5 47.9	145.3 139.1	83.7 78.0
Seasonally Adjusted Annual Rate											
1996: January	1,444 1,520 1,429 1,522 1,476 1,488	1,138 1,188 1,156 1,215 1,142 1,214	2: 3: 2: 5: 4: 4:	5 4 5	284 297 249 252 286 228	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	100 130 139 138 128 126	329 317 322 325 322 300	621 655 631 665 680 686	394 418 337 394 346 376
July August September October November December.	1,492 1,515 1,470 1,407 1,486 1,353	1,164 1,222 1,148 1,104 1,133 1,024	4. 34. 56. 4.	7 5 8 0	284 256 277 245 293 281	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	129 131 140 138 128 139	355 337 309 287 330 300	670 671 682 617 672 641	338 376 339 365 356 273
1997: January <sup>r</sup> February <sup>r</sup> March <sup>p</sup>	1,375 1,522 1,425	1,125 1,218 1,117	4: 4: 3:	0	207 264 273	(NA) (NA) (NA)	(NA) (NA) (NA)	182 131 146	260 366 292	589 666 619	344 359 368
AVERAGE RELATIVE STANDARD ERRORS <sup>2</sup>											
Annual (percent).  Monthly (percent).  Year to date (percent).	1 3 2	1 2 2	7 10 11	8 19 9	2 11 4	1 3 1	3 7 6	1 6 3	2 7 4	2 5 3	1 5 2

NA Not available. Preliminary. Revised.

<sup>&</sup>lt;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]

				U	nited State	es				Northeast			Midwest			South			West	
	Period			In structu	res with—					In stru with			In stru with			In stru witl			In stru wit	uctures :h—
		Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSA's <sup>1</sup>	Outside MSA's <sup>1</sup>	Total	1 unit	2 units or more	Total	1 unit	2 units or more	Total	1 unit	2 units or more	Total	1 unit	2 units or more
	ANNUAL DATA																			
	000-Place Series	1.094.9	910.7	23.3	22.5	138.4	888.5	206.5	124.8	108.5	16.3	259.0	204.4	54.6	442.5	382.2	60.2	268.6	215.6	53.0
1993	000-Place Series	1,199.1	986.5	26.7	25.6	160.2	1,009.0	190.1	133.5	113.7	19.8	276.6	218.4	58.3	500.7	419.5	81.2	288.2	235.0	53.2
1994 1995		1,371.6 1,332.5 1,433.7	1,068.5 997.3 1,073.3	31.4 32.2 33.2	30.8 31.5 32.9	241.0 271.5 294.2	1,144.1 1,116.8 1,199.7	227.5 215.8 233.9	138.5 124.2 138.5	119.1 104.5 108.3	19.4 19.7 30.2	305.2 296.6 318.9	233.6 220.5 235.3	71.6 76.1 83.6	585.5 583.2 626.5	453.0 430.3 471.7	132.5 152.9 154.7	342.4 328.5 349.9	262.8 241.9 258.0	79.7 86.5 91.9
	IONTHLY DATA																			
N	Not Seasonally Adjusted																			
1994:	January	80.7 81.7 126.4 127.6 131.4 138.8	63.4 69.2 104.0 102.0 107.7 109.2	1.8 1.5 2.9 2.9 3.0 3.0	2.0 2.1 2.7 2.7 3.0 3.0	13.4 8.9 16.8 20.0 17.8 23.5	68.6 70.0 106.8 105.8 107.9 114.8	12.1 11.7 19.5 21.8 23.4 24.0	5.0 5.3 10.3 12.6 14.3 15.6	4.5 4.8 8.8 11.0 12.8 13.3	0.5 0.6 1.5 1.5 2.3	12.2 13.9 27.1 29.6 32.8 31.6	9.6 11.6 22.6 24.2 25.7 25.4	2.6 2.2 4.6 5.3 7.1 6.2	40.6 40.0 56.4 54.4 52.9 54.6	31.7 34.2 46.0 42.2 43.2 43.4	8.9 5.9 10.4 12.2 9.7 11.2	22.8 22.5 32.5 31.1 31.4 37.0	17.6 18.6 26.7 24.5 25.9 27.1	5.2 3.9 5.9 6.6 5.4 9.9
	July August September October November December	114.8 131.5 127.2 117.0 100.5 94.2	90.9 100.9 91.5 85.9 74.8 68.9	2.4 2.9 2.7 3.1 3.1 2.1	2.4 2.8 2.6 3.1 2.3 2.1	19.1 24.9 30.3 24.9 20.3 21.0	94.4 108.9 106.5 96.4 85.0 78.9	20.4 22.7 20.7 20.5 15.5 15.3	14.7 14.2 12.3 11.9 11.5 10.8	12.8 11.9 10.5 10.2 9.8 8.7	2.0 2.3 1.7 1.7 1.7 2.1	27.3 30.7 28.3 29.9 23.0 18.8	21.2 22.8 20.8 20.1 16.8 12.8	6.0 8.0 7.5 9.8 6.2 6.0	46.2 54.1 54.3 46.0 43.4 42.6	35.9 42.1 38.2 34.3 31.0 30.9	10.3 12.0 16.2 11.8 12.4 11.6	26.6 32.5 32.2 29.2 22.6 22.0	21.0 24.2 22.0 21.3 17.2 16.5	5.6 8.3 10.2 7.9 5.4 5.5
1995:	January February March April May June	78.0 80.4 111.5 109.7 122.8 129.3	58.2 59.8 85.1 83.1 95.9 97.4	1.8 2.0 3.0 2.8 3.3 3.2	2.0 1.3 2.9 2.5 2.6 3.4	16.1 17.3 20.5 21.3 21.1 25.3	67.3 69.4 93.6 90.5 101.4 106.6	10.7 11.1 17.9 19.3 21.4 22.8	7.4 5.6 10.5 11.4 12.4 12.4	6.2 4.7 8.8 9.5 11.0 10.6	1.2 0.9 1.7 1.9 1.4 1.9	12.3 13.7 23.8 25.2 29.3 29.7	8.6 10.4 18.5 19.4 22.7 23.1	3.7 3.3 5.3 5.8 6.6 6.6	40.1 38.7 52.7 46.6 51.0 53.3	29.1 28.9 39.1 34.9 39.1 39.7	11.0 9.8 13.6 11.7 11.9 13.7	18.3 22.5 24.5 26.5 30.1 33.9	14.3 15.8 18.8 19.3 23.1 24.1	4.0 6.6 5.8 7.2 7.0 9.8
	July August September October November December	115.6 133.5 124.1 122.2 107.8 97.4	88.3 101.4 90.1 90.8 78.4 68.8	2.3 3.1 3.0 3.1 2.9 1.9	2.4 3.0 3.0 3.3 3.1 2.0	22.5 26.1 28.1 25.0 23.5 24.7	95.2 111.4 104.1 101.4 90.9 85.0	20.4 22.1 20.0 20.8 17.0 12.4	10.7 12.3 11.2 11.9 10.5 8.0	9.4 10.6 9.4 9.8 8.0 6.6	1.2 1.7 1.8 2.1 2.5 1.4	27.3 31.9 28.9 31.9 24.9 17.8	20.9 23.5 20.5 22.1 18.2 12.5	6.4 8.3 8.4 9.8 6.7 5.2	48.4 55.9 55.0 51.5 46.3 43.8	36.9 42.1 39.4 37.7 33.3 30.1	11.6 13.8 15.5 13.7 13.0 13.7	29.2 33.5 29.1 27.0 26.2 27.8	21.1 25.2 20.8 21.2 18.9 19.5	8.2 8.3 8.3 5.8 7.3 8.4
1996:	January February March April May June	87.3 94.9 119.9 139.4 140.5 130.6	65.5 73.6 95.1 109.4 109.7 100.7	2.1 2.1 2.6 3.7 3.0 2.9	1.9 1.8 2.4 3.4 2.9 3.0	17.8 17.4 19.6 23.0 24.9 24.0	75.8 82.4 100.1 114.7 115.8 107.4	11.4 12.5 19.8 24.7 24.7 23.2	5.5 6.0 10.5 12.9 14.3 13.1	4.4 5.3 8.4 10.6 11.6 10.4	1.1 0.7 2.1 2.3 2.7 2.6	14.0 16.8 26.4 34.0 32.2 28.7	10.1 13.5 20.0 26.4 26.1 22.9	3.9 3.3 6.4 7.6 6.1 5.9	44.2 46.0 51.6 60.3 62.1 55.0	33.7 37.0 43.3 47.2 46.6 42.7	10.4 9.0 8.3 13.1 15.5 12.3	23.5 26.1 31.3 32.2 31.9 33.8	17.2 17.9 23.4 25.2 25.4 24.7	6.3 8.2 8.0 6.9 6.5 9.1
	July	135.7 129.8 121.0 126.0 101.7 99.9	101.4 98.4 86.0 91.8 71.6 66.3	3.0 2.9 3.1 3.2 2.6 2.0	2.9 2.5 3.1 3.9 2.7 2.1	28.4 26.0 28.8 27.2 24.8 29.6	110.8 108.2 100.3 105.2 86.2 85.7	24.9 21.6 20.8 20.8 15.5 14.3	13.5 14.0 11.9 13.8 10.8 9.8	10.9 10.3 9.4 9.8 8.1 6.9	2.6 3.7 2.5 4.0 2.7 2.8	33.5 30.9 27.9 31.1 23.3 19.1	24.4 22.7 19.9 21.6 15.2 12.0	9.2 8.2 8.0 9.4 8.1 7.1	54.7 55.2 52.0 50.8 45.3 47.3	41.9 41.8 35.8 38.7 31.8 31.1	12.7 13.5 16.2 12.1 13.5 16.2	34.0 29.7 29.3 30.3 22.3 23.8	24.2 23.7 20.9 21.7 16.4 16.3	9.7 6.0 8.4 8.7 5.8 7.5
1997:	January February <sup>r</sup>	88.9 92.8 117.6	66.0 70.2 87.2	2.0 2.3 3.0	1.7 2.0 2.8	19.2 18.3 24.6	78.0 80.2 99.1	10.9 12.6 18.5	8.2 8.1 10.6	6.0 5.7 8.2	2.2 2.5 2.4	13.4 15.9 24.5	9.3 11.3 17.7	4.1 4.6 6.8	44.1 44.5 54.9	34.1 34.4 39.7	10.1 10.0 15.1	23.1 24.3 27.7	16.5 18.8 21.6	6.6 5.6 6.1
Year to	date: 1996 <sup>2</sup>	302.1 299.2	234.3 223.4	6.8 7.4	6.0 6.5	55.0 61.9	258.6 257.2	43.5 42.0	21.9 27.3	18.1 20.2	3.8 7.0	57.0 53.6	43.5 38.2	13.5 15.4	141.9 143.4	114.1 108.1	27.7 35.3	81.4 74.9	58.6 56.9	22.8 18.0

See footnotes at end of table.

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

				U	nited State	es				Northeast			Midwest			South			West	
	Period			In structu	res with—					In stru with	ctures 1—		In stru with			In stru with				ictures h—
		Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSA's <sup>1</sup>	Outside MSA's <sup>1</sup>	Total	1 unit	2 units or more	Total	1 unit	2 units or more	Total	1 unit	2 units or more	Total	1 unit	2 units or more
MON	ITHLY DATA—Con.																			
Sea	asonally Adjusted Annual Rate																			
1994:	January February March April May June	1,390 1,269 1,342 1,392 1,396 1,357	1,112 1,065 1,078 1,084 1,110 1,067	5 6 6 6	68 66 61 62 66 68	210 148 203 246 220 232	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	102 112 121 135 143 146	99 98 103 117 124 126	3 14 18 18 19 20	296 278 305 306 315 301	246 227 243 237 240 232	52 51 62 69 75 69	599 545 576 600 592 565	472 466 460 462 471 450	127 79 116 138 121 115	391 334 340 351 346 345	295 274 272 268 275 259	98 60 68 83 71 86
	July August September October November December	1,335 1,377 1,412 1,397 1,340 1,396	1,041 1,054 1,056 1,042 1,014 1,086	6 6 6 6	50 50 50 58 56 52	234 263 296 287 260 248	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	161 143 135 131 137 167	137 121 118 113 119 129	24 22 17 18 18 38	300 303 295 318 298 323	228 225 228 226 229 246	72 78 67 92 69 77	567 589 608 591 590 603	429 452 450 438 426 466	138 137 158 153 164 137	307 342 374 357 315 303	247 256 260 265 240 245	60 86 114 92 75 58
1995:	January	1,295 1,264 1,221 1,245 1,258 1,290	992 927 904 913 946 970	5 6 6 6	52 54 55 51 52 54	241 283 252 271 250 256	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	144 119 126 129 118 118	138 97 105 105 101 102	6 22 21 24 17 16	285 277 275 274 270 288	211 202 204 197 203 215	74 75 71 77 67 73	566 531 556 532 550 563	415 394 400 394 408 419	151 137 156 138 142 144	300 337 264 310 320 321	228 234 195 217 234 234	72 103 69 93 86 87
	July August September October November December	1,358 1,379 1,427 1,393 1,450 1,487	1,017 1,046 1,079 1,050 1,073 1,123	6 6 6 7	52 52 59 58 11 50	279 271 279 275 306 304	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	117 122 128 125 124 128	101 106 109 103 98 101	16 16 19 22 26 27	304 309 313 323 324 317	226 230 233 237 248 251	78 79 80 86 76 66	598 601 637 629 634 644	441 447 483 458 461 471	157 154 154 171 173 173	339 347 349 316 368 398	249 263 254 252 266 300	90 84 95 64 102 98
1996:	January	1,378 1,417 1,423 1,459 1,452 1,415	1,056 1,087 1,097 1,115 1,098 1,085	6 6 7 6	55 50 51 75 52 52	257 270 265 269 292 268	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	102 122 137 135 137 134	94 103 110 108 108 108	8 19 27 27 29 26	312 323 329 342 304 302	238 250 240 249 237 231	74 73 89 93 67 71	594 600 591 634 668 634	460 481 483 494 493 488	134 119 108 140 175 146	370 372 366 348 343 345	264 253 264 264 260 258	106 119 102 84 83 87
	July August September October November December	1,457 1,423 1,399 1,362 1,418 1,422	1,073 1,078 1,040 1,011 1,025 1,015	6 7 6 6	68 60 73 69 67 64	316 285 286 282 326 343	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	136 147 138 138 135 146	106 110 109 100 105 101	30 37 29 38 30 45	338 317 306 298 313 313	240 236 228 220 216 219	98 81 78 78 97 94	625 629 604 587 641 642	465 471 446 444 460 457	160 158 158 143 181 185	358 330 351 339 329 321	262 261 257 247 244 238	96 69 94 92 85 83
1997:	January February <sup>r</sup> March <sup>p</sup>	1,400 1,444 1,423	1,051 1,077 1,015		61 68 70	288 299 338	(NA) (NA) (NA)	(NA) (NA) (NA)	147 162 145	112 118 110	35 44 35	299 316 309	219 217 213	80 99 96	600 611 637	468 470 446	132 141 191	354 355 332	252 272 246	102 83 86
	ERAGE RELATIVE NDARD ERRORS <sup>3</sup>																			
Monthly	(percent) y (percent) date (percent)	(Z) 1 1	1 1 1	2 4 4	3 5 3	1 2 2	(Z) 1 1	2 4 3	1 1 3	1 1 2	4 4 4	1 2 2	1 1 1	3 6 3	1 1 1	1 1 1	1 2 3	1 1 1	1 1 1	1 2 2

NA Not available. Preliminary. Revised. Z Less than 0.5 percent.

<sup>&</sup>lt;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

		United	States			North	neast			Mid	vest			Soi	uth			W	est	
Authorized, but not started		In str	uctures w	rith—		In str	uctures w	vith—		In str	uctures w	vith—		In str	uctures w	rith—		In st	ructures w	vith—
at end of period	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	2 to 4 units	5 units or more	Total	1 unit	2 to 4 units	5 units or more
END OF YEAR 14,000-Place Series																				
1977	231.8 207.8	90.7 86.7	12.9 15.1	128.2 106.0	42.4 39.6	12.5 14.3	1.0 1.3	28.9 24.0	32.2 26.5	14.1 12.6	2.5 3.0	15.6 10.9	94.9 83.6	35.9 32.0	3.3 4.4	55.7 47.2	62.3 58.1	28.2 27.8	6.1 6.4	28.0 23.9
16,000-Place Series																			• • •	
1979 1980 1981 1982 1983 1984	184.1 173.6 145.5 167.8 178.0 192.5	77.3 70.1 60.1 66.9 68.9 66.2	14.4 15.3 10.7 11.6 13.0 10.2	92.4 88.2 74.7 89.3 96.1 116.1	32.6 26.0 23.3 19.4 21.9 23.2	12.3 12.3 11.5 9.4 12.6 10.8	1.1 1.2 0.9 1.0 1.1 1.2	19.3 12.6 10.8 9.0 8.2 11.2	19.6 17.5 10.0 10.4 12.2 14.0	7.7 6.8 5.0 4.5 5.2 5.1	2.7 2.9 1.7 1.7 1.8 1.5	9.2 7.8 3.2 4.2 5.1 7.5	85.3 88.5 77.5 100.3 104.2 109.4	32.9 32.9 29.8 38.5 33.6 34.5	5.1 6.5 4.9 5.9 6.8 4.8	47.4 49.1 42.8 55.9 63.8 70.1	46.4 41.6 34.7 37.7 39.8 45.8	24.4 18.1 13.8 14.5 17.4 15.7	5.5 4.8 3.1 2.9 3.3 2.7	16.6 18.7 17.9 20.2 19.0 27.4
17,000-Place Series																				
1985 1986 1987 1988 1988 1990 1991 1991 1992 1993	223.3 205.2 155.0 156.4 173.9 131.6 126.3 108.7 118.9 115.6	80.6 92.8 79.3 76.4 93.1 75.0 71.1 71.9 72.5 66.0	13.7 12.3 11.1 9.9 8.4 8.5 4.7 5.1 3.7	129.0 100.2 64.6 70.1 72.5 48.1 50.6 31.7 42.8 46.1	36.9 34.4 36.8 32.9 34.1 25.8 24.4 18.6 22.3 17.1	19.2 21.2 23.3 20.0 25.1 20.0 17.3 13.5 15.4 12.2	2.1 2.4 2.1 1.9 1.6 1.3 0.7 0.7 0.5 0.4	15.7 10.8 11.4 11.0 7.4 4.5 6.4 4.5 6.4 4.5	20.4 21.1 11.9 15.5 18.0 14.2 16.9 13.4 14.3 13.1	5.8 6.5 5.9 7.5 5.7 6.4 8.6 8.3	2.2 2.3 2.2 2.3 1.8 2.2 1.4 1.7 1.2	12.4 12.4 3.2 7.3 8.7 6.3 9.1 2.9 4.5 3.7	120.6 91.3 68.6 64.0 73.5 55.1 51.3 49.8 58.5 58.1	43.3 43.5 33.8 30.4 34.3 27.3 26.0 33.3 35.2 31.2	5.7 3.8 3.5 2.9 2.1 1.3 1.3 1.0	71.6 43.9 31.4 30.7 37.1 25.7 24.0 15.2 22.3 25.8	45.4 58.4 37.7 44.0 48.3 36.5 33.8 26.9 23.8 27.3	12.3 21.7 15.7 20.1 26.2 22.0 21.4 16.3 13.2 14.2	3.8 3.7 3.3 2.7 2.8 2.9 1.4 1.5 1.0	29.3 33.0 18.6 21.1 19.2 11.6 11.1 9.1 9.6 12.1
19,000-Place Series																				
1995	142.2 126.4	80.1 67.5	4.5 4.8	57.6 54.2	18.3 16.0	13.5 9.0	0.5 0.6	4.3 6.4	18.7 16.6	12.8 10.6	1.4 1.7	4.5 4.2	71.6 68.1	36.7 32.3	1.3 1.3	33.6 34.4	33.5 25.8	17.1 15.5	1.2 1.2	15.2 9.2
END OF MONTH																				
1996: January February March April May June	137.9 136.8 147.6 144.8 146.5 143.3	79.7 82.3 89.9 87.4 91.0 84.6	4.9 4.5 6.3 5.6 4.8 4.0	53.4 50.0 51.4 51.8 50.7 54.7	18.6 16.6 17.3 17.4 18.6 17.9	13.7 11.7 12.5 12.8 12.9 12.6	0.6 0.5 0.6 0.7 0.5 0.5	4.3 4.5 4.3 3.9 5.2 4.7	17.5 20.0 23.0 26.3 26.9 25.5	11.6 14.4 16.2 17.4 20.2 18.1	1.6 1.5 2.2 1.9 1.6 1.3	4.3 4.2 4.6 7.0 5.1 6.0	72.3 73.2 75.9 74.1 74.9 73.2	39.7 42.5 45.8 43.1 41.8 38.5	1.3 1.4 1.8 1.6 1.4 1.2	31.2 29.3 28.3 29.3 31.7 33.6	29.7 26.9 31.3 27.1 26.1 26.7	14.8 13.6 15.4 14.2 16.1 15.3	1.3 1.2 1.6 1.4 1.3 1.0	13.6 12.1 14.3 11.6 8.8 10.4
July	146.0 130.7 128.4 127.7 121.0 126.4	85.0 77.0 72.8 71.9 65.7 67.5	4.7 3.7 5.4 6.0 4.7 4.8	56.3 50.0 50.2 49.7 50.6 54.2	18.7 16.4 15.2 15.6 15.7 16.0	12.4 11.6 10.7 10.1 10.2 9.0	0.6 0.4 0.6 0.7 0.5 0.6	5.8 4.4 4.0 4.8 5.0 6.4	25.1 19.8 20.1 21.2 18.6 16.6	15.9 14.8 13.0 12.3 11.2 10.6	1.6 1.3 2.0 2.3 1.7	7.6 3.7 5.2 6.7 5.8 4.2	72.9 71.1 68.9 68.9 66.1 68.1	39.4 37.1 35.3 35.9 32.1 32.3	1.3 1.1 1.4 1.6 1.3 1.3	32.2 33.0 32.2 31.5 32.6 34.4	29.3 23.4 24.1 22.0 20.7 25.8	17.3 13.5 13.9 13.8 12.3 15.5	1.2 1.0 1.4 1.5 1.2	10.7 8.9 8.8 6.7 7.3 9.2
1997: January <sup>r</sup> February <sup>r</sup> March <sup>p</sup>	131.8 131.4 137.0	70.7 69.9 71.7	4.1 4.2 5.2	56.9 57.3 60.1	14.8 16.2 15.9	8.8 8.8 9.0	0.6 0.4 0.6	5.4 7.0 6.3	19.4 17.9 22.0	11.5 10.8 13.3	1.3 1.4 1.7	6.6 5.7 6.9	71.5 71.0 75.0	36.2 35.1 35.8	1.2 1.3 1.4	34.0 34.7 37.7	26.1 26.2 24.2	14.2 15.2 13.6	1.1 1.1 1.4	10.8 9.9 9.1
AVERAGE RELATIVE STANDARD ERRORS <sup>1</sup> End of period (percent)	4	3	10	7	8	10	41	14	10	10	14	25	6	5	22	10	5	6	14	8

PPreliminary. Revised.

<sup>&</sup>lt;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

		Uı	nited Stat	es	Ins	ide MSA	's¹	Out	side MSA	∖'s¹		Northeas	t		Midwest			South			West	
	Period		In stru wit	ictures h—		In stru with	ctures 1—		In stru with			In stru wit	ictures h—		In stru with			In stru with	ictures h—			ictures h—
		Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more	Total <sup>2</sup>	1 unit	5 units or more
AN	NNUAL DATA																					
1978		1,987 2,020 1,745 1,292 1,084 1,063 1,750 1,750 1,805 1,488 1,376 1,193 1,014 1,208 1,457 1,354	1,451 1,433 1,194 852 705 663 1,068 1,084 1,072 1,179 1,146 1,081 1,083 895 840 1,030 1,126 1,198 1,076	414 462 429 331 288 320 522 544 576 409 348 318 260 138 133 224 244	1,377 1,432 1,241 914 760 785 1,351 1,415 1,546 1,372 1,243 1,1243 1,1243 1,128 947 789 932 1,183 1,106	943 941 790 563 458 452 795 830 882 970 934 874 798 685 648 793 897 958 861 936	347 396 362 271 236 274 464 491 535 508 385 323 289 233 117 117 114 200 221	610 588 505 379 324 277 352 335 248 259 248 245 246 225 266 274 248	508 492 405 289 247 211 272 254 190 209 212 207 205 210 193 237 229 241 215	68 66 67 59 52 46 58 53 41 24 25 29 27 21 22 23 23 29	202 200 178 125 117 117 168 204 252 294 269 235 178 131 113 126 138 118	156 147 123 87 84 79 123 158 182 228 204 181 132 104 116 123 102	36 43 46 30 25 31 35 55 50 42 37 21 8 12 12 12 12	465 451 349 218 165 149 218 243 243 296 298 274 263 253 233 288 329 298 321	337 325 243 110 99 153 167 148 203 194 190 236 251 268 234	99 98 80 56 40 38 60 77 91 81 66 62 50 31 42 75 50 45	783 824 748 643 562 591 935 866 782 733 634 575 536 479 414 497 562 639 615	588 604 522 428 363 357 558 504 504 485 443 409 371 353 438 498 522 485 522	163 185 186 165 153 189 317 274 2201 129 115 109 51 507 117 115	538 545 470 306 240 205 382 436 463 493 420 404 396 329 254 288 302 351 331 331	370 358 306 196 148 127 234 230 255 264 275 226 197 244 261 286 256	117 137 119 80 69 61 121 175 200 148 125 108 91 47 36 33 54 67 79
	RTERLY DATA	.,	,,,,,,,,		-,																_, .	
1993:	1st quarter 2nd quarter 3rd quarter 4th quarter	241 367 356 324	213 324 309 279	22 35 37 38	198 289 284 261	176 253 245 224	18 30 33 33	43 79 71 63	38 71 64 56	4 5 4 6	19 36 38 33	17 34 35 30	1 2 3 2	46 89 86 78	40 74 73 64	4 12 9 12	119 156 147 140	107 140 130 121	10 13 15 17	57 87 85 73	49 76 71 64	6 8 11 8
1994:	1st quarter 2nd quarter 3rd quarter 4th quarter	294 423 398 343	253 354 326 266	35 60 62 66	248 339 317 279	212 279 254 212	32 53 55 60	46 84 81 63	41 75 72 54	4 7 6 7	20 43 39 36	17 39 35 32	3 3 4 3	51 104 94 79	45 86 77 60	5 16 14 15	142 180 167 150	121 148 137 115	19 29 27 32	80 95 98 78	69 81 77 58	9 12 17 16
1995:	1st quarter 2nd quarter 3rd quarter 4th quarter	270 371 387 326	214 297 308 257	48 65 69 62	226 298 314 268	177 232 245 207	44 59 62 56	44 73 73 58	37 65 63 50	4 6 7 6	22 36 33 27	19 29 30 24	2 5 2 3	45 85 89 71	36 70 72 57	8 12 14 13	134 160 170 152	106 127 133 118	24 30 35 31	69 91 95 76	54 70 73 59	14 19 19 15
1996:	1st quarter 2nd quarter 3rd quarter 4th quarter	303 428 410 335	240 344 324 252	57 69 75 69	253 348 332 278	198 275 257 206	52 62 66 62	49 80 78 58	42 69 67 47	6 7 9 8	21 39 38 34	18 33 33 27	2 4 4 5	53 96 99 74	43 78 78 55	8 13 17 14	145 188 176 152	117 154 139 115	27 30 34 34	84 105 97 76	62 79 74 55	20 22 20 17
1997:	1st quarter <sup>p</sup>	290	234	49	249	199	45	41	35	4	25	20	5	48	39	6	139	112	25	78	62	14
	AGE RELATIVE DARD ERRORS <sup>3</sup>																					
	(percent) ly (percent)	1 2	1 2	2 7	1 2	1 1	2 7	3 6	3 5	11 29	1 3	1 2	8 15	2 5	2 3	7 23	2	2	4 10	1 2	1 2	2 4

rRevised.

<sup>&</sup>lt;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 Mobile Homes: Placements, Average Sales Price, Dealers' Inventories, and Manufacturers' Shipments

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

												1					
					Plac	ed for re	esidentia	l use							1-44		
	Period		Numb	er (thous	sands)		Д	verage s	sales pric	e (dollar	s)	l N	umber or of peri	od (thou		10	Mobile home
		United States	North- east	Mid- west	South	West	United States	North- east	Mid- west	South	West	United States	North- east	Mid- west	South	West	ship- ments (thous)
	NNUAL DATA																
1992		212.0	15.0	42.2	124.4	30.4	28,400	30,900	28,800	25,400 27,700	39,000	50.9	3.9	9.1	31.7	6.2	210.5
1994		242.5 286.1	15.4 16.2	44.5 53.0	146.7 174.4	35.9 42.5	30,500 33,500	33,900	28,800 31,400 34,600	27,700 30,500	40,500 44,600	61.4 72.3	4.2 3.9	10.6 12.4	39.2 47.4	7.3 8.6	254.3 303.9
		310.7 319.7	14.6 15.4	56.0 56.6	198.3 205.1	41.8 42.6		37,600 40,200	36,600 39,600	34,000 36,100	46,800 47,700	91.0 110.2	4.6 4.8	15.9 16.3	58.0 75.5	12.5 13.6	339.9 363.3
MC	ONTHLY DATA																
	asonally Adjusted																
1996: <sup>r</sup>	January February March April May June	18.6 25.2 26.7 22.1 29.8 31.2	0.7 1.0 0.9 0.7 1.7 1.6	2.1 3.6 3.7 3.4 5.6 6.1	13.4 17.3 18.5 15.0 18.7 18.9	2.3 3.4 3.7 3.0 3.8 4.7	37,500 36,600 35,900 38,700 38,100 39,000	35,300 36,200 38,400	37,600 36,700	35,700 34,600 34,200 35,700 35,900 36,300	44,600 46,700 43,900 46,500 48,200 49,200	88.8 86.9 88.5 96.7 98.3 100.7	4.6 4.6 4.8 5.3 5.0 4.9	16.1 16.3 16.8 18.2 18.6 17.9	56.8 54.7 55.5 61.1 63.0 66.1	11.4 11.5 12.1 11.8 11.7	27.1 27.2 30.1 32.5 33.5 31.2
	July	26.3 30.7 27.2 36.0 24.7 21.1	1.6 1.9 1.6 1.4 1.3	5.3 6.4 5.6 6.3 4.1 4.3	15.6 18.0 15.9 24.3 16.4 13.0	3.7 4.4 4.1 3.9 2.9 2.7	39,600 38,000 39,700 38,800 39,500 39,300	38,600 40,100 43,500 41,300 42,700 44,200	40,400 38,100 41,000 40,000 39,800 38,400	37,400 35,800 36,400 36,800 37,600 37,000	48,800 46,100 49,900 48,700 48,800 50,100	103.3 105.3 108.5 107.7 108.0 110.2	5.1 5.1 5.2 5.4 5.1 4.8	17.8 17.3 16.9 16.9 16.9 16.3	68.7 71.5 74.7 72.7 73.0 75.5	11.7 11.4 11.7 12.6 12.9 13.6	29.1 34.3 31.5 36.0 28.0 22.9
1997:	January <sup>p</sup> February	20.0 (NA)	0.6 (NA)	2.2 (NA)	14.3 (NA)	2.9 (NA)	39,000 (NA)	47,100 (NA)	41,900 (NA)	36,600 (NA)	47,400 (NA)	115.7 (NA)	5.1 (NA)	17.3 (NA)	78.9 (NA)	14.5 (NA)	26.7 26.3
Seas	onally Adjusted <sup>1</sup>																
1994: <sup>r</sup>	January	257 273 267 283 297 277	15 13 11 16 17 12	61 55 56 53 52 49	141 167 159 171 185 172	40 38 41 43 43 44	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	64 67 68 69 68 70	4 5 4 4 4	12 12 13 13 13	40 42 42 43 43 43	8 8 9 8 8	296 293 298 294 297 299
	July	303 270 282 300 320 312	20 17 17 20 17 15	54 49 47 55 60 58	186 165 176 181 198 191	43 39 42 44 45 48	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	70 71 73 72 71 74	4 4 4 4 4	14 14 14 14 13	44 45 46 46 45 47	8 9 9 9 9 9 9 9	301 303 305 315 317 343
1995: <sup>r</sup>	January	363 310 309 293 302 314	22 17 15 11 12 14	67 65 60 51 49 55	230 184 194 188 202 206	44 44 40 43 39 39	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	70 73 74 75 78 78	4 4 4 4 5 5	14 14 14 14 15	43 46 47 47 48 47	9 10 10 11 11	344 329 326 325 333 331
	July	300 311 330 320 295 306	15 16 18 12 15	53 52 66 53 57 58	192 198 204 211 182 198	41 45 42 44 42 41	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	81 84 83 87 89 93	5 4 4 5 5 5	16 16 16 17 17	48 51 51 53 55 57	12 12 12 12 12 13	336 342 349 352 354 370
1996: <sup>r</sup>	January	313 368 329 256 314 324	17 20 14 9 17 16	51 74 58 45 57 60	205 224 211 164 198 200	39 50 45 38 41 48	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	88 82 86 93 96 100	5 5 5 5 5 5	17 15 16 17 17	55 52 54 60 63 67	11 11 11 11 11	350 346 368 373 366 372
	July	295 323 314 391 312 292	16 17 16 13 15	53 58 57 60 48 57	184 204 195 277 210 183	43 44 45 40 38 37	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	106 108 112 111 110 112	5 5 5 5 5 5	18 18 18 18 18	72 73 77 74 73 75	12 12 13 13 13	366 369 372 364 354 338
1997:	January <sup>p</sup> February	337 (NA)	14 (NA)	52 (NA)	220 (NA)	50 (NA)	(X) (X)	(X) (X)	(X) (X)	(X) (X)	(X) (X)	114 (NA)	5 (NA)	18 (NA)	76 (NA)	15 (NA)	339 355
STAN Annual	RAGE RELATIVE IDARD ERRORS <sup>2</sup> (percent)	4 4	17 16	9 8	5 5	9	3 3	13	6 5	4 4	7 7	(X)	(X)	(X)	(X)	(X) 5	(X) (X)
ivioriuily	(percent)	4	10	8	ن	10			3	4		2	l °	4		ა	(^)

NA Not available. Preliminary (does not apply to shipments).

<sup>&</sup>lt;sup>r</sup>Revised (does not apply to shipments). X Not applicable.

<sup>&</sup>lt;sup>1</sup>Data for placements and shipments of mobile 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).

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

				In structui	res with—				All	units	
Period	United States		1 ι	ınit							
	implicit index <sup>1</sup>	North- east	Midwest	South	West	2 to 4 units	5 units or more	North- east	Midwest	South	West
1996											
December	82.6	86.9	68.1	85.8	79.4	73.2	91.1	82.0	68.4	87.4	80.4
1997											
January <sup>r</sup> . February <sup>r</sup> . March <sup>p</sup> .	71.7 73.2 97.0	61.1 49.2 84.6	51.0 49.2 92.8	77.2 86.5 106.2	80.6 82.9 101.5	59.2 67.0 91.0	78.3 75.5 85.1	55.2 54.3 91.2	47.5 52.2 91.1	79.7 84.4 105.1	79.9 81.9 102.2

PPreliminary. Revised.

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

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

				In structu	res with—				All	units	
Period	United States		1 ι	ınit							
	implicit index <sup>1</sup>	North- east	Midwest	South	West	2 to 4 units	5 units or more	North- east	Midwest	South	West
1996											
December	84.4	82.1	65.8	81.6	82.3	78.2	103.4	79.5	72.5	87.4	88.0
1997											
January February <sup>r</sup> March <sup>p</sup>	76.2 77.1 99.0	64.8 57.8 89.2	51.0 62.3 99.4	87.4 88.0 106.8	78.6 82.9 105.3	73.2 76.5 99.2	80.1 73.4 87.2	67.3 59.4 88.1	53.7 59.1 95.7	88.3 85.8 104.2	78.4 80.8 100.8

Preliminary. Revised.

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

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

	New m	nobile hom	es placed f	or resident	ial use	ı		homes or end of peri	dealer lots	3	
Period	United States implicit index <sup>1</sup>	North- east	Midwest	South	West	United States implicit index <sup>1</sup>	North- east	Midwest	South	West	Mobile home ship- ments
1996											
October <sup>r</sup>	110.4 95.0 86.8	125.2 102.4 90.0	125.2 102.4 90.0	105.3 93.7 85.4	115.8 90.9 87.1	97.0 98.2 98.4	99.0 96.0 92.7	94.1 92.8 91.0	97.9 100.1 101.0	94.0 96.1 97.1	118.7 94.8 81.4
1997											
January <sup>p</sup>	71.2 (NA)	50.5 (NA)	50.5 (NA)	77.9 (NA)	70.0 (NA)	101.4 (NA)	94.0 (NA)	95.8 (NA)	104.2 (NA)	98.9 (NA)	94.7 88.8

NA Not available. Preliminary (does not apply to shipments). rRevised (does not apply to shipments).

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

<sup>&</sup>lt;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.

<sup>&</sup>lt;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.

<sup>&</sup>lt;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.

#### Supplement 1.

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

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 1996 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 2 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, C20/97-1.

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

	Un	ited Sta	tes	١	Northeas	st		Midwest			South			West	
Year	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
1987	0.8	1.2	1.9	1.1	1.8	1.6	0.4	0.5	0.9	0.9	1.2	2.7	0.8	1.4	1.8
1988	0.8	1.3	1.6	1.1	2.2	1.3	0.4	0.4	0.6	0.8	1.2	2.2	0.7	1.4	1.5
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
Average relative standard errors (percent)	3	19	5	9	33	21	6	47	16	6	24	8	7	16	7

Table S1-2. Percentage Distribution of New Buildings Started in 1996 by Number of Months From Authorization and by Location and Type of Structure

[Percents may not add to 100 because of rounding]

	Un	ited Sta	tes	1	Northeas	st		Midwest			South			West	
Period	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	54	40	55	47	72	59	63	54	55	51	29	62	48	42
1 month	31 6	26 7	23 11	25 8	23 6	12	32 5	24 3	20 6	32 7	28 12	23 13	29 5	30 9	28 13
3 months	2 1 1 2	5 2 3 4	7 5 7 6	4 2 2 3	8 6 7 3	4 2 1 7	2 1 1	3 (Z) 1 4	8 1 5 6	2 1 1 2	5 (Z) 1 3	9 7 11 7	2 1 1	2 4 3 3	6 3 4 3

Z Less than 0.5 percent.

Table S1-3. Relative Standard Errors of Percentage Distribution of New Buildings Started in 1996 by Number of Months From Authorization and by Location and Type of Structure

		United States		Northeast		Midwest			South			West			
Period	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	2	7	6	3	12	5	3	12	11	3	15	15	3	11	7
1 month	2	16	6	6	21	23	6	42	21	3	27	8	4	19	7
2 months	4	20	8	8	60	27	10	45	21	7	30	14	8	36	5
3 months	6	30	12	10	49	25	18	65	40	8	55	14	15	79	17
4 months	9	37	12	24	54	38	27	100	52	13	100	16	14	33	14
5 or 6 months	11	31	13	18	54	56	28	44	22	17	100	18	28	37	14
7 months or more	10	33	15	23	97	30	25	66	32	13	45	24	19	37	18

### Supplement 2.

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

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 1996 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 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 2 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, C20/97-1.

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

			Reg	jion	Construction purpose			
Year	United States	Northeast	Midwest	South	West	Built for sale	Contractor built	Owner built
1987	6.2	7.6	5.9	5.7	6.4	5.6	5.1	10.3
1988	6.5	8.8	5.8	5.7	6.6	5.8	5.3	10.4
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
Average relative								
standard errors(percent).	2	4	3	3	3	2	2	5

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

	Puildings	Buildings with 5 units or more									
Year	Buildings with 2 to 4 units	Total	5 to 9 units	10 to 19 units	20 to 29 units	30 to 49 units	50 units or more				
1987	7.3	9.2	8.7	9.3	9.6	10.6	13.4				
1988	8.1	9.5	9.1	9.4	9.9	10.9	15.6				
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				
Average relative standard errors(percent)	4	1	2	1	2	4	7				

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

Year		Region								
Year	United States	Northeast	Midwest	South	West					
1987	9.2	10.9	7.9	8.6	9.7					
1988	9.5	11.6	8.0	8.8	10.1					
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					
Average relative standard errors(percent)	1	2	4	2	1					

Table S2-4. Percentage Distribution of New Buildings Completed in 1996 by Number of Months From Start and by Number of Units in the Building

[Percents may not add to 100 because of rounding]

		Puildings	Buildings with 5 units or more								
Period	Buildings with 1 unit	Buildings with 2 to 4 units	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 3 months. 4 months. 5 months. 6 months.	10 18 21 16 11	1 8 21 14 11	1 2 5 8 12	2 3 7 11 14	1 1 4 7 13	(Z) 1 2 4 8	(Z) (Z) 2 7 8	1 (Z) 13 14 2			
7 months. 8 months. 9 months. 10 months. 11 months. 12 months.	4 3 2	10 6 8 5 3 2	14 10 11 10 7 5	18 8 9 8 6 4	12 13 12 12 8 5	12 10 12 11 8 7	8 14 19 7 10 4	4 3 10 7 11 5			
13 to 18 months	3 1	7 1	11 2	7	10	21 4	18 2	22 6			
25 months or more	1	2	1	1	1	(Z)	1	3			

Z Less than 0.5 percent.

Table S2-5. Relative Standard Errors of Percentage Distribution of New Buildings Completed in 1996 by Number of Months From Start and by Number of Units in the Building

		Buildings	Buildings with 5 units or more								
Period	Buildings with 1 unit	with 2 to 4	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 3 months 4 months 5 months 6 months	5 5 2 3 3	67 24 13 21 18	36 25 9 10 7	43 33 14 11	55 26 12 13 12	11 34 19 24 14	11 16 62 79 18	20 100 51 15 19			
7 months. 8 months. 9 months. 10 months. 11 months. 12 months.	4 5 7 7 8 8	24 24 17 23 40 33	10 5 10 11 15	17 10 15 21 30 20	7 7 14 17 14 18	14 10 7 7 11	30 22 27 20 52 24	40 17 26 19 24 16			
13 to 18 months	7 8 13	20 61 36	6 17 7	12 37 11	9 25 26	8 15 100	23 15 18	14 24 88			