## March

**Reports** 

C20/00-3

Current Construction

and from start of construction to completion of private residential buildings.

This issue contains supplements on the total time from authorization of construction to start

**New Privately Owned Housing Units Started** 

Seasonally adjusted annual rate in thousands

**Housing Starts** 

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 2000 were at a seasonally adjusted annual rate of 1,604,000; this is 11 ( $\pm$ 6) percent below the revised February rate of 1,807,000 and 8 ( $\pm$ 7) percent below the March 1999 figure of 1,737,000.

Single-family housing starts in March 2000 were at a rate of 1,309,000; this is virtually unchanged (±6 percent) from the February figure of 1,307,000. The March rate for units in buildings with five units or more was 272,000. The March rate for units in buildings with two to four units was 23,000.

During the first 3 months of this year, 361,000 housing units were started compared with the 369,500 units for the same period in 1999. This is a decrease of 2 ( $\pm 4$ ) percent.

New privately owned housing construction was authorized in March in the 19,000 permit-issuing places at a seasonally adjusted annual rate of 1,579,000 units; this is 4  $(\pm 1)$  percent below the revised February rate of 1,653,000, and 5  $(\pm 1)$  percent below the March 1999 figure of 1,654,000.

Single-family authorizations in March 2000 were at a rate of 1,220,000; this is virtually unchanged ( $\pm 1$  percent) below the February figure of 1,223,000. Authorizations of units in buildings with five units or more were at a rate of 296,000 in March; this is 18 percent below the February figure of 362,000. The March rate of permit-authorized units in buildings with two to four units was 63,000.

During the first 3 months of this year, 363,200 housing units were authorized compared with the 373,700 units for the same period in 1999. This is a decrease of 3  $(\pm 1)$  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 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. The appendix to this report includes explanations of confidence intervals and sampling variability. On average, the preliminary seasonally adjusted estimates of total housing starts and building permits are revised about ±1 percent.

### **HISTORICAL DATA**

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

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)	00-1	99-10	99-7	99-4	99-1
private residential buildings (annual data)	00-3	99-3	98-3	97-3	96-3
Total time from authorization of construction to start for private residential buildings (annual data)	00-3	99-3	98-3	97-3	96-3
New privately owned housing units, by intended use and design at time of start (annual data)	00-2	99-2	98-2	97-2	96-2

Table 1. **New Privately Owned Housing Units Started** [Thousands of units. Detail may not add to total because of rounding]

				In structur	es with—							
P6	eriod	Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSAs <sup>1</sup>	Outside MSAs <sup>1</sup>	North- east	Midwest	South	West
ANNUAL DATA												
1991 1992 1993 1994 1995 1996 1997		1,192.7 1,013.9 1,199.7 1,287.6 1,457.0 1,354.1 1,476.8 1,474.0 1,616.9 1,666.5	894.8 840.4 1,029.9 1,125.7 1,198.4 1,076.2 1,160.9 1,133.7 1,271.4 1,334.9	16.1 15.5 12.4 11.1 14.8 14.3 16.4 18.1 15.7	21.4 20.1 18.3 18.3 20.2 19.4 28.8 26.4 26.9 18.5	260.4 137.9 139.0 132.6 223.5 244.1 270.8 295.8 302.9 299.7	946.9 789.2 931.5 1,031.9 1,183.1 1,106.4 1,211.4 1,221.3 1,349.9 1,404.5	245.7 224.7 268.2 255.8 273.9 247.6 265.5 252.7 267.0 261.9	131.3 112.9 126.7 126.5 138.2 117.7 132.1 136.8 148.5 153.7	253.2 233.0 287.8 297.7 328.9 290.1 321.5 303.6 330.5 356.4	479.3 414.1 496.9 561.8 639.1 615.0 661.9 670.3 743.0 760.3	328.9 254.0 288.3 301.7 350.8 331.3 361.4 363.3 394.9 396.1
MONTHLY DATA	<b>A</b>											
Not Seasonally	•	100.0	00.4	0.7	0.0	00.0	05.0	10.4	7.0	10.5	F7.0	00.0
Februa March . April May	y ry	108.0 112.2 149.3 146.5 155.6 152.4	82.1 89.1 122.9 118.8 130.4 127.9	0.7 0.7 1.4 1.8 1.1 1.2	2.0 0.8 1.4 1.2 1.1 1.8	23.3 21.6 23.6 24.8 23.0 21.5	95.6 97.4 124.9 122.0 131.3 124.9	12.4 14.8 24.5 24.5 24.3 27.5	7.9 9.6 12.1 12.1 14.7 16.0	13.5 16.5 29.2 32.6 35.7 38.1	57.3 62.1 73.1 64.9 66.9 63.9	29.2 24.1 34.9 36.9 38.3 34.4
August Septem Octobe Novem	nber r	155.2 155.0 143.3 145.4 127.9 115.7	123.4 119.7 112.5 115.8 102.1 90.2	1.2 1.2 0.9 1.4 0.9 0.9	2.6 1.6 2.6 1.1 1.2 1.2	28.0 32.5 27.4 27.0 23.7 23.4	130.2 131.3 119.1 123.8 105.1 99.1	25.0 23.7 24.2 21.6 22.7 16.6	17.3 16.5 12.3 12.3 12.5 10.6	31.3 33.5 34.5 37.5 30.0 23.8	66.6 68.0 62.8 64.9 54.5 55.1	39.9 37.0 33.7 30.7 30.9 26.1
Februa	y <sup>r</sup> ry <sup>r</sup>	105.2 121.6 134.2	80.5 89.5 112.9	1.0 1.0 1.3	0.7 1.5 0.6	23.0 29.6 19.3	91.2 106.3 113.9	14.1 15.3 20.2	8.1 10.2 12.1	15.9 23.0 24.6	55.4 58.2 65.3	25.8 30.2 32.1
Year to date:	1999	369.5 361.0	294.1 283.0	2.8 3.2	4.2 2.9	68.4 72.0	317.8 311.4	51.7 49.6	29.6 30.5	59.2 63.6	192.5 179.0	88.2 88.0
Seasonally Adju	isted Annual Rate											
Februa March . April	y	1,804 1,738 1,737 1,561 1,649 1,562	1,393 1,379 1,377 1,248 1,368 1,269	5 2 3 3 2 2	5 3 1 6	358 334 327 282 255 264	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	146 194 159 135 152 158	328 358 378 337 352 355	871 843 810 684 734 697	459 343 390 405 411 352
August Septem Octobe Novem	nber	1,704 1,657 1,628 1,636 1,663 1,769	1,348 1,285 1,290 1,343 1,344 1,441	4 3 3 2 2 3	1 8 6 5	316 341 300 267 294 298	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	171 171 135 129 150 159	320 337 365 371 389 407	768 762 740 764 709 807	445 387 388 372 415 396
2000: January Februa March <sup>p</sup>	y <sup>r</sup>	1,744 1,807 1,604	1,361 1,307 1,309	3 4 2	0	351 460 272	(NA) (NA) (NA)	(NA) (NA) (NA)	153 194 159	381 470 320	821 746 746	389 397 379
AVERAGE RELA ERRORS <sup>2</sup>	ATIVE STANDARD											
Monthly	(percent) (percent) (percent)	1 3 2	1 3 1	7 11 8	11 13 18	3 9 8	1 3 2	3 9 5	3 7 13	2 6 4	1 4 2	1 4 2

NA Not available.

Preliminary.

rRevised.

<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			l	Northeast			Midwest			South			West	
	Period			In stru wit						In stru with			In stru wit			In stru with			In stru wit	ictures h—
		Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSAs <sup>1</sup>	Outside MSAs <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
ANNUA	AL DATA																			
1996 1997 1998		1,332.5 1,425.6 1,441.1 1,612.3 1,640.2	997.3 1,069.5 1,062.4 1,187.6 1,231.8	32.2 33.6 34.9 33.2 32.0	31.5 32.2 33.6 36.0 34.4	271.5 290.3 310.3 355.5 342.0	1,116.8 1,200.0 1,220.2 1,377.9 1,409.9	215.8 225.6 220.9 234.4 230.3	124.2 136.9 141.9 159.4 161.5	104.5 108.8 111.2 124.1 125.2	19.7 28.1 30.7 35.3 36.4	296.6 317.8 299.8 327.2 337.0	220.5 236.6 220.0 247.8 257.6	76.1 81.3 79.8 79.4 79.4	583.2 623.4 635.9 724.5 745.5	430.3 468.5 464.2 521.9 548.0	152.9 155.0 171.7 202.6 197.5	328.5 347.4 363.5 401.2 396.2	241.9 255.6 267.1 293.8 301.1	86.5 91.8 96.5 107.4 95.1
	ILY DATA																			
Not Sea 1997:	asonally Adjusted 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
1997.	February March April May June	94.1 120.1 137.2 131.6 133.6	70.3 88.7 104.4 101.3 100.9	2.4 2.3 2.9 3.5 3.0 3.2	1.5 1.8 2.5 3.1 2.8 3.4	19.7 26.0 26.2 24.6 26.2	81.6 102.5 113.1 108.3 111.9	12.5 17.6 24.2 23.3 21.7	9.1 9.1 11.8 12.6 12.8 14.0	5.8 8.7 10.4 11.0 11.0	3.3 3.0 2.2 1.9 3.0	15.2 15.7 24.3 32.0 29.4 29.2	9.2 11.4 18.0 24.3 22.9 22.3	4.0 4.3 6.3 7.7 6.5 6.9	44.6 55.4 61.5 55.8 57.1	34.3 39.7 45.0 42.3 42.4	10.4 15.7 16.5 13.5 14.8	24.6 28.7 31.2 33.5 33.3	18.8 22.3 24.8 25.1 25.2	5.9 6.4 6.4 8.4 8.1
	July	133.7 126.0 134.4 135.5 100.4 106.4	99.8 91.8 95.6 97.5 72.5 73.9	3.3 2.5 3.0 3.7 2.3 2.8	3.3 2.9 3.2 3.9 2.2 2.9	27.2 28.7 32.7 30.4 23.3 26.8	113.0 105.9 113.8 114.5 85.8 92.3	20.7 20.1 20.6 21.0 14.6 14.1	13.5 12.9 12.4 12.5 10.6 10.7	11.1 9.8 10.1 10.7 8.1 8.0	2.4 3.1 2.3 1.8 2.5 2.7	27.8 28.3 28.8 29.5 21.3 20.3	21.6 20.0 20.7 20.7 14.8 14.1	6.2 8.3 8.2 8.8 6.5 6.2	58.7 53.4 57.4 58.0 44.0 46.5	41.8 38.9 40.0 41.4 32.0 32.9	16.9 14.4 17.5 16.6 12.1 13.6	33.7 31.4 35.7 35.5 24.5 28.9	25.3 23.1 24.8 24.8 17.7 18.9	8.5 8.4 10.9 10.7 6.8 10.0
1998:	January	96.2 107.4 140.9 146.3 138.2 153.4	70.1 78.1 105.1 113.6 107.3 115.8	2.0 2.3 2.8 2.7 2.5 3.2	2.0 2.6 3.3 2.7 2.9 4.3	22.1 24.4 29.9 27.3 25.5 30.1	84.6 93.5 121.0 123.3 116.4 129.7	11.6 13.9 20.0 23.0 21.8 23.7	9.7 8.9 12.1 13.2 13.3 16.0	7.0 7.2 10.2 11.4 11.2 12.8	2.7 1.8 1.9 1.7 2.1 3.2	14.7 19.7 26.8 31.0 30.7 31.6	10.9 14.3 20.4 25.2 24.4 25.2	3.8 5.4 6.4 5.8 6.3 6.4	46.3 51.2 68.4 63.6 62.5 65.0	34.4 37.5 47.7 48.0 45.9 48.6	12.0 13.7 20.7 15.6 16.5 16.4	25.4 27.5 33.6 38.5 31.8 40.8	17.8 19.1 26.8 29.0 25.8 29.2	7.6 8.4 6.9 9.5 5.9 11.6
	JulyAugustSeptemberOctoberNovemberDecember	149.3 144.7 141.7 149.8 119.9 124.5	111.2 104.4 102.5 103.8 86.6 89.0	3.3 3.1 2.9 3.0 2.4 3.1	3.2 3.0 3.4 3.7 2.3 2.6	31.7 34.1 32.9 39.3 28.6 29.8	126.1 122.8 120.8 126.8 104.1 108.8	23.2 21.9 20.9 23.1 15.8 15.7	15.4 14.3 14.7 15.7 13.4 12.7	11.9 11.1 11.0 11.1 9.8 9.5	3.5 3.2 3.7 4.6 3.6 3.2	29.7 28.9 30.3 32.4 24.9 26.5	23.4 21.8 22.1 23.6 18.9 17.6	6.3 7.1 8.1 8.8 6.0 8.9	66.1 67.1 62.2 65.8 51.2 55.1	47.7 46.5 44.0 44.0 37.2 40.6	18.5 20.6 18.2 21.9 14.1 14.5	38.0 34.4 34.7 35.9 30.3 30.2	28.2 25.1 25.4 25.1 20.7 21.3	9.8 9.4 9.2 10.7 9.5 8.8
1999:	January	105.3 113.3 152.1 149.1 141.7 165.6	73.7 85.8 117.7 118.3 114.1 125.7	2.2 2.2 2.9 2.9 2.7 3.4	2.3 2.4 3.1 3.3 2.3 3.2	27.1 22.9 28.4 24.6 22.6 33.2	93.7 99.5 130.5 125.8 120.0 140.4	11.6 13.8 21.6 23.3 21.7 25.2	9.0 9.5 14.0 15.1 14.2 18.0	6.6 7.6 10.4 12.4 12.3 12.9	2.3 1.9 3.6 2.7 2.0 5.2	13.3 18.6 31.5 33.7 32.8 33.6	10.3 14.6 23.9 27.0 25.1 26.8	3.1 4.0 7.6 6.6 7.7 6.8	55.9 58.6 69.8 65.8 59.3 71.0	37.6 43.1 53.9 50.8 48.7 52.3	18.3 15.5 15.8 15.0 10.6 18.7	27.1 26.6 36.7 34.6 35.3 43.0	19.2 20.5 29.4 28.1 28.1 33.8	7.8 6.1 7.4 6.5 7.3 9.2
	July August September October November December	145.5 147.4 133.0 133.1 121.1 117.1	112.4 110.3 100.9 95.4 88.2 82.8	2.5 2.6 3.1 2.7 2.5 2.3	2.7 3.3 2.6 3.0 3.1 2.9	27.8 31.2 26.4 32.0 27.3 29.1	124.4 125.6 112.5 113.8 103.8 103.7	21.1 21.8 20.5 19.3 17.4 13.4	14.6 14.9 12.9 12.3 13.1 11.8	12.0 11.7 10.1 9.6 9.3 8.6	2.6 3.2 2.8 2.7 3.8 3.2	29.5 32.2 31.0 30.0 28.0 21.0	24.1 24.6 23.5 22.7 19.6 15.2	5.4 7.6 7.5 7.4 8.5 5.7	65.5 66.7 56.7 60.6 53.1 54.5	48.4 48.5 43.2 40.9 39.3 37.2	17.2 18.2 13.5 19.7 13.8 17.3	35.9 33.6 32.4 30.2 27.0 29.8	27.9 25.5 24.2 22.2 20.1 21.7	7.9 8.1 8.3 8.0 6.9 8.1
2000:	January February <sup>r</sup> March <sup>p</sup>	104.8 115.1 143.9	76.7 85.9 114.1	1.8 2.5 2.8	1.8 2.2 2.8	24.6 24.5 24.3	92.4 100.4 123.7	12.4 14.7 20.2	10.5 9.1 13.8	6.6 6.7 10.7	3.8 2.5 3.2	16.4 20.4 31.4	12.4 14.9 23.7	3.9 5.5 7.7	50.4 56.5 62.7	38.1 43.9 52.3	12.3 12.6 10.4	27.6 29.1 36.0	19.5 20.5 27.4	8.1 8.6 8.6
Year to	date: 1999 <sup>2</sup> 2000 <sup>2</sup>	373.7 363.2	279.3 276.4	7.3 7.0	7.7 6.8	79.4 73.1	326.1 316.2	47.7 47.0	32.7 33.5	25.0 24.0	7.7 9.5	63.3 68.1	48.9 51.1	14.4 17.0	186.5 168.9	135.8 134.1	50.7 34.8	91.2 92.7	69.6 67.2	21.6 25.5

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]

				U	nited State	es				Northeast	i		Midwest			South			West	
	Period				ictures h—					In stru wit	ictures h—		In stru wit	ctures h—		In stru wit	ictures h—			uctures h—
		Total	1 unit	2 units	3 and 4 units	5 units or more	Inside MSAs <sup>1</sup>	Outside MSAs <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
MONTH	HLY DATA—Con.																			
	nally Adjusted al Rate																			
1997:	January February March April May June	1,382 1,445 1,436 1,421 1,414 1,402	1,046 1,070 1,031 1,054 1,046 1,057	6 7 6	64 65 66 70 65	272 310 339 297 303 278	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	160 173 153 129 132 141	121 116 114 105 107 111	39 57 39 24 25 30	295 301 300 312 289 301	215 216 218 228 216 222	80 85 82 84 73 79	590 609 647 646 618 624	458 459 446 466 456 467	132 150 201 180 162 157	337 362 336 334 375 336	252 279 253 255 267 257	85 83 83 79 108 79
	July	1,440 1,449 1,494 1,499 1,469 1,456	1,050 1,061 1,091 1,098 1,093 1,080	6 7 6	74 65 67 76 62 77	316 323 336 325 314 299	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	136 141 138 134 141 149	109 107 112 114 110 117	27 34 26 20 31 32	287 309 304 297 297 307	214 221 221 218 220 238	73 88 83 79 77 69	658 626 654 677 652 621	459 462 472 485 487 461	199 164 182 192 165 160	359 373 398 391 379 379	268 271 286 281 276 264	91 102 112 110 103 115
1998:	January February March April May June	1,578 1,661 1,606 1,529 1,549 1,531	1,165 1,200 1,162 1,155 1,174 1,143	7 7 5	88 77 72 57 64 73	345 384 372 317 311 315	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	176 171 151 140 142 151	134 143 126 119 114 121	42 28 25 21 28 30	341 376 318 306 318 307	259 270 234 240 245 233	82 106 84 66 73 74	662 706 750 674 713 680	486 502 510 498 525 505	176 204 240 176 188 175	399 408 387 409 376 393	286 285 292 298 290 284	113 123 95 111 86 109
	July	1,626 1,670 1,569 1,726 1,688 1,708	1,191 1,202 1,171 1,210 1,254 1,296	7 7 6	74 72 70 89 83 77	361 396 328 447 371 335	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	160 158 159 174 178 177	119 124 119 122 132 138	41 34 40 52 46 39	315 312 320 336 338 399	237 240 240 254 271 294	78 72 80 82 67 105	744 800 708 801 723 733	530 550 521 534 542 567	214 250 187 267 181 166	407 400 382 415 449 399	305 288 291 300 309 297	102 112 91 115 140 102
1999:	January February March April May June	1,778 1,738 1,654 1,572 1,591 1,641	1,279 1,306 1,242 1,214 1,243 1,241	7 6 6	79 72 69 67 69	420 360 343 291 289 336	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	169 181 163 162 155 167	133 151 123 128 128 121	36 30 40 34 27 46	324 352 356 338 338 330	257 275 264 256 253 250	67 77 92 82 85 80	833 810 744 692 692 736	564 575 552 532 554 544	269 235 192 160 138 192	452 395 391 380 406 408	325 305 303 298 308 326	127 90 88 82 98 82
	July	1,641 1,619 1,506 1,594 1,612 1,622	1,247 1,210 1,171 1,178 1,200 1,228	6	63 66 63 62 68 70	331 343 272 354 344 324	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA)	157 157 147 142 161 166	124 124 114 111 117 126	33 33 33 31 44 40	323 333 333 328 352 327	250 256 258 258 260 260	73 77 75 70 92 67	761 746 664 751 720 732	558 549 520 529 539 529	203 197 144 222 181 203	400 383 362 373 379 397	315 281 279 280 284 313	85 102 83 93 95 84
2000:	January February <sup>r</sup> March <sup>p</sup>	1,772 1,653 1,579	1,318 1,223 1,220	6	65 68 63	389 362 296	(NA) (NA) (NA)	(NA) (NA) (NA)	191 159 164	132 123 127	59 36 37	379 354 359	306 261 265	73 93 94	759 729 663	563 549 540	196 180 123	443 411 393	317 290 288	126 121 105
	GE RELATIVE DARD ERRORS <sup>3</sup>																			
Monthly	(percent) (percent) (date (percent)	(Z) 1 (Z)	(Z) (Z) (Z)	2 3 2	3 7 4	(Z) 1 (Z)	(Z) (Z) (Z)	2 3 3	1 2 2	1 2 2	4 3 2	1 1 1	1 1 1	2 3 4	(Z) 1 1	1 1 1	1 2 2	1 1 1	1 1 1	1 1 2

NA Not available.

Preliminary.

rRevised.

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

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

		United	States			North	neast			Mid	west			So	uth			W	'est	
Authorized, but not started		In str	uctures v	vith—		In str	uctures w	vith—		In str	uctures v	vith—		In str	uctures w	vith—		In st	ructures v	with—
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																				
16,000-Place Series																				
1980 1981 1982 1983 1984	173.6 145.5 167.8 178.0 192.5	70.1 60.1 66.9 68.9 66.2	15.3 10.7 11.6 13.0 10.2	88.2 74.7 89.3 96.1 116.1	26.0 23.3 19.4 21.9 23.2	12.3 11.5 9.4 12.6 10.8	1.2 0.9 1.0 1.1 1.2	12.6 10.8 9.0 8.2 11.2	17.5 10.0 10.4 12.2 14.0	6.8 5.0 4.5 5.2 5.1	2.9 1.7 1.7 1.8 1.5	7.8 3.2 4.2 5.1 7.5	88.5 77.5 100.3 104.2 109.4	32.9 29.8 38.5 33.6 34.5	6.5 4.9 5.9 6.8 4.8	49.1 42.8 55.9 63.8 70.1	41.6 34.7 37.7 39.8 45.8	18.1 13.8 14.5 17.4 15.7	4.8 3.1 2.9 3.3 2.7	18.7 17.9 20.2 19.0 27.4
17,000-Place Series	000.0	00.0	10.7	100.0	00.0	10.0	0.1	45.7	00.4	<b>5</b> 0	0.0	10.4	100.0	40.0		71.0	45.4	40.0	0.0	00.0
1985. 1986. 1987. 1988. 1989. 1990. 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 6.4 6.5 5.9 7.5 5.7 6.4 8.8 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. 1996. 1997. 1998.	142.2 126.4 111.1 137.1 138.9	80.1 67.5 63.6 79.5 79.3	4.5 4.8 3.7 3.1 3.9	57.6 54.2 43.8 54.5 55.7	18.3 16.0 11.3 16.0 15.7	13.5 9.0 7.1 10.2 9.0	0.5 0.6 0.4 0.5 0.6	4.3 6.4 3.8 5.3 6.1	18.7 16.6 14.1 18.2 16.5	12.8 10.6 9.2 11.8 11.4	1.4 1.7 1.3 1.1 1.2	4.5 4.2 3.6 5.3 3.9	71.6 68.1 58.7 75.9 79.3	36.7 32.3 32.0 41.4 40.5	1.3 1.3 1.2 0.8 1.2	33.6 34.4 25.5 33.7 37.5	33.5 25.8 26.9 27.1 27.4	17.1 15.5 15.2 16.2 18.4	1.2 1.2 0.8 0.7 1.0	15.2 9.2 10.8 10.2 8.1
END OF MONTH																				
1999: January	135.3 137.2 141.5 148.3 139.5 157.0 154.5 150.1 145.6	76.1 78.5 84.0 94.8 86.9 96.2 94.7 92.1 93.2	2.8 3.3 3.2 2.8 3.4 3.6 4.1 5.0 3.6	56.4 55.4 54.4 50.7 49.1 57.2 55.7 53.1 48.8	16.6 16.2 17.5 19.7 18.9 20.5 17.5 15.7	10.9 11.5 11.2 13.4 12.7 12.4 12.3 11.2	0.5 0.6 0.5 0.4 0.5 0.5 0.6	5.2 4.2 5.8 5.8 5.7 7.6 4.6 3.8 4.1	18.1 20.5 22.6 25.5 24.4 21.1 22.5 22.3 21.2	11.0 12.2 15.3 20.0 17.5 15.6 16.6 16.6	0.8 0.9 1.0 0.8 1.1 1.2 1.3 1.4	6.2 7.3 6.4 4.7 5.8 4.2 4.6 4.2 4.2	75.3 73.3 72.4 75.5 71.0 81.3 83.8 84.8 80.6	38.4 37.7 38.7 43.6 40.7 46.2 45.4 45.5 47.9	0.8 1.0 1.0 0.9 1.1 1.1 1.3 1.8	36.0 34.6 32.7 31.0 29.3 33.9 37.0 37.5 31.6	25.3 27.2 29.0 27.6 25.1 34.2 30.7 27.3 27.9	15.7 17.2 18.8 17.9 16.0 22.0 20.4 18.8 18.3	0.6 0.7 0.7 0.6 0.7 0.7 0.8 1.0	9.0 9.3 9.6 9.2 8.4 11.5 9.5 7.6 8.9
October	133.5 133.0 138.9	80.4 78.3 79.3	3.3 2.9 3.9	49.8 51.8 55.7	14.6 14.6 15.7	10.3 9.1 9.0	0.5 0.5 0.6	3.9 5.0 6.1	16.0 18.5 16.5	12.5 12.2 11.4	1.1 0.9 1.2	2.4 5.4 3.9	75.9 76.5 79.3	40.7 41.3 40.5	1.1 0.9 1.2	34.1 34.4 37.5	27.0 23.4 27.4	16.9 15.7 18.4	0.7 0.6 1.0	9.4 7.1 8.1
2000: January <sup>r</sup> February <sup>r</sup> March <sup>p</sup>	137.3 133.0 147.7	79.3 81.3 91.1	3.0 3.0 4.0	55.0 48.7 52.5	17.3 15.6 16.5	9.4 9.5 10.2	0.5 0.5 0.7	7.5 5.6 5.6	16.3 14.0 21.7	11.1 11.1 15.7	0.9 0.9 1.3	4.3 2.0 4.7	75.8 76.5 78.2	41.2 43.6 47.3	0.9 1.0 1.3	33.7 31.9 29.5	27.9 27.0 31.4	17.7 17.1 17.9	0.8 0.7 0.8	9.5 9.2 12.7
AVERAGE RELATIVE STANDARD ERRORS <sup>1</sup> End of period . (percent)	3	4	8	5	13	20	19	4	8	8	12	25	4	4	15	7	6	8	15	9

Preliminary. Revised

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.

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

## 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]

		Ur	nited Stat	es	Ins	ide MSA	NS <sup>1</sup>	Out	tside MS	As <sup>1</sup>	ı	Northeas	t		Midwest			South			West	
	Period		In stru wit	ictures h—		In stru with	ictures h—		In stru witl	ictures h—		In stru wit	ictures h—		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
ANNUA	AL DATA																					
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1995 1996 1997		1,292 1,084 1,062 1,703 1,750 1,742 1,805 1,620 1,488 1,376 1,193 1,014 1,288 1,457 1,354 1,477 1,477 1,474 1,616	852 705 663 1,068 1,084 1,072 1,179 1,146 1,003 895 840 1,030 1,126 1,198 1,076 1,161 1,161 1,134 1,271	331 288 320 522 544 576 542 409 348 318 220 133 224 241 221 296 303 300	914 760 785 1,351 1,415 1,446 1,372 1,28 947 789 932 1,183 1,106 1,211 1,221 1,350 1,405	563 458 452 795 830 882 970 934 874 798 685 648 793 897 958 861 923 1,036	271 236 274 464 491 535 508 385 3289 233 117 117 111 200 221 267 280	379 324 277 352 335 248 259 248 246 225 268 274 248 256 274 248 256 256 253 265	289 247 211 272 254 190 212 205 210 193 237 229 241 215 225 211 235	59 52 46 58 53 41 24 25 29 27 21 22 29 23 23 29 29 29	125 117 117 168 204 259 294 269 235 178 131 113 127 126 138 118 132 137 148	87 84 79 123 158 182 228 204 181 132 104 99 112 116 112 111 111 122 129	30 25 31 35 35 55 50 42 37 21 8 11 12 12 15 21 21	218 165 149 218 243 240 296 298 274 266 253 233 288 298 329 290 321 304 336	142 110 99 153 167 148 203 194 190 193 191 236 251 268 234 238 273	56 40 38 48 60 77 81 662 50 31 42 35 46 45 48 48 49	643 562 591 866 782 733 634 575 536 479 414 497 562 639 615 662 670 743 760	428 363 357 528 504 485 443 409 371 353 438 498 522 485 524 507 574	165 153 189 317 274 2201 201 129 115 109 99 51 55 107 119 125 151 155	306 240 205 382 436 468 483 420 404 396 329 254 288 302 351 361 363 395	196 148 127 234 230 239 261 255 264 272 226 197 2444 261 278 303 314	80 69 61 121 175 204 200 148 125 108 91 47 36 67 79 76 83 87
	ERLY DATA	,,,,,,,	,,,,,,		,,,,,,,	1,100																
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 2nd quarter 3rd quarter 4th quarter	297 419 400 357	238 325 315 257	51 83 75 86	255 342 328 296	202 260 252 209	47 74 68 78	42 77 72 62	36 65 62 48	4 9 7 8	26 36 40 35	20 31 33 28	5 5 6 6	49 92 88 75	40 74 72 52	6 14 12 16	143 190 177 161	115 143 134 115	26 43 39 43	80 101 96 87	63 77 75 62	15 21 18 22
1998:	1st quarter 2nd quarter 3rd quarter 4th quarter	325 448 445 399	258 360 348 305	57 74 86 86	279 366 369 336	219 287 281 250	52 68 80 79	46 82 76 63	39 73 67 55	5 6 7 6	28 40 41 39	22 34 35 31	5 4 5 7	55 97 92 86	45 83 76 68	7 9 13 15	157 200 201 185	125 158 153 138	29 38 44 44	84 111 111 89	66 85 84 68	16 23 24 20
1999:	1st quarter 2nd quarter 3rd quarter 4th quarter	370 455 453 389	294 377 356 308	68 69 88 74	318 378 381 328	248 307 291 254	64 64 82 69	52 76 73 61	46 70 64 55	4 5 6 5	30 43 46 35	24 38 36 31	5 4 8 4	59 106 99 91	52 90 81 74	5 14 14 15	193 196 197 175	149 159 152 136	41 34 42 36	88 110 111 88	69 91 86 67	17 17 23 19
2000:	1st quarter <sup>p</sup>	361	283	72	311	240	66	50	43	5	30	22	7	64	51	11	179	140	37	88	70	17
	GE RELATIVE DARD ERRORS <sup>3</sup>																					
	(percent) ly (percent)	1 1	1 1	5 5	1	1 1	5 5	4 6	5 6	13 22	6 3	3 4	36 8	3 4	3 4	10 18	2 2	2 2	6 6	1 2	1 1	3 6

PPreliminary.

<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. Seasonal Indexes Used to Adjust Housing Units Started

				In structui	res with—				All	units	
Period	United States		1 u	ınit							
	implicit index <sup>1</sup>	North- east	Midwest	South	West	2 to 4 units	5 units or more	North- east	Midwest	South	West
1999											
December	78.5	83.8	69.0	76.2	75.5	77.5	94.3	80.1	70.6	82.8	79.5
2000											
January <sup>r</sup> February <sup>r</sup> March <sup>p</sup>	72.4 80.8 100.4	57.3 63.8 96.0	50.5 64.9 91.7	79.2 94.7 108.6	80.1 84.1 107.5	63.3 77.4 97.9	78.7 77.2 85.4	63.2 62.0 91.5	49.6 57.4 92.0	80.4 91.9 104.6	78.8 89.5 101.4

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

Table 6. 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
1999											
December	86.6	81.8	70.2	84.5	83.4	90.7	107.6	85.8	77.4	90.1	90.9
2000											
January February <sup>r</sup> March <sup>p</sup>	70.9 83.5 109.3	60.1 64.9 100.9	48.7 68.7 107.6	81.2 95.9 116.2	73.8 84.7 114.4	67.0 81.7 104.8	75.7 81.4 98.5	65.6 68.3 102.5	51.7 68.9 106.0	79.7 92.3 114.5	74.7 84.4 111.0

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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.

# 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 U.S. Census Bureau's 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 1999 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, C20/00-1.

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	1	Northeas	it		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
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
1999	0.7	1.1	1.8	0.8	1.6	1.1	0.5	0.5	1.4	0.8	0.9	2.3	0.5	1.1	1.3
Average relative standard errors (percent)	3	18	5	17	7	20	9	(A)	21	4	11	7	7	15	6

A Relative standard error of 100 percent or more. The estimate should be used with caution because a high standard error indicates lack of precision in the estimate.

Table S1-2. Percentage Distribution of New Buildings Started in 1999 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	Vortheas	t		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	55 33	48 28	32 28	54 30	36 29	40 44	59 32	66 25	45 27	50 35	48 29	21 25	60 30	46 28	41 33
2 months	7	11	14	8	10	8	5	3	8	8	18	19	6	12	11
3 months	2	6	7	3	12	4	1	2	7	2	1	8	2	8	6
4 months	1	2	8	2	4	1	1	1	3	1	2	12	1	2	4
5 or 6 months 7 months or more	1 1	3 2	6 4	1	5 3	2 2	(Z) (Z)	2 (Z)	4 5	1	3 1	10 5	1 (Z)	1	3 2

Z Less than 0.5 percent.

Table S1-3. Relative Standard Errors of Percentage Distribution of New Buildings Started in 1999 by Number of Months From Authorization and by Location and Type of Structure

	Un	ited Sta	tes	1	Vortheas	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	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 error indicates lack of precision in the estimate.

X Not applicable.

# 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 U.S. Census Bureau's 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 1999 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 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, C20/00-1.

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		Con	struction pur	pose
Year	United States	Northeast	Midwest	South	West	Built for sale	Contractor built	Owner built
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
1999	6.2	7.1	7.0	5.7	6.3	5.6	6.4	9.6
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	Buildings with 5 units or more						
	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	
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	
1999	9.0	10.1	9.3	10.1	10.9	11.1	13.5	
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

Voor		Region							
Year	United States	Northeast	Midwest	South	West				
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				
1999	10.1	11.4	9.1	10.0	11.0				
Average relative standard errors(percent)	2	10	7	3	2				

Table S2-4. Percentage Distribution of New Buildings Completed in 1999 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 2 to 4 units	Buildings with 5 units or more						
	Buildings with 1 unit		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.	6 14 19 17 13	(Z) 6 9 11 11	(Z) 1 3 5 10	(Z) 2 4 5 15	(Z) 2 2 6 6	(Z) (Z) 1 3 7	(Z) (Z) 6 2 2	(Z) (Z) (Z) 2 2	
7 months. 8 months. 9 months. 10 months. 11 months. 12 months.	8 6 4 3 2 1	9 9 9 4 14 4	9 9 11 13 10 8	11 9 10 11 9 7	8 9 12 17 10 6	7 9 10 12 10 11	6 7 11 11 14 9	2 2 12 5 5 10	
13 to 18 months	4	10 1	20 2	15 1	19 2	27 2	23 5	51 7	

Z Less than 0.5 percent.

Table S2-5. Relative Standard Errors of Percentage Distribution of New Buildings Completed in 1999 by Number of Months From Start and by Number of Units in the Building

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

A Relative standard error of 100 percent or more. The estimate should be used with caution because a high standard error indicates lack of precision in the estimate.

X Not applicable.