

# Housing Starts

May 1996



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

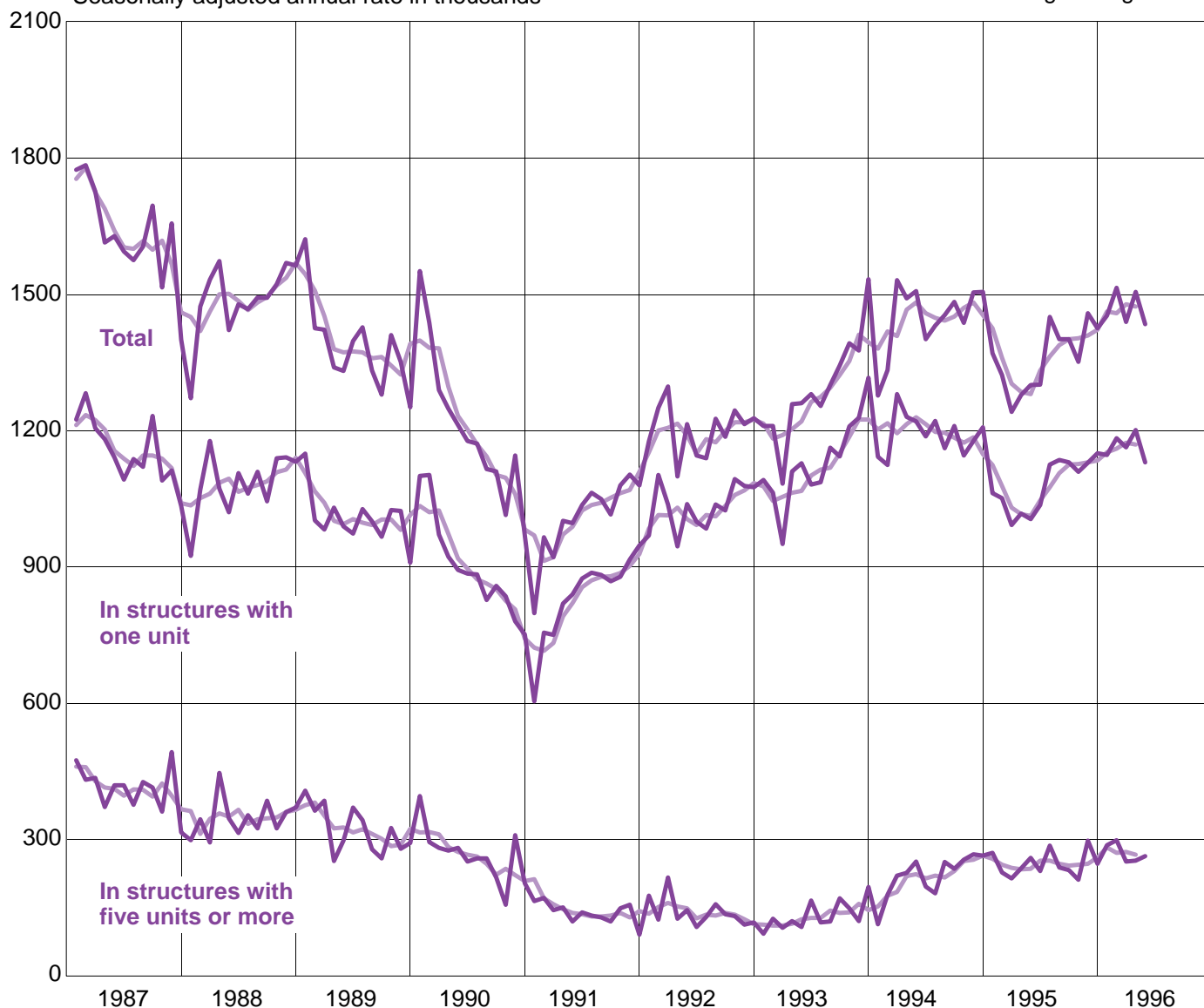
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 Issued June 1996

Seasonally adjusted statistics for building permits, January 1994 through April 1996, and unadjusted statistics for January through December 1995 have been revised (see table 2).  
 The appendix to this report (beginning on page A-1) includes information on survey definitions, sample design, data compilation, seasonal adjustment, and the reliability of the data.

## 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. Bureau of the Census, Housing Starts.

Questions regarding these data may be directed to Erica Filipek, Construction Starts Branch, Telephone 301-457-4703.

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## HOUSING STARTS AND BUILDING PERMITS

Privately owned housing starts in May were at a seasonally adjusted annual rate of 1,434,000. This is 5 ( $\pm 6$ ) percent below the revised April rate of 1,505,000, but 10 ( $\pm 6$ ) percent above the May 1995 figure of 1,300,000.

Single-family housing starts in May 1996 were at a rate of 1,130,000; this is 6 ( $\pm 5$ ) percent below the April figure of 1,201,000. The May rate for units in buildings with five units or more was 263,000. The May rate for units in buildings with two to four units was 41,000.

During the first 5 months of this year, 587,200 housing units were started compared with 517,200 units for the same period in 1995. This is an increase of 14 ( $\pm 2$ ) percent.

New privately owned housing construction was authorized in May in the 19,000 permit-issuing places at a seasonally adjusted annual rate of 1,431,000 units; this is 2 ( $\pm 1$ ) percent below the revised April rate of 1,459,000, but 14 ( $\pm 1$ ) percent above the revised May 1995 rate of 1,258,000.

Single-family authorizations in May 1996 were at a rate of 1,093,000; this is 2 ( $\pm 2$ ) percent below the April figure of 1,115,000. Authorizations of units in buildings with five units or more were at a rate of 273,000. The May rate of permit-authorized units in buildings with two to four units was 65,000.

During the first 5 months of this year, 580,300 housing units were authorized by permits in the 19,000 places compared with 502,500 units for the same period in 1995. This is an increase of 15 ( $\pm 1$ ) 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 ( $\pm 3$ ) 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. 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  $\pm 1$  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 Construction Starts 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 |      |       |      |      |
|--|------------|------|-------|------|------|
|  |            |      |       |      |      |
| New privately owned housing units started, by purpose of construction (quarterly and annual data).....       | 96-4       | 96-1 | 95-10 | 95-7 | 95-4 |
| Total time from start of construction to completion of private residential buildings (annual data) .....     | 96-3       | 95-3 | 94-3  | 93-3 | 92-3 |
| Total time from authorization of construction to start for private residential buildings (annual data) ..... | 96-3       | 95-3 | 94-3  | 93-3 | 92-3 |
| New privately owned housing units, by intended use and design at time of start (annual data) .....           | 96-2       | 95-2 | 94-2  | 93-2 | 92-2 |
| New mobile homes (quarterly and annual data).....  | 96-4       | 96-1 | 95-9  | 95-6 | 95-5 |

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 MSA's <sup>1</sup> | Outside MSA's <sup>1</sup> | North-east | Midwest | South | West  |
|---|-----------|---------------------|---------|---------------|-----------------|---------------------------|----------------------------|------------|---------|-------|-------|
|   |           | 1 unit              | 2 units | 3 and 4 units | 5 units or more |                           |                            |            |         |       |       |
| <b>ANNUAL DATA</b>                                  |           |                     |         |               |                 |                           |                            |            |         |       |       |
| 1986  | 1,805.4   | 1,179.4             | 36.1    | 47.9          | 542.0           | 1,546.3                   | 259.1                      | 293.5      | 295.8   | 733.1 | 483.0 |
| 1987  | 1,620.5   | 1,146.4             | 27.8    | 37.5          | 408.7           | 1,372.2                   | 248.2                      | 269.0      | 297.9   | 633.9 | 419.8 |
| 1988  | 1,488.1   | 1,081.3             | 23.4    | 35.4          | 348.0           | 1,243.0                   | 245.1                      | 235.3      | 274.0   | 574.9 | 403.9 |
| 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 |
| <b>MONTHLY DATA</b>                                 |           |                     |         |               |                 |                           |                            |            |         |       |       |
| <b>Not Seasonally Adjusted</b>                      |           |                     |         |               |                 |                           |                            |            |         |       |       |
| 1995: January                                       | 84.5      | 63.6                | 0.8     | 1.5           | 18.7            | 71.9                      | 12.6                       | 6.3        | 11.9    | 44.1  | 22.2  |
| February  | 81.6      | 65.3                | 1.4     | 1.0           | 13.8            | 69.0                      | 12.6                       | 5.9        | 12.7    | 40.2  | 22.9  |
| March   | 103.8     | 85.3                | 1.4     | 1.8           | 15.3            | 85.3                      | 18.5                       | 9.5        | 20.7    | 49.3  | 24.2  |
| April   | 116.9     | 93.9                | 1.1     | 1.1           | 20.8            | 94.0                      | 22.9                       | 9.6        | 25.9    | 53.5  | 27.9  |
| May   | 130.5     | 102.3               | 1.3     | 1.8           | 25.0            | 106.7                     | 23.7                       | 13.1       | 27.7    | 56.5  | 33.2  |
| June  | 123.4     | 100.5               | 1.6     | 1.9           | 19.4            | 96.9                      | 26.5                       | 13.1       | 31.0    | 49.5  | 29.9  |
| July  | 129.1     | 102.0               | 1.8     | 1.9           | 23.4            | 103.7                     | 25.4                       | 10.6       | 26.6    | 61.9  | 30.0  |
| August  | 135.8     | 108.5               | 0.6     | 2.1           | 24.6            | 109.9                     | 25.9                       | 12.0       | 33.7    | 56.7  | 33.4  |
| September   | 122.4     | 97.7                | 1.7     | 1.7           | 21.3            | 100.6                     | 21.7                       | 10.4       | 28.6    | 51.7  | 31.7  |
| October   | 126.2     | 101.5               | 0.8     | 1.6           | 22.2            | 101.6                     | 24.5                       | 12.1       | 29.6    | 53.6  | 30.9  |
| November  | 107.2     | 82.0                | 1.2     | 1.6           | 22.4            | 88.0                      | 19.2                       | 8.6        | 24.7    | 51.6  | 22.3  |
| December  | 92.8      | 73.7                | 0.5     | 1.3           | 17.2            | 78.8                      | 13.9                       | 6.5        | 17.1    | 46.3  | 22.8  |
| 1996: January                                       | 90.7      | 68.9                | 0.3     | 0.8           | 20.6            | 77.5                      | 13.1                       | 5.0        | 14.7    | 43.8  | 27.2  |
| February  | 95.9      | 74.2                | 0.9     | 1.1           | 19.7            | 83.0                      | 13.0                       | 6.1        | 13.8    | 46.9  | 29.0  |
| March <sup>f</sup>                                  | 116.0     | 96.9                | 1.0     | 1.0           | 17.1            | 92.9                      | 23.1                       | 10.0       | 24.0    | 54.5  | 27.4  |
| April <sup>f</sup>                                  | 146.3     | 117.6               | 1.9     | 3.4           | 23.4            | 120.4                     | 25.9                       | 13.2       | 31.8    | 63.9  | 37.4  |
| May <sup>p</sup>                                    | 138.3     | 109.9               | 1.6     | 2.1           | 24.7            | 113.0                     | 25.4                       | 11.9       | 32.1    | 63.0  | 31.3  |
| Year to date: 1995                                  | 517.2     | 410.3               | 6.0     | 7.2           | 93.6            | 426.8                     | 90.4                       | 44.3       | 98.8    | 243.7 | 130.4 |
| 1996  | 587.2     | 467.5               | 5.7     | 8.5           | 105.5           | 486.8                     | 100.4                      | 46.2       | 116.4   | 272.2 | 152.4 |
| <b>Seasonally Adjusted Annual Rate</b>              |           |                     |         |               |                 |                           |                            |            |         |       |       |
| 1995: January                                       | 1,370     | 1,062               | 38      |               | 270             | (NA)                      | (NA)                       | 117        | 284     | 629   | 340   |
| February  | 1,322     | 1,051               | 44      |               | 227             | (NA)                      | (NA)                       | 132        | 280     | 562   | 348   |
| March   | 1,241     | 992                 | 35      |               | 214             | (NA)                      | (NA)                       | 137        | 275     | 553   | 276   |
| April   | 1,278     | 1,017               | 25      |               | 236             | (NA)                      | (NA)                       | 108        | 276     | 577   | 317   |
| May   | 1,300     | 1,005               | 36      |               | 259             | (NA)                      | (NA)                       | 129        | 256     | 576   | 339   |
| June  | 1,301     | 1,036               | 35      |               | 230             | (NA)                      | (NA)                       | 124        | 289     | 567   | 321   |
| July  | 1,450     | 1,125               | 39      |               | 286             | (NA)                      | (NA)                       | 115        | 290     | 713   | 332   |
| August  | 1,401     | 1,135               | 28      |               | 238             | (NA)                      | (NA)                       | 119        | 320     | 626   | 336   |
| September   | 1,401     | 1,130               | 39      |               | 232             | (NA)                      | (NA)                       | 116        | 308     | 616   | 361   |
| October   | 1,351     | 1,109               | 31      |               | 211             | (NA)                      | (NA)                       | 120        | 278     | 606   | 347   |
| November  | 1,458     | 1,129               | 32      |               | 297             | (NA)                      | (NA)                       | 103        | 318     | 708   | 329   |
| December  | 1,425     | 1,150               | 29      |               | 246             | (NA)                      | (NA)                       | 93         | 305     | 679   | 348   |
| 1996: January                                       | 1,453     | 1,146               | 20      |               | 287             | (NA)                      | (NA)                       | 99         | 333     | 625   | 396   |
| February  | 1,514     | 1,183               | 33      |               | 298             | (NA)                      | (NA)                       | 130        | 317     | 648   | 419   |
| March <sup>f</sup>                                  | 1,439     | 1,163               | 25      |               | 251             | (NA)                      | (NA)                       | 139        | 325     | 634   | 341   |
| April <sup>f</sup>                                  | 1,505     | 1,201               | 51      |               | 253             | (NA)                      | (NA)                       | 136        | 323     | 653   | 393   |
| May <sup>p</sup>                                    | 1,434     | 1,130               | 41      |               | 263             | (NA)                      | (NA)                       | 124        | 312     | 659   | 339   |
| <b>AVERAGE RELATIVE STANDARD ERRORS<sup>2</sup></b> |           |                     |         |               |                 |                           |                            |            |         |       |       |
| Annual  | (percent) | 1                   | 1       | 10            | 5               | 1                         | 3                          | 1          | 2       | 2     | 1     |
| Monthly   | (percent) | 3                   | 3       | 14            | 11              | 9                         | 7                          | 7          | 6       | 4     | 6     |
| Year to date  | (percent) | 1                   | 1       | 8             | 7               | 3                         | 3                          | 3          | 2       | 2     | 1     |

NA Not available. <sup>p</sup>Preliminary. <sup>r</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 MSA's <sup>1</sup> | Outside MSA's <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>17,000-Place Series</b>     |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| 1991                           | 948.8         | 753.5               | 22.0    | 21.1          | 152.1           | 766.8                     | 182.0                      | 109.8     | 91.8                | 18.0            | 215.4   | 168.1               | 47.3            | 375.7 | 308.4               | 67.2            | 247.9 | 185.2               | 62.7            |
| 1992                           | 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                           | 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                           | 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            |
| <b>19,000-Place Series</b>     |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| 1995 <sup>f</sup>              | 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            |
| <b>MONTHLY DATA</b>            |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| <b>Not Seasonally Adjusted</b> |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| 1994:                          |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| January                        | 80.7          | 63.4                | 1.8     | 2.0           | 13.4            | 68.6                      | 12.1                       | 5.0       | 4.5                 | 0.5             | 12.2    | 9.6                 | 2.6             | 40.6  | 31.7                | 8.9             | 22.8  | 17.6                | 5.2             |
| February                       | 81.7          | 69.2                | 1.5     | 2.1           | 8.9             | 70.0                      | 11.7                       | 5.3       | 4.8                 | 0.6             | 13.9    | 11.6                | 2.2             | 40.0  | 34.2                | 5.9             | 22.5  | 18.6                | 3.9             |
| March                          | 126.4         | 104.0               | 2.9     | 2.7           | 16.8            | 106.8                     | 19.5                       | 10.3      | 8.8                 | 1.5             | 27.1    | 22.6                | 4.6             | 56.4  | 46.0                | 10.4            | 32.5  | 26.7                | 5.9             |
| April                          | 127.6         | 102.0               | 2.9     | 2.7           | 20.0            | 105.8                     | 21.8                       | 12.6      | 11.0                | 1.5             | 29.6    | 24.2                | 5.3             | 54.4  | 42.2                | 12.2            | 31.1  | 24.5                | 6.6             |
| May                            | 131.4         | 107.7               | 3.0     | 3.0           | 17.8            | 107.9                     | 23.4                       | 14.3      | 12.8                | 1.5             | 32.8    | 25.7                | 7.1             | 52.9  | 43.2                | 9.7             | 31.4  | 25.9                | 5.4             |
| June                           | 138.8         | 109.2               | 3.0     | 3.0           | 23.5            | 114.8                     | 24.0                       | 15.6      | 13.3                | 2.3             | 31.6    | 25.4                | 6.2             | 54.6  | 43.4                | 11.2            | 37.0  | 27.1                | 9.9             |
| July                           | 114.8         | 90.9                | 2.4     | 2.4           | 19.1            | 94.4                      | 20.4                       | 14.7      | 12.8                | 2.0             | 27.3    | 21.2                | 6.0             | 46.2  | 35.9                | 10.3            | 26.6  | 21.0                | 5.6             |
| August                         | 131.5         | 100.9               | 2.9     | 2.8           | 24.9            | 108.9                     | 22.7                       | 14.2      | 11.9                | 2.3             | 30.7    | 22.8                | 8.0             | 54.1  | 42.1                | 12.0            | 32.5  | 24.2                | 8.3             |
| September                      | 127.2         | 91.5                | 2.7     | 2.6           | 30.3            | 106.5                     | 20.7                       | 12.3      | 10.5                | 1.7             | 28.3    | 20.8                | 7.5             | 54.3  | 38.2                | 16.2            | 32.2  | 22.0                | 10.2            |
| October                        | 117.0         | 85.9                | 3.1     | 3.1           | 24.9            | 96.4                      | 20.5                       | 11.9      | 10.2                | 1.7             | 29.9    | 20.1                | 9.8             | 46.0  | 34.3                | 11.8            | 29.2  | 21.3                | 7.9             |
| November                       | 100.5         | 74.8                | 3.1     | 2.3           | 20.3            | 85.0                      | 15.5                       | 11.5      | 9.8                 | 1.7             | 23.0    | 16.8                | 6.2             | 43.4  | 31.0                | 12.4            | 22.6  | 17.2                | 5.4             |
| December                       | 94.2          | 68.9                | 2.1     | 2.1           | 21.0            | 78.9                      | 15.3                       | 10.8      | 8.7                 | 2.1             | 18.8    | 12.8                | 6.0             | 42.6  | 30.9                | 11.6            | 22.0  | 16.5                | 5.5             |
| 1995: <sup>f</sup>             |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| January                        | 78.0          | 58.2                | 1.8     | 2.0           | 16.1            | 67.3                      | 10.7                       | 7.4       | 6.2                 | 1.2             | 12.3    | 8.6                 | 3.7             | 40.1  | 29.1                | 11.0            | 18.3  | 14.3                | 4.0             |
| February                       | 80.4          | 59.8                | 2.0     | 1.3           | 17.3            | 69.4                      | 11.1                       | 5.6       | 4.7                 | 0.9             | 13.7    | 10.4                | 3.3             | 38.7  | 28.9                | 9.8             | 22.5  | 15.8                | 6.6             |
| March                          | 111.5         | 85.1                | 3.0     | 2.9           | 20.5            | 93.6                      | 17.9                       | 10.5      | 8.8                 | 1.7             | 23.8    | 18.5                | 5.3             | 52.7  | 39.1                | 13.6            | 24.5  | 18.8                | 5.8             |
| April                          | 109.7         | 83.1                | 2.8     | 2.5           | 21.3            | 90.5                      | 19.3                       | 11.4      | 9.5                 | 1.9             | 25.2    | 19.4                | 5.8             | 46.6  | 34.9                | 11.7            | 26.5  | 19.3                | 7.2             |
| May                            | 122.8         | 95.9                | 3.3     | 2.6           | 21.1            | 101.4                     | 21.4                       | 12.4      | 11.0                | 1.4             | 29.3    | 22.7                | 6.6             | 51.0  | 39.1                | 11.9            | 30.1  | 23.1                | 7.0             |
| June                           | 129.3         | 97.4                | 3.2     | 3.4           | 25.3            | 106.6                     | 22.8                       | 12.4      | 10.6                | 1.9             | 29.7    | 23.1                | 6.6             | 53.3  | 39.7                | 13.7            | 33.9  | 24.1                | 9.8             |
| July                           | 115.6         | 88.3                | 2.3     | 2.4           | 22.5            | 95.2                      | 20.4                       | 10.7      | 9.4                 | 1.2             | 27.3    | 20.9                | 6.4             | 48.4  | 36.9                | 11.6            | 29.2  | 21.1                | 8.2             |
| August                         | 133.5         | 101.4               | 3.1     | 3.0           | 26.1            | 111.4                     | 22.1                       | 12.3      | 10.6                | 1.7             | 31.9    | 23.5                | 8.3             | 55.9  | 42.1                | 13.8            | 33.5  | 25.2                | 8.3             |
| September                      | 124.1         | 90.1                | 3.0     | 3.0           | 28.1            | 104.1                     | 20.0                       | 11.2      | 9.4                 | 1.8             | 28.9    | 20.5                | 8.4             | 55.0  | 39.4                | 15.5            | 29.1  | 20.8                | 8.3             |
| October                        | 122.2         | 90.8                | 3.1     | 3.3           | 25.0            | 101.4                     | 20.8                       | 11.9      | 9.8                 | 2.1             | 31.9    | 22.1                | 9.8             | 51.5  | 37.7                | 13.7            | 27.0  | 21.2                | 5.8             |
| November                       | 107.8         | 78.4                | 2.9     | 3.1           | 23.5            | 90.9                      | 17.0                       | 10.5      | 8.0                 | 2.5             | 24.9    | 18.2                | 6.7             | 46.3  | 33.3                | 13.0            | 26.2  | 18.9                | 7.3             |
| December                       | 97.4          | 68.8                | 1.9     | 2.0           | 24.7            | 85.0                      | 12.4                       | 8.0       | 6.6                 | 1.4             | 17.8    | 12.5                | 5.2             | 43.8  | 30.1                | 13.7            | 27.8  | 19.5                | 8.4             |
| 1996:                          |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| January                        | 87.3          | 65.5                | 2.1     | 1.9           | 17.8            | 75.8                      | 11.4                       | 5.5       | 4.4                 | 1.1             | 14.0    | 10.1                | 3.9             | 44.2  | 33.7                | 10.4            | 23.5  | 17.2                | 6.3             |
| February                       | 94.9          | 73.6                | 2.1     | 1.8           | 17.4            | 82.4                      | 12.5                       | 6.0       | 5.3                 | 0.7             | 16.8    | 13.5                | 3.3             | 46.0  | 37.0                | 9.0             | 26.1  | 17.9                | 8.2             |
| March                          | 119.9         | 95.1                | 2.6     | 2.4           | 19.6            | 100.1                     | 19.8                       | 10.5      | 8.4                 | 2.1             | 26.4    | 20.0                | 6.4             | 51.6  | 43.3                | 8.3             | 31.3  | 23.4                | 8.0             |
| April <sup>f</sup>             | 139.4         | 109.4               | 3.7     | 3.4           | 23.0            | 114.7                     | 24.7                       | 12.9      | 10.6                | 2.3             | 34.0    | 26.4                | 7.6             | 60.3  | 47.2                | 13.1            | 32.2  | 25.2                | 6.9             |
| May <sup>p</sup>               | 138.3         | 109.1               | 3.0     | 3.2           | 23.0            | 113.8                     | 24.5                       | 14.0      | 11.7                | 2.3             | 31.9    | 26.1                | 5.7             | 61.3  | 46.1                | 15.1            | 31.1  | 25.1                | 6.0             |
| Year to date:                  |               |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| 1995                           | 502.5         | 382.2               | 12.8    | 11.3          | 96.2            | 422.1                     | 80.4                       | 47.3      | 40.2                | 7.1             | 104.3   | 79.6                | 24.7            | 229.0 | 171.1               | 58.0            | 121.8 | 91.2                | 30.5            |
| 1996 <sup>2</sup>              | 580.3         | 453.5               | 13.4    | 12.5          | 100.9           | 487.6                     | 92.7                       | 49.2      | 40.8                | 8.4             | 122.7   | 96.0                | 26.7            | 263.7 | 207.7               | 56.0            | 144.7 | 108.9               | 35.8            |

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 MSA's <sup>1</sup> | Outside MSA's <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>              |                       |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| 1994: <sup>f</sup>                                  | January               | 1,390               | 1,112   | 68            | 210             | (NA)                      | (NA)                       | 102       | 99                  | 3               | 298     | 246                 | 52              | 599   | 472                 | 127             | 391   | 295                 | 96              |
|   | February              | 1,269               | 1,065   | 56            | 148             | (NA)                      | (NA)                       | 112       | 98                  | 14              | 278     | 227                 | 51              | 545   | 466                 | 79              | 334   | 274                 | 60              |
|   | March                 | 1,342               | 1,078   | 61            | 203             | (NA)                      | (NA)                       | 121       | 103                 | 18              | 305     | 243                 | 62              | 576   | 460                 | 116             | 340   | 272                 | 68              |
|   | April                 | 1,392               | 1,084   | 62            | 246             | (NA)                      | (NA)                       | 135       | 117                 | 18              | 306     | 237                 | 69              | 600   | 462                 | 138             | 351   | 268                 | 83              |
|   | May                   | 1,396               | 1,110   | 66            | 220             | (NA)                      | (NA)                       | 143       | 124                 | 19              | 315     | 240                 | 75              | 592   | 471                 | 121             | 346   | 275                 | 71              |
|   | June                  | 1,357               | 1,067   | 58            | 232             | (NA)                      | (NA)                       | 146       | 126                 | 20              | 301     | 232                 | 69              | 565   | 450                 | 115             | 345   | 259                 | 86              |
|   | July                  | 1,335               | 1,041   | 60            | 234             | (NA)                      | (NA)                       | 161       | 137                 | 24              | 300     | 228                 | 72              | 567   | 429                 | 138             | 307   | 247                 | 60              |
|   | August                | 1,377               | 1,054   | 60            | 263             | (NA)                      | (NA)                       | 143       | 121                 | 22              | 303     | 225                 | 78              | 589   | 452                 | 137             | 342   | 256                 | 86              |
|   | September             | 1,412               | 1,056   | 60            | 296             | (NA)                      | (NA)                       | 135       | 118                 | 17              | 295     | 228                 | 67              | 608   | 450                 | 158             | 374   | 260                 | 114             |
|   | October               | 1,397               | 1,042   | 68            | 287             | (NA)                      | (NA)                       | 131       | 113                 | 18              | 318     | 226                 | 92              | 591   | 438                 | 153             | 357   | 265                 | 92              |
|   | November              | 1,340               | 1,014   | 66            | 260             | (NA)                      | (NA)                       | 137       | 119                 | 18              | 298     | 229                 | 69              | 590   | 426                 | 164             | 315   | 240                 | 75              |
|   | December              | 1,396               | 1,086   | 62            | 248             | (NA)                      | (NA)                       | 167       | 129                 | 38              | 323     | 246                 | 77              | 603   | 466                 | 137             | 303   | 245                 | 58              |
| 1995: <sup>f</sup>                                  | January               | 1,295               | 992     | 62            | 241             | (NA)                      | (NA)                       | 144       | 138                 | 6               | 285     | 211                 | 74              | 566   | 415                 | 151             | 300   | 228                 | 72              |
|   | February              | 1,264               | 927     | 54            | 283             | (NA)                      | (NA)                       | 119       | 97                  | 22              | 277     | 202                 | 75              | 531   | 394                 | 137             | 337   | 234                 | 103             |
|   | March                 | 1,221               | 904     | 65            | 252             | (NA)                      | (NA)                       | 126       | 105                 | 21              | 275     | 204                 | 71              | 556   | 400                 | 156             | 264   | 195                 | 69              |
|   | April                 | 1,245               | 913     | 61            | 271             | (NA)                      | (NA)                       | 129       | 105                 | 24              | 274     | 197                 | 77              | 532   | 394                 | 138             | 310   | 217                 | 93              |
|   | May                   | 1,258               | 946     | 62            | 250             | (NA)                      | (NA)                       | 118       | 101                 | 17              | 270     | 203                 | 67              | 550   | 408                 | 142             | 320   | 234                 | 86              |
|   | June                  | 1,290               | 970     | 64            | 256             | (NA)                      | (NA)                       | 118       | 102                 | 16              | 288     | 215                 | 73              | 563   | 419                 | 144             | 321   | 234                 | 87              |
|   | July                  | 1,358               | 1,017   | 62            | 279             | (NA)                      | (NA)                       | 117       | 101                 | 16              | 304     | 226                 | 78              | 598   | 441                 | 157             | 339   | 249                 | 90              |
|   | August                | 1,379               | 1,046   | 62            | 271             | (NA)                      | (NA)                       | 122       | 106                 | 16              | 309     | 230                 | 79              | 601   | 447                 | 154             | 347   | 263                 | 84              |
|   | September             | 1,427               | 1,079   | 69            | 279             | (NA)                      | (NA)                       | 128       | 109                 | 19              | 313     | 233                 | 80              | 637   | 483                 | 154             | 349   | 254                 | 95              |
|   | October               | 1,393               | 1,050   | 68            | 275             | (NA)                      | (NA)                       | 125       | 103                 | 22              | 323     | 237                 | 86              | 629   | 458                 | 171             | 316   | 252                 | 64              |
|   | November              | 1,450               | 1,073   | 71            | 306             | (NA)                      | (NA)                       | 124       | 98                  | 26              | 324     | 248                 | 76              | 634   | 461                 | 173             | 368   | 266                 | 102             |
|   | December              | 1,487               | 1,123   | 60            | 304             | (NA)                      | (NA)                       | 128       | 101                 | 27              | 317     | 251                 | 66              | 644   | 471                 | 173             | 398   | 300                 | 98              |
| 1996:   | January <sup>f</sup>  | 1,378               | 1,056   | 65            | 257             | (NA)                      | (NA)                       | 102       | 94                  | 8               | 312     | 238                 | 74              | 594   | 460                 | 134             | 370   | 264                 | 106             |
|   | February <sup>f</sup> | 1,417               | 1,087   | 60            | 270             | (NA)                      | (NA)                       | 122       | 103                 | 19              | 323     | 250                 | 73              | 600   | 481                 | 119             | 372   | 253                 | 119             |
|   | March <sup>f</sup>    | 1,423               | 1,097   | 61            | 265             | (NA)                      | (NA)                       | 137       | 110                 | 27              | 329     | 240                 | 89              | 591   | 483                 | 108             | 366   | 264                 | 102             |
|   | April <sup>f</sup>    | 1,459               | 1,115   | 75            | 269             | (NA)                      | (NA)                       | 135       | 108                 | 27              | 342     | 249                 | 93              | 634   | 494                 | 140             | 348   | 264                 | 84              |
|   | May <sup>p</sup>      | 1,431               | 1,093   | 65            | 273             | (NA)                      | (NA)                       | 135       | 109                 | 26              | 301     | 237                 | 64              | 660   | 489                 | 171             | 335   | 258                 | 77              |
| <b>AVERAGE RELATIVE STANDARD ERRORS<sup>3</sup></b> |                       |                     |         |               |                 |                           |                            |           |                     |                 |         |                     |                 |       |                     |                 |       |                     |                 |
| Annual  | (percent)             | (X)                 | (X)     | (X)           | (X)             | (X)                       | (X)                        | (X)       | (X)                 | (X)             | (X)     | (X)                 | (X)             | (X)   | (X)                 | (X)             | (X)   | (X)                 | (X)             |
| Monthly   | (percent)             | 1                   | 1       | 5             | 5               | 1                         | 3                          | 2         | 2                   | 4               | 1       | 1                   | 4               | 1     | 1                   | 2               | 1     | 1                   | 1               |
| Year to date  | (percent)             | 1                   | 1       | 3             | 3               | 1                         | 2                          | 2         | 1                   | 1               | 1       | 1                   | 5               | 1     | 1                   | 1               | 1     | 1                   | 1               |

NA Not available. <sup>p</sup>Preliminary. <sup>f</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>14,000-Place Series</b>                          |               |                     |              |                 |           |                     |              |                 |         |                     |              |                 |       |                     |              |                 |       |                     |              |                 |
| 1976 .....  | 204.5         | 77.8                | 14.0         | 112.7           | 40.8      | 14.4                | 1.4          | 25.0            | 22.5    | 10.0                | 2.9          | 9.5             | 87.5  | 30.5                | 3.0          | 54.1            | 53.8  | 23.0                | 6.8          | 24.1            |
| 1977 .....  | 231.8         | 90.7                | 12.9         | 128.2           | 42.4      | 12.5                | 1.0          | 28.9            | 32.2    | 14.1                | 2.5          | 15.6            | 94.9  | 35.9                | 3.3          | 55.7            | 62.3  | 28.2                | 6.1          | 28.0            |
| 1978 .....  | 207.8         | 86.7                | 15.1         | 106.0           | 39.6      | 14.3                | 1.3          | 24.0            | 26.5    | 12.6                | 3.0          | 10.9            | 83.6  | 32.0                | 4.4          | 47.2            | 58.1  | 27.8                | 6.4          | 23.9            |
| <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            |
| <b>END OF MONTH</b>                                 |               |                     |              |                 |           |                     |              |                 |         |                     |              |                 |       |                     |              |                 |       |                     |              |                 |
| 1995: January .....                                 | 113.4         | 65.8                | 3.5          | 44.0            | 16.5      | 11.3                | 0.4          | 4.8             | 13.0    | 7.4                 | 1.1          | 4.5             | 58.7  | 32.7                | 1.1          | 24.8            | 25.2  | 14.4                | 0.9          | 9.8             |
| February .....                                      | 113.6         | 64.7                | 3.7          | 45.2            | 16.1      | 11.4                | 0.5          | 4.2             | 13.6    | 8.7                 | 1.1          | 3.8             | 59.4  | 32.0                | 1.2          | 26.2            | 24.5  | 12.5                | 1.0          | 11.0            |
| March .....   | 127.7         | 72.9                | 4.3          | 50.4            | 16.8      | 12.1                | 0.5          | 4.2             | 17.6    | 12.4                | 1.4          | 3.9             | 67.3  | 35.6                | 1.4          | 30.3            | 26.0  | 12.8                | 1.1          | 12.1            |
| April .....   | 125.9         | 70.8                | 5.0          | 50.0            | 18.4      | 12.4                | 0.6          | 5.4             | 18.0    | 12.5                | 1.6          | 4.0             | 63.4  | 32.5                | 1.6          | 29.3            | 26.1  | 13.5                | 1.3          | 11.4            |
| May .....   | 124.5         | 72.9                | 5.3          | 46.4            | 18.0      | 13.1                | 0.6          | 4.4             | 19.7    | 13.9                | 1.8          | 3.9             | 61.8  | 32.6                | 1.6          | 27.6            | 25.0  | 13.3                | 1.3          | 10.5            |
| June .....  | 134.5         | 78.5                | 5.7          | 50.3            | 17.0      | 13.3                | 0.6          | 3.1             | 19.2    | 14.0                | 2.1          | 3.1             | 69.8  | 37.1                | 1.6          | 31.1            | 28.5  | 14.0                | 1.5          | 13.0            |
| July .....  | 129.9         | 73.0                | 4.5          | 52.3            | 16.4      | 12.7                | 0.4          | 3.2             | 19.8    | 13.6                | 1.5          | 4.6             | 65.2  | 33.5                | 1.3          | 30.5            | 28.5  | 13.2                | 1.3          | 14.0            |
| August .....  | 130.4         | 77.1                | 4.6          | 48.7            | 16.0      | 12.0                | 0.4          | 3.7             | 18.1    | 13.3                | 1.5          | 3.2             | 67.3  | 37.8                | 1.3          | 28.2            | 28.9  | 14.0                | 1.4          | 13.6            |
| September .....                                     | 133.7         | 77.6                | 3.8          | 52.4            | 16.8      | 12.7                | 0.3          | 3.8             | 17.8    | 12.3                | 1.2          | 4.3             | 71.8  | 39.8                | 1.2          | 30.8            | 27.3  | 12.8                | 1.1          | 13.4            |
| October .....                                       | 128.7         | 74.9                | 3.6          | 50.2            | 15.8      | 11.7                | 0.3          | 3.8             | 18.2    | 12.2                | 1.3          | 4.7             | 71.8  | 39.1                | 1.0          | 31.7            | 23.0  | 11.9                | 1.0          | 10.0            |
| November .....                                      | 135.2         | 79.7                | 4.0          | 51.5            | 17.3      | 12.3                | 0.4          | 4.6             | 18.8    | 12.7                | 1.3          | 4.8             | 71.4  | 39.9                | 1.2          | 30.4            | 27.6  | 14.8                | 1.0          | 11.8            |
| December .....                                      | 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: January .....                                 | 137.9         | 79.7                | 4.9          | 53.4            | 18.6      | 13.7                | 0.6          | 4.3             | 17.5    | 11.6                | 1.6          | 4.3             | 72.3  | 39.7                | 1.3          | 31.2            | 29.7  | 14.8                | 1.3          | 13.6            |
| February .....                                      | 136.8         | 82.3                | 4.5          | 50.0            | 16.6      | 11.7                | 0.5          | 4.5             | 20.0    | 14.4                | 1.5          | 4.2             | 73.2  | 42.5                | 1.4          | 29.3            | 26.9  | 13.6                | 1.2          | 12.1            |
| March <sup>r</sup> .....                            | 147.6         | 89.9                | 6.3          | 51.4            | 17.3      | 12.5                | 0.6          | 4.3             | 23.0    | 16.2                | 2.2          | 4.6             | 75.9  | 45.8                | 1.8          | 28.3            | 31.3  | 15.4                | 1.6          | 14.3            |
| April <sup>r</sup> .....                            | 143.8         | 88.5                | 5.5          | 49.7            | 17.1      | 12.6                | 0.7          | 3.8             | 24.4    | 17.5                | 1.9          | 5.0             | 75.0  | 44.1                | 1.6          | 29.3            | 27.2  | 14.4                | 1.4          | 11.5            |
| May <sup>p</sup> .....                              | 150.7         | 94.5                | 6.3          | 50.0            | 19.3      | 13.6                | 0.6          | 5.0             | 27.3    | 20.0                | 2.1          | 5.3             | 76.0  | 43.5                | 1.9          | 30.6            | 28.1  | 17.4                | 1.6          | 9.0             |
| <b>AVERAGE RELATIVE STANDARD ERRORS<sup>1</sup></b> |               |                     |              |                 |           |                     |              |                 |         |                     |              |                 |       |                     |              |                 |       |                     |              |                 |
| End of period . . . (percent) . .                   | 3             | 4                   | 9            | 6               | 11        | 14                  | 40           | 19              | 11      | 10                  | 19           | 36              | 5     | 5                   | 13           | 8               | 5     | 7                   | 13           | 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 MSA's <sup>1</sup> |                     |                 | Outside MSA's <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>                                  |                    |                     |                 |                           |                     |                 |                            |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |
| 1976  | 1,538              | 1,162               | 289             | 1,043                     | 739                 | 241             | 494                        | 424                 | 48              | 169                | 127                 | 34              | 400                | 294                 | 83              | 569                | 464                 | 86              | 400                | 277                 | 86              |
| 1977  | 1,987              | 1,451               | 414             | 1,377                     | 943                 | 347             | 610                        | 508                 | 68              | 202                | 156                 | 36              | 465                | 337                 | 99              | 783                | 588                 | 163             | 538                | 370                 | 117             |
| 1978  | 2,020              | 1,433               | 462             | 1,432                     | 941                 | 396             | 588                        | 492                 | 66              | 200                | 147                 | 43              | 451                | 325                 | 98              | 824                | 604                 | 185             | 545                | 358                 | 137             |
| 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              |
| <b>QUARTERLY DATA</b>                               |                    |                     |                 |                           |                     |                 |                            |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |
| 1992: 1st quarter                                   | 262                | 219                 | 36              | 210                       | 174                 | 30              | 52                         | 44                  | 6               | 25                 | 20                  | 4               | 54                 | 42                  | 9               | 118                | 102                 | 14              | 66                 | 55                  | 9               |
| 2nd quarter   | 341                | 296                 | 34              | 260                       | 224                 | 29              | 81                         | 72                  | 5               | 37                 | 33                  | 2               | 87                 | 73                  | 12              | 137                | 122                 | 12              | 80                 | 69                  | 9               |
| 3rd quarter   | 322                | 276                 | 38              | 246                       | 208                 | 32              | 77                         | 68                  | 6               | 34                 | 31                  | 2               | 82                 | 66                  | 14              | 127                | 114                 | 11              | 79                 | 66                  | 11              |
| 4th quarter   | 275                | 239                 | 30              | 216                       | 187                 | 25              | 59                         | 52                  | 5               | 31                 | 28                  | 3               | 65                 | 55                  | 8               | 115                | 101                 | 12              | 64                 | 54                  | 7               |
| 1993: 1st quarter                                   | 241                | 213                 | 22              | 198                       | 176                 | 18              | 43                         | 38                  | 4               | 19                 | 17                  | 1               | 46                 | 40                  | 4               | 119                | 107                 | 10              | 57                 | 49                  | 6               |
| 2nd quarter   | 367                | 324                 | 35              | 289                       | 253                 | 30              | 79                         | 71                  | 5               | 36                 | 34                  | 2               | 89                 | 74                  | 12              | 156                | 140                 | 13              | 87                 | 76                  | 8               |
| 3rd quarter   | 356                | 309                 | 37              | 284                       | 245                 | 33              | 71                         | 64                  | 4               | 38                 | 35                  | 3               | 86                 | 73                  | 9               | 147                | 130                 | 15              | 85                 | 71                  | 11              |
| 4th quarter   | 324                | 279                 | 38              | 261                       | 224                 | 33              | 63                         | 56                  | 6               | 33                 | 30                  | 2               | 78                 | 64                  | 12              | 140                | 121                 | 17              | 73                 | 64                  | 8               |
| 1994: 1st quarter                                   | 294                | 253                 | 35              | 248                       | 212                 | 32              | 46                         | 41                  | 4               | 20                 | 17                  | 3               | 51                 | 45                  | 5               | 142                | 121                 | 19              | 80                 | 69                  | 9               |
| 2nd quarter   | 423                | 354                 | 60              | 339                       | 279                 | 53              | 84                         | 75                  | 7               | 43                 | 39                  | 3               | 104                | 86                  | 16              | 180                | 148                 | 29              | 95                 | 81                  | 12              |
| 3rd quarter   | 398                | 326                 | 62              | 317                       | 254                 | 55              | 81                         | 72                  | 6               | 39                 | 35                  | 4               | 94                 | 77                  | 14              | 167                | 137                 | 27              | 98                 | 77                  | 17              |
| 4th quarter   | 343                | 266                 | 66              | 279                       | 212                 | 60              | 63                         | 54                  | 7               | 36                 | 32                  | 3               | 79                 | 60                  | 15              | 150                | 115                 | 32              | 78                 | 58                  | 16              |
| 1995: 1st quarter                                   | 270                | 214                 | 48              | 226                       | 177                 | 44              | 44                         | 37                  | 4               | 22                 | 19                  | 2               | 45                 | 36                  | 8               | 134                | 106                 | 24              | 69                 | 54                  | 14              |
| 2nd quarter   | 371                | 297                 | 65              | 298                       | 232                 | 59              | 73                         | 65                  | 6               | 36                 | 29                  | 5               | 85                 | 70                  | 12              | 160                | 127                 | 30              | 91                 | 70                  | 19              |
| 3rd quarter   | 387                | 308                 | 69              | 314                       | 245                 | 62              | 73                         | 63                  | 7               | 33                 | 30                  | 2               | 89                 | 72                  | 14              | 170                | 133                 | 35              | 95                 | 73                  | 19              |
| 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              |
| <b>AVERAGE RELATIVE STANDARD ERRORS<sup>3</sup></b> |                    |                     |                 |                           |                     |                 |                            |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |                    |                     |                 |
| Annual . . . . . (percent)                          | 1                  | 1                   | 1               | 1                         | 1                   | 1               | 3                          | 4                   | 6               | 1                  | 1                   | 9               | 2                  | 2                   | 4               | 2                  | 3                   | 2               | 1                  | 2                   | 2               |
| Quarterly . . . . . (percent)                       | 2                  | 2                   | 5               | 2                         | 2                   | 5               | 5                          | 5                   | 22              | 2                  | 2                   | 12              | 4                  | 3                   | 14              | 3                  | 4                   | 6               | 3                  | 2                   | 8               |

<sup>1</sup>Revised.

<sup>2</sup>Metropolitan statistical areas.

<sup>3</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]

| Period  | Placed for residential use |            |          |       |      |                               |            |          |        |        | Number on dealer lots at end of period (thousands) |            |          |       |      | Mobile 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>                                  |                            |            |          |       |      |                               |            |          |        |        |  |            |          |       |      |                               |      |
| 1991  | 174.3                      | 14.3       | 35.4     | 97.6  | 27.0 | 27,700                        | 30,400     | 27,600   | 24,500 | 38,600 | 49.3   | 4.4        | 10.0     | 29.1  | 5.9  | 170.9                         |      |
| 1992  | 212.0                      | 15.0       | 42.2     | 124.4 | 30.4 | 28,400                        | 30,900     | 28,800   | 25,400 | 39,000 | 50.9   | 3.9        | 9.1      | 31.7  | 6.2  | 210.5                         |      |
| 1993  | 242.5                      | 15.4       | 44.5     | 146.7 | 35.9 | 30,500                        | 32,000     | 31,400   | 27,700 | 40,500 | 61.4   | 4.2        | 10.6     | 39.2  | 7.3  | 254.3                         |      |
| 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                         |      |
| <b>MONTHLY DATA</b>                                 |                            |            |          |       |      |                               |            |          |        |        |  |            |          |       |      |                               |      |
| <b>Not Seasonally Adjusted</b>                      |                            |            |          |       |      |                               |            |          |        |        |  |            |          |       |      |                               |      |
| 1995:   | January                    | 21.0       | 0.9      | 2.7   | 14.9 | 2.5                           | 35,500     | 36,400   | 34,000 | 33,800 | 47,500   | 70.5       | 3.7      | 13.0  | 45.3 | 8.6                           | 25.7 |
|   | February                   | 20.4       | 0.8      | 3.0   | 13.6 | 2.9                           | 34,800     | 37,600   | 34,300 | 32,900 | 43,300   | 74.6       | 3.9      | 14.1  | 47.0 | 9.6                           | 24.3 |
|   | March                      | 25.6       | 1.0      | 3.9   | 17.4 | 3.3                           | 34,200     | 34,000   | 35,100 | 31,800 | 45,600   | 76.6       | 4.3      | 14.5  | 47.5 | 10.3                          | 29.2 |
|   | April                      | 24.8       | 0.8      | 3.8   | 16.7 | 3.4                           | 33,900     | 37,300   | 34,300 | 31,300 | 45,500   | 78.5       | 4.7      | 15.6  | 47.5 | 10.6                          | 26.1 |
|   | May                        | 28.5       | 1.2      | 4.7   | 18.9 | 3.7                           | 35,300     | 37,200   | 36,100 | 33,200 | 44,800   | 80.2       | 4.9      | 16.3  | 47.6 | 11.4                          | 30.0 |
|   | June                       | 30.9       | 1.5      | 5.8   | 19.9 | 3.7                           | 36,100     | 36,300   | 34,500 | 34,400 | 47,600   | 79.4       | 4.8      | 16.1  | 46.8 | 11.6                          | 30.7 |
|   | July                       | 26.2       | 1.5      | 5.2   | 16.0 | 3.5                           | 36,200     | 37,600   | 36,700 | 33,900 | 45,800   | 78.4       | 4.7      | 15.8  | 46.3 | 11.6                          | 24.7 |
|   | August                     | 29.9       | 1.8      | 5.8   | 17.8 | 4.5                           | 38,300     | 38,000   | 39,800 | 35,200 | 48,900   | 81.3       | 4.5      | 16.0  | 49.4 | 11.5                          | 33.2 |
|   | September                  | 28.2       | 1.7      | 6.3   | 16.4 | 3.8                           | 35,800     | 36,000   | 35,600 | 33,200 | 47,500   | 80.0       | 4.3      | 14.7  | 49.7 | 11.4                          | 29.7 |
|   | October                    | 29.5       | 1.3      | 5.5   | 18.5 | 4.2                           | 37,700     | 39,100   | 39,300 | 35,000 | 47,000   | 83.7       | 4.7      | 15.9  | 51.7 | 11.5                          | 32.9 |
|   | November                   | 23.8       | 1.3      | 5.0   | 14.4 | 3.2                           | 37,700     | 37,800   | 37,600 | 35,500 | 48,100   | 87.3       | 4.6      | 15.7  | 55.3 | 11.7                          | 29.4 |
|   | December                   | 21.8       | 0.7      | 4.3   | 13.8 | 3.0                           | 40,000     | 47,400   | 39,600 | 37,800 | 49,900   | 91.0       | 4.6      | 15.9  | 58.0 | 12.5                          | 24.1 |
| 1996:   | January                    | 17.1       | 0.7      | 1.9   | 12.3 | 2.2                           | 39,000     | 44,500   | 40,500 | 37,300 | 45,900   | 96.8       | 4.9      | 17.4  | 61.6 | 13.0                          | 27.1 |
|   | February <sup>P</sup>      | 24.0       | 0.8      | 3.4   | 16.7 | 3.1                           | 36,200     | 36,000   | 37,800 | 34,100 | 46,300   | 96.2       | 5.0      | 17.8  | 60.4 | 13.0                          | 27.2 |
|   | March                      | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | (NA)       | (NA)     | (NA)   | (NA)   | (NA)   | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | 30.1 |
|   | April                      | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | (NA)       | (NA)     | (NA)   | (NA)   | (NA)   | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | 32.5 |
| <b>Seasonally Adjusted<sup>1</sup></b>              |                            |            |          |       |      |                               |            |          |        |        |  |            |          |       |      |                               |      |
| 1995:   | January                    | 365        | 22       | 66    | 233  | 43                            | (X)        | (X)      | (X)    | (X)    | (X)  | 70         | 4        | 13    | 44   | 9                             | 345  |
|   | February                   | 317        | 17       | 65    | 191  | 44                            | (X)        | (X)      | (X)    | (X)    | (X)  | 72         | 4        | 13    | 45   | 9                             | 325  |
|   | March                      | 312        | 15       | 60    | 196  | 42                            | (X)        | (X)      | (X)    | (X)    | (X)  | 73         | 4        | 14    | 45   | 9                             | 326  |
|   | April                      | 299        | 11       | 51    | 196  | 41                            | (X)        | (X)      | (X)    | (X)    | (X)  | 74         | 4        | 14    | 46   | 10                            | 327  |
|   | May                        | 307        | 13       | 50    | 205  | 39                            | (X)        | (X)      | (X)    | (X)    | (X)  | 78         | 5        | 15    | 47   | 11                            | 335  |
|   | June                       | 308        | 14       | 54    | 201  | 40                            | (X)        | (X)      | (X)    | (X)    | (X)  | 78         | 5        | 15    | 47   | 11                            | 333  |
|   | July                       | 298        | 15       | 52    | 191  | 40                            | (X)        | (X)      | (X)    | (X)    | (X)  | 82         | 5        | 16    | 49   | 12                            | 337  |
|   | August                     | 305        | 17       | 54    | 190  | 44                            | (X)        | (X)      | (X)    | (X)    | (X)  | 85         | 4        | 16    | 52   | 12                            | 344  |
|   | September                  | 328        | 18       | 66    | 200  | 44                            | (X)        | (X)      | (X)    | (X)    | (X)  | 84         | 4        | 16    | 52   | 12                            | 352  |
|   | October                    | 316        | 12       | 52    | 208  | 43                            | (X)        | (X)      | (X)    | (X)    | (X)  | 88         | 5        | 17    | 53   | 13                            | 354  |
|   | November                   | 289        | 14       | 55    | 180  | 39                            | (X)        | (X)      | (X)    | (X)    | (X)  | 89         | 5        | 17    | 55   | 12                            | 355  |
|   | December                   | 307        | 9        | 58    | 199  | 40                            | (X)        | (X)      | (X)    | (X)    | (X)  | 92         | 5        | 18    | 57   | 13                            | 352  |
| 1996:   | January                    | 294        | 17       | 47    | 191  | 38                            | (X)        | (X)      | (X)    | (X)    | (X)  | 95         | 5        | 18    | 59   | 13                            | 352  |
|   | February <sup>P</sup>      | 344        | 16       | 68    | 216  | 44                            | (X)        | (X)      | (X)    | (X)    | (X)  | 90         | 5        | 16    | 56   | 12                            | 341  |
|   | March                      | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | (X)        | (X)      | (X)    | (X)    | (X)  | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | 364  |
|   | April                      | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | (X)        | (X)      | (X)    | (X)    | (X)  | (NA)       | (NA)     | (NA)  | (NA) | (NA)                          | 378  |
| <b>AVERAGE RELATIVE STANDARD ERRORS<sup>2</sup></b> |                            |            |          |       |      |                               |            |          |        |        |  |            |          |       |      |                               |      |
| Annual  | (percent)                  | 1          | 5        | 2     | 1    | 2                             | 1          | 3        | 1      | 1      | 2  | (X)        | (X)      | (X)   | (X)  | (X)                           | (X)  |
| Monthly   | (percent)                  | 4          | 17       | 8     | 5    | 9                             | 3          | 13       | 5      | 4      | 6  | (X)        | (X)      | (X)   | (X)  | (X)                           | (X)  |

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

<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).



## Appendix.

# Definitions and Survey Description

### DEFINITIONS

The start of construction of a privately owned housing unit is when excavation begins for the footings or foundation of a building intended primarily as a housekeeping residential structure and designed for nontransient occupancy. All housing units in a multifamily building are defined as being started when excavation for the building has begun. Beginning with statistics for September 1992, estimates of housing starts include units in residential structures being totally rebuilt on an existing foundation.

A housing unit is a single room or group of rooms intended for occupancy as separate living quarters by a family, by a group of unrelated persons living together, or by a person living alone. Separate living quarters are those in which the occupants do not live and eat with any other persons in the structure and which have direct access from the outside of the building or through a common hall which is used or intended to be used by the occupants of another unit or by the general public.

A housekeeping residential building is one consisting primarily of housing units. New housing starts exclude group quarters (such as dormitories and rooming houses), transient accommodations (such as transient hotels, motels, and tourist courts), mobile homes (trailers), moved or relocated buildings, and housing units created in an existing residential or nonresidential structure. However, in a building combining substantial residential and nonresidential floor areas, every effort is made to include the residential units in these statistics, even though the primary function of the entire building is for nonresidential purposes.

Housing units, as distinguished from mobile homes, include conventional “stick-built” units, prefabricated, panelized, componentized, sectional, and modular units. Except for table 5, mobile homes—single-wide and multiwide—are excluded from the statistics. A mobile home is defined as a portable dwelling constructed to be towed on its own chassis and designed for use without a permanent foundation; it is manufactured with the transportation gear as an integral part of the unit and can be towed from site to site.

Publicly owned housing units (contract awards) are excluded from the statistics. Units in structures built by private developers with partial public subsidies or which are for sale upon completion to local public housing authorities under the HUD “Turnkey” program are both classified as private housing.

The statistics, by type of structure, refer to the structural characteristics of the building. The one-unit structure category includes fully detached, semidetached (semiattached, side-by-side), rowhouses, and townhouses. In the case of attached units, each must be separated from the adjacent unit by a ground-to-roof wall in order to be classified as a one-unit structure. Also, these units must not share heating/air-conditioning systems or interstructural public utilities, such as water supply, power supply, or sewage disposal lines. Units built one on top of another and those built side-by-side which do not have a ground-to-roof wall and/or have common facilities (i.e., attic, basement, heating plant, plumbing, etc.) are classified by the number of units in the structure (i.e., two-unit structure, three-unit structure, etc.). In these statistics, apartment buildings are defined as buildings containing five units or more. Apartments in a conventional-type apartment building may share a common basement, heating plant, stairs, entrance halls, and water supply and sewage disposal facilities. Townhouse apartments, though attached, are not separated by a ground-to-roof wall and/or share some interstructural facilities, such as water supply, sewage disposal, etc.

Ownership is not the criterion for structural classifications in this report. A condominium apartment building is classified with apartment buildings in structures with five units or more, despite the fact that each unit is individually owned. Condominium townhouses may be in the one-unit category if each unit is separated from its neighbor by a ground-to-roof wall (no commonly shared interstructural facilities), or in the multiunit building categories if they are not separated from each other by a ground-to-roof wall (share interstructural facilities).

The standard census geographic regions are used in the tables of this report. States contained in each region are as follows: **Northeast** — Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania; **Midwest** — Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; **South** — Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas; **West** — Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

The distribution of housing starts between units inside and outside metropolitan statistical areas (MSA’s) is based on the definitions published by the Office of Management

and Budget in *Metropolitan Statistical Areas*. Data for the period beginning January 1994 are based on the 1992 definitions, as amended June 1993; data for the period January-December 1993 are based on the 1992 definitions; data for January 1984-December 1992 are based on the 1974 definitions, as amended June 1983; data for January 1976-December 1983 are based on the 1974 definitions, as amended August 1975; data for January 1975-December 1975 are based on the 1967 definitions, as amended April 1974; data for January 1974-December 1974 are based on the 1967 definitions, as amended November 1973; data for April 1973-December 1973 are based on the 1967 definitions, as amended February 1973; data for April 1968-March 1973 are based on the 1967 definitions.

## SAMPLE DESIGN AND SELECTION

The sample design for the Survey of Construction is a stratified multistage cluster design derived from the Current Population Survey (CPS), 1980 design. Each State was divided into areas made up of counties (towns in New England) and independent cities. These areas were grouped within each state to form strata for the CPS according to metropolitan status and 1980 labor force, race/ethnic origin, population change, and family and housing characteristics. One area from each of the strata was selected with probability proportional to the number of persons 16 years of age and older. The CPS strata were further stratified into 169 strata according to Census region, metropolitan status, building permit activity in 1982, population, and the percent of the population in areas which do not issue permits. One of the CPS selected areas was chosen from each of these 169 strata with probability proportional to the number of persons 16 and older.

Within each of these 169 areas, the sample was selected from two different sample frames: permit-issuing places and land areas not covered by building permit systems.

Each of the 17,000 permit-issuing places was assigned to one of six size classes based on a weighted average of 1978, 1981, and 1982 permit activity. The permit places in each of the 169 areas were grouped into these six size classes and a systematic sample of places was selected from each one of them. Places were selected at different sampling rates in each of the classes so that larger proportions of the places were selected from the larger size classes. For example, all places in the largest size classes fell into sample if they were in the 169 areas, whereas, only an expected 1 in 40 of the places in the smallest size class fell into sample. Approximately 840 permit-issuing places were selected.

Monthly, Census field representatives sample permits from these 840 permit-issuing places. They select permits for one-to-four-unit buildings with probability proportional to the number of units at an overall rate of 1 in 40. All permits for buildings with five units or more are selected.

Within each of the 169 areas, the land not covered by building permit systems, called nonpermit areas, was identified. Small land areas (1980 Census enumeration districts) in these nonpermit areas were grouped into two strata according to the 1980 population. Overall, 1 out of every 120 land areas was selected from the strata with the larger areas and 1 out of 600 was selected from the strata with the smaller areas. Monthly, census field representatives intensively canvassed about 130 selected land areas looking for all housing units started.

In January 1995, the area covered by building permit systems was expanded to 19,000 permit-issuing places. Canvassing was stopped in those selected land areas now represented by permit-issuing places. Census field representatives continue to canvass monthly about 70 land areas still not covered by building permit systems.

## HOUSING STARTS COMPILATION

The compilation of the housing starts series is a multi-stage process. First, an estimate is made monthly of the number of housing units for which building permits have been issued in all 19,000 permit-issuing places (table 2). The estimate of building permit authorizations is based on a sample of 8,500 of these 19,000 jurisdictions.

Second, for each permit selected in the 840 permit-issuing places, an inquiry is made of the owner or the builder to determine in which month and year the unit(s) covered by the permit was (were) started. In case the units authorized by permits in a particular month are not started by the end of that month, followups are made in successive months to find out when the units were actually started.

From this sample of permits, ratios are calculated (by type of structure) of the number of units started to the number of units covered by permits; separate ratios are calculated for units started from permits of that month and of each preceding month. These ratios, or starts rates, are then applied to the appropriate estimate of the number of units authorized by permits in the corresponding months to provide estimates of the number of units started for each month of authorization.

Having produced estimates of the number of units started with permit authorization, two additional adjustments are made.

1. An upward adjustment of 3.3 percent is made to the number of one-unit structures (single-family houses) started to account for those units started within permit-issuing areas but without permit authorization. (A study spanning a 4 year period indicated that permits were obtained for all buildings with two housing units or more.)
2. Upward imputations are made to account for those units started prior to permit authorization and for late reports.

The estimates for housing units started in the 19,000 permit-issuing places result from the procedures outlined above.

Third, units identified as started in the monthly canvass of nonpermit areas are weighted appropriately to provide an estimate of total housing starts in areas not covered by building permit systems.

Addition of this estimate of starts in nonpermit areas to the estimate of starts in the 19,000 permit-issuing places results in an estimate of total private housing units started (table 1).

## STARTS BY TYPE OF STRUCTURE

A total of 14 different sets of starts rates that change from month to month are utilized to calculate the number of housing units started by type of structure in permit places. Eight sets of starts rates are used for one-unit structures: separate sets of rates for metropolitan and nonmetropolitan areas within each of the four regions. For structures with five units or more, separate sets of starts rates are used for each of the four regions. Single sets of starts rates are used for all regions for structures with two units and for structures with three and four units.

Starts by type of structure in nonpermit areas are calculated directly in the estimating procedure described above.

## BUILDING PERMITS

Data on housing units authorized by local building permits relate to the time of issuance rather than to the actual start of construction. They do, however, provide some indication of residential building activity in advance of the start of actual construction. Although construction is started on most residential buildings in the same month in which the permit is issued, several months may pass before start of construction.

The 19,000 areas with local building permit systems for which figures are currently given in this report (table 2) account for a major portion of residential building in the United States. For the country as a whole, approximately 96 percent of private housing units are now constructed in permit-issuing places. Beginning with 1994, data are based upon 19,000 places. Data for 1985 through 1994 are for 17,000 places; data for 1978 through 1984 are for 16,000 places; data for 1971 through 1978 are for 14,000 places; data for 1968 through 1972 are for 13,000 places.

Monthly estimates of building permit authorizations are based on reports from a stratified probability sample of 8,500 local building permit jurisdictions. A more detailed description of the sample is provided in the Census Bureau's monthly C40 series, C40(95)-12, *Housing Units Authorized by Building Permits*, issued April 1996.

## MOBILE HOME SHIPMENTS

Beginning with the data for November 1977, the statistics on manufacturers' shipments of mobile homes (table 5) produced by the National Conference of States on Building Codes and Standards (NCSBCS) are published in this report in lieu of those previously provided by the Manufactured Housing Institute (MHI). MHI has accepted, and now publishes, the NCSBCS statistics. For further information on NCSBCS data collection procedures, write to NCSBCS, 481 Carlisle Drive, Herndon, Virginia 22070.

A mobile home is defined as a movable dwelling, 8 feet or more wide and 40 feet or more long, designed to be towed on its own chassis, with transportation gear integral to the unit when it leaves the factory, and without need of a permanent foundation. These mobile homes include multi-wides and expandable mobile homes. Excluded are travel trailers, motor homes, and modular housing. The shipments figures are based on reports submitted by manufacturers on the number of mobile homes actually shipped during the survey month. Shipments to dealers may not necessarily be placed for residential use in the same month as they are shipped. The number of mobile "homes" used for nonresidential purposes is not known.

## MOBILE HOME PLACEMENTS

Data shown on mobile home placements (table 5) are based on a survey conducted by the Bureau of the Census and sponsored by the Department of Housing and Urban Development.

The methodology for collecting information on new mobile homes for 1974 through 1979 involved contacting a sample of mobile home dealers each month within 137 geographic areas or primary sampling units. The dealers were requested to provide data on the number of mobile homes received from manufacturers, the number placed on a site for residential use, and the number held in inventory.

The methodology used after 1979 involves a monthly sample of new mobile homes shipped by manufacturers. The dealer to whom the sampled unit was shipped is contacted by telephone and asked about the status of the unit. This is done each month until that unit is reported placed.

## RELIABILITY OF DATA

The various estimates of privately owned housing units started and privately owned housing units authorized by building permits which are shown in this publication are based on sample surveys and may differ from statistics which 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.

### Measures of Sampling Errors

Sampling error reflects the fact that only a particular sample was surveyed rather than the entire population. Each sample selected for the Housing Starts and Building Permits surveys is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Estimates derived from the different samples would differ from each other. The standard error, or sampling error, of a survey estimate is a measure of the variation among the estimates from all possible samples and, thus, is a measure of the precision with which an estimate from a particular sample approximates the average from all possible samples.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the tables in the form of average relative standard errors. The relative standard error equals the standard error divided by the estimated value to which it refers.

The sample estimate and an estimate of its standard error allow us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples with the same size and design. For example, suppose table 1 of this report showed that an estimated 110,000 units in one-unit structures were started in a particular month. Further, suppose that the average relative standard error of this estimate is 3 percent. Multiplying 110,000 by 0.03, we obtain 3,300 as the standard error. This means that we are confident, with 2 chances out of 3 being correct, that the average estimate from all possible samples of one-unit structures started during the particular month is between 113,300 and 106,700 units. To increase the probability to about 9 chances out of 10 that the interval contains the average value over all possible samples (this is called a 90-percent confidence interval), multiply 3,300 by 1.6, yielding limits of 115,280 and 104,720 (110,000 units plus or minus 5,280 units). The average estimate of one-unit structures started during the specified month may or may not be contained in any one of these computed intervals; but for a particular sample, one can say that the average estimate from all possible samples is included in the constructed interval with a specified confidence of 90 percent.

Ranges of 90-percent confidence intervals for estimated percent changes are shown in the text. When the range of the confidence interval contains zero, it is unclear whether there was an increase or decrease; that is, the change is not statistically significant.

### Nonsampling Errors

As calculated for this report, the coefficient of variation estimates sampling variation but does not measure all

nonsampling error in the data. Nonsampling error consists of both a variance component and a bias component. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. Nonsampling errors are usually attributed to many possible sources: (1) coverage error failure to accurately represent all population units in the sample, (2) inability to obtain information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of coverage, collection and nonresponse, response, processing, or imputing for missing or inconsistent data. These nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps have been taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

As described in the section, "Housing Starts Compilation," a potential source of bias is the upward adjustment of 3.3 percent made to account for one-unit structures started in permit-issuing areas without permit authorization. Another source is the imputation for units started prior to permit authorization and for late reports. For the Building Permits Survey, estimates are imputed for nonresponse. The final estimates of privately owned housing units started and building permits issued are imputed less than 2 percent.

### SEASONAL ADJUSTMENT

For analyzing general trends in the economy, seasonally adjusted data are usually preferred since seasonal adjustment eliminates the effect of changes that normally occur at about the same time and in about the same magnitude every year. For example, suppose that the normal month-to-month change in an unadjusted series between February and March was an increase of 20 percent. Then, an increase in the unadjusted series of less than 20 percent would be viewed as a decrease in the seasonally adjusted series; an increase of exactly 20 percent would be viewed as no change in the adjusted series; and an increase of more than 20 percent would be viewed as an increase in the adjusted series.

The recurring changes in a series that are removed by seasonal adjustment result from such factors as normal changes in weather and differing lengths of months. It should be emphasized that seasonal adjustment does not account for abnormal weather conditions or for year-to-year changes in weather.

Most of the seasonally adjusted series in this report are shown as seasonally adjusted annual rates (SAAR). A SAAR is the seasonally adjusted monthly rate multiplied by 12.

The seasonal adjustment indexes shown in this publication have been developed using X-11-ARIMA, a modification of the X-11 Census Method II seasonal adjustment



program. The computation of the monthly seasonal indexes uses trading-day adjustment factors to account for different patterns of activity among days of the week and the variation in the number of times each day of the week occurs in each particular month.

The X-11-ARIMA program also gives summary statistics which are used in determining the adequacy of the seasonal adjustment. These statistics are summarized in tables A-4 and A-5, and a brief definition of each statistic is given below table A-5. A description of the X-11-ARIMA version appears in "The X-11-ARIMA Seasonal Adjustment Method," by Estela Bee Dagum, Statistics Canada. This publication is available from Statistics Canada, 25-A Coats Building, Ottawa, Ontario, K1A0T6. A description of the test for the impact of trading days is found in Bureau of the Census Technical Paper No. 12, "Estimating Trading-Day Variation in Monthly Economic Time Series" (1967). This paper is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

An assumption underlying the seasonal adjustment process is that the original series can be separated into a seasonal component, a trading-day component, a trend-cycle component, and an irregular component. The seasonally adjusted series consists of the trend-cycle and irregular components taken together. The trend-cycle component includes the long-term trend and the business cycle. The irregular component is made up of residual variations, such as the sudden impact of political events and the effects of strikes, unusual weather conditions, reporting and sampling errors, etc.

## Housing Starts

Seasonal indexes are developed concurrently each month for total private housing starts, by region and by type of structure. With the concurrent seasonal adjustment procedure, each series is run through the X-11-ARIMA program every month as new data become available. The seasonally adjusted U.S. total is the sum of six seasonally adjusted components: single-family structures in each of the four regions, U.S. total for two-to-four unit structures, and U.S. total for structures with five units or more. Also, the unadjusted data for the four regions are seasonally adjusted and subsequently modified so that the seasonally adjusted U.S. total derived from the regions equals the seasonally adjusted U.S. total derived from the structures. The seasonal indexes for private housing starts shown in table A-1 include trading-day adjustment factors which were estimated internally by the regression routine.

## Building Permits

Seasonal indexes are also developed concurrently each month for total housing units authorized by building permits, by region and by type of structure. The seasonally adjusted building permits estimates are computed using a procedure similar to that used for housing starts. Regional estimates of units in structures with 2 units or more are not seasonally adjusted directly. These seasonally adjusted annual rates are derived by calculating the differences between the seasonally adjusted regional total and one-unit estimates.

Trading-day adjustment factors for building permits are not estimated internally by the regression routine. The daily pattern obtained empirically from the unadjusted building permits data closely approximates a 5-day week in which Monday through Friday are assigned equal weight and Saturday and Sunday receive zero weights, and, thus, the trading-day adjustment is based on this pattern. (There is no holiday adjustment in the assignment of daily weights.) The seasonal indexes for building permits shown in table A-2 include this trading-day adjustment.

## Mobile Home Shipments

Seasonal indexes for mobile home shipments are derived once a year; projected indexes are computed for the upcoming 12 months. Seasonal adjustment of mobile home shipments, beginning in November 1977, is based on shipments from July 1976 through December 1995, as reported by NCSBCS, and adjusted MHI shipments for the period January 1970 through June 1976. Seasonal adjustment of mobile home shipments for the period January 1976 through October 1977 is based on shipments from January 1959 through September 1977 that were provided by MHI, and included estimates for firms not associated with MHI. The seasonal indexes shown in table A-3 include trading-day adjustment factors which were estimated internally by the regression routine.

## Mobile Home Placements

Seasonal indexes are developed concurrently for each month for total mobile home placements and mobile homes on dealer lots. The seasonally adjusted U.S. total is the sum of the four regional components. The seasonal indexes shown in table A-3 include trading-day adjustment factors which were estimated internally by the regression routine.

**CENSUS BUREAU CONSTRUCTION REPORTS  
AND RELATED PUBLICATIONS**

Current Construction Reports, Series C21: *New Residential Construction in Selected Metropolitan Areas* (quarterly).

Current Construction Reports, Series C22: *Housing Completions* (monthly).

Current Construction Reports, Series C25: *New One-Family Houses Sold* (monthly).

Current Construction Reports, Series C30: *Value of New Construction Put in Place* (monthly).

Current Construction Reports, Series C50: *Expenditures for Residential Improvements and Repairs* (quarterly).

*Construction Review*: A quarterly publication of the International Trade Administration, U.S. Department of Commerce.

Table A-1. 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>1993</b>        |   |                     |         |       |       |              |                 |            |         |       |       |
| January            | 69.9                                      | 59.8                | 48.1    | 80.2  | 75.3  | 74.3         | 79.0            | 65.1       | 51.2    | 82.9  | 76.8  |
| February           | 73.9                                      | 50.1                | 53.6    | 85.4  | 83.7  | 69.9         | 74.6            | 53.0       | 54.5    | 85.5  | 79.1  |
| March              | 105.8                                     | 89.9                | 96.7    | 113.2 | 112.7 | 106.7        | 91.1            | 88.4       | 95.8    | 112.9 | 110.5 |
| April              | 112.4                                     | 112.6               | 120.1   | 113.5 | 106.8 | 115.1        | 107.2           | 110.3      | 117.1   | 113.9 | 108.4 |
| May                | 115.2                                     | 116.1               | 125.8   | 111.6 | 115.8 | 100.7        | 108.1           | 116.2      | 124.1   | 111.6 | 112.4 |
| June               | 120.4                                     | 132.2               | 135.8   | 115.1 | 119.2 | 126.6        | 108.1           | 129.5      | 133.9   | 110.3 | 115.8 |
| July               | 110.4                                     | 119.2               | 119.3   | 104.6 | 111.2 | 112.2        | 104.0           | 116.7      | 115.3   | 107.7 | 113.2 |
| August             | 112.4                                     | 110.4               | 118.6   | 107.0 | 115.0 | 115.0        | 118.2           | 118.9      | 120.7   | 105.4 | 116.1 |
| September          | 105.9                                     | 108.9               | 112.8   | 103.2 | 101.6 | 103.5        | 108.5           | 106.2      | 111.6   | 101.0 | 104.4 |
| October            | 106.2                                     | 114.3               | 115.2   | 99.9  | 99.7  | 96.0         | 121.4           | 113.9      | 120.2   | 101.4 | 101.1 |
| November           | 89.2                                      | 103.4               | 90.9    | 87.9  | 81.5  | 101.7        | 94.0            | 102.8      | 94.1    | 89.1  | 83.2  |
| December           | 77.3                                      | 88.0                | 66.1    | 77.7  | 77.7  | 80.4         | 85.5            | 82.3       | 64.3    | 77.2  | 78.6  |
| <b>1994</b>        |   |                     |         |       |       |              |                 |            |         |       |       |
| January            | 71.6                                      | 57.9                | 48.7    | 80.4  | 75.6  | 73.5         | 80.8            | 64.3       | 50.4    | 83.6  | 77.7  |
| February           | 75.2                                      | 49.1                | 52.7    | 86.0  | 84.2  | 69.6         | 73.9            | 53.0       | 54.4    | 85.5  | 78.8  |
| March              | 105.3                                     | 89.8                | 97.4    | 113.9 | 112.3 | 109.8        | 90.7            | 88.8       | 96.2    | 113.6 | 111.2 |
| April              | 110.8                                     | 111.8               | 117.3   | 112.0 | 104.9 | 111.2        | 107.2           | 108.5      | 115.8   | 113.5 | 108.0 |
| May                | 118.5                                     | 118.4               | 130.4   | 115.4 | 120.6 | 104.4        | 111.9           | 120.3      | 127.5   | 115.1 | 115.7 |
| June               | 116.8                                     | 129.8               | 131.5   | 111.4 | 116.0 | 124.5        | 104.0           | 127.5      | 130.4   | 106.4 | 112.9 |
| July               | 107.2                                     | 115.9               | 116.0   | 103.0 | 108.1 | 108.4        | 97.7            | 112.5      | 111.4   | 105.4 | 110.0 |
| August             | 115.3                                     | 112.3               | 121.8   | 108.7 | 117.6 | 116.9        | 121.8           | 120.7      | 123.9   | 106.9 | 117.8 |
| September          | 105.3                                     | 109.1               | 111.5   | 101.6 | 100.9 | 104.2        | 109.5           | 106.4      | 111.4   | 100.6 | 104.5 |
| October            | 109.1                                     | 116.9               | 116.8   | 101.0 | 100.6 | 96.1         | 123.8           | 115.7      | 122.5   | 102.4 | 102.2 |
| November           | 90.5                                      | 103.8               | 91.8    | 88.7  | 81.7  | 101.7        | 92.9            | 101.1      | 93.7    | 89.1  | 82.6  |
| December           | 78.5                                      | 88.5                | 66.7    | 77.3  | 78.2  | 82.2         | 87.8            | 83.1       | 65.5    | 78.1  | 79.3  |
| <b>1995</b>        |   |                     |         |       |       |              |                 |            |         |       |       |
| January            | 74.0                                      | 58.8                | 50.7    | 82.6  | 78.3  | 73.1         | 82.9            | 65.8       | 51.3    | 85.7  | 79.7  |
| February           | 74.1                                      | 47.9                | 52.0    | 86.3  | 83.8  | 69.3         | 73.1            | 53.3       | 54.0    | 85.2  | 78.5  |
| March              | 100.3                                     | 86.0                | 93.9    | 109.6 | 107.6 | 108.5        | 85.9            | 85.4       | 92.4    | 109.1 | 107.1 |
| April              | 109.8                                     | 112.2               | 115.6   | 111.6 | 104.2 | 106.2        | 106.0           | 107.1      | 114.0   | 112.7 | 107.2 |
| May                | 120.4                                     | 119.0               | 133.0   | 117.8 | 123.0 | 106.6        | 115.7           | 121.5      | 128.9   | 117.1 | 117.1 |
| June               | 113.9                                     | 128.0               | 128.1   | 108.8 | 113.6 | 125.2        | 101.3           | 127.4      | 129.0   | 104.8 | 112.4 |
| July               | 106.8                                     | 116.9               | 116.4   | 104.1 | 109.0 | 110.1        | 98.5            | 112.9      | 112.0   | 106.5 | 110.6 |
| August             | 116.3                                     | 112.7               | 123.1   | 109.2 | 118.0 | 116.6        | 123.9           | 121.1      | 125.6   | 107.7 | 118.1 |
| September          | 104.8                                     | 109.4               | 110.8   | 100.8 | 100.7 | 105.0        | 110.1           | 107.6      | 111.4   | 100.6 | 105.1 |
| October            | 112.1                                     | 121.3               | 122.0   | 104.5 | 104.5 | 97.2         | 125.9           | 118.8      | 126.5   | 104.7 | 105.1 |
| November           | 88.2                                      | 101.9               | 90.0    | 87.3  | 78.8  | 102.5        | 90.7            | 98.8       | 91.6    | 85.8  | 79.7  |
| December           | 78.1                                      | 88.4                | 67.3    | 79.2  | 77.2  | 78.6         | 83.8            | 82.8       | 65.8    | 80.4  | 77.0  |
| <b>1996</b>        |   |                     |         |       |       |              |                 |            |         |       |       |
| January            | 74.9                                      | 56.2                | 52.7    | 80.3  | 81.4  | 66.7         | 86.2            | 60.0       | 52.9    | 84.5  | 82.7  |
| February           | 76.0                                      | 49.7                | 51.5    | 88.9  | 85.5  | 74.2         | 79.2            | 57.0       | 52.8    | 87.7  | 84.0  |
| March <sup>†</sup> | 96.8                                      | 85.7                | 91.8    | 106.5 | 101.6 | 98.4         | 81.5            | 88.3       | 90.9    | 105.6 | 98.9  |
| April <sup>†</sup> | 116.6                                     | 117.7               | 120.1   | 118.0 | 114.0 | 123.4        | 111.1           | 117.1      | 118.7   | 117.9 | 114.8 |
| May <sup>†</sup>   | 115.8                                     | 113.5               | 126.4   | 113.8 | 114.9 | 107.1        | 112.9           | 115.7      | 123.3   | 114.8 | 111.0 |

<sup>†</sup>Preliminary. <sup>†</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 A-2. 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>1993</b>             |   |                     |         |       |       |              |                 |            |         |       |       |
| January                 | 68.4                                      | 54.1                | 44.7    | 81.4  | 72.9  | 68.8         | 79.4            | 60.3       | 50.8    | 84.6  | 73.7  |
| February                | 76.3                                      | 58.0                | 60.7    | 88.2  | 82.6  | 77.6         | 70.9            | 58.1       | 58.7    | 86.3  | 79.8  |
| March                   | 112.5                                     | 99.1                | 111.3   | 119.5 | 116.0 | 108.9        | 99.7            | 100.1      | 105.9   | 116.8 | 113.6 |
| April                   | 116.6                                     | 118.7               | 131.2   | 114.9 | 116.1 | 113.6        | 100.6           | 115.4      | 123.0   | 113.7 | 112.4 |
| May                     | 109.8                                     | 119.5               | 124.4   | 105.9 | 108.7 | 105.0        | 96.4            | 114.2      | 120.2   | 102.9 | 103.4 |
| June                    | 125.2                                     | 130.0               | 133.5   | 117.8 | 127.7 | 123.7        | 126.4           | 130.2      | 128.6   | 118.8 | 130.1 |
| July                    | 106.8                                     | 117.1               | 116.6   | 103.2 | 105.9 | 99.8         | 99.4            | 114.4      | 112.8   | 100.9 | 106.7 |
| August                  | 109.1                                     | 112.9               | 115.3   | 106.5 | 106.5 | 112.3        | 108.1           | 113.3      | 114.9   | 104.7 | 106.8 |
| September               | 106.9                                     | 107.7               | 110.9   | 102.5 | 101.8 | 104.3        | 121.3           | 108.0      | 114.3   | 104.8 | 102.0 |
| October                 | 99.8                                      | 107.2               | 105.7   | 93.1  | 97.1  | 107.8        | 105.5           | 109.3      | 110.8   | 93.8  | 98.9  |
| November                | 86.7                                      | 96.6                | 84.9    | 85.4  | 83.1  | 92.7         | 90.1            | 97.2       | 88.8    | 85.3  | 84.0  |
| December                | 82.3                                      | 81.9                | 62.8    | 81.7  | 82.2  | 86.8         | 105.0           | 82.6       | 73.6    | 88.4  | 90.8  |
| <b>1994<sup>f</sup></b> |   |                     |         |       |       |              |                 |            |         |       |       |
| January                 | 69.6                                      | 54.0                | 46.8    | 80.6  | 71.8  | 67.6         | 76.8            | 59.3       | 50.0    | 82.4  | 70.9  |
| February                | 77.3                                      | 58.6                | 61.6    | 88.0  | 81.4  | 75.8         | 72.6            | 56.2       | 58.9    | 86.6  | 79.2  |
| March                   | 112.9                                     | 102.3               | 111.2   | 119.9 | 117.6 | 109.1        | 99.3            | 101.6      | 105.8   | 116.3 | 113.8 |
| April                   | 110.1                                     | 112.7               | 122.8   | 109.6 | 110.0 | 110.2        | 97.5            | 112.1      | 116.7   | 109.6 | 107.2 |
| May                     | 113.0                                     | 124.0               | 128.3   | 110.1 | 113.3 | 108.4        | 97.0            | 119.3      | 124.0   | 106.4 | 107.9 |
| June                    | 122.7                                     | 127.0               | 131.3   | 115.7 | 125.9 | 123.7        | 121.6           | 127.5      | 125.4   | 115.4 | 128.2 |
| July                    | 103.1                                     | 111.6               | 111.7   | 100.3 | 101.8 | 94.6         | 98.2            | 110.5      | 109.6   | 98.3  | 104.6 |
| August                  | 114.6                                     | 118.3               | 121.2   | 111.6 | 113.5 | 114.2        | 113.7           | 118.6      | 121.3   | 109.8 | 113.5 |
| September               | 108.0                                     | 107.3               | 109.5   | 101.7 | 101.4 | 105.7        | 123.1           | 107.9      | 114.2   | 106.2 | 102.4 |
| October                 | 100.4                                     | 108.2               | 106.4   | 94.0  | 96.3  | 109.0        | 104.1           | 108.4      | 111.8   | 93.0  | 97.3  |
| November                | 90.0                                      | 98.6                | 88.2    | 87.4  | 85.6  | 99.7         | 93.6            | 100.9      | 92.6    | 88.3  | 85.9  |
| December                | 80.9                                      | 81.0                | 62.2    | 79.7  | 80.9  | 81.3         | 101.7           | 78.6       | 70.6    | 85.9  | 88.4  |
| <b>1995<sup>f</sup></b> |   |                     |         |       |       |              |                 |            |         |       |       |
| January                 | 72.2                                      | 53.9                | 49.0    | 84.3  | 75.0  | 71.1         | 80.0            | 62.3       | 52.3    | 86.1  | 73.8  |
| February                | 76.4                                      | 58.4                | 61.7    | 88.0  | 81.2  | 74.8         | 73.3            | 55.7       | 58.8    | 86.7  | 79.3  |
| March                   | 109.5                                     | 99.9                | 108.8   | 117.2 | 115.2 | 108.3        | 97.6            | 100.5      | 105.2   | 114.9 | 112.5 |
| April                   | 105.8                                     | 108.8               | 118.2   | 106.2 | 106.4 | 106.2        | 94.4            | 107.3      | 111.5   | 105.9 | 103.4 |
| May                     | 117.0                                     | 129.9               | 134.2   | 114.8 | 118.4 | 113.4        | 100.9           | 125.1      | 130.0   | 110.9 | 112.6 |
| June                    | 120.2                                     | 124.5               | 128.9   | 113.5 | 123.7 | 123.0        | 118.5           | 126.2      | 123.8   | 113.5 | 126.5 |
| July                    | 102.2                                     | 112.0               | 111.4   | 100.4 | 101.4 | 92.4         | 97.1            | 109.5      | 107.8   | 97.1  | 103.2 |
| August                  | 116.1                                     | 119.5               | 122.6   | 113.0 | 115.2 | 114.7        | 115.5           | 119.5      | 122.6   | 110.8 | 114.9 |
| September               | 104.3                                     | 103.6               | 105.5   | 97.9  | 98.2  | 102.3        | 120.9           | 104.4      | 110.3   | 103.2 | 99.6  |
| October                 | 105.3                                     | 113.3               | 111.7   | 98.8  | 100.8 | 115.4        | 109.1           | 113.3      | 117.7   | 97.6  | 102.1 |
| November                | 89.2                                      | 97.9                | 88.0    | 86.7  | 85.0  | 99.6         | 92.3            | 100.4      | 91.8    | 87.3  | 84.8  |
| December                | 78.6                                      | 78.4                | 60.1    | 76.8  | 77.7  | 77.6         | 97.6            | 76.1       | 68.8    | 83.4  | 85.6  |
| <b>1996</b>             |   |                     |         |       |       |              |                 |            |         |       |       |
| January <sup>f</sup>    | 76.0                                      | 55.9                | 51.2    | 88.0  | 78.2  | 74.8         | 83.0            | 65.3       | 54.4    | 89.8  | 76.8  |
| February <sup>f</sup>   | 80.4                                      | 61.1                | 64.7    | 92.3  | 85.0  | 77.3         | 77.3            | 57.5       | 61.2    | 90.3  | 82.7  |
| March <sup>f</sup>      | 101.1                                     | 91.7                | 99.9    | 107.8 | 106.3 | 100.0        | 89.1            | 92.8       | 97.1    | 105.9 | 103.9 |
| April <sup>f</sup>      | 114.8                                     | 117.5               | 127.2   | 114.7 | 114.7 | 114.3        | 102.4           | 115.1      | 119.3   | 114.1 | 110.9 |
| May <sup>p</sup>        | 115.9                                     | 128.7               | 132.0   | 113.3 | 116.9 | 114.0        | 101.2           | 125.1      | 127.5   | 111.9 | 111.7 |

<sup>f</sup>Preliminary. <sup>r</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 A-3. Seasonal Indexes Used to Adjust New Mobile Home Placements, Dealer's Inventories, and Manufacturers' Shipments

| Period                  | New mobile homes placed for residential use |            |         |       |       | New mobile homes on dealer lots at end of period |            |         |       |       | Mobile 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>1993<sup>r</sup></b> |   |            |         |       |       |  |            |         |       |       |                       |
| January                 | 67.4  | 46.8       | 46.8    | 73.7  | 68.8  | 101.2  | 93.9       | 97.4    | 104.2 | 100.0 | 83.6                  |
| February                | 78.0  | 54.2       | 54.2    | 85.4  | 77.7  | 104.2  | 98.8       | 105.3   | 103.8 | 104.7 | 88.4                  |
| March                   | 97.0  | 74.9       | 74.9    | 105.7 | 94.5  | 104.4  | 104.0      | 106.7   | 103.6 | 107.0 | 104.7                 |
| April                   | 105.0                                       | 95.5       | 95.5    | 111.1 | 99.3  | 105.6  | 108.9      | 110.4   | 102.3 | 109.3 | 106.8                 |
| May                     | 108.8                                       | 117.0      | 117.0   | 104.5 | 113.7 | 103.6  | 105.2      | 107.0   | 101.0 | 106.5 | 101.2                 |
| June                    | 116.4                                       | 123.7      | 123.7   | 114.8 | 110.7 | 101.0  | 105.6      | 104.6   | 99.4  | 102.0 | 110.6                 |
| July                    | 105.8                                       | 116.4      | 116.4   | 102.3 | 105.1 | 97.0   | 100.6      | 99.0    | 94.9  | 99.0  | 94.5                  |
| August                  | 119.6                                       | 133.5      | 133.5   | 113.8 | 120.7 | 95.2   | 102.6      | 96.7    | 94.8  | 94.8  | 111.2                 |
| September               | 106.2                                       | 118.7      | 118.7   | 101.7 | 103.5 | 95.0   | 96.9       | 95.0    | 96.6  | 92.0  | 106.9                 |
| October                 | 108.8                                       | 126.0      | 126.0   | 100.4 | 115.8 | 95.0   | 95.6       | 93.2    | 97.3  | 91.9  | 106.5                 |
| November                | 100.8                                       | 107.6      | 107.6   | 99.1  | 97.5  | 97.8   | 96.1       | 91.8    | 99.6  | 95.4  | 97.4                  |
| December                | 88.8  | 88.4       | 88.4    | 88.2  | 92.6  | 99.0   | 91.8       | 91.2    | 101.5 | 96.6  | 87.5                  |
| <b>1994<sup>r</sup></b> |   |            |         |       |       |  |            |         |       |       |                       |
| January                 | 65.4  | 47.8       | 47.8    | 74.7  | 68.8  | 101.8  | 93.8       | 97.3    | 104.1 | 99.8  | 85.0                  |
| February                | 77.0  | 55.1       | 55.1    | 85.3  | 78.0  | 104.8  | 98.6       | 105.3   | 104.0 | 104.9 | 89.4                  |
| March                   | 95.2  | 74.3       | 74.3    | 105.1 | 94.7  | 104.8  | 103.6      | 107.8   | 104.2 | 107.7 | 107.5                 |
| April                   | 101.0                                       | 90.8       | 90.8    | 105.5 | 98.7  | 105.8  | 108.7      | 109.7   | 102.9 | 108.7 | 100.3                 |
| May                     | 111.2                                       | 116.1      | 116.1   | 108.5 | 113.9 | 103.2  | 104.7      | 107.7   | 100.4 | 106.1 | 104.5                 |
| June                    | 118.2                                       | 127.7      | 127.7   | 117.0 | 110.2 | 100.8  | 105.2      | 105.9   | 99.1  | 103.2 | 110.7                 |
| July                    | 103.8                                       | 117.0      | 117.0   | 98.7  | 105.7 | 96.0   | 100.7      | 98.4    | 94.4  | 98.2  | 88.6                  |
| August                  | 119.6                                       | 131.3      | 131.3   | 114.3 | 121.3 | 95.2   | 102.4      | 96.1    | 95.1  | 94.2  | 113.7                 |
| September               | 107.2                                       | 120.0      | 120.0   | 103.8 | 103.4 | 95.8   | 97.2       | 94.8    | 96.1  | 92.8  | 106.9                 |
| October                 | 109.6                                       | 126.0      | 126.0   | 102.6 | 115.9 | 95.0   | 96.7       | 93.3    | 97.0  | 91.6  | 106.5                 |
| November                | 97.0  | 104.9      | 104.9   | 94.5  | 97.3  | 97.8   | 96.0       | 91.0    | 99.9  | 94.5  | 98.0                  |
| December                | 87.2  | 87.7       | 87.7    | 86.3  | 91.1  | 99.0   | 92.1       | 91.7    | 101.8 | 96.9  | 86.2                  |
| <b>1995<sup>r</sup></b> |   |            |         |       |       |  |            |         |       |       |                       |
| January                 | 69.0  | 48.8       | 48.8    | 76.7  | 69.1  | 100.8  | 93.6       | 97.4    | 103.9 | 99.2  | 89.3                  |
| February                | 77.2  | 55.8       | 55.8    | 85.4  | 78.6  | 103.6  | 98.5       | 105.3   | 104.0 | 105.2 | 89.7                  |
| March                   | 98.4  | 78.4       | 78.4    | 106.8 | 95.3  | 105.0  | 103.5      | 106.9   | 104.6 | 108.7 | 107.4                 |
| April                   | 99.6  | 89.4       | 89.4    | 102.5 | 98.6  | 106.0  | 108.9      | 110.6   | 103.0 | 108.4 | 95.8                  |
| May                     | 111.4                                       | 113.4      | 113.4   | 110.4 | 113.4 | 102.8  | 104.5      | 107.2   | 100.8 | 105.9 | 107.6                 |
| June                    | 120.4                                       | 129.7      | 129.7   | 119.1 | 110.3 | 101.8  | 105.0      | 106.3   | 98.6  | 104.1 | 110.6                 |
| July                    | 105.6                                       | 118.9      | 118.9   | 100.7 | 105.2 | 95.6   | 100.6      | 98.8    | 93.9  | 98.1  | 87.8                  |
| August                  | 117.6                                       | 128.8      | 128.8   | 112.3 | 121.5 | 95.6   | 102.1      | 97.1    | 95.1  | 94.3  | 115.6                 |
| September               | 103.2                                       | 114.2      | 114.2   | 98.2  | 103.8 | 95.2   | 97.3       | 93.6    | 96.2  | 92.2  | 101.4                 |
| October                 | 112.0                                       | 126.0      | 126.0   | 106.6 | 116.3 | 95.2   | 97.2       | 93.5    | 96.8  | 91.3  | 111.3                 |
| November                | 98.8  | 109.5      | 109.5   | 95.9  | 97.4  | 98.0   | 95.9       | 91.4    | 100.1 | 95.5  | 99.5                  |
| December                | 85.2  | 88.5       | 88.5    | 83.2  | 90.3  | 99.0   | 92.3       | 90.8    | 101.9 | 96.1  | 82.2                  |
| <b>1996</b>             |   |            |         |       |       |  |            |         |       |       |                       |
| January                 | 69.8  | 48.7       | 48.7    | 77.1  | 69.1  | 101.8  | 93.5       | 96.7    | 104.4 | 98.6  | 92.5                  |
| February <sup>p</sup>   | 83.8  | 60.3       | 60.3    | 92.8  | 83.8  | 106.8  | 101.2      | 109.0   | 107.0 | 109.4 | 95.5                  |
| March                   | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 99.0                  |
| April                   | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 103.1                 |
| May                     | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 109.0                 |
| June                    | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 100.7                 |
| July                    | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 94.0                  |
| August                  | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 111.6                 |
| September               | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 101.1                 |
| October                 | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 117.1                 |
| November                | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 94.9                  |
| December                | (NA)  | (NA)       | (NA)    | (NA)  | (NA)  | (NA)   | (NA)       | (NA)    | (NA)  | (NA)  | 85.6                  |

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

Table A-4. **Average Percent Changes and Related Measures for Monthly Housing Starts and Permit Authorizations**

| Series                       | Average percentage change |                                |                         |                        | Ratio of irregular component to cyclical component (I/C) | Number of months for cyclical dominance (MCD) |
|------------------------------|---------------------------|--------------------------------|-------------------------|------------------------|--|---|
|                              | Original series (O)       | Seasonally adjusted series (C) | Irregular component (I) | Cyclical component (C) |  |   |
| <b>HOUSING STARTS</b>        |                           |                                |                         |                        |  |   |
| <b>U. S. total</b> .....     | <b>12.24</b>              | <b>6.05</b>                    | <b>5.70</b>             | <b>1.69</b>            | <b>3.37</b>  | <b>4</b>                                      |
| Northeast .....              | 24.21                     | 14.43                          | 14.28                   | 1.74                   | 8.22   | 9   |
| Midwest .....                | 25.39                     | 12.73                          | 12.44                   | 1.60                   | 7.75   | 9   |
| South .....                  | 11.85                     | 7.94                           | 7.67                    | 1.95                   | 3.94   | 4   |
| West .....                   | 13.32                     | 9.10                           | 8.60                    | 2.24                   | 3.84   | 4   |
| 1 unit                       |                           |                                |                         |                        |  |   |
| Northeast .....              | 24.90                     | 11.65                          | 11.12                   | 2.26                   | 4.91   | 6   |
| Midwest .....                | 26.27                     | 12.66                          | 12.44                   | 1.59                   | 7.82   | 8   |
| South .....                  | 11.36                     | 7.04                           | 6.75                    | 1.74                   | 3.87   | 4   |
| West .....                   | 13.40                     | 8.53                           | 7.87                    | 2.27                   | 3.47   | 4   |
| 2 to 4 units .....           | 25.90                     | 20.57                          | 20.52                   | 2.06                   | 9.96   | 10  |
| 5 units or more .....        | 21.05                     | 17.28                          | 16.95                   | 2.42                   | 7.00   | 7   |
| <b>PERMIT AUTHORIZATIONS</b> |                           |                                |                         |                        |  |   |
| <b>U. S. total</b> .....     | <b>12.15</b>              | <b>5.08</b>                    | <b>4.31</b>             | <b>2.27</b>            | <b>1.90</b>  | <b>3</b>                                      |
| Northeast .....              | 19.23                     | 9.23                           | 8.74                    | 2.30                   | 3.81   | 5   |
| Midwest .....                | 21.98                     | 8.26                           | 7.51                    | 2.78                   | 2.70   | 4   |
| South .....                  | 10.56                     | 6.20                           | 5.61                    | 2.40                   | 2.34   | 3   |
| West .....                   | 13.34                     | 7.61                           | 6.73                    | 2.79                   | 2.41   | 3   |
| 1 unit                       |                           |                                |                         |                        |  |   |
| Northeast .....              | 20.50                     | 7.68                           | 7.07                    | 2.44                   | 2.90   | 4   |
| Midwest .....                | 22.94                     | 6.91                           | 5.81                    | 2.82                   | 2.06   | 3   |
| South .....                  | 11.19                     | 5.22                           | 4.46                    | 2.25                   | 1.98   | 3   |
| West .....                   | 12.54                     | 6.62                           | 5.69                    | 2.64                   | 2.16   | 3   |
| 2 to 4 units .....           | 14.60                     | 8.56                           | 7.85                    | 2.45                   | 3.20   | 4   |
| 5 units or more .....        | 17.21                     | 10.70                          | 10.04                   | 2.98                   | 3.37   | 4   |

Note: See page A-11 for definitions of the measures shown in this table.

Table A-5. Average Percent Changes and Related Measures for Monthly New Mobile Home Placements, Dealers' Inventories, and Manufacturers' Shipments

| Series  | Average percentage change |                                 |                         |                        | Ratio of irregular component to cyclical component (I/C) | Number of months for cyclical dominance (MCD) |
|---|---------------------------|---------------------------------|-------------------------|------------------------|--|---|
|   | Original series (O)       | Seasonally adjusted series (CI) | Irregular component (I) | Cyclical component (C) |  |   |
| <b>NEW MOBILE HOMES PLACED FOR RESIDENTIAL USE</b>      |                           |                                 |                         |                        |  |   |
| <b>U. S. total</b> .....                                | <b>12.00</b>              | <b>6.04</b>                     | <b>5.96</b>             | <b>0.86</b>            | <b>6.90</b>  | <b>7</b>                                      |
| Northeast .....   | 22.55                     | 10.89                           | 10.81                   | 1.02                   | 10.63  | 12  |
| Midwest .....   | 22.55                     | 10.89                           | 10.81                   | 1.02                   | 10.63  | 12  |
| South .....   | 10.95                     | 7.41                            | 7.26                    | 1.12                   | 6.48   | 6   |
| West .....  | 16.77                     | 12.04                           | 11.96                   | 1.04                   | 11.47  | 12  |
| <b>NEW MOBILE HOMES ON DEALER LOTS AT END OF PERIOD</b> |                           |                                 |                         |                        |  |   |
| <b>U. S. total</b> .....                                | <b>2.33</b>               | <b>1.80</b>                     | <b>1.32</b>             | <b>1.12</b>            | <b>1.18</b>  | <b>2</b>                                      |
| Northeast .....   | 5.42                      | 3.93                            | 3.41                    | 1.51                   | 2.26   | 3   |
| Midwest .....   | 4.04                      | 2.71                            | 2.21                    | 1.31                   | 1.68   | 2   |
| South .....   | 2.51                      | 2.04                            | 1.55                    | 1.19                   | 1.30   | 2   |
| West .....  | 3.92                      | 3.05                            | 2.64                    | 1.27                   | 2.08   | 3   |
| <b>MOBILE HOME SHIPMENTS</b>                            |                           |                                 |                         |                        |  |   |
| <b>U. S. total</b> .....                                | <b>11.61</b>              | <b>2.37</b>                     | <b>1.60</b>             | <b>1.35</b>            | <b>1.18</b>  | <b>2</b>                                      |

#### Definitions of Summary Measures

The following are brief definitions of the measures shown here. More complete explanations appear in *Electronic Computers and Business Indicators* by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from the *Journal of Business*, October 1957).

'O' is the average month-to-month percentage change, without regard to sign, in the original series.

'CI' is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

'I' is the average month-to-month percentage change, without regard to sign, for the irregular component, which is obtained by dividing the cyclical component into the seasonally adjusted series.

'C' is the average month-to-month percentage change, without regard to sign, in the cyclical component. 'C' is a smooth, flexible moving average of the seasonally adjusted series.

'I/C' is the average month-to-month percentage change, without regard to sign, of the irregular component divided by the average month-to-month percentage change, without regard to sign, of the cyclical component. It serves as an indication of the series' relative smoothness (small values) or irregularity (large values).

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movement in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and in the cyclical component are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 12-month spans. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; thus, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.