



Housing Starts

JULY 1997

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

C20/97-7
 Issued August 1997

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.

HOUSING STARTS AND BUILDING PERMITS

Privately owned housing starts in July 1997 were at a seasonally adjusted annual rate of 1,447,000; this is the same (± 6 percent) as the revised June rate, but 3 (± 6) percent below the July 1996 figure of 1,492,000.

Single-family housing starts in July 1997 were at a rate of 1,141,000; this is 3 (± 5) percent above the June figure of 1,111,000. The July rate for units in buildings with five units or more was 275,000. The July rate for units in buildings with two to four units was 31,000.

During the first 7 months of this year, 841,600 housing units were started compared with 868,500 units for the same period in 1996. This is a decrease of 3 (± 1) percent.

New privately owned housing construction was authorized in July in the 19,000 permit-issuing places at a seasonally adjusted annual rate of 1,422,000 units; this is 1 (± 1) percent above the revised June rate of 1,402,000, but 2 (± 2) percent below the July 1996 figure of 1,454,000.

Single-family authorizations in July 1997 were at a rate of 1,029,000; this is 2 (± 1) percent below the June figure of 1,049,000. Authorizations of units in buildings with five units or more were at a rate of 311,000 in July; this is 10 (± 5) percent above the June rate of 283,000. The July rate of permit-authorized units in buildings with two to four units was 82,000.

During the first 7 months of this year, 838,400 housing units were authorized by permits in the 19,000 places compared with 851,800 units for the same period in 1996. This is a decrease of 2 (± 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, 3 months for building permit authorizations, and 2 months for mobile home shipments.

Except for those in mobile home shipments, the statistics in this report are estimated from sample surveys and are subject to sampling variability as well as nonsampling error including bias and variance from response, nonreporting, and undercoverage. Estimated average relative standard errors of preliminary data are shown in the tables. Whenever a statement such as "2 (± 3) percent above" appears in the text, this indicates the range (-1 to +5 percent) in which the actual percent change is likely to have occurred. All ranges given are 90-percent confidence intervals and account for only sampling variability. If a range contains zero, it is uncertain whether there was an increase or decrease; that is, the change is not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. Explanations of confidence intervals and sampling variability appear in the appendix to the April 1997 Current Construction Reports, C20/97-4. On average, the preliminary seasonally adjusted estimates of total housing starts and building permits are revised about ± 1 percent.

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

HISTORICAL DATA

Historical data on housing starts and residential permit authorizations are available from Construction Starts Branch, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233-6900. 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).....	97-7	97-4	97-1	96-10	96-7
Total time from start of construction to completion of private residential buildings (annual data)	97-3	96-3	95-3	94-3	93-3
Total time from authorization of construction to start for private residential buildings (annual data)	97-3	96-3	95-3	94-3	93-3
New privately owned housing units, by intended use and design at time of start (annual data).....	97-2	96-2	95-2	94-2	93-2
New mobile homes (quarterly and annual data).....	97-6	97-5	97-4	96-12	96-9

Table 6. Seasonal Indexes Used to Adjust Housing Units Started

Period	United States implicit index ¹	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						
1997											
April.....	115.2	112.0	119.4	117.7	111.1	117.4	111.7	115.8	115.9	116.0	110.8
May ^a	116.7	117.6	124.7	113.6	113.1	109.6	120.1	118.3	127.3	116.0	114.9
June ^b	110.4	122.9	126.8	107.5	113.1	126.8	93.6	121.9	123.9	103.5	112.4
July ^p	109.9	119.9	124.7	105.1	110.0	108.2	101.7	115.8	120.0	105.7	109.3

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

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

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

Period	United States implicit index ¹	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						
1997											
April.....	113.9	114.6	126.2	116.1	113.5	114.5	101.6	118.1	121.4	115.6	111.4
May.....	110.4	122.9	123.3	109.6	112.8	107.6	96.9	118.3	118.7	108.2	107.9
June ^b	112.6	120.4	121.7	108.1	115.2	116.0	106.9	120.6	114.3	107.3	117.3
July ^p	112.4	123.1	121.9	109.7	113.5	104.7	107.6	122.5	118.4	106.8	116.3

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

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

Table 8. Seasonal Indexes Used to Adjust New Mobile Home Placements, Dealers' 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 ¹	North-east	Midwest	South	West	United States implicit index ¹	North-east	Midwest	South	West	
1997											
February	82.0	53.4	53.4	88.8	87.0	102.0	96.5	101.5	101.6	103.9	88.8
March	101.8	77.4	77.4	109.6	98.3	102.2	102.2	103.7	101.2	105.3	97.8
April	95.6	89.3	89.3	97.6	96.6	103.8	109.6	109.3	102.0	107.2	104.8
May ^p	111.0	111.4	111.4	112.4	102.9	102.4	105.6	110.5	99.6	105.9	105.6
June	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	104.5

NA Not available. ^aPreliminary (does not apply to shipments). ^bRevised (does not apply to shipments).¹The 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 9. New Privately Owned Housing Units Started, by Purpose of Construction

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

Period		In structures with—								
		1 unit				2 units or more				
		Total	Total	For sale ¹	For owner occupancy on owner's land	Contractor built	Owner built	For rent	Total	For sale
ANNUAL DATA										
1977.....	1,987	1,451	904	298	240	9	536	90	446	
1978.....	2,020	1,433	901	287	231	14	587	131	456	
1979.....	1,745	1,194	742	213	222	17	551	173	378	
1980.....	1,292	852	526	149	164	12	440	163	277	
1981.....	1,084	705	426	122	148	10	379	158	221	
1982.....	1,062	663	409	108	133	12	400	140	259	
1983.....	1,703	1,068	713	151	179	24	635	210	425	
1984.....	1,750	1,084	728	157	165	33	665	206	459	
1985.....	1,742	1,072	713	177	157	26	669	154	515	
1986.....	1,805	1,179	782	204	166	27	626	143	483	
1987.....	1,620	1,146	732	208	178	28	474	130	344	
1988.....	1,488	1,081	709	196	154	22	407	99	307	
1989.....	1,376	1,003	648	192	144	19	373	87	286	
1990.....	1,193	895	529	196	147	22	298	56	241	
1991.....	1,014	840	490	198	138	14	174	41	132	
1992.....	1,200	1,030	618	224	168	19	170	41	128	
1993.....	1,288	1,126	716	225	162	22	162	44	118	
1994.....	1,457	1,198	763	245	169	22	259	52	206	
1995.....	1,354	1,076	712	199	133	33	278	51	227	
1996.....	1,477	1,161	774	218	144	25	316	59	257	
QUARTERLY DATA										
1991:	1st quarter.....	185	147	92	33	19	3	39	8	31
	2nd quarter.....	301	254	147	59	45	4	47	12	34
	3rd quarter.....	285	240	135	60	42	3	45	12	33
	4th quarter.....	243	200	118	47	30	4	43	9	34
1992:	1st quarter.....	262	219	145	42	28	4	44	10	34
	2nd quarter.....	341	296	173	67	52	4	44	11	34
	3rd quarter.....	322	276	159	64	49	5	46	10	36
	4th quarter.....	275	239	145	52	37	5	36	11	25
1993:	1st quarter.....	241	213	142	42	26	3	27	10	18
	2nd quarter.....	367	324	204	62	52	6	43	11	32
	3rd quarter.....	356	309	192	64	48	5	46	12	34
	4th quarter.....	324	279	181	55	38	6	45	11	34
1994:	1st quarter.....	294	253	176	46	26	5	41	12	30
	2nd quarter.....	423	354	221	75	54	4	69	14	54
	3rd quarter.....	398	326	199	71	50	5	72	16	56
	4th quarter.....	342	266	170	52	36	7	77	12	64
1995:	1st quarter.....	270	214	149	37	25	4	56	11	45
	2nd quarter.....	371	297	195	54	37	10	74	15	59
	3rd quarter.....	387	308	198	59	42	9	79	13	66
	4th quarter.....	326	257	177	46	27	8	69	12	57
1996:	1st quarter.....	303	240	175	40	21	4	63	11	52
	2nd quarter.....	428	344	229	70	39	5	85	18	67
	3rd quarter.....	410	324	210	63	44	7	87	18	68
	4th quarter.....	335	252	171	46	30	5	83	16	67
1997:	1st quarter ^r	297	238	175	36	22	5	59	13	46
	2nd quarter ^p	412	322	216	56	46	3	90	17	73
AVERAGE RELATIVE STANDARD ERRORS²										
Annual.....(percent).....	1	1	2	6	5	10	3	9	3	
Quarterly.....(percent).....	1	1	2	7	8	18	4	12	6	

NA Not available. ^pPreliminary. ^rRevised.¹Includes houses already sold when construction started.²Average 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).

Notes: Housing units for which purpose of construction was not reported have been distributed proportionally to those for which the information was reported. Quarterly estimates may not add to the annual figures as the latter include late reports and corrections.

Appendix.

Monthly Revisions to Estimates

Each month the Census Bureau publishes preliminary estimates of Housing Starts and Building Permits. The Bureau releases these estimates to provide government and private data users with early measures of new privately owned residential construction activity. A necessary part of the process of issuing these early data involves the issuance of subsequent revisions. The revisions to monthly housing starts and building permit estimates are primarily the result of the replacement of imputed data with data which are reported in subsequent months.

For total housing starts, the range of the difference between the last 12 preliminary and first revision estimates for the same months was from -0.86 percent to 1.46 percent, with a median of 0.07 percent. The range of the difference between preliminary and final estimates was from -1.85 percent to 3.79 percent, with a median of 1.21 percent. The preliminary-to-final difference for total building permits over the last 12 months ranged from -2.37 percent to 2.39 percent, with a median of 0.28 percent.

Analysis of Revisions to Monthly Seasonally Adjusted Estimates of Housing Starts and Building Permits

Series	Percent changes between estimates—last 12 months							
	First revision versus preliminary			Final versus preliminary			Median	
	Range		Median	Range		Median		
	From	To		From	To			
HOUSING STARTS								
U. S. total	-0.86	1.46	0.07	-1.85	3.79	1.21		
In structures with-								
1 unit.....	-1.96	1.22	-0.18	-2.66	2.24	1.38		
2 to 4 units	-16.67	26.47	9.32	-10.53	28.57	8.79		
5 units or more.....	-4.86	5.96	0.06	-3.82	7.80	1.71		
Northeast.....	-2.42	8.00	1.08	-3.62	11.20	1.37		
Midwest.....	-4.94	0.88	-0.73	-2.08	3.08	-0.13		
South.....	-2.64	1.91	0.15	-1.47	5.49	0.67		
West.....	-2.03	3.11	0.86	-2.20	6.23	1.41		
BUILDING PERMITS¹								
U.S. total.....	-2.37	2.39	0.28	-2.37	2.39	0.28		
In structures with-								
1 unit.....	-4.53	3.27	-0.05	-4.53	3.27	-0.05		
2 to 4 units	-2.86	3.08	-0.72	-2.86	3.08	-0.72		
5 units or more.....	-4.76	9.20	0.94	-4.76	9.20	0.94		
Northeast.....	-8.15	11.29	0.38	-8.15	11.29	0.38		
Midwest.....	-5.10	3.93	0.00	-5.10	3.93	0.00		
South.....	-6.97	5.52	0.79	-6.97	5.52	0.79		
West.....	-2.75	3.99	0.59	-2.75	3.99	0.59		

¹For the building permit series, the first revision is the final estimate.