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FEBRUARY 2002 CONSTRUCTION AT \$879.4 BILLION ANNUAL RATE

Construction put in place during February 2002 was estimated at a seasonally adjusted annual rate of \$879.4 billion, 1 (± 5) percent above the revised January estimate of \$869.7 billion, according to the U.S. Commerce Department's Census Bureau. The February figure represents a 1 (± 5) percent increase over February 2001.

During the first 2 months of this year \$116.7 billion of construction was put in place, nearly the same (± 5 percent) as the \$116.2 billion for the same period in 2001.

In constant (1996) dollars, the February annual rate was \$728.9 billion, 1 (± 5) percent above the revised estimate of \$720.2 billion for January.

PRIVATE CONSTRUCTION

Spending on new residential housing units was at a seasonally adjusted annual rate of \$293.4 billion in February, 3 percent above the revised January estimate of \$286.2 billion. Nonresidential building construction was at a rate of \$181.9 billion, 3 (± 3) percent below the revised January estimate of \$187.5 billion.

PUBLIC CONSTRUCTION

In February, the estimated seasonally adjusted annual rate of public construction put in place was \$218.8 billion, nearly the same (± 5 percent) as the revised January estimate of \$219.8 billion.

March 2002 data will be released on May 1, 2002 at 10:00 AM EDT.

EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 2 months to establish an underlying trend for total construction and as long as 8 months for specific categories of construction.

The statistics in this release are estimated from several sources and surveys and are subject to sampling variability as well as nonsampling errors including bias and variance from response, nonreporting, and undercoverage. Estimates of the standard errors are provided in Table 4 for selected types of construction. 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. If the range contains zero, it is uncertain whether there was an increase or decrease; that is, the change was not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. Statistics for the current month are preliminary estimates subject to revision in following months as additional data become available. The average absolute percent changes from preliminary estimate to first revision for the major seasonally adjusted components are as follows: total construction, 0.6 percent; private construction, 0.7 percent; private residential construction, 0.7 percent; private nonresidential construction, 1.3 percent; and public construction, 1.6 percent.

More detailed data will appear in Current Construction Reports, C30/02-2, to be issued later this month. A discussion of sources and reliability of the data appears in Current Construction Reports, C30/01-5.

This press release is available on the date of issue through:

1. The internet at http://www.census.gov/const/c30_curr.html
2. The Commerce Department's on-line Economic Bulletin Board (EBB) and STAT-USA/Fax services. For more information, telephone (202) 482-1986.

Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

Type of construction	Feb ^P 2002	Jan ^r 2002	Dec ^r 2001	Nov ^r 2001	Oct ^r 2001	Sep 2001	Aug 2001	Feb 2001	Percent change Feb 2002 from—	
									Jan 2002	Feb 2001
Current dollars										
Total construction	879.4	869.7	862.6	856.0	856.1	851.9	856.6	869.3	1	1
Private construction ¹	660.7	649.9	654.3	651.5	656.9	660.2	663.1	681.8	2	- 3
Residential buildings ²	416.7	402.8	399.2	396.5	400.1	398.1	399.6	398.9	3	4
New housing units.....	293.4	286.2	281.2	280.0	280.3	279.3	280.2	275.4	3	7
1 unit.....	258.7	250.9	246.6	247.9	248.9	248.2	248.9	245.6	3	5
2 units or more.....	34.7	35.3	34.7	32.1	31.5	31.1	31.3	29.8	- 2	16
Nonresidential buildings.....	181.9	187.5	190.8	193.0	198.1	202.0	201.9	220.2	- 3	- 17
Industrial.....	21.1	22.8	23.9	23.9	26.1	31.3	31.9	33.4	- 7	- 37
Office.....	42.1	44.0	46.2	48.0	50.5	50.0	49.7	58.9	- 4	- 29
Hotels, motels.....	12.1	12.4	13.1	14.0	14.2	14.7	14.3	15.9	- 2	- 24
Other commercial.....	59.4	60.7	60.5	61.0	61.3	61.3	61.2	65.6	- 2	- 10
Religious.....	8.3	8.4	8.4	8.4	8.2	8.6	8.8	8.1	- 1	2
Educational.....	14.2	14.3	14.1	13.9	13.7	13.0	12.4	12.1	- 1	17
Hospital and institutional.....	15.9	15.8	15.3	14.3	15.0	14.3	14.6	15.7	1	1
Miscellaneous buildings.....	8.8	9.2	9.4	9.3	9.1	8.9	9.1	10.4	- 4	- 15
Telecommunications.....	(NA)	17.6	21.9	20.6	19.0	21.1	22.6	22.9	(NA)	(NA)
All other private.....	3.1	3.0	3.0	2.9	2.9	3.0	2.7	2.9	3	5
Public construction	218.8	219.8	208.3	204.4	199.2	191.6	193.5	187.5	(Z)	17
Housing and redevelopment.....	7.1	7.5	7.6	6.8	6.7	6.2	6.0	5.5	- 5	30
Industrial.....	2.4	1.5	2.4	1.4	1.1	2.0	1.4	1.4	58	70
Educational.....	56.4	54.4	52.2	52.7	53.5	50.6	51.4	45.7	4	23
Hospital.....	5.1	5.5	4.6	4.4	4.2	4.1	4.2	3.9	- 7	30
Other public buildings.....	32.8	34.9	34.0	34.2	33.9	33.0	31.7	30.3	- 6	8
Highways and streets.....	65.7	68.3	59.8	58.7	56.0	53.5	55.7	56.2	- 4	17
Military facilities.....	2.3	2.2	2.2	2.4	2.3	2.4	2.5	2.3	4	- 1
Conservation and development ..	8.5	8.6	7.5	7.4	7.5	7.3	7.3	7.8	- 1	8
Sewer systems.....	11.8	11.2	10.6	10.8	10.0	9.9	10.0	10.4	5	14
Water supply facilities.....	8.3	8.4	8.5	8.2	7.7	8.0	8.0	7.6	- 2	9
Miscellaneous public.....	18.4	17.3	18.8	17.4	16.3	14.6	15.2	16.4	6	12
1996 dollars										
Total construction	728.9	720.2	713.9	710.5	711.6	713.0	718.5	738.5	1	- 1
Private construction ¹	547.6	537.5	540.9	539.3	544.6	551.0	554.8	578.2	2	- 5
Residential buildings ²	343.0	330.5	327.0	325.0	329.3	330.4	332.4	336.3	4	2
New housing units.....	241.5	234.8	230.3	229.5	230.7	231.8	233.1	232.2	3	4
1 unit.....	212.9	205.8	201.9	203.2	204.8	205.9	207.1	207.1	3	3
2 units or more.....	28.6	28.9	28.4	26.3	25.9	25.8	26.0	25.2	- 1	14
Nonresidential buildings.....	149.5	154.1	156.6	158.7	163.0	167.1	167.4	184.7	- 3	- 19
Industrial.....	17.4	18.7	19.6	19.7	21.5	25.9	26.4	28.0	- 7	- 38
Office.....	34.6	36.1	37.9	39.5	41.6	41.3	41.2	49.4	- 4	- 30
Hotels, motels.....	9.9	10.2	10.7	11.5	11.7	12.1	11.9	13.4	- 2	- 26
Other commercial.....	48.8	49.9	49.7	50.1	50.4	50.7	50.7	55.1	- 2	- 11
Religious.....	6.9	6.9	6.9	6.9	6.8	7.1	7.3	6.8	- 1	(Z)
Educational.....	11.6	11.7	11.5	11.5	11.3	10.8	10.2	10.1	- 1	15
Hospital and institutional.....	13.0	12.9	12.6	11.8	12.3	11.9	12.1	13.2	1	- 1
Miscellaneous buildings.....	7.2	7.6	7.7	7.7	7.5	7.4	7.5	8.7	- 4	- 17
Telecommunications.....	(NA)	16.4	20.4	19.4	17.8	19.7	21.1	21.9	(NA)	(NA)
All other private.....	2.6	2.5	2.5	2.5	2.5	2.6	2.4	2.6	3	1
Public construction	181.3	182.7	173.1	171.2	167.0	162.0	163.7	160.3	- 1	13
Housing and redevelopment.....	5.9	6.1	6.2	5.6	5.5	5.1	5.0	4.6	- 5	27
Industrial.....	1.9	1.2	2.0	1.2	0.9	1.7	1.2	1.2	58	67
Educational.....	46.3	44.7	42.8	43.3	44.1	41.9	42.6	38.4	4	21
Hospital.....	4.2	4.5	3.8	3.6	3.4	3.4	3.5	3.3	- 7	28
Other public buildings.....	26.9	28.7	27.9	28.1	27.9	27.3	26.3	25.4	- 6	6
Highways and streets.....	53.8	56.2	49.3	49.1	47.1	45.8	47.5	48.1	- 4	12
Military facilities.....	1.9	1.8	1.8	2.0	2.0	2.0	2.1	2.0	4	- 5
Conservation and development ..	7.4	7.6	6.7	6.6	6.7	6.5	6.5	7.1	- 2	5
Sewer systems.....	10.3	9.9	9.3	9.6	8.9	8.8	8.9	9.3	5	11
Water supply facilities.....	7.0	7.1	7.2	7.0	6.5	6.8	6.8	6.6	- 2	6
Miscellaneous public.....	15.6	14.8	16.1	15.1	14.1	12.8	13.3	14.4	6	8

NA Not available. ^PPreliminary. ^rRevised. Z Less than 0.5 percent.

¹Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential. ²Includes improvements.

Table 2. Value of Construction Put in Place in the United States, Not Seasonally Adjusted in Current Dollars

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

Type of construction	Feb ^P 2002	Jan ^f 2002	Dec ^f 2001	Nov ^f 2001	Oct ^f 2001	Sep 2001	Aug 2001	Feb 2001	Year to date		
									Feb 2002	Feb 2001	Percent change
Total construction	57.6	59.1	64.1	73.3	79.1	79.9	81.8	57.1	116.7	116.2	(Z)
Private construction ¹	43.9	45.1	49.2	56.2	60.4	60.8	61.7	45.5	89.0	92.9	- 4
Residential buildings ²	25.8	27.1	28.5	34.3	37.3	37.4	38.0	24.6	52.9	50.9	4
New housing units.....	19.2	19.6	20.9	24.2	25.3	25.8	26.3	18.0	38.9	36.6	6
1 unit.....	16.6	17.0	18.2	21.5	22.6	23.1	23.5	15.8	33.6	32.2	4
2 units or more.....	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.2	5.2	4.4	19
Nonresidential buildings.....	13.5	13.9	15.3	16.6	17.7	17.9	18.0	16.4	27.4	33.1	- 17
Industrial.....	1.6	1.7	2.0	2.1	2.4	2.7	2.8	2.5	3.3	5.2	- 37
Office.....	3.2	3.4	3.7	4.1	4.4	4.3	4.3	4.6	6.6	9.3	- 29
Hotels, motels.....	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.9	2.5	- 23
Other commercial.....	4.2	4.3	4.7	5.3	5.6	5.7	5.7	4.7	8.5	9.2	- 8
Religious.....	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.6	1.3	1.2	5
Educational.....	1.0	1.0	1.0	1.1	1.2	1.2	1.2	0.8	2.0	1.7	17
Hospital and institutional.....	1.3	1.2	1.3	1.2	1.3	1.2	1.2	1.2	2.5	2.5	(Z)
Miscellaneous buildings.....	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	1.4	1.5	- 12
Telecommunications.....	(NA)	1.2	1.9	1.8	1.8	1.7	2.1	1.6	(NA)	3.3	(NA)
All other private.....	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	7
Public construction	13.7	14.0	14.9	17.1	18.6	19.1	20.1	11.6	27.8	23.3	19
Housing and redevelopment.....	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.4	1.1	0.8	29
Industrial.....	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.3	0.2	27
Educational.....	3.8	3.8	3.8	4.2	4.7	4.8	5.4	3.0	7.6	6.2	22
Hospital.....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.8	0.6	36
Other public buildings.....	2.4	2.6	2.7	3.0	3.0	3.0	2.8	2.2	5.0	4.4	13
Highways and streets.....	3.1	3.3	3.5	4.9	6.0	5.9	6.7	2.6	6.4	5.1	26
Military facilities.....	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	- 2
Conservation and development ..	0.6	0.6	0.6	0.6	0.5	0.9	0.7	0.5	1.2	1.0	13
Sewer systems.....	0.8	0.8	0.8	1.0	1.0	0.9	0.9	0.7	1.5	1.4	13
Water supply facilities.....	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.5	1.1	1.0	13
Miscellaneous public.....	1.2	1.1	1.4	1.5	1.5	1.5	1.5	1.1	2.4	2.1	11

NA Not available. ^PPreliminary. ^fRevised. Z Less than 0.5 percent.

¹Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential. ²Includes improvements.

Table 3. U.S. Census Bureau Composite Fixed-Weighted (1996 Weights) Price Index and Implicit Price Deflator

[1996 = 100]

Period	Fixed-Weighted Index			Implicit Price Deflator		
	2000	2001	2002	2000	2001	2002
January.....	113.9	117.8	^f 121.1	114.0	117.4	^f 120.8
February.....	114.1	118.3	^P 121.1	114.1	117.7	^P 120.6
March.....	114.0	118.8		113.9	118.5	
April.....	114.5	118.7		114.4	118.3	
May.....	114.8	118.9		114.8	118.6	
June.....	115.0	119.2		115.1	119.0	
July.....	115.6	119.1		115.7	118.8	
August.....	115.7	119.4		115.8	119.2	
September.....	116.1	119.6		115.9	119.4	
October.....	116.4	^f 120.4		116.3	^f 120.3	
November.....	116.7	^f 120.8		116.6	^f 120.5	
December.....	117.1	^f 121.2		116.9	^f 120.7	
Annual.....	115.3	^f 119.4		115.4	^f 119.1	

^PPreliminary. ^fRevised.

Note: The fixed-weighted price index is a weighted average of the individual price index series used to deflate the Value of Construction Put in Place (VIP) series. In calculating the index, the weights (the composition of current dollar VIP in 1996 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The implicit price deflator is a derived ratio of total current to constant dollar VIP (multiplied by 100). It is the average of the individual price indexes used in the deflation of VIP, but the prices are weighted by the composition of VIP each period. As a result, the implicit price deflator reflects not only changes in prices, but also changes in the composition of VIP, and its use as a measure of price change is discouraged.

Table 4. **Relative Standard Errors and Coefficients for Standard Errors of Changes**

Type of construction	Relative standard error (percent)			Coefficient for changes	
	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	2	1	.03	.03
Private construction	3	3	1	.04	.04
Residential buildings	5	4	2	.06	.06
New housing units	2	2	1	.01	.02
1 unit	2	2	2	.01	.02
2 units or more	4	4	3	.03	.04
Nonresidential buildings	2	2	1	.02	.03
Industrial	3	3	2	.04	.04
Office	4	4	2	.05	.06
Hotels, motels	7	7	5	.09	.10
Other commercial	5	4	2	.06	.06
Religious	9	9	5	.12	.13
Educational	7	6	5	.10	.09
Hospital and institutional	6	6	5	.07	.08
Miscellaneous buildings	7	6	4	.09	.09
Public construction	2	1	1	.03	.01
Housing and redevelopment	8	6	4	.11	.09
Industrial	(NA)	(NA)	(NA)	(NA)	(NA)
Educational	3	3	2	.04	.04
Hospital	6	6	4	.08	.09
Other public buildings	3	3	2	.04	.04
Highways and streets	4	3	2	.05	.04
Military facilities	(NA)	(NA)	(NA)	(NA)	(NA)
Conservation and development	4	3	2	.06	.04
Sewer systems	6	4	3	.08	.06
Water supply facilities	8	6	3	.11	.09
Miscellaneous public	8	7	4	.11	.10

NA Not available.

Note: All statistics are based upon 2001 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

The standard errors (SE) for month-to-month and year-to-date changes may be approximated by the following formula with the appropriate coefficient shown in Table 4:

$$SE(\text{change}) = (k1 \text{ or } k2) (100 + \% \text{ change shown in table}).$$

For example, Table 1 shows that private 'office' construction decreased 4 percent from last month. The standard error of the 4 percent decrease is about equal to 5 percentage points:

$$SE(4\% \text{ decrease}) = (.05)(100-4) = (.05)(96) = 5\%$$

Once the standard error is available, one can construct a 90 percent confidence interval of the change by multiplying the standard error by 1.6. In the above example, an approximate 90 percent confidence interval of the 4 percent decrease for private 'office' construction would be between:

$$4 \text{ and } -12 \text{ percent } (-4\% \text{ plus or minus } 8\% (5\% \times 1.6)).$$

Table 5. Annual Value of Construction Put in Place in the United States in Current Dollars and 1996 Dollars

[Detail may not add to total due to rounding]

Type of construction	Value (millions of dollars)				Percent change from 2000 to 2001	
	Current dollars		1996 dollars		Current dollars	1996 dollars
	2001 ^r	2000	2001 ^r	2000		
Total construction	861,181	815,414	723,199	706,899	6	2
Private construction ¹	666,519	640,554	558,850	555,089	4	1
Residential buildings ²	395,716	374,274	329,710	323,708	6	2
New housing units	277,717	264,864	231,399	229,103	5	1
1 unit	246,537	236,788	205,419	204,812	4	(Z)
2 units or more	31,181	28,076	25,980	24,292	11	7
Nonresidential buildings	208,699	210,140	173,360	179,654	- 1	- 4
Industrial	31,120	32,073	25,861	27,419	- 3	- 6
Office	53,956	55,686	44,836	47,594	- 3	- 6
Hotels, motels	14,710	16,396	12,221	14,027	- 10	- 13
Other commercial	62,899	61,453	52,232	52,539	2	- 1
Religious	8,428	8,068	6,997	6,898	4	1
Educational	12,604	11,356	10,462	9,707	11	8
Hospital and institutional	15,284	14,575	12,696	12,459	5	2
Miscellaneous buildings	9,698	10,533	8,056	9,010	- 8	- 11
Telecommunications	22,002	17,994	20,732	17,497	22	18
All other private	2,768	2,899	2,402	2,570	- 5	- 7
Public construction	194,662	174,860	164,349	151,810	11	8
Housing and redevelopment	6,281	5,228	5,230	4,521	20	16
Industrial	1,556	1,159	1,292	991	34	30
Educational	49,302	43,560	40,920	37,237	13	10
Hospital	4,056	4,007	3,367	3,427	1	- 2
Other public buildings	32,311	28,321	26,821	24,214	14	11
Highways and streets	57,485	52,088	48,545	45,230	10	7
Military facilities	2,347	2,337	1,965	2,016	(Z)	- 3
Conservation and development ..	7,136	6,014	6,370	5,449	19	17
Sewer systems	10,215	10,287	9,118	9,324	- 1	- 2
Water supply facilities	7,979	6,928	6,843	6,160	15	11
Miscellaneous public	15,996	14,930	13,879	13,241	7	5

NA Not available. ^PPreliminary. ^rRevised. Z Less than 0.5 percent.

¹Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

²Includes improvements.