

# Value of Construction Put in Place: April 2003

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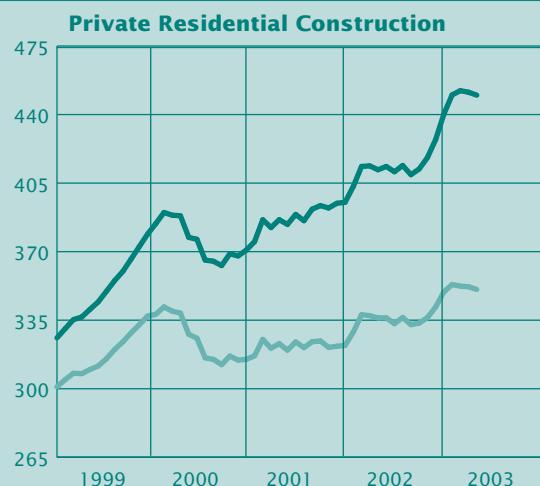
## Monthly Value of Construction Put in Place

Seasonally adjusted annual rate in billions of dollars

Current dollars  
1996 dollars

The May 2003 issue for "Value of Construction Put in Place" will be the last printed publication of this series. The current types of construction classifications and the current table formats will no longer be available. New monthly detailed types of construction will be presented in new table formats on the Internet only. Also, constant dollar series will be discontinued. For further details, see: <http://www.census.gov/const/C30/newtc.html>.

## Current Construction Reports



Source: U.S. Census Bureau, Value of Construction Put in Place.

Questions regarding these data may be directed to **Michael Davis**, Construction Expenditures Branch, Manufacturing and Construction Division, telephone: 301-763-1605.

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## VALUE OF CONSTRUCTION PUT IN PLACE

Construction put in place during April 2003 was estimated at a seasonally adjusted annual rate of \$862.6 billion, 0.3 ( $\pm 4.8$ ) percent below the revised March estimate of \$864.8 billion. The April figure is 0.7 ( $\pm 4.8$ ) percent above April 2002.

During the first 4 months of this year \$249.6 billion of construction was put in place, 0.9 ( $\pm 4.8$ ) percent above the \$247.4 billion for the same period in 2002.

In constant (1996) dollars, the April annual rate was \$686.1 billion, 0.3 ( $\pm 4.8$ ) percent below the revised estimate of \$688.4 billion for March.

Spending on new residential housing units was at a seasonally adjusted annual rate of \$325.6 billion in April, 0.5 ( $\pm 1.6$ ) percent below the revised March estimate of \$327.3 billion. Nonresidential building construction was at a rate of \$156.1 billion, 2.6 ( $\pm 3.1$ ) percent below the revised March estimate of \$160.3 billion.

In April, the estimated seasonally adjusted annual rate of public construction put in place was \$201.2 billion, 0.2 ( $\pm 4.8$ ) percent above the revised March estimate of \$200.7 billion.

The "value of construction put in place" is a measure of the value of construction installed or erected at the site during a given period. For an individual project, this includes—

1. Cost of materials installed or erected.
2. Cost of labor (both by contractors and force account) and a proportionate share of the cost of construction equipment rental.
3. Contractor's profit.
4. Project owner's overhead and office costs.
5. Cost of architectural and engineering work.
6. Miscellaneous costs chargeable to the project on the owner's books.
7. Interest and taxes paid during construction.

The total value-in-place for a given period is the sum of the value of work done on all projects underway during this period, regardless of when work on each individual project was started or when payment was made to the contractors. For some categories, estimates are derived by distributing the total construction cost of the project by means of historic construction progress patterns.

## ADDITIONAL DATA

Additional data related to the value of construction put in place can be found in the following publications:

- Current Construction Reports, *Value of Construction Put in Place: May 2002*, C30/02-5, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2002; contains annual data for 1997 to 2001 and monthly data for 1998 to 2001.
- Current Construction Reports, *Value of Construction Put in Place: June 2002*, C30/02-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2002; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1995 to 2001.

- Current Construction Reports, *Value of New Construction Put in Place: October 1992*, C30/92-10, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1992; contains total time and monthly progress from start to completion for private nonresidential buildings and for state and local construction.
- Current Construction Reports, *Value of New Construction Put in Place in the United States, 1964 to 1980*, C30-80 supplement, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1981; contains annual data for 1915 to 1963.
- Current Construction Reports Special Study, *Expenditures for Nonresidential Improvements and Repairs: 1992*, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1994.



**Table 2. Annual Value of Public Construction Put in Place: 1998-2002**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
<b>Total public construction . . . . .</b>	<b>154,302</b>	<b>169,545</b>	<b>178,561</b>	<b>192,509</b>	<b>203,868</b>	<b>145,297</b>	<b>153,904</b>	<b>154,902</b>	<b>161,965</b>	<b>167,895</b>
<b>State and local construction . . . . .</b>	<b>139,984</b>	<b>155,519</b>	<b>164,396</b>	<b>177,527</b>	<b>187,304</b>	<b>131,792</b>	<b>141,107</b>	<b>142,484</b>	<b>149,147</b>	<b>153,987</b>
Total buildings . . . . .	66,392	74,948	83,408	91,852	100,876	61,894	67,031	71,356	76,044	82,239
Housing and redevelopment . . . . .	4,649	4,229	3,926	4,330	4,812	4,403	3,834	3,395	3,591	3,897
Educational. . . . .	34,986	42,411	49,785	55,718	63,015	32,575	37,890	42,563	46,119	51,389
Hospital. . . . .	2,914	3,175	3,413	3,389	4,207	2,715	2,838	2,920	2,805	3,431
Other <sup>1</sup> . . . . .	23,844	25,133	26,284	28,415	28,842	22,200	22,469	22,478	23,528	23,523
Highways and streets . . . . .	44,419	48,600	48,925	53,743	53,978	42,006	44,330	42,471	45,177	44,044
Conservation and development . . . . .	1,930	2,053	2,003	2,427	2,461	1,849	1,916	1,815	2,172	2,157
Sewer systems. . . . .	9,943	9,864	8,807	8,751	9,335	9,526	9,214	7,982	7,828	8,172
Water supply facilities. . . . .	6,678	6,541	5,993	7,152	7,264	6,405	6,147	5,327	6,138	6,069
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,622	13,513	15,260	13,602	13,389	10,112	12,469	13,534	11,788	11,307
<b>Federal construction . . . . .</b>	<b>14,318</b>	<b>14,025</b>	<b>14,165</b>	<b>14,981</b>	<b>16,563</b>	<b>13,505</b>	<b>12,796</b>	<b>12,418</b>	<b>12,818</b>	<b>13,908</b>
Total buildings . . . . .	6,026	5,469	5,158	5,115	5,277	5,624	4,896	4,416	4,236	4,302
Housing. . . . .	538	424	382	421	512	510	384	331	349	415
Industrial . . . . .	1,010	925	1,157	1,556	1,863	941	827	990	1,288	1,519
Educational. . . . .	15	15	29	35	44	14	14	25	29	36
Hospital. . . . .	1,009	850	722	664	793	941	762	618	550	646
Other <sup>3</sup> . . . . .	3,454	3,255	2,867	2,440	2,066	3,217	2,909	2,452	2,021	1,685
Highways and streets . . . . .	257	251	337	283	(NA)	243	229	292	238	(NA)
Military facilities . . . . .	2,530	2,125	2,441	2,843	2,929	2,377	1,922	2,105	2,372	2,391
Conservation and development . . . . .	3,536	4,035	4,061	4,695	5,343	3,387	3,766	3,679	4,200	4,676
Miscellaneous public <sup>4</sup> . . . . .	1,969	2,145	2,169	2,046	2,722	1,873	1,983	1,925	1,773	2,303

NA Not available, but estimates are included in totals.

<sup>1</sup>Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers, etc.

<sup>2</sup>Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc.

<sup>3</sup>Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc.

<sup>4</sup>Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.







∞ Table 4. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in Current Dollars—Con.

[Millions of dollars]

Period	Public construction													
	Total	Buildings						Highways and streets	Military facilities	Conserva- tion and develop- ment	Sewer systems	Water supply facilities	Miscel- laneous public <sup>7</sup>	
		Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>								
2001:	April .....	194,739	96,586	4,669	1,636	54,887	3,826	31,568	56,199	3,262	6,553	9,022	7,318	15,799
	May .....	197,802	97,062	4,867	1,365	55,444	4,017	31,369	57,932	2,754	7,384	8,952	6,960	16,757
	June .....	194,141	94,894	4,769	1,454	52,634	4,308	31,730	57,828	2,965	6,586	8,691	7,581	15,596
	July .....	192,587	96,819	4,418	1,469	56,614	4,087	30,230	56,181	2,802	6,432	8,469	7,233	14,652
	August .....	188,062	96,884	4,463	1,509	56,856	4,198	29,858	50,965	3,110	7,005	8,744	7,231	14,124
	September .....	187,417	97,807	4,473	1,896	56,727	4,184	30,527	49,432	2,900	7,564	8,235	7,546	13,932
	October .....	193,140	100,977	5,000	1,048	59,262	4,025	31,642	51,612	2,894	7,239	8,586	6,772	15,060
	November .....	196,869	100,295	5,008	1,417	58,347	4,145	31,377	54,183	2,838	7,115	9,218	7,381	15,840
	December .....	201,014	102,071	5,267	2,308	58,088	4,385	32,023	55,250	2,559	7,461	8,881	7,636	17,155
2002:	January .....	208,702	104,647	4,943	1,470	61,052	5,375	31,808	61,726	2,481	8,159	9,536	7,270	14,884
	February .....	214,938	108,858	5,172	2,321	63,861	5,068	32,435	61,726	2,533	8,661	9,884	7,197	16,078
	March .....	199,882	103,940	4,806	1,876	60,875	5,017	31,366	52,418	2,609	8,693	9,334	6,935	15,953
	April .....	200,232	105,468	5,096	2,097	62,789	4,845	30,641	51,456	2,720	7,885	9,192	7,091	16,419
	May .....	204,932	108,406	5,137	2,056	65,856	4,759	30,599	51,881	3,094	7,378	9,773	7,572	16,827
	June .....	199,136	104,528	5,672	1,896	61,156	4,657	31,148	51,401	2,962	7,343	9,376	7,570	15,957
	July .....	202,068	104,901	5,724	1,841	62,292	4,813	30,231	54,548	3,318	6,975	9,477	6,963	15,886
	August .....	202,757	106,320	6,017	2,231	62,423	5,093	30,554	53,806	2,845	7,505	9,487	7,080	15,715
	September .....	205,706	107,712	5,594	1,383	64,837	5,308	30,591	54,728	3,141	7,692	9,158	7,424	15,850
	October .....	203,234	107,652	5,070	1,557	65,000	4,841	31,183	52,036	2,721	8,347	8,987	7,340	16,151
	November .....	206,747	108,087	5,369	1,963	64,400	5,176	31,178	54,490	2,983	7,734	9,113	7,193	17,146
	December .....	206,699	105,382	5,507	1,830	63,438	5,165	29,442	56,668	3,428	8,191	9,050	7,477	16,502
2003:	January .....	211,037	110,011	5,784	2,234	66,480	4,894	30,620	56,360	3,210	8,303	9,315	8,143	15,695
	February <sup>f</sup> .....	207,017	107,004	5,738	1,845	63,364	5,456	30,601	56,243	3,217	8,130	9,588	8,281	14,553
	March <sup>f</sup> .....	200,717	105,596	5,699	1,892	63,718	5,162	29,124	53,736	2,848	8,054	8,876	7,752	13,856
	April <sup>p</sup> .....	201,194	103,801	5,973	1,858	62,407	4,749	28,814	54,321	3,034	8,597	9,220	7,621	14,600
<b>PERCENT CHANGE</b>														
March 2003- April 2003 .....	0.2	-1.7	4.8	-1.8	-2.1	-8.0	-1.1	1.1	6.5	6.7	3.9	-1.7	5.4	

NA Not available, but estimates are included in totals.

<sup>p</sup>Preliminary.

<sup>r</sup>Revised.

<sup>Z</sup> Less than 0.05 percent.

<sup>1</sup>Includes farm nonresidential and other private categories, not shown separately. <sup>2</sup>Includes residential improvements, not shown separately. <sup>3</sup>Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc. <sup>4</sup>Includes gas, electric, railroad, and petroleum pipelines, not shown separately. <sup>5</sup>Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc. <sup>6</sup>Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc. <sup>7</sup>Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc.



















**Table 12. Factors Used to Seasonally Adjust Estimates of the Value of Construction Put in Place**  
 [Percent]

Type of construction	Apr. 2003 <sup>p</sup>	Mar. 2003 <sup>r</sup>	Feb. 2003 <sup>r</sup>	Jan. 2003	Dec. 2002	Nov. 2002	Oct. 2002	Sep. 2002	Aug. 2002	July 2002	June 2002	Apr. 2002
<b>PRIVATE CONSTRUCTION</b>												
Residential buildings:												
New housing units:												
1 unit .....	97.0	92.3	78.7	82.4	88.3	104.3	108.9	111.4	113.4	112.7	109.1	97.1
2 units or more.....	100.5	95.9	89.5	91.2	94.2	99.7	104.8	102.4	105.8	104.4	105.4	99.0
Nonresidential buildings:												
Industrial .....	98.5	94.4	88.4	88.5	103.8	102.5	106.8	104.7	103.7	104.2	102.9	97.5
Office .....	100.6	97.6	92.7	93.1	96.9	101.8	104.6	102.8	103.2	102.0	100.7	100.9
Hotels, motels .....	101.6	100.8	94.3	94.0	97.8	98.0	102.6	100.9	102.5	102.3	101.7	103.5
Other commercial .....	96.1	92.4	86.6	84.9	93.5	104.1	110.1	110.7	110.4	106.6	105.0	96.3
Religious .....	95.6	93.1	89.6	91.0	98.4	105.3	114.3	108.0	108.8	101.0	98.5	96.8
Educational.....	95.3	90.6	85.0	84.9	89.4	97.0	100.5	105.3	118.3	115.7	114.0	95.2
Hospital and institutional .....	101.0	98.7	94.6	93.3	98.9	103.7	104.8	102.5	101.9	98.3	101.2	101.2
Miscellaneous nonresidential .....	102.0	98.9	92.0	89.0	96.4	101.7	105.2	102.5	103.7	101.1	102.7	102.6
Telecommunications .....	97.7	90.8	82.8	83.3	108.2	106.6	113.6	100.3	108.5	104.7	98.5	97.8
All other private .....	91.7	88.4	81.0	83.6	102.3	105.0	112.2	112.9	116.7	107.5	100.5	90.1
<b>PUBLIC CONSTRUCTION</b>												
<b>State and Local</b>												
Buildings:												
Housing and redevelopment .....	98.6	92.6	87.8	91.8	97.9	103.7	109.8	107.1	102.3	99.4	103.1	97.8
Educational.....	91.7	85.1	81.7	83.7	87.4	95.1	105.3	114.3	127.0	119.5	111.5	91.9
Hospital .....	98.8	94.4	91.8	95.2	99.0	100.7	109.1	105.7	101.1	102.1	101.5	98.8
Other buildings.....	99.8	91.7	88.8	89.6	95.7	102.7	110.5	105.9	107.4	101.2	103.6	100.2
Highways and streets.....	80.0	60.8	53.5	60.1	74.2	99.6	130.8	138.4	142.5	131.4	122.0	81.9
Conservation and development .....	94.4	82.2	77.3	77.4	89.4	104.6	117.7	117.6	118.8	109.2	106.5	94.6
Sewer systems.....	95.4	88.2	80.7	83.0	88.6	104.8	113.0	113.1	113.2	106.3	109.2	95.4
Water supply facilities.....	97.2	86.9	82.9	81.6	92.3	105.4	116.3	111.0	110.3	108.4	105.2	96.9
Miscellaneous construction .....	94.4	82.2	77.3	77.4	89.4	104.6	117.7	117.6	118.8	109.2	106.5	94.6
<b>Federal</b>												
Buildings:												
Housing and redevelopment .....	97.4	98.5	89.5	91.7	101.5	97.3	88.4	132.2	100.3	101.1	103.6	97.8
Industrial .....	97.4	98.5	89.5	91.7	101.5	97.3	88.4	132.2	100.3	101.1	103.6	97.8
Educational.....	97.4	98.5	89.5	91.7	101.5	97.3	88.4	132.2	100.3	101.1	103.6	97.8
Hospital .....	97.4	98.5	89.5	91.7	101.5	97.3	88.4	132.2	100.3	101.1	103.6	97.8
Other buildings.....	97.4	98.5	89.5	91.7	101.5	97.3	88.4	132.2	100.3	101.1	103.6	97.8
Military .....	94.3	100.9	86.5	91.0	104.6	102.9	80.1	127.4	103.9	102.4	105.2	94.5
Conservation and development .....	97.8	94.5	89.3	91.9	97.0	98.8	75.0	154.2	106.4	99.8	96.7	96.1
Miscellaneous construction .....	97.8	94.5	89.3	91.9	97.0	98.8	75.0	154.2	106.4	99.8	96.7	96.1

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

# Appendix A.

## Reliability of the Estimates

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The statistics on the value of construction put in place result from direct measurement and indirect estimation. A series results from direct measurement when it is based on reports of the actual value of construction progress or construction expenditures obtained from a complete census or sample survey. All other series are developed by indirect estimation using related construction statistics.

On an annual basis, the estimates for series directly measured monthly, quarterly, or annually accounted for about 70 percent of total construction in 2001 (private multifamily residential, private residential improvements, private nonresidential buildings, farm nonresidential construction, public utility construction, all other private construction, and virtually all of public construction). On a monthly basis, directly measured data are available for about 51 percent of the value-in-place estimates.

Some of the directly measured monthly construction value-in-place estimates are based on samples. Estimates from these samples may differ from statistics that would have been obtained from a complete census using the same schedules and procedures. An estimate based on a sample survey is subject to both sampling error and nonsampling error. The accuracy of a survey result is determined by the joint effects of these errors.

### MEASURE 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 monthly value-in-place survey 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 one another. 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 for the monthly, year-to-date and annual estimates were computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors in the following table. 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. A 90-percent confidence interval is defined to be from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate. If all possible samples were selected and surveyed under essentially the same conditions and all the respective 90-percent confidence intervals were generated, then approximately nine-tenths of the intervals would include the average value of all sample estimates and approximately one-tenth would not include this estimate. For example, suppose Table 3 of this report showed that the monthly VIP estimate for "total private nonresidential buildings" was \$10.0 billion in a particular month. According to the following table, the relative standard error of this estimate is 2 percent. Multiplying \$10.0 billion by .02, we obtain \$200 million as the standard error. To obtain a 90-percent confidence interval, multiply \$200 million by 1.6 and add and subtract the result from \$10.0 billion, yielding limits of \$9.68 billion and \$10.32 billion. The average value of the monthly VIP estimate for "total private nonresidential buildings" may or may not be contained in this computed interval, but one can say that the average is included in the constructed interval with a specified confidence of 90 percent.

The following table also presents coefficients necessary to compute standard errors for the month-to-month and year-to-date changes. To derive a specific standard error of a change, look up an appropriate coefficient ( $k_1$  or  $k_2$ ) for the change and apply the following formula:

$$\text{Standard error of a change} = k (100 + (\text{percent change shown in Tables 3 through 6}))$$

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.

No standard errors are shown for farm nonresidential or public utilities because the estimates are based on a complete enumeration.

### NONSAMPLING ERRORS

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

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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 were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For preliminary value-in-place estimates, the average imputation rates for major components are as follows: private nonresidential construction, 49 percent; state and locally owned public construction, 33 percent; private residential construction of 2 units or more, 42 percent; and private residential improvements, 15 percent. Each of these imputation rates is not an explicit indication of the potential error in statistics, but the degree of uncertainty regarding the accuracy of the statistics increases as the percentage of imputation increases.

Other potential sources of bias are the upward adjustment of 25 percent made to the private nonresidential construction and the adjustment of the state and local owned public construction to the construction outlays from the Annual Survey of Government Finances in order to account for construction projects not included in their respective sampling frames. The adjustment for the nonresidential construction results from a coverage evaluation sample; hence, the estimated percentage adjustment is subject to sampling error and nonsampling errors associated with the evaluation study. In addition, the percentage was estimated from data collected during a limited time period; therefore, these adjustments do not reflect any recent changes in the proportion of projects not included in the frame.

For state and locally owned construction, construction outlays from the Survey of Government Finances are available only through Fiscal Year 1999. (Outlays are

included if a government agency's fiscal year ending date falls within July 1998 to June 1999 inclusive, and for three state agencies with fiscal years ending in August or September 1999.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1999 through April 2003. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12 month period, but result from capital outlays made over a 26 month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

Consequently, even though the private nonresidential and state and local owned construction adjustments are designed to reduce the bias due to the failure to include projects in the sampling frames, for the above stated reasons, these adjustment procedures, themselves, may introduce a bias in the current estimates of value-in-place.

Furthermore, additional nonsampling errors may be introduced into the estimates because the procedures such as phasing, extrapolating, and forecasting used to develop the indirectly measured series are subject to the validity of the underlying assumptions made and mathematical models used. No explicit measures of the effects of these procedures are available.

## **MONTHLY REVISIONS TO ESTIMATES**

Statistics for the current month are preliminary estimates. These estimates are released to provide government and private data users with early measures of construction activity. A necessary part of the process of issuing these early data involves the issuance of subsequent revisions. The revisions to monthly construction put in place estimates are primarily the result of the replacement of imputed data with data which are reported in subsequent months.

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -1.5 percent to 1.0 percent with a median of -0.1 percent. The range of the difference between first revision and second revision was from -1.2 to 0.8 percent, with a median of 0.1 percent.

## 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)
<b>Total construction .....</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>.03</b>	<b>.03</b>
Private construction .....	3	2	1	.04	.03
Residential buildings .....	5	4	2	.06	.05
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	3	2	.05	.04
Hotels, motels .....	7	6	5	.09	.08
Other commercial .....	5	3	2	.06	.04
Religious .....	9	8	5	.12	.11
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	5	4	.11	.07
Industrial .....	(NA)	(NA)	(NA)	(NA)	(NA)
Educational .....	3	3	2	.04	.04
Hospital .....	6	6	4	.08	.09
Other public buildings .....	3	2	2	.04	.03
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	5	3	.11	.07
Miscellaneous public .....	8	5	4	.11	.07
State and local construction .....	2	1	1	.03	.01
Housing and redevelopment .....	8	5	5	.11	.07
Educational .....	3	3	2	.04	.04
Hospital .....	8	7	5	.11	.10
Other public buildings .....	4	3	2	.05	.04
Highways and streets .....	4	3	2	.05	.04
Conservation and development .....	16	11	9	.23	.16
Sewer systems .....	6	4	3	.08	.06
Water supply facilities .....	8	5	3	.11	.07
Miscellaneous public .....	9	6	4	.12	.09
Federal construction .....	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Note: All statistics are based upon 2002 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.