

# Value of Construction Put in Place

February  
2001  
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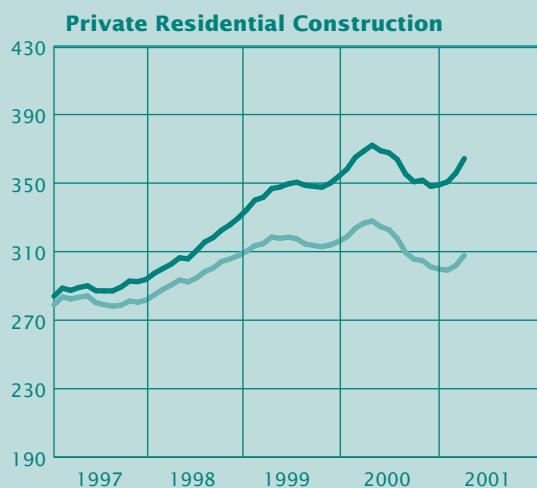
## Current Construction Reports

In the May 2001 press release, normal revisions to unadjusted and seasonally adjusted data will go back to January 1997. In addition, estimates to residential improvements, private industrial, and electric light and power will be revised back to January 1993 due to new estimating methodologies.

### Monthly Value of Construction Put in Place

Seasonally adjusted annual rate in billions of dollars

— Current dollars  
— 1996 dollars



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: 301-457-1605.

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## VALUE OF CONSTRUCTION PUT IN PLACE

Construction put in place during February 2001 was estimated at a seasonally adjusted annual rate of \$834.2 billion, 1 ( $\pm 5$ ) percent above the revised January estimate of \$829.4 billion. The February figure represents a 2 ( $\pm 5$ ) percent increase over February 2000.

During the first 2 months of this year \$112.7 billion of construction was put in place, 4 ( $\pm 5$ ) percent above the \$108.2 billion for the same period in 2000.

In constant (1996) dollars, the February annual rate was \$710.4 billion, nearly the same ( $\pm 5$  percent) as the revised estimate of \$708.4 billion for January.

Spending on new residential housing units was at a seasonally adjusted annual rate of \$269.4 billion in February, 2 ( $\pm 2$ ) percent above the revised January estimate of \$263.3 billion. Nonresidential building construction was at a rate of \$231.9 billion, nearly the same ( $\pm 3$  percent) as the revised January estimate of \$231.6 billion.

In February, the estimated seasonally adjusted annual rate of public construction put in place was \$187.1 billion, 2 ( $\pm 5$ ) percent below the revised January estimate of \$190.2 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 2000*, C30/00-5, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2000; contains annual data for 1994 to 1999 and monthly data for 1996 to 1999.
- Current Construction Reports, *Value of Construction Put in Place: June 2000*, C30/00-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2000; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1994 to 1998.
- 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.

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.

**Table 1. Annual Value of Construction Put in Place: 1996 to 2000**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1996	1997	1998	1999	2000 <sup>r</sup>	1996	1997	1998	1999	2000 <sup>r</sup>
<b>Total construction .....</b>	<b>613,535</b>	<b>656,630</b>	<b>711,759</b>	<b>764,233</b>	<b>807,582</b>	<b>613,454</b>	<b>635,765</b>	<b>670,859</b>	<b>692,477</b>	<b>704,028</b>
<b>Private construction .....</b>	<b>474,273</b>	<b>501,749</b>	<b>552,236</b>	<b>591,561</b>	<b>623,930</b>	<b>474,307</b>	<b>486,273</b>	<b>520,613</b>	<b>535,625</b>	<b>543,985</b>
Residential buildings .....	281,115	289,014	314,607	348,826	358,620	281,229	280,748	297,886	315,757	312,800
New housing units .....	191,113	198,063	223,983	249,536	259,614	191,212	192,386	212,068	225,896	226,452
1 unit .....	170,790	175,179	199,409	222,280	231,692	170,865	170,154	188,785	201,210	202,091
2 units or more .....	20,324	22,883	24,574	27,256	27,922	20,347	22,232	23,283	24,686	24,361
Improvements .....	90,002	90,951	90,624	99,290	(NA)	90,018	88,362	85,818	89,860	(NA)
Nonresidential buildings .....	153,912	172,990	190,711	195,776	217,004	153,866	166,754	177,639	175,048	186,305
Industrial .....	36,220	36,739	40,484	34,894	40,462	36,215	35,411	37,715	31,214	34,721
Office .....	27,886	34,305	42,226	46,570	54,061	27,875	33,058	39,333	41,643	46,405
Hotels, motels .....	10,912	12,898	14,816	15,939	16,213	10,909	12,438	13,794	14,262	13,932
Other commercial .....	48,188	51,809	53,598	57,143	60,800	48,170	49,948	49,915	51,067	52,207
Religious .....	4,534	5,777	6,594	7,497	7,903	4,531	5,565	6,139	6,701	6,785
Educational .....	6,742	8,693	9,698	9,784	11,788	6,737	8,375	9,039	8,743	10,120
Hospital and institutional .....	11,780	13,546	13,793	13,624	15,377	11,778	13,066	12,853	12,183	13,202
Miscellaneous <sup>1</sup> .....	7,650	9,223	9,501	10,327	10,400	7,650	8,892	8,850	9,235	8,934
Farm nonresidential .....	3,658	3,815	4,284	4,451	(NA)	3,657	3,675	3,989	3,977	(NA)
Public utilities .....	33,156	33,638	40,028	39,607	(NA)	33,124	32,884	38,616	38,166	(NA)
Telecommunications .....	11,810	12,416	13,328	15,223	18,883	11,791	12,159	13,036	15,142	18,325
Other public utilities .....	21,346	21,222	26,700	24,384	(NA)	21,333	20,725	25,581	23,024	(NA)
Railroads .....	4,398	4,922	5,736	4,918	(NA)	4,391	4,745	5,463	4,540	(NA)
Electric light and power .....	11,211	11,325	12,381	14,057	(NA)	11,209	11,122	11,885	13,393	(NA)
Gas .....	4,722	4,006	7,318	3,920	(NA)	4,720	3,911	7,020	3,690	(NA)
Petroleum pipelines .....	1,015	969	1,265	1,489	(NA)	1,013	947	1,213	1,401	(NA)
All other private <sup>2</sup> .....	2,431	2,292	2,606	2,901	3,171	2,431	2,212	2,482	2,678	2,812
<b>Public construction .....</b>	<b>139,263</b>	<b>154,882</b>	<b>159,523</b>	<b>172,673</b>	<b>183,653</b>	<b>139,147</b>	<b>149,493</b>	<b>150,246</b>	<b>156,852</b>	<b>160,043</b>
Buildings .....	63,471	71,867	73,277	77,690	86,875	63,446	69,319	68,334	69,497	74,652
Housing and redevelopment .....	5,048	5,230	5,124	5,618	5,448	5,046	5,084	4,853	5,088	4,753
Industrial .....	1,389	999	1,010	925	1,159	1,390	965	941	828	995
Educational .....	28,590	34,385	36,234	39,725	46,415	28,577	33,136	33,743	35,497	39,834
Hospital .....	4,617	5,152	3,906	3,968	4,183	4,617	4,970	3,642	3,548	3,593
Other <sup>3</sup> .....	23,826	26,100	27,004	27,454	29,670	23,815	25,164	25,155	24,537	25,477
Highways and streets .....	39,464	44,105	48,515	53,532	51,490	39,412	42,535	45,877	48,827	44,716
Military facilities .....	2,591	2,556	2,529	2,111	2,258	2,593	2,466	2,377	1,909	1,951
Conservation and development .....	6,008	5,739	5,447	6,003	5,984	6,000	5,541	5,219	5,602	5,423
Sewer systems .....	9,798	10,392	10,168	11,181	11,211	9,778	10,034	9,743	10,438	10,163
Water supply facilities .....	5,618	6,419	6,830	7,602	7,674	5,609	6,275	6,552	7,142	7,039
Miscellaneous public <sup>4</sup> .....	12,313	13,803	12,755	14,555	18,160	12,310	13,323	12,145	13,436	16,098

NA Not available, but estimates are included in totals.

<sup>r</sup>Revised.

<sup>1</sup>Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc.

<sup>2</sup>Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc.

<sup>3</sup>Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc.

<sup>4</sup>Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc.

**Table 2. Annual Value of Public Construction Put in Place: 1996 to 2000**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1996	1997	1998	1999	2000 <sup>r</sup>	1996	1997	1998	1999	2000 <sup>r</sup>
<b>Total public construction . . . . .</b>	<b>139,263</b>	<b>154,882</b>	<b>159,523</b>	<b>172,673</b>	<b>183,653</b>	<b>139,147</b>	<b>149,493</b>	<b>150,246</b>	<b>156,852</b>	<b>160,043</b>
<b>State and local construction . . . . .</b>	<b>123,938</b>	<b>140,795</b>	<b>145,207</b>	<b>158,617</b>	<b>169,889</b>	<b>123,819</b>	<b>135,901</b>	<b>136,743</b>	<b>144,028</b>	<b>147,949</b>
Total buildings . . . . .	57,240	65,760	67,246	72,220	81,813	57,212	63,427	62,706	64,601	70,299
Housing and redevelopment . . . . .	4,367	4,554	4,581	5,194	5,070	4,365	4,426	4,338	4,704	4,422
Educational. . . . .	28,578	34,366	36,219	39,709	46,388	28,565	33,118	33,729	35,483	39,811
Hospital. . . . .	3,457	3,901	2,897	3,118	3,551	3,457	3,764	2,701	2,785	3,050
Other <sup>1</sup> . . . . .	20,838	22,939	23,550	24,199	26,805	20,826	22,120	21,938	21,628	23,016
Highways and streets. . . . .	39,096	43,850	48,264	53,214	51,168	39,045	42,289	45,640	48,537	44,437
Conservation and development . . . . .	2,163	2,371	1,911	1,993	1,941	2,159	2,289	1,832	1,860	1,759
Sewer systems. . . . .	9,798	10,392	10,168	11,181	11,211	9,778	10,034	9,743	10,438	10,163
Water supply facilities. . . . .	5,618	6,419	6,830	7,602	7,674	5,609	6,275	6,552	7,142	7,039
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,022	12,002	10,787	12,407	16,080	10,017	11,587	10,271	11,450	14,252
<b>Federal construction . . . . .</b>	<b>15,325</b>	<b>14,087</b>	<b>14,317</b>	<b>14,056</b>	<b>13,764</b>	<b>15,328</b>	<b>13,592</b>	<b>13,503</b>	<b>12,824</b>	<b>12,094</b>
Total buildings . . . . .	6,230	6,107	6,031	5,470	5,062	6,234	5,892	5,628	4,896	4,353
Housing. . . . .	681	677	543	424	379	682	658	515	384	330
Industrial . . . . .	1,389	999	1,010	925	1,159	1,390	965	941	828	995
Educational. . . . .	12	19	15	15	28	12	19	14	14	24
Hospital. . . . .	1,159	1,251	1,009	850	632	1,161	1,206	941	762	543
Other <sup>3</sup> . . . . .	2,989	3,161	3,454	3,255	2,865	2,989	3,045	3,217	2,909	2,461
Highways and streets. . . . .	368	255	251	318	(NA)	368	246	237	290	(NA)
Military facilities . . . . .	2,591	2,556	2,529	2,111	2,258	2,593	2,466	2,377	1,909	1,951
Conservation and development . . . . .	3,845	3,368	3,536	4,009	4,043	3,841	3,252	3,387	3,743	3,664
Miscellaneous public <sup>4</sup> . . . . .	2,291	1,800	1,969	2,148	2,079	2,293	1,735	1,873	1,986	1,847

NA Not available, but estimates are included in totals.

<sup>r</sup>Revised.

<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 3. Monthly Value of Construction Put in Place—Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Period	Total construction	Private construction																	All other private <sup>5</sup>
		Residential buildings			Nonresidential buildings										Public utilities <sup>4</sup>				
		Total <sup>1</sup>	New housing units		Total	Indus-trial	Office	Hotels, motels	Other com-mercial	Reli-gious	Educa-tional	Hospital and institu-tional	Mis-cella-neous <sup>3</sup>	Total	Tele-com-muni-ca-tions				
			Total	1 unit	2 units or more														
<b>YEAR TO DATE</b>																			
February 2000.....	108,191	84,677	47,389	35,899	31,730	4,169	31,167	5,436	7,676	2,601	8,821	1,172	1,587	2,234	1,641	(NA)	2,411	374	
February 2001.....	112,728	88,567	47,071	36,023	31,532	4,491	34,567	7,065	9,058	2,343	9,137	1,187	1,819	2,422	1,535	(NA)	(NA)	401	
Percent change.....	4	5	-1	(Z)	-1	8	11	30	18	-10	4	1	15	8	-6	(NA)	(NA)	7	
<b>MONTHLY DATA</b>																			
1999: February.....	50,817	40,039	21,367	16,022	14,005	2,017	15,021	2,825	3,675	1,412	3,992	552	646	1,108	811	(NA)	977	173	
March.....	57,544	45,757	25,746	19,114	16,896	2,219	15,868	2,997	3,757	1,434	4,368	571	722	1,138	881	(NA)	1,399	216	
April.....	60,957	47,711	27,997	19,980	17,710	2,269	16,050	2,892	3,786	1,389	4,538	598	823	1,125	900	(NA)	1,359	259	
May.....	64,660	50,596	30,623	21,176	18,845	2,331	16,416	2,896	3,913	1,367	4,830	597	792	1,128	894	(NA)	1,114	249	
June.....	69,001	53,214	32,642	22,372	19,954	2,418	16,698	2,954	3,942	1,300	4,991	634	947	1,090	840	(NA)	1,242	257	
July.....	70,701	54,337	33,076	23,070	20,693	2,378	16,806	3,033	3,832	1,368	5,054	637	956	1,078	847	(NA)	1,344	273	
August.....	72,608	55,012	33,477	23,372	20,910	2,462	17,057	2,977	4,090	1,288	5,090	683	941	1,143	846	(NA)	1,390	269	
September.....	71,204	53,597	32,284	23,160	20,762	2,398	17,123	2,915	4,230	1,233	5,190	655	840	1,173	887	(NA)	1,270	253	
October.....	69,170	52,843	32,059	22,754	20,409	2,345	16,929	2,822	4,108	1,218	5,152	702	830	1,219	878	(NA)	1,329	252	
November.....	66,722	51,557	30,652	22,248	19,973	2,275	16,970	2,795	3,957	1,312	5,291	675	847	1,212	881	(NA)	1,365	255	
December.....	60,055	46,498	26,374	19,536	17,342	2,194	16,236	2,905	3,740	1,309	4,791	625	827	1,157	882	(NA)	1,531	276	
2000: January.....	54,051	42,130	24,274	18,320	16,223	2,097	14,900	2,526	3,675	1,307	4,182	563	760	1,107	781	(NA)	1,239	173	
February.....	54,140	42,547	23,115	17,579	15,507	2,072	16,267	2,910	4,001	1,295	4,639	609	828	1,127	860	(NA)	1,173	202	
March.....	61,785	48,680	27,703	20,829	18,459	2,370	17,243	3,106	4,290	1,429	4,785	631	888	1,232	882	(NA)	1,529	236	
April.....	64,979	50,726	29,911	21,724	19,268	2,455	17,429	3,132	4,409	1,390	4,852	617	912	1,279	838	(NA)	1,312	214	
May.....	69,773	54,419	32,416	22,811	20,346	2,465	18,207	3,288	4,521	1,432	5,141	619	1,046	1,260	900	(NA)	1,502	227	
June.....	72,711	56,577	33,974	23,553	21,025	2,528	18,445	3,399	4,440	1,429	5,326	654	1,056	1,253	887	(NA)	1,624	231	
July.....	73,140	56,601	33,646	23,575	21,286	2,289	18,477	3,524	4,375	1,364	5,272	699	1,110	1,271	861	(NA)	1,470	272	
August.....	77,038	57,837	33,518	23,701	21,325	2,376	19,627	3,608	4,753	1,389	5,649	725	1,212	1,347	942	(NA)	1,592	358	
September.....	76,203	57,006	32,411	23,268	20,967	2,301	19,788	3,624	4,986	1,389	5,695	711	1,053	1,428	901	(NA)	1,781	369	
October <sup>r</sup> .....	73,535	56,203	32,196	22,822	20,458	2,364	19,666	3,810	4,890	1,319	5,542	777	1,038	1,390	901	(NA)	1,723	343	
November <sup>r</sup> .....	69,485	53,965	30,293	22,169	19,813	2,355	19,249	4,025	4,968	1,278	5,038	692	978	1,398	874	(NA)	1,846	296	
December <sup>r</sup> .....	60,744	47,240	25,163	19,265	17,014	2,250	17,707	3,508	4,755	1,193	4,679	607	906	1,285	773	(NA)	2,093	252	
2001: January <sup>r</sup> .....	57,197	44,851	24,233	18,252	16,055	2,197	17,214	3,510	4,521	1,186	4,496	595	910	1,244	754	(NA)	1,702	194	
February <sup>r</sup> .....	55,532	43,717	22,839	17,772	15,477	2,294	17,352	3,556	4,537	1,158	4,641	592	909	1,177	782	(NA)	207		
<b>PERCENT CHANGE</b>																			
January 2001-February 2001.....	-3	-3	-6	-3	-4	4	1	1	(Z)	-2	3	-1	(Z)	-5	4	(NA)	(NA)	7	

See footnotes at end of table.

6 Table 3. Monthly Value of Construction Put in Place—Not Seasonally Adjusted 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>							
<b>YEAR TO DATE</b>													
February 2000.....	23,514	12,191	772	189	6,176	624	4,429	5,295	340	904	1,512	1,117	2,155
February 2001.....	24,161	12,848	834	226	6,666	625	4,497	4,744	325	1,054	1,430	1,070	2,691
Percent change.....	3	5	8	20	8	(Z)	2	-10	-4	17	-5	-4	25
<b>MONTHLY DATA</b>													
1999: February.....	10,778	5,401	387	69	2,602	343	2,001	2,548	174	423	727	545	959
March.....	11,787	5,726	445	85	2,727	305	2,164	3,000	187	459	852	586	978
April.....	13,246	6,090	473	76	3,053	283	2,205	3,837	179	443	877	605	1,216
May.....	14,063	6,187	515	83	3,103	314	2,173	4,524	179	413	954	638	1,168
June.....	15,787	6,995	479	73	3,810	344	2,289	5,166	186	496	1,028	669	1,247
July.....	16,364	7,136	479	89	3,881	346	2,341	5,514	195	491	1,003	724	1,300
August.....	17,596	7,587	514	70	4,194	327	2,483	6,099	142	594	1,031	713	1,430
September.....	17,607	7,398	539	112	3,828	379	2,540	6,139	207	776	1,019	697	1,371
October.....	16,327	6,992	508	45	3,529	349	2,561	5,618	145	423	1,034	711	1,404
November.....	15,165	6,603	451	72	3,266	344	2,469	4,849	166	554	975	648	1,369
December.....	13,557	6,289	441	88	3,101	343	2,316	3,844	204	546	906	565	1,203
2000: January.....	11,921	6,053	398	93	3,081	314	2,168	2,952	135	425	755	540	1,061
February.....	11,593	6,137	375	96	3,095	310	2,261	2,343	205	479	757	577	1,094
March.....	13,105	6,391	448	92	3,222	310	2,318	3,285	194	494	857	551	1,333
April.....	14,253	6,859	489	91	3,469	357	2,453	3,915	172	461	1,009	633	1,206
May.....	15,353	7,256	474	89	3,799	386	2,508	4,512	191	443	973	670	1,310
June.....	16,134	7,663	503	98	4,135	383	2,544	4,767	188	499	1,060	616	1,341
July.....	16,539	7,681	437	98	4,363	365	2,417	5,070	179	425	943	574	1,667
August.....	19,201	8,451	465	109	4,869	370	2,638	6,429	201	522	1,032	685	1,882
September.....	19,197	8,233	475	125	4,544	399	2,689	6,138	259	773	1,043	726	2,025
October <sup>r</sup> .....	17,333	7,860	474	76	4,195	340	2,774	5,161	129	496	1,033	788	1,866
November <sup>r</sup> .....	15,520	7,274	461	93	3,866	344	2,510	4,007	224	472	945	705	1,892
December <sup>r</sup> .....	13,504	7,018	449	99	3,777	304	2,389	2,912	183	495	805	608	1,483
2001: January <sup>r</sup> .....	12,346	6,601	437	123	3,465	318	2,257	2,359	171	512	742	546	1,415
February <sup>p</sup> .....	11,815	6,247	396	103	3,201	306	2,240	2,385	154	542	688	523	1,276
<b>PERCENT CHANGE</b>													
January 2001- February 2001.....	-4	-5	-9	-16	-8	-4	-1	1	-10	6	-7	-4	-10

NA Not available, but estimates are included in totals.

<sup>P</sup>Preliminary.

<sup>r</sup>Revised.

Z Less than 0.5 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 4. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Period	Total construction	Private construction																			All other private <sup>5</sup>					
		Residential buildings						Nonresidential buildings										Public utilities <sup>4</sup>								
		Total <sup>1</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications										
			Total	1 unit	2 units or more																					
1999:	February.....	776,268	597,184	341,742	245,291	217,980	27,312	201,435	37,493	47,470	18,161	56,562	7,619	9,188	14,093	10,848	(NA)	14,030	2,638							
	March.....	777,990	602,473	346,811	248,801	221,097	27,704	201,045	38,019	46,238	17,246	58,044	7,374	9,539	13,763	10,822	(NA)	16,551	2,865							
	April.....	766,495	591,532	347,724	248,952	221,611	27,341	196,287	35,699	45,251	16,351	57,261	7,598	10,285	13,352	10,490	(NA)	16,034	3,308							
	May.....	758,942	590,028	349,638	249,494	222,799	26,694	195,742	35,311	45,498	16,334	57,726	7,372	9,284	13,513	10,707	(NA)	14,121	3,071							
	June.....	755,587	587,457	350,485	249,468	222,329	27,140	193,312	34,953	46,062	14,946	56,821	7,803	9,771	13,129	9,827	(NA)	13,990	3,021							
	July.....	759,825	590,438	348,729	248,669	221,310	27,358	195,279	36,326	45,574	15,889	56,791	7,763	9,628	13,339	9,969	(NA)	15,709	3,002							
	August.....	755,253	584,016	348,084	248,363	220,876	27,487	191,317	34,279	47,235	14,851	54,731	7,526	9,470	13,364	9,860	(NA)	15,461	2,741							
	September.....	753,081	582,464	347,616	248,800	221,259	27,540	191,179	32,696	48,522	14,355	55,408	6,957	9,437	13,614	10,190	(NA)	14,669	2,732							
	October.....	756,854	584,860	349,968	249,644	222,844	26,800	191,463	31,354	48,089	14,678	55,846	7,670	10,033	13,959	9,834	(NA)	15,189	2,569							
	November.....	776,476	596,942	353,854	253,806	226,538	27,268	197,362	32,244	46,373	15,717	60,932	7,253	10,626	13,981	10,235	(NA)	15,213	3,014							
	December.....	791,698	605,802	358,223	259,835	232,004	27,831	199,689	33,262	46,224	15,848	60,963	7,498	11,332	13,806	10,756	(NA)	16,884	3,405							
2000:	January.....	806,099	614,584	365,149	265,361	236,834	28,528	202,450	33,947	48,144	17,192	59,817	7,560	11,009	14,235	10,546	(NA)	19,155	2,497							
	February.....	816,012	629,590	368,745	268,696	240,727	27,970	215,499	38,538	49,644	15,969	65,796	7,959	11,812	14,309	11,473	(NA)	15,936	3,116							
	March.....	829,517	637,743	372,118	270,657	241,034	29,623	218,044	39,030	52,586	17,178	63,444	8,287	11,777	14,886	10,858	(NA)	17,748	3,138							
	April.....	816,156	629,491	368,948	268,079	238,618	29,461	214,640	38,670	53,819	16,792	61,223	7,888	11,388	15,065	9,795	(NA)	16,998	2,772							
	May.....	811,816	629,820	367,653	266,017	237,737	28,280	215,604	39,814	52,119	16,868	61,262	7,618	12,169	15,033	10,720	(NA)	17,442	2,825							
	June.....	798,860	624,383	363,756	261,504	233,179	28,325	213,619	39,951	52,080	16,274	60,754	8,044	11,004	15,086	10,425	(NA)	17,916	2,745							
	July.....	793,036	619,046	355,196	254,402	227,860	26,543	216,047	42,081	52,707	16,163	59,407	8,534	11,321	15,658	10,176	(NA)	18,115	3,003							
	August.....	801,748	616,918	350,783	253,905	227,058	26,847	219,524	41,552	54,480	15,914	60,799	7,834	12,215	15,804	10,926	(NA)	17,242	3,637							
	September.....	813,477	625,317	351,682	252,481	225,856	26,624	222,660	40,872	57,477	16,655	60,968	7,882	11,885	16,542	10,380	(NA)	20,828	3,938							
	October <sup>r</sup> .....	803,893	618,738	348,076	253,228	226,060	27,168	222,084	42,811	56,527	15,543	60,512	8,131	12,523	15,873	10,163	(NA)	19,177	3,478							
	November <sup>r</sup> .....	808,948	624,580	348,998	255,434	227,087	28,347	224,501	46,894	58,043	15,323	58,181	7,477	12,325	16,050	10,208	(NA)	20,800	3,439							
	December <sup>r</sup> .....	811,535	625,141	350,679	257,786	229,149	28,637	219,665	40,716	59,123	14,987	59,864	7,529	12,388	15,587	9,470	(NA)	24,989	3,084							
2001:	January <sup>r</sup> .....	829,411	639,196	355,887	263,278	233,527	29,751	231,612	47,056	58,082	15,282	64,069	7,881	13,095	15,953	10,195	(NA)	24,252	2,790							
	February <sup>p</sup> .....	834,206	647,063	364,279	269,419	238,726	30,693	231,899	46,993	58,290	14,935	65,372	8,042	12,867	15,013	10,387	(NA)	24,252	3,216							
<b>PERCENT CHANGE</b>																										
January 2001-February 2001.....		1	1	2	2	2	3	(Z)	(Z)	(Z)	-2	2	2	-2	-6	2	(NA)	(NA)	15							

See footnotes at end of table.

∞ 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>	
		Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>							
1999:	February.....	179,084	76,475	5,232	923	38,832	4,524	26,965	59,843	2,587	6,164	11,216	8,010	14,788
	March.....	175,517	76,946	5,673	1,015	38,681	3,730	27,847	56,515	2,157	6,045	11,485	8,280	14,089
	April.....	174,962	77,075	5,753	920	40,077	3,426	26,899	55,809	2,268	5,635	11,172	7,548	15,456
	May.....	168,914	75,114	6,154	1,022	38,790	3,878	25,271	53,647	2,124	5,050	11,509	7,452	14,018
	June.....	168,130	77,152	5,547	848	40,536	3,912	26,308	50,074	2,140	5,814	11,359	7,641	13,950
	July.....	169,387	76,490	5,669	1,024	38,521	4,067	27,208	51,896	2,268	5,598	11,306	7,933	13,896
	August.....	171,237	78,764	6,101	891	39,545	3,995	28,232	51,542	1,646	6,373	10,857	7,791	14,264
	September.....	170,617	78,684	5,803	989	40,157	4,025	27,709	52,432	1,932	6,145	10,447	7,592	13,386
	October.....	171,994	79,978	5,678	640	40,448	4,035	29,176	50,646	2,114	5,941	10,885	7,202	15,228
	November.....	179,534	80,188	5,176	877	41,084	4,101	28,949	56,547	1,944	6,585	10,925	7,191	16,154
	December.....	185,895	81,004	5,359	986	41,628	4,079	28,952	60,218	2,332	7,001	11,740	7,255	16,346
2000:	January.....	191,515	84,659	5,307	1,253	44,487	4,165	29,448	63,368	1,782	6,223	11,199	7,955	16,329
	February.....	186,422	86,507	5,036	1,267	45,685	4,105	30,413	53,145	3,011	6,975	11,518	8,475	16,792
	March.....	191,774	85,849	5,685	1,077	45,540	3,825	29,722	59,007	2,249	6,494	11,507	7,748	18,919
	April.....	186,665	86,697	6,070	1,160	45,049	4,523	29,895	55,923	2,180	5,840	12,976	7,862	15,186
	May.....	181,995	87,658	5,581	1,081	47,186	4,651	29,159	51,966	2,246	5,363	11,375	7,770	15,618
	June.....	174,477	84,598	5,795	1,105	44,070	4,331	29,297	48,148	2,157	5,832	11,638	7,085	15,019
	July.....	173,990	82,760	5,239	1,167	43,708	4,347	28,299	49,262	2,100	4,875	10,817	6,324	17,853
	August.....	184,830	87,036	5,407	1,336	46,193	4,384	29,716	52,694	2,331	5,629	10,829	7,507	18,803
	September.....	188,160	87,723	5,171	1,087	47,740	4,281	29,444	53,183	2,418	6,158	10,913	7,917	19,848
	October <sup>r</sup> .....	185,155	89,786	5,284	1,074	48,185	3,875	31,368	47,932	1,880	6,989	10,795	8,021	19,752
	November <sup>r</sup> .....	184,368	88,689	5,286	1,134	48,681	4,080	29,507	46,825	2,612	5,603	10,671	7,871	22,097
	December <sup>r</sup> .....	186,393	91,318	5,553	1,173	50,745	3,761	30,085	48,073	2,097	6,330	10,683	7,835	20,056
2001:	January <sup>r</sup> .....	190,215	91,254	5,701	1,618	49,437	4,074	30,423	49,067	2,253	7,398	10,742	7,887	21,614
	February <sup>p</sup> .....	187,143	88,162	5,343	1,362	47,249	4,045	30,164	51,194	2,237	7,765	10,526	7,707	19,551
<b>PERCENT CHANGE</b>														
January 2001- February 2001.....														
	-2	-3	-6	-16	-4	-1	-1	4	-1	5	-2	-2	-10	

NA Not available, but estimates are included in totals.

<sup>p</sup>Preliminary.

<sup>r</sup>Revised.

Z Less than 0.5 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 5. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in 1996 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>	
		Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>							
1999:	February.....	166,017	69,584	4,818	839	35,302	4,113	24,514	55,980	2,384	5,876	10,693	7,536	13,964
	March.....	161,938	69,710	5,209	919	35,005	3,376	25,201	52,621	1,981	5,735	10,897	7,753	13,242
	April.....	160,750	69,628	5,258	830	36,170	3,092	24,277	51,628	2,073	5,316	10,540	7,121	14,445
	May.....	154,219	67,619	5,605	919	34,883	3,487	22,725	49,172	1,927	4,724	10,766	7,031	12,980
	June.....	152,406	69,014	5,025	758	36,225	3,496	23,510	45,522	1,928	5,393	10,537	7,202	12,810
	July.....	153,630	68,288	5,111	914	34,363	3,628	24,271	47,308	2,045	5,202	10,507	7,484	12,796
	August.....	154,842	70,143	5,496	792	35,182	3,555	25,117	46,856	1,481	5,901	10,053	7,323	13,086
	September.....	154,315	70,064	5,223	880	35,726	3,581	24,653	47,709	1,739	5,695	9,682	7,135	12,292
	October.....	154,678	70,845	5,093	567	35,795	3,571	25,820	45,710	1,889	5,496	10,070	6,750	13,919
	November.....	160,729	70,653	4,621	772	36,166	3,610	25,484	50,760	1,728	6,080	10,088	6,721	14,699
	December.....	165,911	71,123	4,768	865	36,516	3,578	25,396	53,862	2,066	6,452	10,820	6,755	14,833
2000:	January.....	170,331	74,008	4,705	1,094	38,853	3,638	25,718	56,629	1,574	5,709	10,274	7,359	14,778
	February.....	165,154	75,490	4,461	1,105	39,830	3,579	26,515	47,282	2,651	6,353	10,490	7,775	15,114
	March.....	169,790	74,717	5,009	936	39,600	3,326	25,845	52,591	1,980	5,904	10,461	7,108	17,029
	April.....	163,820	75,030	5,343	1,003	38,936	3,909	25,838	49,055	1,899	5,304	11,786	7,187	13,559
	May.....	159,131	75,717	4,900	933	40,713	4,013	25,158	45,227	1,946	4,884	10,360	7,102	13,895
	June.....	152,483	72,936	5,061	952	37,959	3,730	25,234	41,832	1,866	5,331	10,638	6,494	13,386
	July.....	151,198	70,991	4,564	1,000	37,453	3,725	24,250	42,578	1,807	4,419	9,807	5,796	15,799
	August.....	160,402	74,538	4,710	1,143	39,515	3,750	25,420	45,505	2,003	5,085	9,783	6,893	16,596
	September.....	162,913	74,858	4,481	927	40,699	3,649	25,101	45,847	2,072	5,547	9,832	7,270	17,487
	October <sup>r</sup> .....	159,769	76,427	4,571	913	40,974	3,295	26,673	41,073	1,605	6,285	9,708	7,346	17,326
	November <sup>r</sup> .....	158,622	75,162	4,541	960	41,221	3,455	24,985	40,021	2,223	5,039	9,596	7,214	19,366
	December <sup>r</sup> .....	160,141	77,114	4,738	990	42,823	3,174	25,389	41,123	1,782	5,703	9,624	7,202	17,593
2001:	January <sup>r</sup> .....	163,496	76,910	4,835	1,363	41,649	3,432	25,630	42,045	1,914	6,671	9,686	7,276	18,993
	February <sup>p</sup> .....	160,556	74,113	4,516	1,144	39,705	3,399	25,348	43,793	1,898	6,996	9,483	7,109	17,165
<b>PERCENT CHANGE</b>														
January 2001- February 2001.....		-2	-4	-7	-16	-5	-1	-1	4	-1	5	-2	-2	-10

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised. Z Less than 0.5 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 6. Monthly Value of Construction Put in Place—Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Period	Total construction	Private construction																	All other private <sup>5</sup>	
		Residential buildings			Nonresidential buildings										Public utilities <sup>4</sup>					
		Total <sup>1</sup>	New housing units		Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications					
			Total	1 unit	2 units or more															
<b>YEAR TO DATE</b>																				
February 2000.....	95,817	74,964	41,993	31,811	28,117	3,694	27,195	4,743	6,698	2,270	7,697	1,022	1,385	1,949	1,431	(NA)	2,394	337		
February 2001.....	96,109	75,367	39,860	30,504	26,700	3,802	29,084	5,945	7,622	1,972	7,687	999	1,531	2,037	1,292	(NA)	(NA)	353		
Percent change.....	(Z)	1	-5	-4	-5	3	7	25	14	-13	(Z)	-2	11	5	-10	(NA)	(NA)	5		
<b>MONTHLY DATA</b>																				
1999:	February.....	46,802	36,828	19,675	14,753	12,896	1,857	13,655	2,568	3,341	1,284	3,629	502	587	1,007	737	(NA)	961	163	
	March.....	52,826	41,962	23,642	17,552	15,515	2,037	14,360	2,712	3,400	1,298	3,953	517	653	1,030	797	(NA)	1,370	203	
	April.....	55,761	43,594	25,591	18,263	16,189	2,074	14,485	2,610	3,417	1,253	4,096	539	743	1,015	813	(NA)	1,348	242	
	May.....	58,896	46,055	27,890	19,286	17,163	2,123	14,763	2,604	3,519	1,229	4,343	537	712	1,015	804	(NA)	1,110	231	
	June.....	62,497	48,187	29,567	20,264	18,074	2,190	14,922	2,639	3,523	1,162	4,460	567	846	974	751	(NA)	1,238	236	
	July.....	63,916	49,074	29,825	20,803	18,659	2,144	14,992	2,706	3,418	1,220	4,509	568	853	962	756	(NA)	1,344	252	
	August.....	65,516	49,602	30,159	21,056	18,837	2,218	15,175	2,648	3,639	1,146	4,528	608	837	1,017	752	(NA)	1,387	247	
	September.....	64,220	48,283	29,058	20,846	18,687	2,159	15,234	2,594	3,763	1,097	4,617	582	747	1,044	790	(NA)	1,268	233	
	October.....	62,094	47,403	28,752	20,407	18,304	2,103	14,981	2,497	3,635	1,078	4,559	622	735	1,079	777	(NA)	1,329	230	
	November.....	59,627	46,044	27,368	19,864	17,833	2,031	14,939	2,460	3,483	1,155	4,657	594	746	1,067	776	(NA)	1,367	232	
	December.....	53,499	41,402	23,465	17,381	15,429	1,952	14,242	2,548	3,281	1,148	4,202	548	726	1,015	774	(NA)	1,532	251	
2000:	January.....	47,927	37,335	21,519	16,241	14,382	1,859	13,013	2,206	3,210	1,141	3,653	491	663	967	682	(NA)	1,234	156	
	February.....	47,890	37,629	20,474	15,570	13,735	1,835	14,182	2,537	3,488	1,129	4,044	531	722	982	749	(NA)	1,160	181	
	March.....	54,511	42,916	24,408	18,352	16,264	2,088	14,994	2,701	3,731	1,242	4,161	549	772	1,071	767	(NA)	1,513	212	
	April.....	57,050	44,541	26,330	19,123	16,962	2,161	15,064	2,707	3,810	1,201	4,194	533	788	1,106	725	(NA)	1,282	191	
	May.....	61,119	47,693	28,460	20,028	17,863	2,164	15,709	2,837	3,901	1,236	4,436	534	902	1,087	776	(NA)	1,459	202	
	June.....	63,518	49,422	29,672	20,570	18,362	2,208	15,887	2,928	3,824	1,231	4,588	563	910	1,080	764	(NA)	1,576	206	
	July.....	63,644	49,279	29,309	20,536	18,542	1,994	15,833	3,020	3,749	1,169	4,518	599	951	1,089	738	(NA)	1,421	240	
	August.....	66,978	50,324	29,196	20,645	18,575	2,070	16,789	3,086	4,066	1,188	4,833	620	1,037	1,153	806	(NA)	1,537	316	
	September.....	66,030	49,404	28,086	20,163	18,169	1,994	16,869	3,090	4,251	1,184	4,855	606	898	1,217	768	(NA)	1,717	325	
	October <sup>r</sup> .....	63,537	48,581	27,851	19,742	17,698	2,045	16,723	3,240	4,158	1,121	4,713	660	883	1,182	766	(NA)	1,658	301	
	November <sup>r</sup> .....	59,765	46,405	26,025	19,045	17,022	2,023	16,299	3,408	4,206	1,082	4,265	586	828	1,183	740	(NA)	1,768	260	
	December <sup>r</sup> .....	52,059	40,455	21,470	16,437	14,517	1,920	14,942	2,961	4,012	1,006	3,949	512	765	1,084	653	(NA)	2,001	221	
2001:	January <sup>r</sup> .....	48,824	38,216	20,554	15,481	13,617	1,863	14,502	2,957	3,809	999	3,787	501	767	1,048	635	(NA)	1,628	171	
	February <sup>r</sup> .....	47,285	37,151	19,306	15,023	13,083	1,939	14,582	2,988	3,813	973	3,900	498	764	989	657	(NA)	(NA)	182	
<b>PERCENT CHANGE</b>																				
January 2001-February 2001.....	-3	-3	-6	-3	-4	4	1	1	(Z)	-3	3	-1	(Z)	-6	3	(NA)	(NA)	6		

See footnotes at end of table.

**Table 6. Monthly Value of Construction Put in Place—Not Seasonally Adjusted in 1996 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>
		Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
February 2000.....	20,852	10,648	685	165	5,390	544	3,865	4,722	299	826	1,383	1,029	1,945
February 2001.....	20,742	10,816	706	190	5,609	525	3,785	4,062	276	950	1,289	987	2,363
Percent change.....	-1	2	3	15	4	-3	-2	-14	-8	15	-7	-4	21
<b>MONTHLY DATA</b>													
1999: February.....	9,974	4,915	356	63	2,365	312	1,819	2,384	161	403	693	512	906
March.....	10,864	5,188	409	77	2,468	276	1,958	2,793	172	435	808	549	919
April.....	12,167	5,502	432	68	2,755	256	1,990	3,549	163	418	827	571	1,137
May.....	12,841	5,570	469	75	2,791	282	1,954	4,147	163	386	893	602	1,081
June.....	14,310	6,257	434	65	3,405	307	2,046	4,696	168	460	954	630	1,145
July.....	14,842	6,371	432	80	3,462	308	2,089	5,026	176	457	933	683	1,197
August.....	15,915	6,756	463	62	3,731	291	2,209	5,545	128	550	954	670	1,312
September.....	15,937	6,587	485	99	3,406	337	2,260	5,586	186	719	944	655	1,259
October.....	14,691	6,194	455	40	3,123	309	2,267	5,070	129	391	957	666	1,284
November.....	13,583	5,818	403	63	2,875	303	2,174	4,353	148	512	900	606	1,246
December.....	12,097	5,522	393	77	2,721	301	2,031	3,438	180	504	835	526	1,092
2000: January.....	10,591	5,292	353	81	2,691	274	1,894	2,638	119	389	693	500	960
February.....	10,261	5,356	332	84	2,699	270	1,971	2,084	180	437	690	529	985
March.....	11,595	5,562	395	80	2,802	270	2,016	2,928	171	449	779	506	1,200
April.....	12,509	5,936	431	79	2,998	309	2,120	3,434	149	418	916	579	1,077
May.....	13,426	6,267	416	77	3,277	333	2,164	3,927	165	403	886	612	1,166
June.....	14,095	6,607	440	84	3,562	330	2,191	4,141	162	457	969	565	1,195
July.....	14,366	6,588	381	84	3,739	313	2,071	4,382	154	386	855	526	1,475
August.....	16,654	7,236	405	93	4,165	316	2,256	5,552	172	472	932	629	1,661
September.....	16,626	7,025	412	106	3,874	340	2,293	5,292	222	696	940	667	1,784
October <sup>r</sup> .....	14,956	6,691	410	65	3,568	289	2,359	4,422	110	446	929	722	1,637
November <sup>r</sup> .....	13,360	6,165	396	79	3,274	291	2,125	3,425	191	425	850	646	1,658
December <sup>r</sup> .....	11,604	5,927	383	84	3,187	256	2,016	2,491	155	446	725	559	1,301
2001: January <sup>r</sup> .....	10,608	5,564	371	104	2,919	268	1,902	2,022	145	461	669	504	1,243
February <sup>p</sup> .....	10,134	5,252	335	86	2,690	257	1,883	2,040	131	489	620	483	1,120
<b>PERCENT CHANGE</b>													
January 2001- February 2001.....	-4	-6	-10	-17	-8	-4	-1	1	-10	6	-7	-4	-10

NA Not available, but estimates are included in totals.

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

Z Less than 0.5 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 7. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Period	State and locally owned public construction										
	Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
		Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1999:	February .....	9,649	4,935	360	2,601	220	1,753	2,535	129	727	545
	March.....	10,643	5,261	408	2,726	223	1,904	2,984	127	852	586
	April.....	12,094	5,662	431	3,052	223	1,957	3,816	151	877	605
	May.....	13,026	5,768	483	3,103	247	1,936	4,497	142	954	638
	June.....	14,596	6,541	440	3,809	274	2,019	5,133	158	1,028	669
	July.....	15,152	6,657	441	3,878	260	2,079	5,480	159	1,003	724
	August.....	16,422	7,171	480	4,190	281	2,220	6,062	197	1,031	713
	September.....	16,017	6,806	493	3,828	306	2,180	6,101	196	1,019	697
	October.....	15,349	6,572	476	3,529	300	2,267	5,581	187	1,034	711
	November.....	13,930	6,150	413	3,266	302	2,169	4,821	216	975	648
	December.....	12,335	5,813	408	3,101	275	2,029	3,823	193	906	565
2000:	January.....	10,969	5,663	373	3,081	255	1,954	2,938	146	755	540
	February.....	10,538	5,745	347	3,095	254	2,048	2,329	174	757	577
	March.....	11,885	5,968	416	3,222	270	2,060	3,268	147	857	551
	April.....	13,194	6,445	460	3,462	288	2,234	3,894	146	1,009	633
	May.....	14,266	6,858	444	3,798	343	2,274	4,484	151	973	670
	June.....	14,916	7,221	472	4,133	322	2,295	4,733	144	1,060	616
	July.....	15,497	7,299	406	4,362	320	2,210	5,036	147	943	574
	August.....	17,938	7,997	434	4,867	315	2,382	6,391	153	1,032	685
	September.....	17,560	7,683	441	4,539	329	2,374	6,100	188	1,043	726
	October <sup>f</sup> .....	16,339	7,439	443	4,193	301	2,503	5,125	209	1,033	788
	November <sup>f</sup> .....	14,406	6,887	429	3,864	293	2,301	3,980	175	945	705
	December <sup>f</sup> .....	12,381	6,609	404	3,774	261	2,170	2,891	163	805	608
2001:	January <sup>f</sup> .....	11,246	6,198	401	3,463	277	2,057	2,344	175	742	546
	February <sup>p</sup> .....	10,729	5,871	364	3,199	259	2,049	2,370	185	688	523
Federally owned public construction											
	Total federal	Buildings						Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>
		Total	Housing	Industrial	Educa-tional	Hospital	Other buildings <sup>3</sup>				
1999:	February .....	1,129	466	26	69	1	123	247	(NA)	174	294
	March.....	1,144	465	37	85	1	82	260	(NA)	187	332
	April.....	1,153	428	42	76	1	60	248	(NA)	179	292
	May.....	1,038	420	32	83	1	67	237	(NA)	179	271
	June.....	1,190	453	39	73	1	71	270	(NA)	186	338
	July.....	1,213	479	39	89	3	86	263	(NA)	195	333
	August.....	1,174	416	34	70	4	46	263	(NA)	142	397
	September.....	1,590	592	46	112	1	73	360	(NA)	207	580
	October.....	978	421	32	45	-	49	295	(NA)	145	236
	November.....	1,236	453	38	72	-	43	301	(NA)	166	338
	December.....	1,222	476	33	88	1	68	287	(NA)	204	354
2000:	January.....	952	390	25	93	-	59	214	(NA)	135	279
	February.....	1,055	393	27	96	-	56	213	(NA)	205	306
	March.....	1,220	423	32	92	-	40	259	(NA)	194	347
	April.....	1,059	414	29	91	7	69	218	(NA)	172	315
	May.....	1,087	397	30	89	1	43	235	(NA)	191	291
	June.....	1,218	442	32	98	3	62	249	(NA)	188	356
	July.....	1,042	382	32	98	1	45	207	(NA)	179	278
	August.....	1,263	454	31	109	2	55	256	(NA)	201	369
	September.....	1,637	550	34	125	5	71	316	(NA)	259	585
	October <sup>f</sup> .....	993	421	31	76	3	40	272	(NA)	129	287
	November <sup>f</sup> .....	1,114	387	31	93	2	52	209	(NA)	224	297
	December <sup>f</sup> .....	1,123	409	46	99	3	43	219	(NA)	183	332
2001:	January <sup>f</sup> .....	1,100	403	36	123	2	42	200	(NA)	171	336
	February <sup>p</sup> .....	1,086	376	33	103	3	47	191	(NA)	154	357

- Less than \$0.5 million. NA Not available, but estimates are included in totals.

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

<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 10. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Period	State and locally owned public construction										
	Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
		Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1999:	February .....	8,925	4,491	332	2,365	200	1,594	2,372	123	693	512
	March.....	9,805	4,767	375	2,467	202	1,723	2,778	120	808	549
	April.....	11,104	5,115	394	2,754	201	1,766	3,530	142	827	571
	May.....	11,892	5,192	439	2,790	222	1,741	4,122	132	893	602
	June.....	13,228	5,851	398	3,404	244	1,804	4,666	146	954	630
	July.....	13,740	5,943	397	3,459	232	1,854	4,995	147	933	683
	August.....	14,848	6,385	433	3,728	250	1,975	5,511	182	954	670
	September.....	14,493	6,061	444	3,405	272	1,939	5,551	181	944	655
	October.....	13,810	5,821	427	3,123	265	2,006	5,037	173	957	666
	November.....	12,471	5,419	369	2,875	266	1,909	4,328	199	900	606
	December .....	11,002	5,104	363	2,720	241	1,780	3,419	177	835	526
2000:	January .....	9,741	4,951	331	2,690	223	1,707	2,625	134	693	500
	February .....	9,324	5,013	308	2,698	222	1,786	2,072	158	690	529
	March.....	10,510	5,194	367	2,802	235	1,791	2,912	134	779	506
	April.....	11,574	5,577	405	2,992	249	1,931	3,415	132	916	579
	May.....	12,468	5,924	390	3,277	296	1,962	3,903	138	886	612
	June.....	13,020	6,225	412	3,560	277	1,977	4,112	131	969	565
	July.....	13,453	6,260	354	3,738	274	1,894	4,353	134	855	526
	August.....	15,549	6,848	378	4,163	269	2,037	5,519	138	932	629
	September.....	15,194	6,556	382	3,870	280	2,023	5,259	169	940	667
	October <sup>r</sup> .....	14,093	6,332	383	3,565	256	2,128	4,391	188	929	722
	November <sup>r</sup> .....	12,394	5,837	369	3,272	248	1,949	3,402	157	850	646
	December <sup>r</sup> .....	10,630	5,581	344	3,185	220	1,832	2,473	147	725	559
2001:	January <sup>r</sup> .....	9,653	5,224	340	2,917	233	1,733	2,009	158	669	504
	February <sup>P</sup> .....	9,190	4,935	307	2,688	218	1,722	2,027	167	620	483
Federally owned public construction											
Period	Total federal	Buildings						Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>
		Total	Housing	Industrial	Educational	Hospital	Other buildings <sup>3</sup>				
1999:	1,049	424	24	63	1	112	225	(NA)	161	281	171
		1,058	421	34	77	1	74	235	(NA)	172	315
		1,063	387	39	68	1	54	224	(NA)	163	218
		949	378	30	75	1	61	213	(NA)	163	254
		1,082	406	36	65	1	63	241	(NA)	168	314
		1,102	428	35	80	2	77	234	(NA)	176	309
		1,066	371	30	62	3	41	234	(NA)	128	368
		1,444	527	41	99	1	65	321	(NA)	186	538
		881	373	28	40	-	44	261	(NA)	129	219
		1,112	400	34	63	-	38	265	(NA)	148	312
		1,096	418	29	77	1	60	251	(NA)	180	326
2000:	850	341	22	81	-	51	187	(NA)	119	256	122
		937	343	24	84	-	49	186	(NA)	180	279
		1,085	368	28	80	-	35	225	(NA)	171	315
		935	359	26	79	6	59	189	(NA)	149	286
		958	343	27	77	1	37	203	(NA)	165	265
		1,075	381	28	84	2	53	214	(NA)	162	325
		912	328	28	84	1	38	177	(NA)	154	252
		1,105	389	27	93	2	47	219	(NA)	172	334
		1,432	469	29	106	4	60	269	(NA)	222	527
		863	358	26	65	2	34	231	(NA)	110	258
		966	328	27	79	2	44	177	(NA)	191	267
2001:	974	346	39	84	2	36	185	(NA)	155	299	156
		955	340	31	104	2	35	168	(NA)	145	303
- Less than \$0.5 million.		NA Not available, but estimates are included in totals.						<sup>P</sup> Preliminary.		<sup>r</sup> Revised.	

<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 11. Indexes Used in Deriving Estimates of the Value of Construction Put in Place in Constant Dollars**

[1996 = 100]

Period	U.S. Census Bureau		Engineering News-Record		U.S. Census Bureau Houses Under Construction		Federal Highway Adminis- tration compos- ite	Bureau of Reclama- tion	Turner Con- struction Company	Handy-Whitman public utility				C.A. Turner telephone plant
	Com- posite fixed- weighted	Implicit price deflator	Buildings	Construction	Fixed- weighted	Price deflator				Buildings	Electric	Gas	Water	
Annual indexes														
1996.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	100	100	100	100	100	100
1997.....	103.2	103.3	105.0	103.6	102.9	102.9	107.5	103	104	103	102	102	102	102
1998.....	106.0	106.1	105.8	105.3	105.6	105.6	105.2	105	109	104	104	104	104	102
1999.....	110.3	110.4	107.9	107.8	110.4	110.4	112.7	107	113	107	105	107	107	101
2000.....	114.6	114.7	110.5	110.6	115.4	115.5	119.3	111	118	110	106	111	108	103
Monthly indexes														
1999: January .....	108.4	108.5	106.9	106.7	108.5	108.5	107.1	105	111	105	105	105	106	102
February .....	108.6	108.6	106.7	106.6	108.7	108.6								
March.....	109.0	108.9	106.5	106.5	109.0	108.9								
April .....	109.3	109.3	106.8	106.9	109.5	109.4								
May .....	109.7	109.8	106.8	106.8	109.8	109.8								
June.....	110.4	110.4	107.2	107.4	110.4	110.4								
July.....	110.6	110.6	108.0	108.1	110.8	110.9								
August.....	110.8	110.8	108.5	108.3	110.9	111.0								
September .....	110.9	110.9	109.4	109.0	111.0	111.1								
October .....	111.4	111.4	109.4	109.1	111.5	111.5								
November .....	112.0	111.9	109.2	109.0	112.1	112.0								
December .....	112.3	112.3	109.2	109.0	112.3	112.4								
2000: January .....	112.6	112.8	109.4	109.0	112.6	112.8	113.2	109	116	109	106	110	108	101
February .....	113.0	113.1	110.0	109.6	112.8	112.9								
March.....	113.3	113.3	110.4	110.3	113.3	113.5								
April .....	113.8	113.9	110.3	110.3	113.6	113.6								
May .....	114.1	114.2	111.1	110.9	113.8	113.9								
June.....	114.4	114.5	110.9	111.0	114.3	114.5								
July.....	114.9	114.9	110.7	110.7	114.7	114.8								
August.....	115.0	115.0	110.7	110.9	114.8	114.8								
September .....	115.5	115.4	110.5	110.7	115.5	115.4								
October .....	115.8	115.7	110.5	110.7	115.7	115.6								
November .....	116.3	116.3	110.6	111.4	116.4	116.4								
December .....	116.9	116.7	110.8	111.7	117.3	117.2								
2001: January .....	117.3	117.1	110.7	111.7	118.0	117.9	(NA)	112	121	110	107	112	109	104
February .....	P117.6	P117.4	110.4	111.6	P118.5	P118.3								
March.....			110.5	111.7										

NA Not available.

PPreliminary.

'Revised.

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

Type of construction	Feb. 2001 <sup>P</sup>	Jan. 2001 <sup>r</sup>	Dec. 2000 <sup>r</sup>	Nov. 2000 <sup>r</sup>	Oct. 2000 <sup>r</sup>	Sep. 2000	Aug. 2000	July 2000	June 2000	May 2000	Apr. 2000	Feb. 2000
<b>PRIVATE CONSTRUCTION</b>												
Residential buildings:												
New housing units:												
1 unit .....	77.8	82.5	89.1	104.7	108.6	111.4	112.7	112.1	108.2	102.7	96.9	77.3
2 units or more.....	89.7	88.6	94.3	99.7	104.4	103.7	106.2	103.5	107.1	104.6	100.0	88.9
Nonresidential buildings:												
Industrial .....	90.8	89.5	103.4	103.0	106.8	106.4	104.2	100.5	102.1	99.1	97.2	90.6
Office .....	93.4	93.4	96.5	102.7	103.8	104.1	104.7	99.6	102.3	104.1	98.3	96.7
Hotels, motels .....	93.0	93.1	95.5	100.1	101.8	100.1	104.7	101.3	105.4	101.9	99.3	97.3
Other commercial .....	85.2	84.2	93.8	103.9	109.9	112.1	111.5	106.5	105.2	100.7	95.1	84.6
Religious .....	88.4	90.6	96.8	111.0	114.6	108.2	111.1	98.3	97.5	97.5	93.9	91.8
Educational.....	84.8	83.4	87.8	95.2	99.5	106.3	119.1	117.7	115.2	103.1	96.1	84.1
Hospital and institutional .....	94.1	93.6	98.9	104.5	105.1	103.6	102.3	97.4	99.7	100.6	101.9	94.5
Miscellaneous nonresidential .....	90.3	88.7	98.0	102.7	106.4	104.2	103.5	101.5	102.1	100.7	102.7	89.9
Telecommunications .....	83.4	84.2	100.5	106.5	107.8	102.6	110.8	97.4	108.8	103.3	92.6	88.3
All other private .....	77.2	83.6	97.9	103.4	118.3	112.4	118.1	108.5	101.0	96.6	92.7	77.6
<b>PUBLIC CONSTRUCTION</b>												
<b>State and Local</b>												
Buildings:												
Housing and redevelopment .....	88.9	92.1	96.6	105.0	109.6	108.6	103.6	100.2	104.1	102.1	96.9	89.1
Educational.....	81.3	84.1	89.3	95.3	104.5	114.2	126.5	119.8	112.6	96.6	92.4	81.3
Hospital .....	90.9	94.1	96.2	101.7	108.9	107.6	101.7	100.9	106.2	99.6	94.9	90.5
Other buildings.....	89.0	88.8	94.7	102.4	109.1	106.7	107.5	102.7	104.0	103.7	98.9	89.0
Highways and streets.....	55.9	57.7	72.7	102.7	129.2	138.5	146.4	123.5	118.8	104.2	84.0	52.9
Conservation and development .....	76.9	77.6	87.7	103.0	118.3	119.0	121.8	113.5	108.3	101.1	95.4	77.2
Sewer systems.....	78.4	82.9	90.4	106.3	114.8	114.7	114.3	104.6	109.3	102.6	93.3	78.9
Water supply facilities.....	81.5	83.1	93.1	107.5	117.9	110.1	109.5	108.9	104.4	103.4	96.6	81.7
Miscellaneous construction .....	76.9	77.6	87.7	103.0	118.3	119.0	121.8	113.5	108.3	101.1	95.4	77.2
<b>Federal</b>												
Buildings:												
Housing and redevelopment .....	90.5	91.5	101.6	98.6	84.9	137.8	98.2	100.3	106.1	98.9	94.1	91.3
Industrial .....	90.5	91.5	101.6	98.6	84.9	137.8	98.2	100.3	106.1	98.9	94.1	91.3
Educational.....	90.5	91.5	101.6	98.6	84.9	137.8	98.2	100.3	106.1	98.9	94.1	91.3
Hospital .....	90.5	91.5	101.6	98.6	84.9	137.8	98.2	100.3	106.1	98.9	94.1	91.3
Other buildings.....	90.5	91.5	101.6	98.6	84.9	137.8	98.2	100.3	106.1	98.9	94.1	91.3
Military .....	82.7	90.8	104.7	103.1	82.1	128.4	103.3	102.4	104.3	101.8	94.4	81.7
Conservation and development .....	87.9	86.1	97.1	100.1	70.8	164.6	107.5	100.6	100.7	98.0	94.3	85.8
Miscellaneous construction .....	87.9	86.1	97.1	100.1	70.8	164.6	107.5	100.6	100.7	98.0	94.3	85.8

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

# Appendix.

## 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 71 percent of total construction in 1999 (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 54 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.

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## **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 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, 45 percent; state and locally owned public construction, 32 percent; private residential construction of 2 units or more, 43 percent; and private residential improvements, 13 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 28 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 1997. (Outlays are included if a government agency's fiscal year ending date falls within July 1996 to June 1997 inclusive, and for three state agencies with fiscal years ending in August or September 1997.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1997 through April 2001. 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 effect 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 -0.7 percent to 1.0 percent with a median of 0.2 percent. The range of the difference between first revision and second revision was from -0.2 to 1.1 percent, with a median of 0.2 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	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
State and local construction .....	2	2	1	.03	.03
Housing and redevelopment .....	8	6	5	.11	.09
Educational .....	3	3	2	.04	.04
Hospital .....	8	8	5	.11	.11
Other public buildings .....	4	4	2	.05	.06
Highways and streets .....	4	3	2	.05	.04
Conservation and development .....	16	12	9	.23	.17
Sewer systems .....	6	4	3	.08	.06
Water supply facilities .....	8	6	3	.11	.09
Miscellaneous public .....	9	8	4	.12	.11
Federal construction .....	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Note: All statistics are based upon 2000 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.