

# Value of Construction Put in Place: April 2002

Issued July 2002

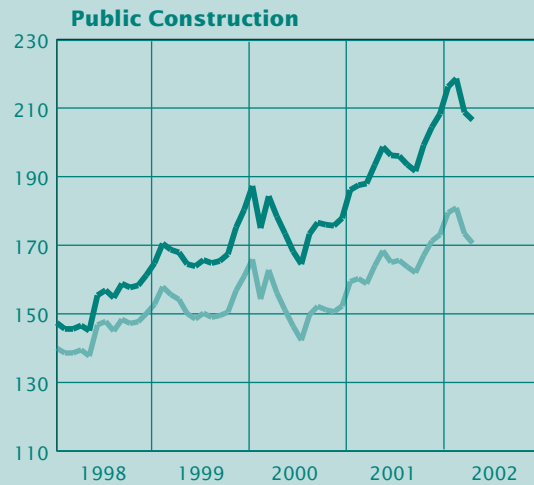
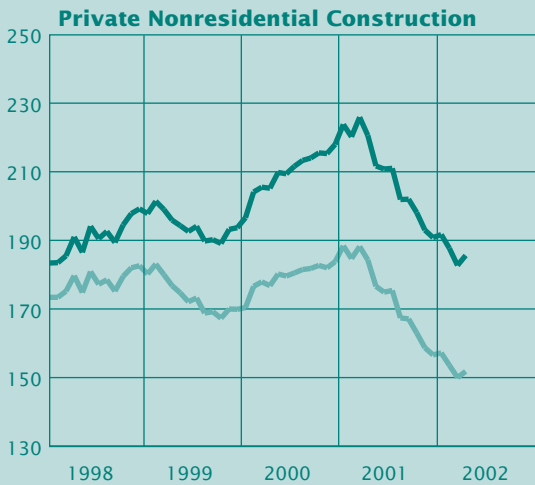
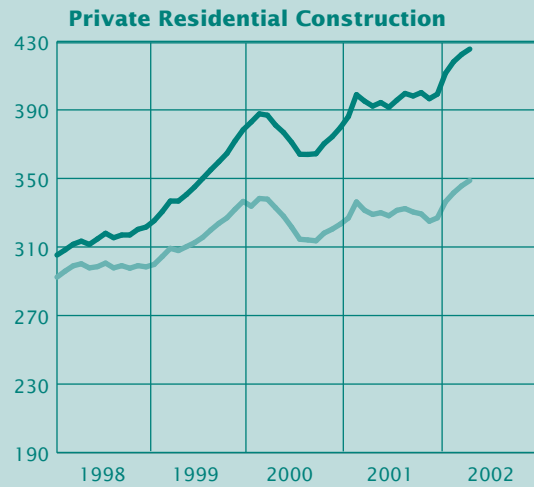
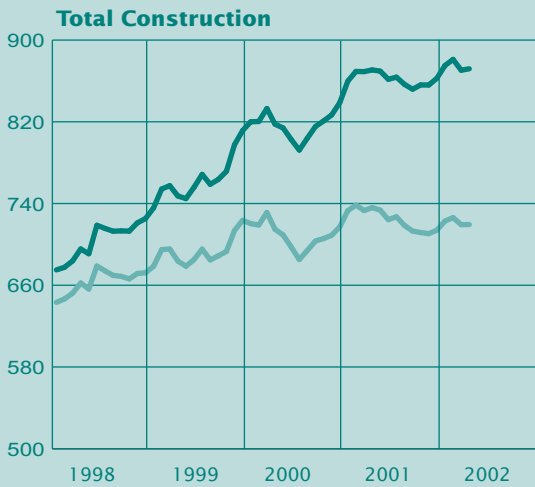
C30/02-4

## Current Construction Reports

### 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: 301-763-1605.

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## VALUE OF CONSTRUCTION PUT IN PLACE

Construction put in place during April 2002 was estimated at a seasonally adjusted annual rate of \$871.9 billion, the same ( $\pm 5$  percent) as the revised March estimate of \$875.5 billion. The April figure is the same ( $\pm 5$  percent) as April 2001.

During the first 4 months of this year \$251.5 billion of construction was put in place, the same ( $\pm 3$  percent) as the \$250.3 billion for the same period in 2001.

In constant (1996) dollars, the April annual rate was \$719.4 billion, the same ( $\pm 5$  percent) as the revised estimate of \$719.3 billion for March.

Spending on new residential housing units was at a seasonally adjusted annual rate of \$296.4 billion in April, the same ( $\pm 2$  percent) as the revised March estimate. Nonresidential building construction was at a rate of \$185.6 billion, 2 ( $\pm 3$ ) percent above the revised March estimate of \$182.7 billion.

In April, the estimated seasonally adjusted annual rate of public construction put in place was \$206.5 billion, 1 ( $\pm 5$ ) percent below the revised March estimate of \$208.8 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: June 2001*, C30/01-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2001; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1993 to 2000.
- 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 1. Annual Value of Construction Put in Place: 1997-2001**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
<b>Total construction</b> .....	<b>653,429</b>	<b>704,724</b>	<b>763,786</b>	<b>815,414</b>	<b>861,181</b>	<b>632,680</b>	<b>664,244</b>	<b>692,281</b>	<b>706,899</b>	<b>723,199</b>
<b>Private construction</b> .....	<b>502,734</b>	<b>551,383</b>	<b>596,280</b>	<b>640,554</b>	<b>666,519</b>	<b>487,197</b>	<b>519,859</b>	<b>540,159</b>	<b>555,089</b>	<b>558,850</b>
Residential buildings .....	289,014	314,607	350,562	374,274	395,716	280,720	297,960	317,232	323,708	329,710
New housing units .....	198,063	223,983	251,272	264,864	277,717	192,386	212,068	227,461	229,103	231,399
1 unit .....	175,179	199,409	223,837	236,788	246,537	170,154	188,785	202,615	204,812	205,419
2 units or more .....	22,883	24,574	27,434	28,076	31,181	22,232	23,283	24,847	24,292	25,980
Improvements .....	90,951	90,624	99,290	109,410	(NA)	88,334	85,892	89,771	94,605	(NA)
Nonresidential buildings .....	173,875	190,710	193,935	210,140	208,699	167,610	177,644	173,418	179,654	173,360
Industrial .....	37,624	40,484	32,639	32,073	31,120	36,267	37,720	29,204	27,419	25,861
Office .....	34,305	42,226	47,582	55,686	53,956	33,058	39,333	42,549	47,594	44,836
Hotels, motels .....	12,898	14,816	15,951	16,396	14,710	12,438	13,794	14,273	14,027	12,221
Other commercial .....	51,809	53,598	56,915	61,453	62,899	49,948	49,915	50,867	52,539	52,232
Religious .....	5,777	6,594	7,371	8,068	8,428	5,565	6,139	6,590	6,898	6,997
Educational .....	8,693	9,698	9,645	11,356	12,604	8,375	9,039	8,621	9,707	10,462
Hospital and institutional .....	13,546	13,793	13,530	14,575	15,284	13,066	12,853	12,101	12,459	12,696
Miscellaneous <sup>1</sup> .....	9,223	9,501	10,301	10,533	9,698	8,892	8,850	9,214	9,010	8,056
Farm nonresidential .....	3,815	4,284	5,008	5,158	(NA)	3,675	3,989	4,474	4,407	(NA)
Public utilities .....	33,638	39,212	44,066	48,084	(NA)	32,883	37,818	42,534	44,749	(NA)
Telecommunications .....	12,416	12,458	18,404	17,994	22,002	12,159	12,188	18,305	17,497	20,732
Other public utilities .....	21,222	26,754	25,662	30,089	(NA)	20,725	25,631	24,229	27,253	(NA)
Railroads .....	4,922	5,736	4,670	4,226	(NA)	4,745	5,463	4,311	3,750	(NA)
Electric light and power .....	11,325	12,381	14,585	21,111	(NA)	11,122	11,883	13,892	19,251	(NA)
Gas .....	4,006	7,372	4,918	3,750	(NA)	3,911	7,072	4,625	3,354	(NA)
Petroleum pipelines .....	969	1,265	1,489	1,003	(NA)	947	1,213	1,401	897	(NA)
All other private <sup>2</sup> .....	2,392	2,570	2,709	2,899	2,768	2,309	2,447	2,501	2,570	2,402
<b>Public construction</b> .....	<b>150,695</b>	<b>153,341</b>	<b>167,507</b>	<b>174,860</b>	<b>194,662</b>	<b>145,483</b>	<b>144,385</b>	<b>152,121</b>	<b>151,810</b>	<b>164,349</b>
Buildings .....	69,860	71,776	76,542	82,275	93,505	67,400	66,920	68,474	70,390	77,630
Housing and redevelopment ..	5,299	4,922	5,138	5,228	6,281	5,150	4,663	4,653	4,521	5,230
Industrial .....	999	1,010	925	1,159	1,556	965	941	827	991	1,292
Educational .....	33,552	34,828	38,966	43,560	49,302	32,340	32,431	34,821	37,237	40,920
Hospital .....	4,977	3,906	3,932	4,007	4,056	4,802	3,641	3,516	3,427	3,367
Other <sup>3</sup> .....	25,033	27,110	27,582	28,321	32,311	24,144	25,245	24,657	24,214	26,821
Highways and streets .....	42,602	45,565	51,374	52,088	57,485	41,093	43,085	46,858	45,230	48,545
Military facilities .....	2,556	2,530	2,130	2,337	2,347	2,466	2,377	1,926	2,016	1,965
Conservation and development ..	5,625	5,452	5,993	6,014	7,136	5,431	5,223	5,594	5,449	6,370
Sewer systems .....	10,515	9,367	10,343	10,287	10,215	10,152	8,976	9,653	9,324	9,118
Water supply facilities .....	6,493	6,290	6,844	6,928	7,979	6,347	6,035	6,431	6,160	6,843
Miscellaneous public <sup>4</sup> .....	13,045	12,361	14,280	14,930	15,996	12,594	11,767	13,185	13,241	13,879

NA Not available, but estimates are included in totals.

<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: 1997-2001**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
<b>Total public construction . . . .</b>	<b>150,695</b>	<b>153,341</b>	<b>167,507</b>	<b>174,860</b>	<b>194,662</b>	<b>145,483</b>	<b>144,385</b>	<b>152,121</b>	<b>151,810</b>	<b>164,349</b>
<b>State and local construction . . . .</b>	<b>136,608</b>	<b>139,023</b>	<b>153,505</b>	<b>161,053</b>	<b>180,308</b>	<b>131,891</b>	<b>130,880</b>	<b>139,348</b>	<b>139,704</b>	<b>152,045</b>
Total buildings . . . . .	63,752	65,750	71,073	77,203	88,412	61,508	61,297	63,578	66,049	73,400
Housing and redevelopment . . . .	4,622	4,384	4,714	4,846	5,860	4,492	4,153	4,269	4,190	4,879
Educational . . . . .	33,533	34,813	38,950	43,531	49,265	32,322	32,417	34,807	37,212	40,890
Hospital . . . . .	3,725	2,897	3,081	3,372	3,439	3,596	2,700	2,754	2,884	2,855
Other <sup>1</sup> . . . . .	21,872	23,656	24,327	25,454	29,849	21,099	22,027	21,749	21,763	24,777
Highways and streets . . . . .	42,347	45,308	51,123	51,790	57,186	40,847	42,842	46,629	44,971	48,293
Conservation and development . .	2,256	1,915	1,988	1,985	2,471	2,178	1,836	1,855	1,798	2,206
Sewer systems . . . . .	10,515	9,367	10,343	10,287	10,215	10,152	8,976	9,653	9,324	9,118
Water supply facilities . . . . .	6,493	6,290	6,844	6,928	7,979	6,347	6,035	6,431	6,160	6,843
Miscellaneous nonbuilding <sup>2</sup> . . . .	11,245	10,393	12,135	12,859	14,045	10,859	9,894	11,202	11,402	12,186
<b>Federal construction . . . . .</b>	<b>14,087</b>	<b>14,318</b>	<b>14,002</b>	<b>13,807</b>	<b>14,354</b>	<b>13,592</b>	<b>13,505</b>	<b>12,774</b>	<b>12,106</b>	<b>12,304</b>
Total buildings . . . . .	6,107	6,026	5,470	5,072	5,093	5,892	5,624	4,896	4,341	4,230
Housing . . . . .	677	538	424	382	421	658	510	384	331	351
Industrial . . . . .	999	1,010	925	1,159	1,556	965	941	827	991	1,292
Educational . . . . .	19	15	15	29	37	19	14	14	25	31
Hospital . . . . .	1,251	1,009	850	634	617	1,206	941	762	543	512
Other <sup>3</sup> . . . . .	3,161	3,454	3,255	2,867	2,462	3,045	3,217	2,909	2,452	2,045
Highways and streets . . . . .	255	257	251	298	(NA)	246	243	229	258	(NA)
Military facilities . . . . .	2,556	2,530	2,130	2,337	2,347	2,466	2,377	1,926	2,016	1,965
Conservation and development . .	3,368	3,536	4,005	4,029	4,666	3,252	3,387	3,739	3,651	4,164
Miscellaneous public <sup>4</sup> . . . . .	1,800	1,969	2,145	2,071	1,950	1,735	1,873	1,983	1,839	1,693

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 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>		
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings										Public utilities <sup>4</sup>	
			Total <sup>2</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>																			
April 2001	250,320	199,385	111,448	79,860	70,621	9,238	68,925	10,692	19,190	4,999	19,549	2,500	3,633	5,087	3,275	(NA)	6,832	788	
April 2002	251,468	193,621	119,057	85,596	74,676	10,920	57,655	6,333	13,694	3,808	18,835	2,650	4,193	5,291	2,851	(NA)	(NA)	886	
Percent change	(Z)	-3	7	7	6	18	-16	-41	-29	-24	-4	6	15	4	-13	(NA)	(NA)	12	
<b>MONTHLY DATA</b>																			
2000: April	64,670	51,088	30,172	22,036	19,585	2,451	16,610	2,530	4,366	1,404	4,784	626	851	1,173	877	(NA)	1,213	204	
May	70,259	55,626	33,292	23,247	20,743	2,504	17,815	2,807	4,784	1,407	5,066	637	1,007	1,193	914	(NA)	1,443	215	
June	72,991	57,340	34,596	24,097	21,552	2,545	18,130	2,902	4,653	1,426	5,345	691	1,016	1,200	899	(NA)	1,597	233	
July	72,395	56,740	34,229	24,187	21,882	2,305	18,095	2,793	4,650	1,394	5,370	719	1,070	1,223	877	(NA)	1,332	241	
August	76,948	58,851	34,650	24,270	21,903	2,367	19,123	2,857	5,009	1,394	5,736	741	1,182	1,276	929	(NA)	1,447	304	
September	77,025	58,994	34,302	23,788	21,491	2,297	19,054	2,796	5,156	1,362	5,799	722	1,022	1,295	903	(NA)	1,818	302	
October	75,332	58,846	34,271	23,320	20,961	2,359	19,158	2,910	5,103	1,364	5,780	778	1,006	1,323	894	(NA)	1,631	300	
November	70,999	56,251	32,628	22,632	20,286	2,346	18,452	2,850	5,177	1,327	5,208	705	961	1,342	882	(NA)	1,753	277	
December	62,594	49,819	27,109	19,634	17,385	2,249	17,491	2,713	5,044	1,255	4,856	625	880	1,322	796	(NA)	1,999	238	
2001: January	59,043	47,316	26,285	18,600	16,417	2,183	16,695	2,715	4,721	1,237	4,540	618	864	1,255	746	(NA)	1,675	193	
February	57,121	45,548	24,588	18,015	15,800	2,215	16,420	2,476	4,571	1,241	4,661	602	848	1,231	789	(NA)	1,604	196	
March	64,851	52,066	29,450	21,047	18,676	2,371	17,842	2,739	5,004	1,273	5,072	624	934	1,313	884	(NA)	1,780	191	
April	69,305	54,454	31,125	22,199	19,729	2,470	17,968	2,761	4,894	1,249	5,276	657	987	1,288	856	(NA)	1,773	208	
May	75,287	58,419	34,993	24,046	21,227	2,819	18,021	2,697	4,786	1,237	5,358	690	1,057	1,346	851	(NA)	2,097	210	
June	78,219	59,909	36,579	25,226	22,460	2,766	18,178	2,821	4,674	1,288	5,423	700	1,102	1,312	858	(NA)	1,934	213	
July	79,264	60,462	37,194	26,021	23,267	2,754	18,177	2,930	4,481	1,278	5,537	746	1,127	1,263	815	(NA)	1,841	227	
August	81,800	61,740	37,977	26,317	23,542	2,775	17,984	2,750	4,307	1,227	5,663	787	1,223	1,250	777	(NA)	2,114	262	
September	79,864	60,776	37,351	25,801	23,120	2,681	17,882	2,746	4,271	1,229	5,705	781	1,155	1,230	764	(NA)	1,704	283	
October	79,055	60,446	37,299	25,329	22,586	2,743	17,655	2,378	4,414	1,219	5,625	778	1,151	1,297	794	(NA)	1,765	276	
November	73,297	56,182	34,335	24,226	21,550	2,677	16,568	2,064	4,115	1,174	5,305	757	1,118	1,236	800	(NA)	1,849	260	
December	64,075	49,200	28,542	20,891	18,164	2,727	15,309	2,042	3,718	1,059	4,735	689	1,036	1,265	765	(NA)	1,867	251	
2002: January	59,709	45,885	27,813	19,708	17,006	2,702	14,252	1,704	3,461	1,010	4,469	676	1,000	1,246	686	(NA)	1,205	208	
February <sup>f</sup>	57,834	43,994	25,939	19,215	16,666	2,549	13,929	1,512	3,271	943	4,583	638	981	1,295	706	(NA)	1,387	212	
March <sup>f</sup>	64,495	50,218	31,501	22,696	19,970	2,727	14,308	1,525	3,382	910	4,756	656	1,048	1,337	694	(NA)	1,454	223	
April <sup>p</sup>	69,430	53,523	33,804	23,976	21,034	2,942	15,167	1,592	3,581	946	5,026	681	1,164	1,413	765	(NA)	(NA)	244	
<b>PERCENT CHANGE</b>																			
March 2002-																			
April 2002	8	7	7	6	5	8	6	4	6	4	6	4	11	6	10	(NA)	(NA)	9	

See footnotes at end of table.

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	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
April 2001	50,935	26,011	1,778	470	13,071	1,219	9,472	12,466	716	2,114	2,962	2,263	4,403
April 2002	57,848	30,884	2,247	558	15,768	1,660	10,652	13,160	721	2,506	3,188	2,331	5,058
Percent change	14	19	26	19	21	36	12	6	1	19	8	3	15
<b>MONTHLY DATA</b>													
2000: April	13,582	6,426	431	91	3,237	344	2,323	3,928	180	462	930	564	1,092
May	14,633	6,749	436	89	3,509	367	2,348	4,490	198	440	903	607	1,247
June	15,651	7,318	450	98	4,008	360	2,403	4,855	196	501	981	565	1,235
July	15,655	7,334	427	98	4,180	334	2,295	5,095	188	427	873	542	1,197
August	18,097	7,958	457	109	4,547	342	2,502	6,474	206	518	927	652	1,363
September	18,031	7,708	480	125	4,157	374	2,573	6,179	269	797	918	654	1,506
October	16,485	7,398	497	76	3,797	336	2,693	5,271	129	502	927	679	1,580
November	14,748	6,930	488	93	3,522	341	2,486	4,181	225	479	867	619	1,446
December	12,775	6,605	451	99	3,444	295	2,315	3,024	183	488	737	535	1,203
2001: January	11,726	6,241	447	124	3,163	309	2,199	2,570	171	509	697	484	1,053
February	11,573	6,071	401	103	3,049	296	2,222	2,553	161	536	670	513	1,069
March	12,785	6,477	422	114	3,236	308	2,397	3,188	184	569	735	570	1,063
April	14,851	7,222	509	130	3,623	307	2,654	4,156	200	500	860	696	1,218
May	16,868	7,781	555	108	4,017	319	2,782	5,374	192	601	877	667	1,376
June	18,309	8,213	554	127	4,348	345	2,839	6,246	216	571	933	734	1,399
July	18,802	8,657	511	124	4,973	331	2,718	6,395	203	535	881	725	1,407
August	20,060	9,222	513	125	5,409	354	2,821	6,750	220	680	943	735	1,510
September	19,088	8,910	545	211	4,814	372	2,968	5,889	253	910	923	729	1,476
October	18,609	8,751	610	78	4,666	374	3,023	5,953	160	531	962	743	1,510
November	17,115	8,216	600	116	4,178	363	2,959	4,908	202	613	955	724	1,498
December	14,875	7,744	615	198	3,826	377	2,729	3,506	186	582	781	659	1,417
2002: January	13,824	7,396	537	113	3,732	427	2,588	3,207	167	599	767	564	1,123
February <sup>f</sup>	13,840	7,550	522	174	3,844	394	2,617	2,911	167	614	774	558	1,266
March <sup>f</sup>	14,277	7,704	562	154	3,851	410	2,726	3,009	200	666	804	564	1,330
April <sup>p</sup>	15,907	8,235	626	118	4,341	429	2,721	4,033	187	627	842	644	1,339
<b>PERCENT CHANGE</b>													
March 2002- April 2002	11	7	11	-23	13	5	(Z)	34	-6	-6	5	14	1

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>	
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings									Public utilities <sup>4</sup>		
			Total <sup>2</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													
2000: April	817,654	639,303	381,142	272,536	243,037	29,499	205,237	31,854	53,352	16,970	60,299	7,955	10,722	13,923	10,162	(NA)	16,121	2,654	
May	814,016	640,622	376,813	270,515	241,903	28,611	209,758	33,319	54,880	16,598	60,434	7,823	11,692	14,205	10,807	(NA)	17,012	2,670	
June	802,668	634,506	371,020	266,468	237,925	28,543	209,399	33,837	54,529	16,232	60,911	8,466	10,560	14,356	10,510	(NA)	17,789	2,762	
July	792,253	627,733	364,140	260,266	233,407	26,859	211,555	33,986	55,805	16,432	60,388	8,723	10,852	15,038	10,332	(NA)	16,698	2,720	
August	803,968	630,656	364,039	258,652	231,979	26,673	213,266	32,623	57,461	15,961	61,678	7,998	11,834	14,922	10,790	(NA)	15,648	3,165	
September	815,410	638,851	364,372	257,355	230,675	26,680	214,027	31,384	59,380	16,273	61,969	8,064	11,469	15,053	10,434	(NA)	21,072	3,280	
October	820,805	644,836	370,256	257,459	230,345	27,114	215,534	32,125	58,992	16,004	62,768	8,166	12,119	15,220	10,140	(NA)	17,955	3,121	
November	826,746	651,066	374,281	259,935	232,061	27,874	215,342	33,265	60,552	15,862	60,035	7,662	12,103	15,528	10,335	(NA)	19,699	3,166	
December	838,731	660,849	379,593	263,547	234,931	28,615	217,998	31,398	63,114	15,659	62,120	7,793	12,051	16,003	9,860	(NA)	23,043	2,829	
2001: January	859,815	673,715	386,088	269,061	239,661	29,399	223,788	35,878	60,849	15,940	64,553	8,081	12,396	16,049	10,041	(NA)	24,272	2,681	
February	869,334	681,826	398,863	275,425	245,596	29,829	220,158	33,386	58,922	15,939	65,646	8,143	12,077	15,685	10,359	(NA)	22,920	2,914	
March	869,140	681,176	395,080	273,876	244,392	29,484	225,853	34,823	61,840	15,121	66,952	8,092	12,394	15,900	10,731	(NA)	21,657	2,549	
April	870,826	677,429	392,160	274,700	244,827	29,873	220,579	34,662	58,842	14,902	66,093	8,373	12,428	15,318	9,961	(NA)	22,777	2,709	
May	869,574	670,838	394,330	278,801	246,823	31,978	211,694	31,943	55,008	14,508	63,593	8,377	12,201	16,025	10,040	(NA)	24,358	2,618	
June	861,571	665,322	391,508	278,540	247,493	31,047	210,782	32,966	54,984	14,956	61,858	8,737	11,574	15,666	10,043	(NA)	22,379	2,545	
July	863,742	667,765	395,668	279,985	248,177	31,808	211,010	34,645	53,508	14,922	62,386	8,882	11,602	15,445	9,620	(NA)	21,960	2,611	
August	856,629	663,108	399,558	280,175	248,904	31,271	201,920	31,884	49,697	14,325	61,163	8,779	12,358	14,644	9,070	(NA)	22,551	2,726	
September	851,883	660,249	398,136	279,272	248,155	31,116	202,035	31,291	49,958	14,665	61,291	8,578	13,002	14,331	8,918	(NA)	21,057	3,027	
October	856,097	656,913	400,147	280,348	248,883	31,465	198,052	26,126	50,493	14,185	61,251	8,226	13,726	14,980	9,066	(NA)	19,047	2,867	
November	855,952	651,509	396,518	279,990	247,934	32,056	192,975	23,934	48,035	14,014	60,980	8,409	13,936	14,325	9,342	(NA)	20,585	2,938	
December	862,567	654,297	399,241	281,242	246,571	34,670	190,767	23,888	46,186	13,066	60,506	8,371	14,050	15,299	9,401	(NA)	21,874	2,969	
2002: January	875,111	658,933	411,417	286,882	251,013	35,870	191,672	22,549	44,748	12,812	63,611	8,633	14,218	15,911	9,190	(NA)	17,489	2,924	
February	881,054	662,428	418,134	293,794	259,388	34,406	187,715	20,474	42,433	12,100	64,479	8,634	13,962	16,430	9,203	(NA)	19,742	3,116	
March	870,540	661,714	422,392	294,948	260,759	34,189	182,732	19,450	42,319	11,228	62,443	8,779	13,931	16,169	8,413	(NA)	18,382	3,008	
April <sup>P</sup>	871,940	665,484	425,545	296,380	260,757	35,623	185,557	19,612	42,885	11,171	63,027	8,557	14,652	16,720	8,934	(NA)	(NA)	3,170	
<b>PERCENT CHANGE</b>																			
March 2002-																			
April 2002	(Z)	1	1	(Z)	(Z)	4	2	1	1	-1	1	-3	5	3	6	(NA)	(NA)	5	

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	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
			Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
2000:	April . . . . .	178,351	81,160	5,353	1,163	42,083	4,313	28,248	56,185	2,289	5,845	12,013	6,920	13,939
	May . . . . .	173,394	81,473	5,139	1,059	43,538	4,255	27,483	51,903	2,329	5,314	10,515	6,979	14,881
	June . . . . .	168,162	80,489	5,210	1,078	42,641	4,131	27,428	48,431	2,262	5,814	10,809	6,491	13,868
	July . . . . .	164,520	79,082	5,132	1,161	41,911	3,998	26,881	49,628	2,196	4,818	9,945	5,961	12,890
	August . . . . .	173,311	81,979	5,342	1,308	43,038	4,055	28,236	52,777	2,386	5,568	9,719	7,137	13,747
	September . . . . .	176,559	82,233	5,275	1,099	43,751	4,042	28,067	53,923	2,509	6,425	9,617	7,156	14,695
	October . . . . .	175,969	85,163	5,517	1,116	44,020	3,805	30,705	48,764	1,883	6,815	9,703	7,000	16,640
	November . . . . .	175,680	84,673	5,575	1,177	44,776	4,151	28,994	48,858	2,629	5,789	9,831	6,989	16,911
	December . . . . .	177,883	86,184	5,578	1,201	46,745	3,643	29,016	50,189	2,107	6,339	10,009	6,950	16,105
2001:	January . . . . .	186,100	87,358	5,852	1,587	46,001	3,875	30,043	55,368	2,270	7,381	10,166	7,239	16,318
	February . . . . .	187,508	86,785	5,482	1,392	45,732	3,925	30,254	56,204	2,342	7,838	10,352	7,550	16,437
	March . . . . .	187,964	87,547	5,392	1,351	45,946	3,953	30,904	57,443	2,131	7,573	10,076	7,919	15,275
	April . . . . .	193,397	91,607	6,240	1,605	47,773	3,802	32,188	57,717	2,530	6,332	10,997	8,654	15,560
	May . . . . .	198,736	94,405	6,535	1,329	49,953	3,844	32,743	60,437	2,274	7,216	10,282	7,716	16,406
	June . . . . .	196,249	91,120	6,488	1,388	46,754	3,949	32,542	61,534	2,477	6,592	10,410	8,463	15,652
	July . . . . .	195,977	93,938	6,135	1,499	50,282	3,902	32,120	60,470	2,375	6,063	9,980	8,011	15,140
	August . . . . .	193,521	94,802	6,020	1,419	51,394	4,220	31,750	55,667	2,539	7,265	10,008	8,021	15,218
	September . . . . .	191,635	95,921	6,163	1,997	50,626	4,140	32,995	53,534	2,362	7,344	9,875	7,955	14,645
	October . . . . .	199,184	99,413	6,742	1,078	53,537	4,152	33,903	55,982	2,343	7,489	9,978	7,662	16,317
	November . . . . .	204,443	99,577	6,835	1,433	52,665	4,418	34,226	58,717	2,353	7,392	10,799	8,160	17,444
	December . . . . .	208,270	100,788	7,552	2,410	52,163	4,647	34,016	59,840	2,152	7,548	10,561	8,536	18,845
2002:	January . . . . .	216,178	102,747	7,037	1,490	53,624	5,444	35,151	66,014	2,223	8,668	10,950	8,350	17,225
	February <sup>f</sup> . . . . .	218,626	106,618	7,128	2,346	56,800	5,166	35,178	61,726	2,416	8,865	11,760	8,167	19,074
	March <sup>f</sup> . . . . .	208,826	104,052	7,258	1,875	54,624	5,170	35,125	56,245	2,321	8,715	11,057	7,799	18,637
	April <sup>p</sup> . . . . .	206,457	103,666	7,562	1,441	56,747	5,137	32,779	56,796	2,366	7,957	10,610	7,979	17,083
<b>PERCENT CHANGE</b>														
	March 2002- April 2002 . . . . .	-1	(Z)	4	-23	4	-1	-7	1	2	-9	-4	2	-8

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

[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>	Total <sup>2</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													
2000:	April	714,807	558,658	332,875	238,023	212,259	25,764	176,776	27,436	45,954	14,617	51,937	6,852	9,235	11,992	8,753	(NA)	15,758	2,370	
	May	709,169	558,056	327,949	235,435	210,534	24,901	180,204	28,624	47,148	14,260	51,919	6,721	10,045	12,203	9,284	(NA)	16,581	2,376	
	June	697,476	551,061	321,508	230,908	206,174	24,734	179,588	29,019	46,765	13,921	52,239	7,261	9,056	12,312	9,014	(NA)	17,339	2,461	
	July	685,157	542,810	314,456	224,755	201,560	23,194	180,508	28,998	47,615	14,021	51,526	7,443	9,259	12,831	8,816	(NA)	16,228	2,407	
	August	694,146	544,485	314,097	223,168	200,155	23,014	181,503	27,764	48,903	13,584	52,492	6,807	10,071	12,699	9,183	(NA)	15,221	2,793	
	September	703,256	551,028	313,573	221,476	198,515	22,960	181,841	26,664	50,451	13,826	52,650	6,851	9,744	12,790	8,865	(NA)	20,479	2,890	
	October	705,695	554,513	318,089	221,185	197,891	23,294	182,656	27,225	49,993	13,562	53,193	6,920	10,271	12,899	8,593	(NA)	17,281	2,738	
	November	708,897	558,316	320,446	222,547	198,682	23,865	182,030	28,119	51,185	13,408	50,748	6,477	10,231	13,126	8,736	(NA)	18,869	2,775	
	December	717,155	564,809	323,333	224,486	200,112	24,374	183,809	26,474	53,216	13,203	52,378	6,571	10,161	13,493	8,314	(NA)	22,051	2,482	
2001:	January	733,045	573,632	326,916	227,824	202,931	24,894	188,374	30,201	51,220	13,418	54,337	6,802	10,434	13,509	8,452	(NA)	23,227	2,355	
	February	738,460	578,166	336,310	232,230	207,079	25,151	184,696	28,008	49,432	13,372	55,073	6,831	10,132	13,159	8,690	(NA)	21,891	2,559	
	March	733,051	574,277	331,443	229,761	205,027	24,735	188,211	29,019	51,533	12,601	55,793	6,743	10,329	13,250	8,942	(NA)	20,646	2,207	
	April	735,978	571,952	328,993	230,453	205,392	25,061	184,277	28,957	49,158	12,450	55,215	6,995	10,383	12,797	8,321	(NA)	21,692	2,360	
	May	733,543	565,160	329,983	233,307	206,547	26,760	176,559	26,641	45,878	12,100	53,038	6,987	10,176	13,365	8,374	(NA)	23,088	2,281	
	June	724,181	559,224	328,171	233,479	207,454	26,025	174,923	27,357	45,629	12,412	51,335	7,250	9,605	13,001	8,334	(NA)	20,895	2,192	
	July	726,952	561,317	331,380	234,493	207,853	26,639	175,403	28,799	44,479	12,404	51,859	7,383	9,644	12,838	7,997	(NA)	20,543	2,266	
	August	718,539	554,822	332,411	233,091	207,075	26,016	167,430	26,438	41,208	11,878	50,716	7,280	10,247	12,142	7,521	(NA)	21,076	2,375	
	September	712,971	550,988	330,403	231,761	205,938	25,823	167,109	25,882	41,322	12,130	50,696	7,095	10,754	11,854	7,377	(NA)	19,662	2,639	
	October	711,615	544,590	329,339	230,739	204,842	25,897	163,006	21,503	41,558	11,675	50,412	6,770	11,297	12,329	7,461	(NA)	17,817	2,478	
	November	710,477	539,274	325,015	229,500	203,225	26,276	158,697	19,682	39,502	11,525	50,148	6,915	11,461	11,780	7,682	(NA)	19,365	2,537	
	December	713,910	540,859	326,979	230,337	201,942	28,395	156,623	19,612	37,920	10,727	49,677	6,873	11,535	12,561	7,718	(NA)	20,386	2,531	
2002:	January	722,798	543,278	336,400	234,573	205,243	29,329	157,237	18,498	36,709	10,510	52,183	7,082	11,664	13,053	7,539	(NA)	16,299	2,493	
	February	726,218	545,331	341,613	240,028	211,919	28,109	153,613	16,755	34,724	9,902	52,765	7,066	11,425	13,445	7,531	(NA)	18,297	2,640	
	March	719,301	545,941	345,656	241,365	213,387	27,978	150,026	15,969	34,745	9,219	51,267	7,207	11,438	13,275	6,907	(NA)	17,099	2,558	
	April <sup>P</sup>	719,378	548,737	348,808	242,935	213,735	29,200	151,847	16,049	35,094	9,141	51,577	7,003	11,990	13,682	7,311	(NA)	(NA)	2,682	
<b>PERCENT CHANGE</b>																				
	March 2002- April 2002	(Z)	1	1	1	(Z)	4	1	1	1	-1	1	-3	5	3	6	(NA)	(NA)	5	

See footnotes at end of table.

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	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
			Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
2000:	April . . . . .	156,149	69,969	4,675	1,002	36,247	3,715	24,330	49,285	1,989	5,309	10,911	6,240	12,445
	May . . . . .	151,113	70,052	4,472	909	37,404	3,656	23,610	45,172	2,013	4,839	9,576	6,220	13,240
	June . . . . .	146,415	69,076	4,515	924	36,571	3,543	23,523	42,077	1,953	5,314	9,880	5,754	12,360
	July . . . . .	142,347	67,529	4,431	990	35,760	3,411	22,936	42,893	1,885	4,368	9,017	5,248	11,407
	August . . . . .	149,662	69,832	4,609	1,113	36,628	3,451	24,030	45,576	2,046	5,029	8,779	6,266	12,133
	September . . . . .	152,228	69,925	4,539	934	37,171	3,435	23,846	46,486	2,146	5,789	8,664	6,272	12,947
	October . . . . .	151,182	72,237	4,740	946	37,305	3,224	26,021	41,786	1,606	6,129	8,725	6,103	14,597
	November . . . . .	150,580	71,636	4,773	995	37,849	3,509	24,509	41,759	2,235	5,206	8,841	6,083	14,821
	December . . . . .	152,347	72,715	4,751	1,013	39,414	3,072	24,465	42,933	1,788	5,711	9,017	6,054	14,127
2001:	January . . . . .	159,413	73,563	4,955	1,336	38,721	3,262	25,289	47,445	1,927	6,655	9,167	6,317	14,340
	February . . . . .	160,294	72,829	4,622	1,168	38,365	3,293	25,381	48,079	1,985	7,061	9,326	6,583	14,431
	March . . . . .	158,774	72,986	4,524	1,126	38,289	3,294	25,753	48,029	1,779	6,804	9,053	6,898	13,225
	April . . . . .	164,026	76,552	5,234	1,340	39,911	3,177	26,890	48,665	2,125	5,705	9,907	7,518	13,554
	May . . . . .	168,383	78,755	5,468	1,109	41,662	3,206	27,309	51,045	1,908	6,483	9,238	6,663	14,291
	June . . . . .	164,957	75,672	5,438	1,152	38,800	3,277	27,006	51,450	2,064	5,849	9,237	7,203	13,481
	July . . . . .	165,635	78,125	5,138	1,246	41,797	3,244	26,700	51,289	1,994	5,390	8,871	6,824	13,142
	August . . . . .	163,718	78,625	5,008	1,177	42,615	3,499	26,327	47,538	2,137	6,452	8,889	6,821	13,256
	September . . . . .	161,982	79,356	5,114	1,651	41,874	3,425	27,291	45,834	1,988	6,516	8,762	6,758	12,769
	October . . . . .	167,025	81,822	5,549	888	44,063	3,418	27,904	47,123	1,951	6,651	8,861	6,516	14,102
	November . . . . .	171,203	81,871	5,603	1,179	43,310	3,633	28,147	49,095	1,951	6,600	9,642	6,980	15,064
	December . . . . .	173,051	82,734	6,185	1,978	42,826	3,816	27,928	49,251	1,770	6,668	9,329	7,234	16,066
2002:	January . . . . .	179,520	84,269	5,754	1,222	43,990	4,466	28,836	54,333	1,827	7,658	9,673	7,076	14,685
	February <sup>f</sup> . . . . .	180,887	87,239	5,824	1,920	46,481	4,228	28,787	50,512	1,977	7,783	10,325	6,886	16,164
	March <sup>f</sup> . . . . .	173,359	85,409	5,939	1,539	44,847	4,245	28,838	46,178	1,906	7,679	9,742	6,598	15,848
	April <sup>p</sup> . . . . .	170,641	84,843	6,199	1,179	46,438	4,204	26,824	46,402	1,934	6,980	9,307	6,722	14,453
<b>PERCENT CHANGE</b>														
	March 2002- April 2002 . . . . .	-2	-1	4	-23	4	-1	-7	(Z)	1	-9	-4	2	-9

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>		
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings										Public utilities <sup>4</sup>	
			Total <sup>2</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>																			
April 2001	212,137	168,805	93,806	67,219	59,441	7,776	57,708	8,952	16,067	4,187	16,366	2,094	3,042	4,259	2,741	(NA)	6,519	689	
April 2002	207,625	159,667	97,420	70,039	61,104	8,933	47,248	5,190	11,223	3,122	15,435	2,172	3,436	4,335	2,337	(NA)	(NA)	753	
Percent change	-2	-5	4	4	3	15	-18	-42	-30	-25	-6	4	13	2	-15	(NA)	(NA)	9	
<b>MONTHLY DATA</b>																			
2000: April	56,530	44,640	26,351	19,245	17,105	2,141	14,307	2,179	3,761	1,210	4,120	539	733	1,010	756	(NA)	1,186	182	
May	61,208	48,454	28,975	20,232	18,053	2,179	15,305	2,412	4,110	1,209	4,353	547	865	1,025	785	(NA)	1,407	191	
June	63,419	49,795	29,979	20,881	18,676	2,205	15,549	2,488	3,991	1,223	4,584	592	871	1,029	771	(NA)	1,556	208	
July	62,592	49,051	29,558	20,887	18,896	1,991	15,439	2,383	3,968	1,189	4,581	613	913	1,044	748	(NA)	1,294	213	
August	66,447	50,821	29,897	20,940	18,898	2,042	16,275	2,432	4,263	1,186	4,882	630	1,006	1,086	790	(NA)	1,408	268	
September	66,442	50,886	29,520	20,472	18,495	1,977	16,189	2,375	4,381	1,157	4,927	614	868	1,100	767	(NA)	1,766	266	
October	64,772	50,608	29,442	20,035	18,008	2,027	16,235	2,466	4,324	1,156	4,898	659	852	1,121	758	(NA)	1,570	263	
November	60,882	48,236	27,935	19,377	17,368	2,009	15,598	2,409	4,376	1,122	4,402	596	813	1,134	745	(NA)	1,679	243	
December	53,543	42,602	23,091	16,724	14,808	1,915	14,748	2,288	4,253	1,058	4,094	527	742	1,114	671	(NA)	1,913	209	
2001: January	50,313	40,273	22,256	15,749	13,901	1,848	14,053	2,285	3,974	1,041	3,822	520	727	1,056	628	(NA)	1,603	170	
February	48,527	38,639	20,732	15,190	13,322	1,867	13,775	2,077	3,835	1,041	3,910	505	712	1,033	662	(NA)	1,532	172	
March	54,718	43,912	24,706	17,657	15,667	1,989	14,869	2,283	4,170	1,061	4,226	520	778	1,094	736	(NA)	1,696	166	
April	58,579	45,981	26,112	18,623	16,551	2,072	15,011	2,307	4,088	1,044	4,408	549	825	1,076	715	(NA)	1,688	181	
May	63,499	49,206	29,282	20,122	17,763	2,359	15,030	2,249	3,991	1,032	4,468	575	882	1,123	710	(NA)	1,987	183	
June	65,725	50,340	30,661	21,145	18,826	2,318	15,085	2,341	3,879	1,068	4,500	581	915	1,089	712	(NA)	1,806	183	
July	66,695	50,804	31,151	21,793	19,486	2,307	15,110	2,436	3,725	1,063	4,602	620	937	1,050	677	(NA)	1,722	197	
August	68,641	51,662	31,595	21,895	19,586	2,309	14,912	2,280	3,571	1,018	4,695	653	1,014	1,036	644	(NA)	1,976	228	
September	66,863	50,706	30,996	21,412	19,187	2,225	14,790	2,271	3,533	1,017	4,719	646	955	1,017	632	(NA)	1,591	247	
October	65,723	50,114	30,699	20,847	18,589	2,257	14,531	1,957	3,633	1,003	4,630	640	947	1,067	653	(NA)	1,651	238	
November	60,839	46,501	28,144	19,858	17,664	2,194	13,625	1,698	3,384	965	4,363	622	920	1,016	657	(NA)	1,740	224	
December	53,077	40,711	23,376	17,110	14,876	2,234	12,569	1,677	3,053	870	3,887	565	851	1,038	628	(NA)	1,740	214	
2002: January	49,314	37,829	22,742	16,115	13,905	2,209	11,691	1,398	2,839	829	3,666	554	820	1,022	563	(NA)	1,123	177	
February <sup>f</sup>	47,706	36,247	21,192	15,698	13,616	2,082	11,398	1,237	2,677	772	3,751	522	803	1,060	578	(NA)	1,285	179	
March <sup>f</sup>	53,308	41,446	25,778	18,573	16,342	2,231	11,747	1,252	2,777	747	3,905	539	861	1,097	570	(NA)	1,352	190	
April <sup>p</sup>	57,297	44,145	27,708	19,653	17,241	2,411	12,412	1,303	2,930	774	4,113	557	952	1,156	626	(NA)	(NA)	207	
<b>PERCENT CHANGE</b>																			
March 2002-April 2002	7	7	7	6	6	8	6	4	6	4	5	3	11	5	10	(NA)	(NA)	9	

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	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
April 2001	43,331	21,786	1,497	393	10,944	1,020	7,930	10,556	602	1,903	2,667	1,972	3,846
April 2002	47,957	25,306	1,839	456	12,921	1,360	8,729	10,788	590	2,205	2,805	1,969	4,294
Percent change	11	16	23	16	18	33	10	2	-2	16	5	(Z)	12
<b>MONTHLY DATA</b>													
2000: April	11,890	5,540	376	78	2,788	296	2,001	3,446	156	419	845	509	975
May	12,754	5,803	380	77	3,014	315	2,017	3,907	171	400	822	541	1,109
June	13,623	6,280	390	84	3,438	308	2,060	4,218	169	458	897	501	1,101
July	13,541	6,262	368	83	3,567	285	1,958	4,404	161	387	791	477	1,060
August	15,626	6,778	394	93	3,870	291	2,130	5,591	177	468	837	573	1,203
September	15,556	6,555	413	106	3,532	318	2,186	5,326	230	718	827	573	1,327
October	14,164	6,275	427	64	3,218	285	2,282	4,516	110	451	833	592	1,386
November	12,645	5,863	417	79	2,978	288	2,102	3,574	192	431	779	539	1,268
December	10,940	5,573	385	84	2,904	249	1,952	2,587	155	440	664	466	1,056
2001: January	10,039	5,256	378	104	2,662	260	1,851	2,202	145	459	629	423	926
February	9,887	5,095	338	86	2,558	248	1,864	2,184	136	483	604	447	939
March	10,807	5,400	354	95	2,697	256	1,998	2,666	153	511	660	497	920
April	12,598	6,035	427	108	3,027	256	2,217	3,504	168	450	774	605	1,061
May	14,294	6,491	465	90	3,350	266	2,320	4,539	161	540	788	576	1,199
June	15,385	6,820	464	105	3,608	287	2,356	5,222	180	506	828	624	1,205
July	15,891	7,200	428	103	4,134	275	2,259	5,424	170	476	783	618	1,221
August	16,979	7,649	427	104	4,485	294	2,339	5,764	185	604	838	625	1,315
September	16,157	7,371	452	174	3,982	308	2,455	5,042	213	808	819	619	1,287
October	15,609	7,203	502	64	3,840	308	2,488	5,011	133	472	854	631	1,305
November	14,338	6,755	492	95	3,436	299	2,433	4,104	168	547	853	619	1,294
December	12,366	6,357	504	162	3,141	309	2,240	2,885	153	514	690	559	1,208
2002: January	11,485	6,066	439	92	3,061	350	2,123	2,640	137	529	678	478	957
February <sup>f</sup>	11,459	6,178	427	142	3,145	322	2,142	2,382	136	539	680	471	1,073
March <sup>f</sup>	11,862	6,323	460	126	3,162	337	2,238	2,471	164	587	709	477	1,131
April <sup>p</sup>	13,151	6,739	513	96	3,553	351	2,226	3,295	153	550	738	543	1,133
<b>PERCENT CHANGE</b>													
March 2002- April 2002	11	7	12	-24	12	4	-1	33	-7	-6	4	14	(Z)

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>					
2000:	April	12,516	6,011	402	3,230	275	2,104	3,908	148	930	564	955
	May	13,543	6,351	406	3,508	325	2,113	4,465	149	903	607	1,068
	June	14,430	6,875	418	4,006	298	2,154	4,825	146	981	565	1,038
	July	14,610	6,952	395	4,179	290	2,088	5,064	150	873	542	1,030
	August	16,832	7,504	426	4,545	288	2,246	6,436	150	927	652	1,163
	September	16,371	7,159	446	4,152	303	2,257	6,144	195	918	654	1,302
	October	15,518	6,982	466	3,797	296	2,424	5,238	232	927	679	1,460
	November	13,623	6,534	453	3,517	289	2,275	4,155	180	867	619	1,268
	December	11,663	6,193	406	3,440	253	2,095	3,006	167	737	535	1,025
2001:	January	10,631	5,837	410	3,161	268	1,999	2,555	173	697	484	884
	February	10,510	5,706	369	3,047	258	2,032	2,539	186	670	513	897
	March	11,621	6,051	386	3,231	258	2,175	3,171	198	735	570	895
	April	13,767	6,835	483	3,620	271	2,462	4,135	193	860	696	1,048
	May	15,723	7,400	516	4,015	272	2,598	5,348	225	877	667	1,206
	June	17,113	7,763	522	4,346	281	2,614	6,216	208	933	734	1,260
	July	17,676	8,236	476	4,970	276	2,514	6,364	201	881	725	1,269
	August	18,812	8,799	480	5,406	304	2,610	6,714	252	943	735	1,369
	September	17,392	8,348	513	4,809	292	2,734	5,855	215	923	729	1,324
	October	17,544	8,360	566	4,663	320	2,811	5,921	204	962	743	1,354
	November	15,898	7,805	563	4,175	308	2,759	4,883	222	955	724	1,310
	December	13,622	7,270	576	3,822	331	2,542	3,488	194	781	659	1,230
2002:	January	12,666	6,995	503	3,727	350	2,416	3,192	220	767	564	927
	February <sup>f</sup>	12,476	7,102	473	3,842	318	2,469	2,897	202	774	558	943
	March <sup>f</sup>	12,884	7,284	522	3,849	356	2,557	2,992	215	804	564	1,025
	April <sup>p</sup>	14,696	7,845	572	4,339	380	2,555	4,012	241	842	644	1,112
		Federally owned public construction										
		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>
2000:	April	1,065	414	29	91	7	69	218	(NA)	180	314	137
	May	1,090	397	30	89	1	43	235	(NA)	198	291	179
	June	1,221	442	32	98	3	62	249	(NA)	196	355	197
	July	1,045	382	32	98	1	45	207	(NA)	188	277	167
	August	1,265	454	31	109	2	55	256	(NA)	206	368	200
	September	1,661	550	34	125	5	71	316	(NA)	269	602	205
	October	968	416	31	76	-	40	269	(NA)	129	270	120
	November	1,125	396	35	93	5	52	211	(NA)	225	299	179
	December	1,112	412	46	99	4	43	220	(NA)	183	321	178
2001:	January	1,095	403	36	124	2	42	200	(NA)	171	336	169
	February	1,063	365	33	103	2	37	190	(NA)	161	350	173
	March	1,165	426	36	114	5	49	222	(NA)	184	371	168
	April	1,084	387	26	130	4	36	193	(NA)	200	307	170
	May	1,145	381	40	108	2	47	184	(NA)	192	377	170
	June	1,197	449	32	127	2	65	225	(NA)	216	363	139
	July	1,126	421	34	124	3	56	204	(NA)	203	334	138
	August	1,248	423	33	125	3	51	211	(NA)	220	428	141
	September	1,696	562	32	211	5	80	234	(NA)	253	696	152
	October	1,066	391	44	78	3	54	212	(NA)	160	327	156
	November	1,217	410	37	116	3	55	200	(NA)	202	390	189
	December	1,253	474	40	198	3	46	187	(NA)	186	389	187
2002:	January	1,158	401	34	113	5	77	173	(NA)	167	379	196
	February <sup>f</sup>	1,364	448	49	174	2	76	148	(NA)	167	412	323
	March <sup>f</sup>	1,393	420	41	154	2	54	169	(NA)	200	451	305
	April <sup>p</sup>	1,210	389	54	118	3	49	165	(NA)	187	386	227

- 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 8. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate 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>					
2000:	April	164,802	75,862	4,982	41,990	3,434	25,456	55,899	1,891	12,013	6,920	12,216
	May	160,332	76,751	4,780	43,526	3,750	24,694	51,614	1,774	10,515	6,979	12,699
	June	154,205	75,610	4,863	42,614	3,452	24,682	48,132	1,625	10,809	6,491	11,538
	July	152,295	74,536	4,755	41,897	3,464	24,420	49,326	1,589	9,945	5,961	10,938
	August	158,889	76,544	4,967	43,011	3,399	25,168	52,467	1,490	9,719	7,137	11,533
	September	162,936	77,393	4,976	43,708	3,422	25,286	53,618	1,972	9,617	7,156	13,181
	October	161,188	79,062	5,070	44,017	3,220	26,755	48,459	2,328	9,703	7,000	14,637
	November	161,829	79,674	5,136	44,711	3,499	26,327	48,554	2,081	9,831	6,989	14,700
	December	164,146	81,197	5,025	46,693	3,128	26,351	49,890	2,260	10,009	6,950	13,840
2001:	January	171,341	82,174	5,386	45,974	3,339	27,475	55,045	2,740	10,166	7,239	13,978
	February	172,554	81,839	5,042	45,700	3,420	27,676	55,896	2,909	10,352	7,550	14,008
	March	173,723	82,513	4,973	45,888	3,370	28,281	57,137	2,910	10,076	7,919	13,168
	April	179,792	86,818	5,919	47,730	3,363	29,806	57,425	2,473	10,997	8,654	13,425
	May	184,888	89,711	6,048	49,924	3,268	30,472	60,145	2,673	10,282	7,716	14,362
	June	182,625	86,190	6,140	46,733	3,240	30,077	61,238	2,309	10,410	8,463	14,013
	July	182,697	88,861	5,720	50,248	3,229	29,664	60,177	2,146	9,980	8,011	13,523
	August	179,564	89,999	5,645	51,360	3,642	29,352	55,370	2,515	10,008	8,021	13,651
	September	177,363	90,601	5,862	50,577	3,385	30,778	53,225	2,192	9,875	7,955	13,517
	October	183,135	94,011	6,136	53,500	3,404	30,971	55,682	2,070	9,978	7,662	13,733
	November	189,537	94,485	6,378	52,627	3,736	31,743	58,418	2,565	10,799	8,160	15,111
	December	192,699	95,017	7,069	52,124	4,086	31,739	59,532	2,593	10,561	8,536	16,460
2002:	January	200,405	97,435	6,583	53,563	4,423	32,865	65,706	3,445	10,950	8,350	14,521
	February <sup>f</sup>	199,599	100,564	6,469	56,774	4,142	33,179	61,429	3,112	11,760	8,167	14,567
	March <sup>f</sup>	191,681	98,930	6,763	54,597	4,508	33,062	55,927	3,117	11,057	7,799	14,851
	April <sup>p</sup>	191,288	98,906	6,901	56,715	4,534	30,757	56,500	3,077	10,610	7,979	14,216
		Federally owned public construction										
		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>
2000:	April	13,549	5,297	371	1,163	93	879	2,791	(NA)	2,289	3,954	1,723
	May	13,062	4,723	359	1,059	12	505	2,789	(NA)	2,329	3,539	2,182
	June	13,957	4,878	347	1,078	28	679	2,746	(NA)	2,262	4,189	2,329
	July	12,225	4,546	376	1,161	14	535	2,461	(NA)	2,196	3,229	1,952
	August	14,422	5,435	375	1,308	28	656	3,068	(NA)	2,386	4,078	2,214
	September	13,623	4,840	298	1,099	42	621	2,780	(NA)	2,509	4,454	1,514
	October	14,781	6,101	447	1,116	3	585	3,949	(NA)	1,883	4,487	2,004
	November	13,850	5,000	440	1,177	64	652	2,667	(NA)	2,629	3,708	2,211
	December	13,737	4,986	553	1,201	52	515	2,665	(NA)	2,107	4,080	2,265
2001:	January	14,759	5,184	466	1,587	27	536	2,568	(NA)	2,270	4,641	2,341
	February	14,954	4,946	440	1,392	31	505	2,577	(NA)	2,342	4,928	2,430
	March	14,241	5,034	420	1,351	58	583	2,622	(NA)	2,131	4,663	2,107
	April	13,605	4,789	320	1,605	43	439	2,381	(NA)	2,530	3,859	2,135
	May	13,848	4,694	487	1,329	30	577	2,272	(NA)	2,274	4,543	2,044
	June	13,624	4,929	348	1,388	21	709	2,465	(NA)	2,477	4,283	1,639
	July	13,279	5,077	414	1,499	34	673	2,457	(NA)	2,375	3,917	1,617
	August	13,956	4,803	375	1,419	34	578	2,398	(NA)	2,539	4,750	1,567
	September	14,271	5,320	301	1,997	49	756	2,217	(NA)	2,362	5,152	1,129
	October	16,049	5,403	607	1,078	37	748	2,932	(NA)	2,343	5,418	2,584
	November	14,906	5,093	457	1,433	37	683	2,483	(NA)	2,353	4,827	2,333
	December	15,571	5,771	484	2,410	39	562	2,277	(NA)	2,152	4,956	2,385
2002:	January	15,772	5,313	454	1,490	61	1,021	2,286	(NA)	2,223	5,223	2,705
	February <sup>f</sup>	19,027	6,054	659	2,346	26	1,024	1,999	(NA)	2,416	5,753	4,507
	March <sup>f</sup>	17,145	5,122	494	1,875	27	663	2,063	(NA)	2,321	5,598	3,786
	April <sup>p</sup>	15,168	4,760	662	1,441	32	603	2,022	(NA)	2,366	4,880	2,867

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 9. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate 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>					
2000:	April	144,212	65,402	4,351	36,167	2,958	21,926	49,035	1,717	10,911	6,240	10,907
	May	139,622	65,991	4,160	37,394	3,222	21,215	44,921	1,616	9,576	6,220	11,298
	June	134,110	64,889	4,214	36,547	2,960	21,168	41,817	1,485	9,880	5,754	10,284
	July	131,663	63,646	4,107	35,748	2,955	20,836	42,632	1,440	9,017	5,248	9,680
	August	137,080	65,202	4,285	36,605	2,893	21,419	45,309	1,346	8,779	6,266	10,179
	September	140,356	65,809	4,282	37,135	2,907	21,484	46,222	1,776	8,664	6,272	11,613
	October	138,346	67,061	4,356	37,303	2,728	22,674	41,524	2,093	8,725	6,103	12,839
	November	138,583	67,405	4,397	37,795	2,958	22,255	41,499	1,872	8,841	6,083	12,884
	December	140,431	68,506	4,281	39,370	2,638	22,218	42,678	2,036	9,017	6,054	12,140
2001:	January	146,601	69,197	4,560	38,699	2,811	23,127	47,168	2,471	9,167	6,317	12,283
	February	147,321	68,678	4,251	38,339	2,869	23,218	47,815	2,621	9,326	6,583	12,298
	March	146,528	68,788	4,172	38,240	2,809	23,568	47,773	2,615	9,053	6,898	11,401
	April	152,318	72,551	4,966	39,874	2,810	24,901	48,419	2,228	9,907	7,518	11,695
	May	156,449	74,838	5,061	41,638	2,725	25,414	50,798	2,401	9,238	6,663	12,510
	June	153,340	71,579	5,147	38,783	2,689	24,960	51,203	2,049	9,237	7,203	12,070
	July	154,283	73,902	4,791	41,769	2,684	24,658	51,041	1,908	8,871	6,824	11,739
	August	151,760	74,642	4,696	42,587	3,020	24,338	47,284	2,233	8,889	6,821	11,891
	September	149,773	74,955	4,864	41,833	2,799	25,457	45,569	1,945	8,762	6,758	11,784
	October	153,329	77,375	5,050	44,033	2,802	25,490	46,870	1,839	8,861	6,516	11,869
	November	158,490	77,684	5,228	43,279	3,072	26,104	48,845	2,290	9,642	6,980	13,049
	December	159,880	77,997	5,789	42,794	3,354	26,059	48,998	2,290	9,329	7,234	14,033
2002:	January	166,162	79,912	5,383	43,940	3,629	26,961	54,079	3,043	9,673	7,076	12,379
	February <sup>P</sup>	164,843	82,286	5,285	46,460	3,390	27,152	50,269	2,732	10,325	6,886	12,345
	March <sup>P</sup>	158,837	81,205	5,535	44,825	3,701	27,145	45,917	2,747	9,742	6,598	12,628
	April <sup>P</sup>	157,863	80,947	5,656	46,412	3,710	25,169	46,160	2,699	9,307	6,722	12,027
		Federally owned public construction										
		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>
2000:	April	11,936	4,567	324	1,002	80	757	2,404	(NA)	1,989	3,591	1,538
	May	11,491	4,061	312	909	10	434	2,396	(NA)	2,013	3,223	1,941
	June	12,305	4,187	301	924	24	583	2,355	(NA)	1,953	3,829	2,076
	July	10,684	3,883	325	990	12	456	2,100	(NA)	1,885	2,928	1,728
	August	12,581	4,630	323	1,113	23	559	2,611	(NA)	2,046	3,684	1,954
	September	11,872	4,116	257	934	36	527	2,362	(NA)	2,146	4,012	1,334
	October	12,836	5,176	384	946	2	496	3,347	(NA)	1,606	4,035	1,758
	November	11,997	4,231	376	995	54	551	2,254	(NA)	2,235	3,334	1,937
	December	11,915	4,209	471	1,013	44	435	2,247	(NA)	1,788	3,675	1,987
2001:	January	12,812	4,366	395	1,336	23	451	2,162	(NA)	1,927	4,185	2,057
	February	12,973	4,151	371	1,168	26	424	2,162	(NA)	1,985	4,440	2,133
	March	12,246	4,197	352	1,126	48	486	2,185	(NA)	1,779	4,189	1,824
	April	11,708	4,002	269	1,340	36	367	1,990	(NA)	2,125	3,477	1,859
	May	11,934	3,916	407	1,109	25	481	1,895	(NA)	1,908	4,082	1,781
	June	11,617	4,094	291	1,152	17	588	2,045	(NA)	2,064	3,801	1,412
	July	11,351	4,223	347	1,246	28	560	2,042	(NA)	1,994	3,482	1,403
	August	11,958	3,984	312	1,177	28	479	1,988	(NA)	2,137	4,219	1,365
	September	12,209	4,401	250	1,651	41	625	1,834	(NA)	1,988	4,571	984
	October	13,696	4,447	500	888	31	616	2,413	(NA)	1,951	4,812	2,233
	November	12,713	4,187	374	1,179	31	561	2,042	(NA)	1,951	4,310	2,015
	December	13,171	4,737	396	1,978	32	461	1,869	(NA)	1,770	4,378	2,033
2002:	January	13,358	4,357	371	1,222	50	838	1,875	(NA)	1,827	4,614	2,306
	February <sup>P</sup>	16,044	4,953	539	1,920	21	838	1,636	(NA)	1,977	5,051	3,819
	March <sup>P</sup>	14,522	4,204	405	1,539	22	544	1,694	(NA)	1,906	4,932	3,220
	April <sup>P</sup>	12,778	3,896	542	1,179	26	494	1,655	(NA)	1,934	4,280	2,426

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 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>					
2000:	April	10,951	5,183	351	2,782	237	1,813	3,428	134	845	509	853
	May	11,796	5,461	353	3,013	279	1,816	3,886	136	822	541	950
	June	12,548	5,900	362	3,435	256	1,847	4,192	134	897	501	925
	July	12,627	5,936	341	3,566	247	1,781	4,377	136	791	477	912
	August	14,521	6,392	367	3,868	245	1,912	5,558	136	837	573	1,026
	September	14,106	6,087	384	3,528	258	1,917	5,296	175	827	573	1,147
	October	13,325	5,923	400	3,217	251	2,054	4,488	209	833	592	1,281
	November	11,671	5,528	388	2,973	244	1,923	3,552	161	779	539	1,111
	December	9,977	5,225	346	2,900	213	1,766	2,571	151	664	466	899
2001:	January	9,090	4,916	347	2,661	225	1,682	2,189	156	629	423	777
	February	8,966	4,788	311	2,556	217	1,705	2,172	168	604	447	787
	March	9,806	5,045	324	2,693	215	1,813	2,651	178	660	497	775
	April	11,664	5,712	405	3,024	227	2,056	3,486	174	774	605	913
	May	13,307	6,173	431	3,348	227	2,167	4,517	202	788	576	1,051
	June	14,365	6,447	437	3,607	233	2,169	5,197	184	828	624	1,085
	July	14,928	6,849	399	4,132	229	2,090	5,398	179	783	618	1,101
	August	15,910	7,298	400	4,482	252	2,164	5,733	224	838	625	1,192
	September	14,701	6,906	426	3,978	242	2,261	5,013	190	819	619	1,154
	October	14,702	6,881	466	3,838	264	2,313	4,984	181	854	631	1,170
	November	13,301	6,417	461	3,433	253	2,269	4,083	198	853	619	1,131
	December	11,307	5,968	471	3,138	271	2,087	2,870	171	690	559	1,049
2002:	January	10,505	5,737	411	3,058	287	1,982	2,627	194	678	478	790
	February <sup>f</sup>	10,309	5,811	387	3,144	260	2,021	2,371	177	680	471	799
	March <sup>f</sup>	10,682	5,979	427	3,160	292	2,099	2,457	190	709	477	871
	April <sup>P</sup>	12,132	6,421	469	3,550	311	2,091	3,277	211	738	543	941
		Federally owned public construction										
		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>
2000:	April	939	357	25	78	6	59	188	(NA)	156	285	122
	May	958	342	26	77	1	37	202	(NA)	171	265	159
	June	1,075	380	27	84	2	53	214	(NA)	169	324	176
	July	914	326	27	83	1	38	176	(NA)	161	251	148
	August	1,104	387	27	93	2	47	218	(NA)	177	332	176
	September	1,451	467	29	106	4	60	268	(NA)	230	542	180
	October	839	353	26	64	-	34	228	(NA)	110	242	106
	November	975	335	30	79	4	44	178	(NA)	192	269	156
	December	964	348	39	84	4	36	186	(NA)	155	289	156
2001:	January	949	340	31	104	2	35	168	(NA)	145	303	149
	February	922	307	27	86	2	31	160	(NA)	136	315	151
	March	1,001	355	30	95	4	41	185	(NA)	153	333	145
	April	933	323	22	108	3	30	161	(NA)	168	276	148
	May	987	318	33	90	2	39	154	(NA)	161	338	148
	June	1,020	373	27	105	2	54	186	(NA)	180	322	120
	July	963	351	29	103	2	46	169	(NA)	170	297	120
	August	1,070	351	27	104	2	42	175	(NA)	185	380	123
	September	1,456	465	26	174	4	66	194	(NA)	213	617	133
	October	907	322	36	64	2	45	175	(NA)	133	290	135
	November	1,037	337	30	95	2	45	165	(NA)	168	348	163
	December	1,059	389	33	162	3	38	153	(NA)	153	343	159
2002:	January	980	329	28	92	4	63	142	(NA)	137	335	167
	February <sup>f</sup>	1,150	367	40	142	2	62	121	(NA)	136	362	274
	March <sup>f</sup>	1,179	344	33	126	2	45	139	(NA)	164	397	259
	April <sup>P</sup>	1,020	318	44	96	2	40	135	(NA)	153	339	192

- 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 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 Administration composite	Bureau of Reclamation	Turner Construction Company	Handy-Whitman public utility				C.A. Turner telephone plant
	Composite fixed-weighted	Implicit price deflator	Buildings	Construction	Fixed-weighted	Price deflator				Buildings	Electric	Gas	Water	
Annual indexes														
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.....	115.3	115.4	110.5	110.6	115.5	115.6	119.3	111	118	110	109	111	112	103
2001.....	119.4	119.1	111.6	112.8	120.7	120.6	119.5	112	121	113	112	114	117	106
Monthly indexes						Quarterly indexes				Semiannual indexes				
2000: January .....	113.9	114.0	109.4	109.0	114.5	114.7								
February .....	114.1	114.1	110.0	109.6	114.5	114.6	113.2	109	116					
March.....	114.0	113.9	110.4	110.3	114.4	114.5				109	106	110	108	101
April.....	114.5	114.4	110.3	110.3	114.5	114.5								
May.....	114.8	114.8	111.1	110.9	114.8	114.9	128.4	111	117					
June.....	115.0	115.1	110.9	111.0	115.2	115.4								
July.....	115.6	115.7	110.7	110.7	115.7	115.8								
August.....	115.7	115.8	110.7	110.9	115.8	115.9	113.0	111	119					
September .....	116.1	115.9	110.5	110.7	116.2	116.2				111	110	111	113	103
October.....	116.4	116.3	110.5	110.7	116.5	116.4								
November.....	116.7	116.6	110.6	111.4	116.8	116.8	122.9	111	120					
December.....	117.1	116.9	110.8	111.7	117.4	117.4								
2001: January .....	117.8	117.4	110.7	111.7	118.2	118.1								
February.....	118.3	117.7	110.4	111.6	118.7	118.6	123.9	112	121					
March.....	118.8	118.5	110.5	111.7	119.4	119.2				112	111	113	115	104
April.....	118.7	118.3	110.5	111.8	119.5	119.2								
May.....	118.9	118.6	110.7	111.8	119.8	119.5	111.9	112	121					
June.....	119.2	119.0	111.5	112.4	119.5	119.3								
July.....	119.1	118.8	113.2	113.9	119.7	119.4								
August.....	119.4	119.2	112.6	113.6	120.3	120.2	107.8	112	122					
September.....	119.6	119.4	112.3	113.7	120.5	120.5				114	113	115	117	106
October.....	120.4	120.3	112.4	113.8	121.6	121.5								
November.....	120.8	120.5	112.3	114.0	122.2	122.0	127.1	113	122					
December.....	121.2	120.7	111.7	113.7	122.3	122.1								
2002: January.....	121.4	121.1	111.8	114.9	122.7	122.3								
February.....	<sup>r</sup> 121.6	<sup>r</sup> 121.2	111.8	114.9	<sup>r</sup> 122.7	<sup>r</sup> 122.4	(NA)	113	122					
March.....	<sup>r</sup> 121.2	<sup>r</sup> 121.0	112.3	115.6	<sup>r</sup> 122.3	<sup>r</sup> 122.2				113	113	115	118	107
April.....	<sup>p</sup> 121.1	<sup>p</sup> 121.2	111.8	115.3	<sup>p</sup> 121.8	<sup>p</sup> 122.0								
May.....			112.8	115.8			(NA)	(NA)	(NA)					

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

Type of construction	Apr. 2002 <sup>P</sup>	Mar. 2002 <sup>r</sup>	Feb. 2002 <sup>r</sup>	Jan. 2002	Dec. 2001	Nov. 2001	Oct. 2001	Sep. 2001	Aug. 2001	July 2001	June 2001	Apr. 2001
<b>PRIVATE CONSTRUCTION</b>												
Residential buildings:												
New housing units:												
1 unit .....	96.8	91.9	77.1	81.3	88.4	104.3	108.9	111.8	113.5	112.5	108.9	96.7
2 units or more .....	99.1	95.7	88.9	90.4	94.4	100.2	104.6	103.4	106.5	103.9	106.9	99.2
Nonresidential buildings:												
Industrial .....	97.4	94.1	88.6	90.7	102.6	103.5	109.2	105.3	103.5	101.5	102.7	95.6
Office .....	100.2	95.9	92.5	92.8	96.6	102.8	104.9	102.6	104.0	100.5	102.0	99.8
Hotels, motels .....	101.6	97.2	93.5	94.6	97.3	100.5	103.1	100.6	102.8	102.8	103.3	100.6
Other commercial .....	95.7	91.4	85.3	84.3	93.9	104.4	110.2	111.7	111.1	106.5	105.2	95.8
Religious .....	95.5	89.7	88.6	93.9	98.7	108.0	113.5	109.2	107.6	100.8	96.2	94.1
Educational .....	95.3	90.3	84.3	84.4	88.5	96.3	100.6	106.6	118.8	116.6	114.3	95.3
Hospital and institutional .....	101.4	99.2	94.6	94.0	99.2	103.5	103.9	103.0	102.4	98.1	100.5	100.9
Miscellaneous nonresidential .....	102.7	99.0	92.1	89.6	97.7	102.7	105.1	102.8	102.8	101.6	102.5	103.1
Telecommunications .....	97.3	94.9	84.3	82.7	102.4	107.8	111.2	97.1	112.5	100.6	103.7	93.4
All other private .....	92.4	89.0	81.5	85.2	101.6	106.1	115.3	112.2	115.2	104.3	100.2	92.0
<b>PUBLIC CONSTRUCTION</b>												
<b>State and Local</b>												
Buildings:												
Housing and redevelopment .....	99.4	92.6	87.8	91.6	97.7	105.9	110.7	105.0	102.1	99.9	102.0	97.9
Educational .....	91.8	84.6	81.2	83.5	88.0	95.2	104.6	114.1	126.3	118.7	111.6	91.0
Hospital .....	100.5	94.8	92.1	94.9	97.1	99.0	112.9	103.6	100.0	102.4	104.0	96.8
Other buildings .....	99.7	92.8	89.3	88.2	96.1	104.3	108.9	106.6	106.7	101.7	104.3	99.1
Highways and streets .....	85.2	64.2	56.6	58.3	70.3	100.3	127.6	132.0	145.5	126.9	121.8	86.4
Conservation and development .....	93.9	82.8	77.7	76.6	89.7	104.0	118.3	117.5	120.3	112.6	107.9	93.7
Sewer systems .....	95.2	87.3	79.0	84.1	88.7	106.1	115.7	112.1	113.1	105.9	107.5	93.8
Water supply facilities .....	96.9	86.8	82.0	81.1	92.7	106.4	116.3	109.9	110.0	108.6	104.0	96.5
Miscellaneous construction .....	93.9	82.8	77.7	76.6	89.7	104.0	118.3	117.5	120.3	112.6	107.9	93.7
<b>Federal</b>												
Buildings:												
Housing and redevelopment .....	98.1	98.3	88.8	90.6	98.5	96.7	86.8	126.7	105.7	99.6	109.4	97.0
Industrial .....	98.1	98.3	88.8	90.6	98.5	96.7	86.8	126.7	105.7	99.6	109.4	97.0
Educational .....	98.1	98.3	88.8	90.6	98.5	96.7	86.8	126.7	105.7	99.6	109.4	97.0
Hospital .....	98.1	98.3	88.8	90.6	98.5	96.7	86.8	126.7	105.7	99.6	109.4	97.0
Other buildings .....	98.1	98.3	88.8	90.6	98.5	96.7	86.8	126.7	105.7	99.6	109.4	97.0
Military .....	94.9	103.4	82.8	90.1	103.6	103.2	82.0	128.4	103.9	102.4	104.4	94.8
Conservation and development .....	95.0	96.7	86.0	87.0	94.1	97.0	72.4	162.0	108.1	102.2	101.7	95.4
Miscellaneous construction .....	95.0	96.7	86.0	87.0	94.1	97.0	72.4	162.0	108.1	102.2	101.7	95.4

<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 71 percent of total construction in 2000 (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 (k1 or k2) 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 27 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 Annual Survey of Government Finances are available only through Fiscal Year 1998. (Outlays are included if a government agency's fiscal

year ending date falls within July 1997 to June 1998 inclusive, and for three state agencies with fiscal years ending in August or September 1998.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1998 through April 2002. 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 Annual 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 that 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 -2.4 percent to 1.1 percent with a median of -0.1 percent. The range of the difference between first revision and second revision was from -1.8 to 0.9 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, but estimates are included in totals.

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