

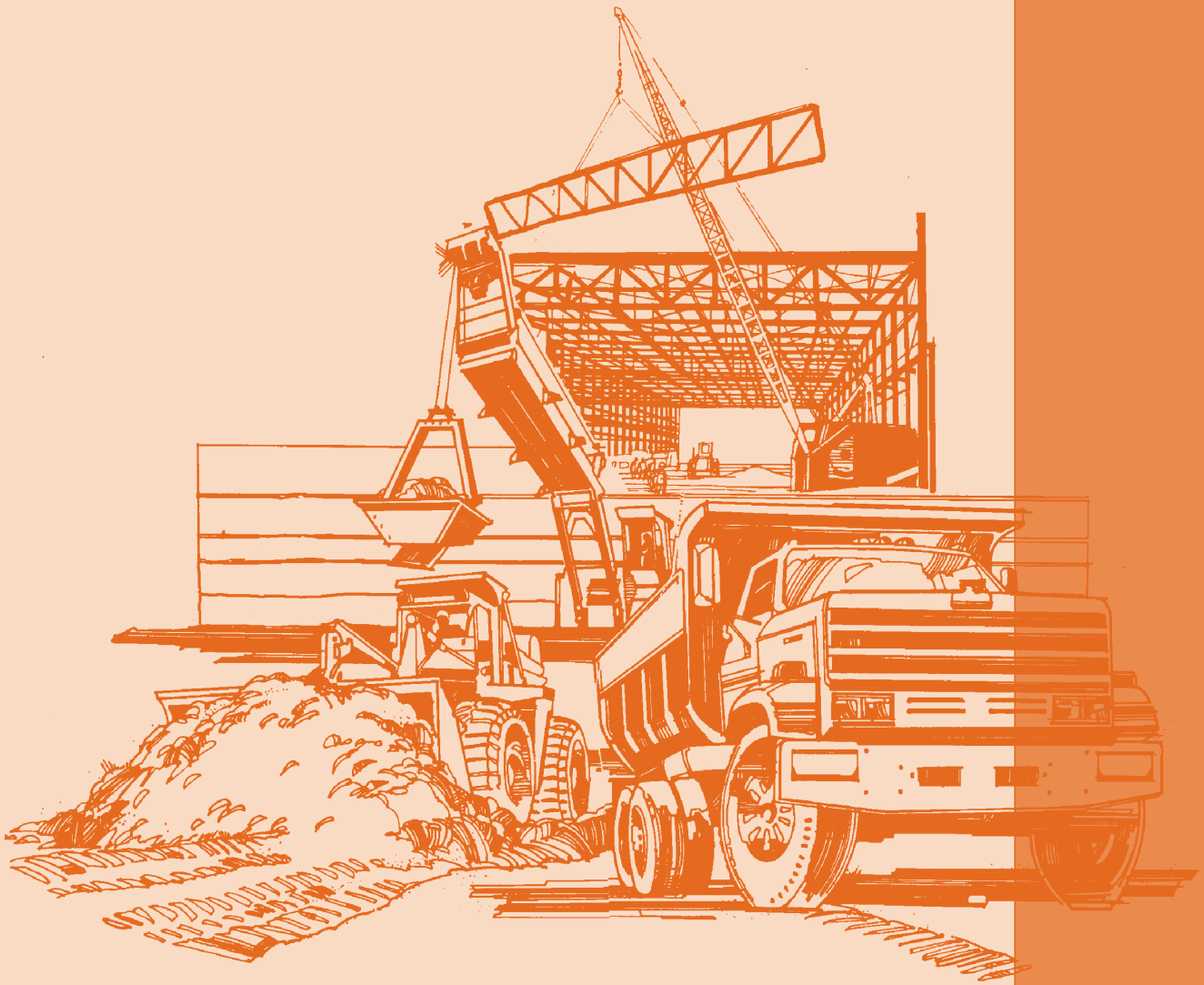
Value of Construction Put in Place: May 2003

Annual

Issued October 2003

C30/03-5

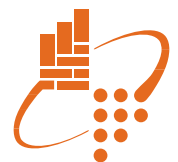
Current Construction Reports



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This report was developed in the U.S. Census Bureau's Manufacturing and Construction Division. It was prepared under the general direction of **Michael Davis**, Chief, Construction Expenditures Branch. **Joe Huesman, Linnet Holland, Lisa Feldman, John P. Hill, Brenda Swann-Newman, Kyle Mulgrew, Rachel Dinkes, Jason DeLorenzo, Nikita Silver, Ray Merryman, West Garrett, Roxana García,** and **Shawn Eaton** performed specific activities related to the development, presentation and review of the data.

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Introduction

ANNUAL DATA BACK TO 1998 AND MONTHLY DATA BACK TO 1999 ARE SHOWN IN THIS REPORT

Construction put in place during May 2003 was estimated at a seasonally adjusted annual rate of \$869.8 billion, 1.7 (± 4.7) percent below the revised April estimate of \$885.0 billion. The May figure is 1.1 (± 4.9) percent above May 2002.

In constant (1996) dollars, the May annual rate was \$689.6 billion, 1.8 (± 4.7) percent below the revised estimate of \$702.6 billion for April.

DESCRIPTION OF CURRENT REVISIONS

In each May report, unadjusted value-in-place estimates are revised to incorporate additional data not previously available. Seasonally adjusted statistics are also revised using newly computed seasonal factors. The revised factors for January 2000-December 2002 were computed using data through April 2003. The revised factors for January-May 2003 were computed using data through May 2003. See Appendix D, Adjustments for Seasonal Variations and Cost Changes.

For comparison, the Table A on page 3 shows the previously published and revised data for selected series back to 1999.

Annual statistics reflecting all revisions back to 1999 are shown in Tables 1 and 2. Monthly estimates for January 1999 through May 2003 are presented in Tables 3-10. Monthly and annual data back to 1964 are available upon request or on the Internet at www.census.gov/const/C30/oldtc.html.

RELATIONSHIP OF VALUE OF CONSTRUCTION PUT IN PLACE TO STRUCTURES IN GDP

The estimates shown in this report differ from the estimates of structures components of the gross domestic product (GDP) as developed by the Bureau of Economic Analysis (BEA), because of differences in coverage, estimation procedures, classification, and the timing of revisions.

Coverage Differences

GDP estimates of the structures components of gross private domestic fixed investment exclude the imputed

interest amount of the allowances for funds used during construction of public utility plants; these amounts are included in the value-in-place estimates. In addition, GDP estimates include the following items not included in the value-in-place series:

1. Expenditures on new manufactured homes.
2. Expenditures for petroleum and natural gas well drilling and exploration.
3. Expenditures for construction of mine shafts and mining exploration.
4. Brokers' commissions on the sale of new and existing structures.
5. Net value of purchases of used structures from the public sector by the private sector.
6. Expenditures for federal government structures located outside the United States.

Estimation Procedures Differences

Effective with the October 1997 comprehensive revision of the national income and product accounts (NIPAs), the estimates of the structures components of GDP for 1997 are estimated as follows:¹

Private Structures

Estimates of residential structures are the value-in-place estimates.

Estimates of all components of nonresidential buildings, except industrial buildings, are prepared by BEA as an extrapolation of a 1992 benchmark Input-Output account estimates using the corresponding value-in-place estimates. Input-Output account estimates are prepared by BEA every 5 years. For structures, most Input-Output estimates are based on the value-in-place estimates adjusted for coverage differences. The estimate of industrial buildings is the value-in-place estimate.

¹For additional information, see the December 1999 Survey of Current Business, pages 21-22 and Tables 5.6 and 5.7.

Estimates of public utility structures are the value-in-place estimates adjusted by BEA to exclude remaining allowances for funds used during construction (imputed interest).

The estimate of all other private nonresidential structures is prepared by BEA as an extrapolation of a 1992 benchmark estimate using the corresponding value-in-place series.

Government Structures

Estimates of state and local structures are the value-in-place estimates.

Estimates of all components of federal structures are the value-in-place estimates, except housing and military facilities; these two estimates are prepared by BEA from Department of Defense data.

Residential Improvements

In the quarterly estimate of GDP, Consumer Expenditure Survey (CES) estimates of residential improvements are not usually available. Consequently, BEA projects estimates for the current quarter and normally replaces the projections with the CES estimates in the annual NIPA revision.

Classification Differences

BEA classifies dormitories, fraternity and sorority houses, etc. as private residential structures. They are classified in the educational component of private nonresidential buildings in the value-in-place series.

BEA classifies federal government expenditures for military family housing in the defense purchases component of GDP. These expenditures are classified in the housing component of the value-in-place series. BEA separates atomic energy related construction and hospital construction into the defense and nondefense components; they are not separated in the value-in-place series.

BEA classifies federal government expenditures on structures by the Coast Guard in the nondefense purchases component of GDP. These expenditures are classified in the military facilities component of the value-in-place series.

Timing of Revisions

Because of differences in the timing of revisions, not all revisions to the value-in-place estimates have been incorporated in the NIPAs.

ADDITIONAL DATA

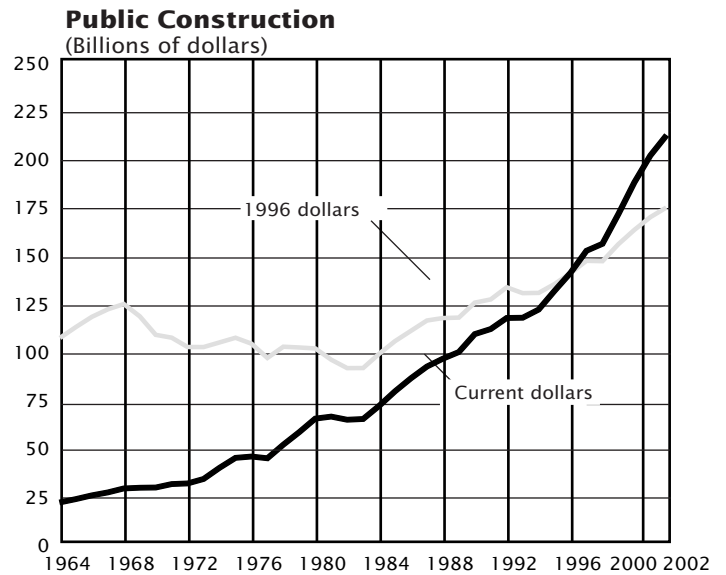
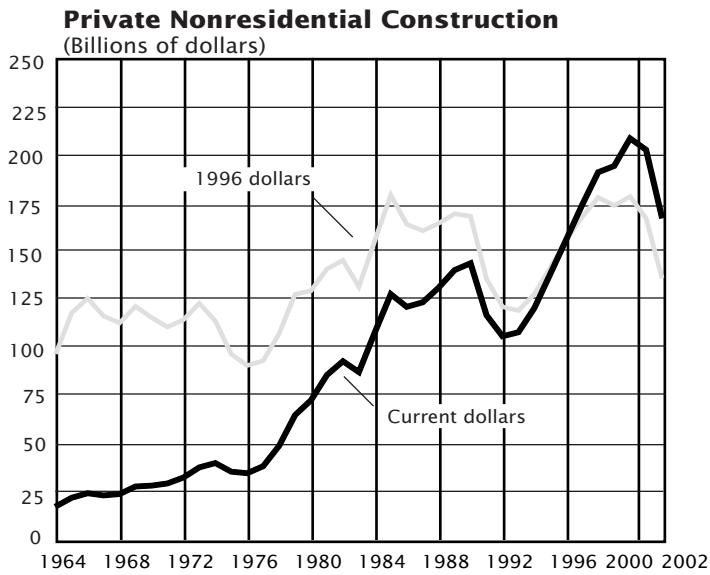
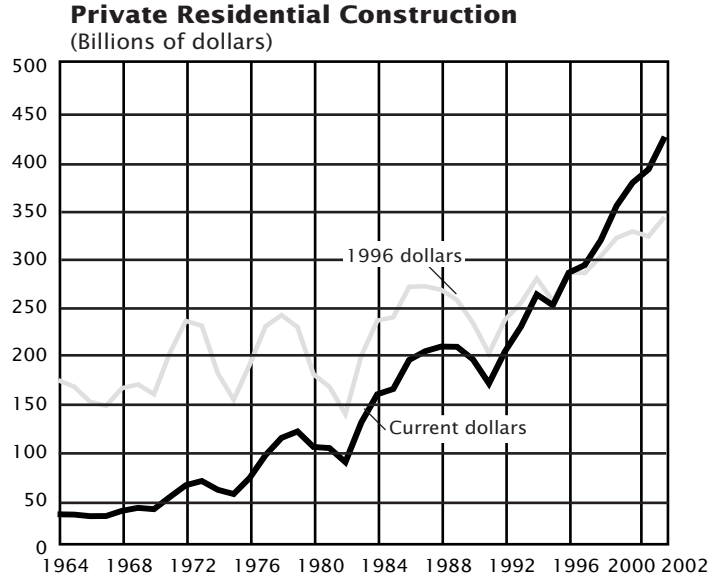
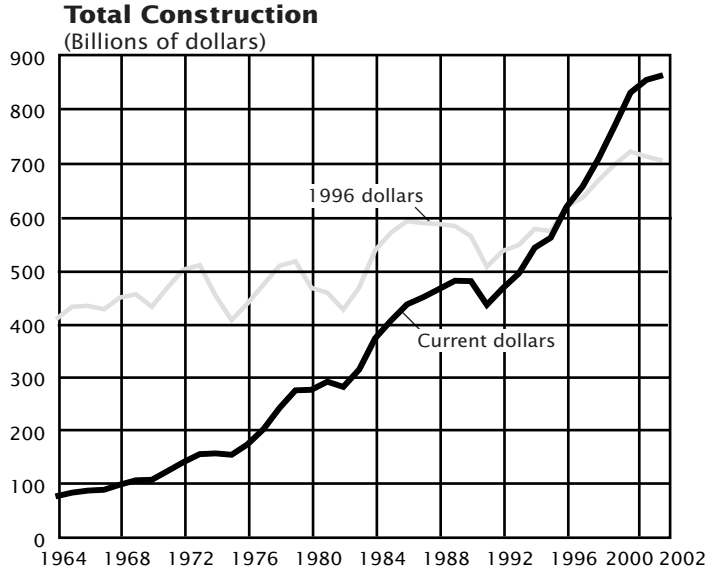
Additional data related to the value of construction put in place can be found in the following publications:

- Current Construction Reports, *Value of Construction Put in Place: June 2002*, C30/02-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2002; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1995 to 2001.
- Current Construction Reports, *Value of New Construction Put in Place: October 1992*, C30/92-10, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1992; contains total time and monthly progress from start to completion for private nonresidential buildings and for state and local construction.
- Current Construction Reports, *Value of New Construction Put in Place in the United States, 1964 to 1980*, C30-80 supplement, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1981; contains annual data for 1915 to 1963.
- Current Construction Reports Special Study, *Expenditures for Nonresidential Improvements and Repairs: 1992*, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1994.

Table A. **Comparison of Previously Published Data With Revised Data for Selected Construction Categories: 1999-2002**

Year	Total construction		Total private construction		Residents construction		Total nonresidential buildings		Total public construction		Total state and local construction		Total federal construction	
	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised
1999.....	765,876	766,062	596,331	596,331	350,562	350,562	193,935	193,935	169,545	169,732	155,519	155,706	14,025	14,025
2000.....	820,345	828,768	641,783	642,633	374,457	374,457	208,241	208,241	178,561	186,135	164,396	171,969	14,165	14,166
2001.....	842,539	852,553	650,030	652,496	388,705	388,324	201,094	202,334	192,509	200,057	177,527	184,976	14,981	15,081
2002.....	846,057	860,923	642,189	650,495	415,515	421,521	167,850	167,084	203,868	210,428	187,304	194,115	16,563	16,313

Annual Value of Construction Put in Place: 1964-2002



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

Table 1. Annual Value of Construction Put in Place: 1998-2002

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1998	1999 ^r	2000 ^r	2001 ^r	2002 ^r	1998	1999 ^r	2000 ^r	2001 ^r	2002 ^r
Total construction	705,685	766,062	828,768	852,553	860,923	665,156	694,326	718,708	709,233	701,943
Private construction	551,383	596,331	642,633	652,496	650,495	519,859	540,220	557,186	541,110	528,844
Residential buildings	314,607	350,562	374,457	388,324	421,521	297,960	317,236	323,977	318,803	338,852
New housing units	223,983	251,272	265,047	279,391	298,450	212,068	227,467	229,324	229,426	239,908
1 unit	199,409	223,837	236,788	249,086	265,889	188,785	202,620	204,867	204,522	213,727
2 units or more	24,574	27,434	28,259	30,305	32,561	23,283	24,848	24,457	24,903	26,182
Improvements	90,624	99,290	109,410	108,933	123,071	85,892	89,769	94,653	89,377	98,944
Nonresidential buildings	190,710	193,935	208,241	202,334	167,084	177,644	173,429	178,074	166,852	135,764
Industrial	40,484	32,639	31,801	29,521	16,580	37,720	29,206	27,194	24,358	13,475
Office	42,226	47,582	55,605	52,260	37,578	39,333	42,552	47,534	43,126	30,536
Hotels, motels	14,816	15,951	16,293	14,490	10,285	13,794	14,274	13,944	11,950	8,359
Other commercial	53,598	56,915	60,381	60,760	55,879	49,915	50,870	51,635	50,077	45,404
Religious	6,594	7,371	8,019	8,385	8,217	6,139	6,590	6,858	6,908	6,676
Educational	9,698	9,645	11,375	12,591	12,841	9,039	8,621	9,726	10,371	10,434
Hospital and institutional	13,793	13,530	14,434	14,910	17,434	12,853	12,102	12,342	12,295	14,161
Miscellaneous ¹	9,501	10,301	10,332	9,418	8,269	8,850	9,214	8,842	7,766	6,719
Farm nonresidential	4,284	5,059	5,988	5,135	5,040	3,989	4,519	5,116	4,230	4,095
Public utilities	39,212	44,066	50,994	53,849	54,370	37,818	42,534	47,400	48,752	48,036
Telecommunications	12,458	18,404	18,799	19,569	18,024	12,188	18,305	18,255	18,473	16,757
Other public utilities	26,754	25,662	32,195	34,280	36,346	25,631	24,229	29,145	30,280	31,280
Railroads	5,736	4,670	4,263	4,456	4,864	5,463	4,311	3,782	3,861	4,108
Electric light and power	12,381	14,585	22,038	23,803	24,789	11,883	13,892	20,090	21,120	21,396
Gas	7,372	4,918	4,891	5,078	5,500	7,072	4,625	4,377	4,468	4,747
Petroleum pipelines	1,265	1,489	1,003	943	1,193	1,213	1,401	897	830	1,029
All other private ²	2,570	2,709	2,954	2,853	2,481	2,447	2,501	2,619	2,473	2,096
Public construction	154,302	169,732	186,135	200,057	210,428	145,297	154,106	161,523	168,123	173,099
Buildings	72,418	79,976	90,005	94,407	102,071	67,517	71,541	77,003	77,774	82,876
Housing and redevelopment ..	5,187	5,146	4,927	5,096	5,507	4,913	4,661	4,263	4,186	4,427
Industrial	1,010	925	1,158	1,556	1,906	941	827	991	1,282	1,548
Educational	35,001	41,079	45,643	50,035	56,154	32,589	36,710	39,023	41,207	45,623
Hospital	3,923	4,070	4,785	4,243	4,932	3,656	3,639	4,092	3,497	4,006
Other ³	27,297	28,756	33,494	33,477	33,572	25,418	25,704	28,635	27,602	27,273
Highways and streets	44,676	48,900	52,992	58,942	59,613	42,249	44,601	45,992	49,549	48,677
Military facilities	2,530	2,125	2,441	2,842	2,923	2,377	1,922	2,105	2,365	2,382
Conservation and development ..	5,466	6,121	6,381	7,269	7,937	5,237	5,713	5,779	6,503	6,938
Sewer systems	9,943	10,525	10,332	10,339	11,072	9,526	9,826	9,363	9,249	9,676
Water supply facilities	6,678	6,967	7,028	8,358	8,528	6,405	6,547	6,247	7,173	7,107
Miscellaneous public ⁴	12,591	15,117	16,955	17,899	18,284	11,985	13,957	15,033	15,511	15,443

^rRevised.

¹Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc.

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

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

⁴Includes 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: 1998-2002

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1998	1999 ^r	2000 ^r	2001 ^r	2002 ^r	1998	1999 ^r	2000 ^r	2001 ^r	2002 ^r
Total public construction	154,302	169,732	186,135	200,057	210,428	145,297	154,106	161,523	168,123	173,099
State and local construction	139,984	155,706	171,969	184,976	194,115	131,792	141,310	149,106	155,252	159,431
Total buildings	66,392	74,507	84,847	89,197	96,699	61,894	66,645	72,587	73,480	78,516
Housing and redevelopment	4,649	4,722	4,544	4,675	4,995	4,403	4,277	3,932	3,840	4,015
Educational	34,986	41,064	45,613	50,001	56,110	32,575	36,697	38,998	41,178	45,587
Hospital	2,914	3,219	4,062	3,579	4,139	2,715	2,877	3,473	2,950	3,362
Other ¹	23,844	25,502	30,627	30,942	31,455	22,200	22,795	26,183	25,511	25,552
Highways and streets	44,419	48,649	52,656	58,545	59,242	42,006	44,372	45,700	49,216	48,374
Conservation and development	1,930	2,087	2,320	2,582	2,409	1,849	1,947	2,101	2,311	2,108
Sewer systems	9,943	10,525	10,332	10,339	11,072	9,526	9,826	9,363	9,249	9,676
Water supply facilities	6,678	6,967	7,028	8,358	8,528	6,405	6,547	6,247	7,173	7,107
Miscellaneous nonbuilding ²	10,622	12,972	14,787	15,953	16,164	10,112	11,974	13,108	13,824	13,650
Federal construction	14,318	14,025	14,166	15,081	16,313	13,505	12,796	12,417	12,871	13,668
Total buildings	6,026	5,469	5,159	5,210	5,372	5,624	4,896	4,417	4,294	4,360
Housing	538	424	382	421	512	510	384	331	345	412
Industrial	1,010	925	1,158	1,556	1,906	941	827	991	1,282	1,548
Educational	15	15	29	35	44	14	14	25	29	36
Hospital	1,009	850	722	664	793	941	762	618	547	644
Other ³	3,454	3,255	2,867	2,535	2,118	3,217	2,909	2,452	2,091	1,721
Highways and streets	257	251	336	397	371	243	229	292	334	303
Military facilities	2,530	2,125	2,441	2,842	2,923	2,377	1,922	2,105	2,365	2,382
Conservation and development	3,536	4,035	4,061	4,686	5,528	3,387	3,766	3,679	4,192	4,830
Miscellaneous public ⁴	1,969	2,145	2,169	1,945	2,119	1,873	1,983	1,925	1,686	1,793

^rRevised.

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

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

³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc.

⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 3a. **Monthly Value of Construction Put in Place: May 2001-May 2003—Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Period	Total construction	Private construction																All other private ⁵	
		Total ¹	Residential buildings					Nonresidential buildings									Public utilities ⁴		
			Total ²	New housing units				Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous ³	Total		Telecommunications
				Total	1 unit	2 units or more													
YEAR TO DATE																			
May 2002	325,602	250,416	155,228	111,773	98,433	13,340	69,871	7,425	16,136	4,704	22,915	3,359	5,258	6,623	3,451	(NA)	7,207	953	
May 2003	330,938	255,285	169,285	124,135	110,356	13,779	62,457	5,347	13,465	4,169	20,913	3,248	4,893	7,480	2,944	(NA)	(NA)	803	
Percent change	1.6	1.9	9.1	11.1	12.1	3.3	-0.6	-28.0	-16.6	-11.4	-8.7	-3.3	-6.9	12.9	-14.7	(NA)	(NA)	-15.7	
MONTHLY DATA																			
2001: May ^f	74,380	56,749	33,901	24,083	21,437	2,646	17,371	2,505	4,618	1,232	5,173	682	1,026	1,299	836	(NA)	1,917	227	
June ^f	79,021	60,071	36,165	25,346	22,686	2,660	18,061	2,731	4,709	1,286	5,335	703	1,141	1,286	870	(NA)	1,684	273	
July ^f	79,668	60,498	37,120	26,089	23,511	2,578	17,810	2,661	4,416	1,301	5,517	742	1,142	1,224	809	(NA)	1,590	267	
August ^f	81,022	60,747	37,298	26,475	23,797	2,679	17,504	2,573	4,166	1,266	5,483	782	1,223	1,218	792	(NA)	1,796	286	
September ^f	78,206	58,870	36,360	25,920	23,380	2,540	17,059	2,570	4,031	1,212	5,385	765	1,148	1,226	723	(NA)	1,556	279	
October ^f	77,046	58,379	35,595	25,410	22,793	2,617	17,040	2,271	4,172	1,172	5,430	775	1,148	1,269	803	(NA)	1,749	253	
November ^f	72,591	55,781	34,394	24,367	21,761	2,606	15,893	1,931	3,895	1,133	5,121	750	1,108	1,186	769	(NA)	1,682	228	
December ^f	63,856	49,235	28,591	20,867	18,347	2,520	14,675	1,916	3,471	1,036	4,577	675	1,056	1,217	728	(NA)	1,644	221	
2002: January ^f	59,631	45,870	27,340	19,742	17,195	2,547	13,764	1,588	3,301	966	4,372	667	989	1,224	658	(NA)	1,351	180	
February ^f	57,773	44,143	26,118	19,375	16,928	2,447	13,337	1,459	3,084	899	4,365	636	965	1,258	672	(NA)	1,378	185	
March ^f	64,136	50,233	31,002	22,888	20,323	2,565	13,856	1,474	3,178	895	4,625	657	1,031	1,321	676	(NA)	1,413	199	
April ^f	69,637	53,782	33,914	24,153	21,303	2,850	14,461	1,451	3,309	984	4,791	707	1,121	1,382	716	(NA)	1,525	199	
May ^f	74,424	56,388	36,854	25,615	22,684	2,931	14,452	1,453	3,265	960	4,762	692	1,153	1,439	729	(NA)	1,540	191	
June ^f	77,799	58,813	39,117	26,782	23,886	2,896	14,390	1,497	3,115	876	4,827	683	1,131	1,532	730	(NA)	1,558	212	
July ^f	79,790	59,745	39,951	27,705	24,842	2,863	14,067	1,400	3,156	831	4,713	684	1,129	1,465	689	(NA)	1,620	202	
August ^f	80,474	59,123	39,966	27,606	24,715	2,891	14,190	1,308	3,111	789	4,873	739	1,155	1,483	733	(NA)	1,538	244	
September ^f	79,378	57,867	38,994	27,389	24,662	2,727	14,068	1,256	3,074	783	4,987	693	1,044	1,548	683	(NA)	1,364	238	
October ^f	78,219	58,460	38,871	27,209	24,487	2,722	14,355	1,276	3,115	806	4,980	708	1,100	1,633	738	(NA)	1,650	227	
November ^f	74,423	56,478	37,496	26,535	23,943	2,592	13,805	1,251	3,078	753	4,634	716	1,066	1,663	643	(NA)	1,463	226	
December ^f	65,238	49,594	31,899	23,452	20,922	2,530	12,337	1,169	2,792	745	3,950	636	958	1,487	601	(NA)	1,625	179	
2003: January ^f	61,311	47,064	31,068	22,823	20,152	2,671	11,862	1,039	2,635	769	3,941	637	920	1,378	543	(NA)	1,066	159	
February ^f	58,510	44,875	28,932	21,848	19,240	2,607	11,810	998	2,588	771	3,904	624	896	1,450	579	(NA)	1,051	127	
March ^f	65,738	51,578	33,883	25,313	22,643	2,670	12,610	1,117	2,757	845	4,170	637	963	1,510	610	(NA)	1,174	169	
April ^f	70,632	54,461	36,400	26,448	23,594	2,854	12,902	1,089	2,720	875	4,335	665	1,039	1,561	618	(NA)	1,278	175	
May ^p	74,746	57,307	39,002	27,703	24,726	2,977	13,274	1,104	2,766	908	4,563	685	1,074	1,580	594	(NA)	(NA)	174	
PERCENT CHANGE																			
April 2003- May 2003	5.8	5.2	7.1	4.7	4.8	4.3	2.9	1.4	1.7	3.8	5.3	3.0	3.4	1.2	-3.9	(NA)	(NA)	-0.6	

See footnotes at end of table.

∞ Table 3a. **Monthly Value of Construction Put in Place: May 2001-May 2003—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 ⁷
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
YEAR TO DATE													
May 2002	75,186	38,373	2,135	775	20,589	1,871	13,003	18,462	1,066	3,080	4,260	3,206	6,739
May 2003	75,653	38,895	2,324	813	20,637	2,119	13,002	18,129	1,240	3,181	4,145	3,384	6,679
Percent change	0.6	1.4	8.9	4.9	0.2	13.3	(Z)	-1.8	16.3	3.3	-2.7	5.6	-0.9
MONTHLY DATA													
2001: May ^f	17,630	7,901	446	108	4,009	360	2,979	5,671	232	633	894	707	1,592
June ^f	18,950	8,349	444	126	4,410	385	2,984	6,484	258	582	931	777	1,571
July ^f	19,171	8,619	396	125	5,032	351	2,715	6,486	239	548	885	778	1,616
August ^f	20,276	9,068	407	125	5,412	356	2,769	6,796	269	673	971	778	1,721
September ^f	19,336	8,778	434	211	4,896	396	2,840	5,921	303	901	934	811	1,688
October ^f	18,668	8,565	474	78	4,656	362	2,996	6,049	196	512	974	766	1,606
November ^f	16,810	7,825	465	116	4,137	355	2,752	4,925	245	597	964	747	1,508
December ^f	14,621	7,378	472	198	3,812	346	2,551	3,587	220	564	767	680	1,426
2002: January ^f	13,762	7,233	412	112	3,806	393	2,510	3,250	187	574	786	573	1,159
February ^f	13,630	7,245	419	173	3,830	361	2,462	3,033	182	609	782	593	1,187
March ^f	13,903	7,313	412	154	3,851	354	2,541	3,020	220	656	822	593	1,280
April ^f	15,856	8,047	448	170	4,373	377	2,679	3,912	214	613	887	683	1,498
May ^f	18,036	8,535	444	166	4,729	386	2,810	5,248	264	628	983	764	1,615
June ^f	18,986	9,039	487	164	5,107	407	2,874	5,819	260	619	973	760	1,517
July ^f	20,045	9,392	488	155	5,532	426	2,790	6,471	283	631	980	703	1,584
August ^f	21,352	9,998	496	187	5,907	413	2,996	6,902	246	696	1,040	746	1,724
September ^f	21,511	9,617	508	153	5,396	483	3,078	6,917	334	1,024	1,034	802	1,785
October ^f	19,759	9,183	477	157	5,004	428	3,117	6,146	181	605	1,018	839	1,786
November ^f	17,945	8,627	469	160	4,541	453	3,004	4,969	255	648	952	765	1,728
December ^f	15,644	7,842	448	155	4,079	450	2,709	3,928	298	634	815	707	1,421
2003: January ^f	14,247	7,589	470	171	4,034	392	2,522	3,189	242	584	771	631	1,241
February ^f	13,635	7,302	444	138	3,795	432	2,493	2,884	232	588	761	669	1,199
March ^f	14,160	7,562	451	154	4,024	422	2,511	3,118	239	610	779	659	1,193
April ^f	16,171	8,075	484	152	4,282	419	2,738	4,046	243	699	878	699	1,531
May ^p	17,440	8,366	474	199	4,502	454	2,738	4,893	284	700	956	726	1,514
PERCENT CHANGE													
April 2003-May 2003	7.8	3.6	-2.1	30.9	5.1	8.4	(Z)	20.9	16.9	0.1	8.9	3.9	-1.1

NA Not available, but estimates are included in totals. ^fPreliminary. ^rRevised. Z Less than 0.05 percent.

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

Table 3b. Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	766,062	50,219	49,740	56,797	59,656	63,901	69,070	70,860	72,514	72,650	70,888	68,707	61,061
Private construction	596,331	39,828	39,024	45,071	46,575	50,048	53,604	54,863	55,364	55,433	55,013	53,803	47,705
Residential buildings	350,562	22,135	20,573	25,218	26,756	30,021	32,110	32,882	33,754	33,907	33,756	32,343	27,107
New housing units	251,272	16,763	16,084	19,215	20,090	21,288	22,478	23,208	23,545	23,362	22,959	22,476	19,804
1 unit	223,837	14,806	14,063	16,989	17,815	18,948	20,069	20,820	21,068	20,938	20,582	20,186	17,553
2 units or more	27,434	1,956	2,022	2,226	2,274	2,340	2,409	2,388	2,477	2,424	2,376	2,290	2,251
Improvements	99,290	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	193,935	14,557	14,994	15,781	15,990	16,329	16,705	16,708	16,916	17,027	16,689	16,589	15,651
Industrial	32,639	2,802	2,716	2,828	2,711	2,672	2,851	2,816	2,767	2,739	2,597	2,547	2,594
Office	47,582	3,596	3,754	3,844	3,875	4,015	4,050	3,964	4,169	4,325	4,184	4,015	3,792
Hotels, motels	15,951	1,304	1,410	1,432	1,383	1,354	1,296	1,346	1,277	1,266	1,251	1,326	1,308
Other commercial	56,915	3,829	3,986	4,357	4,536	4,841	4,979	5,071	5,127	5,199	5,143	5,225	4,624
Religious	7,371	571	555	574	600	599	628	628	669	638	680	641	587
Educational	9,645	614	647	723	827	798	946	955	930	828	800	803	776
Hospital and institutional	13,530	1,056	1,108	1,137	1,145	1,149	1,109	1,083	1,137	1,164	1,180	1,163	1,100
Miscellaneous ¹	10,301	786	819	886	914	901	847	846	840	867	856	869	871
Farm nonresidential	5,059	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	44,066	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,404	880	994	1,461	1,479	1,294	1,472	1,638	1,747	1,694	1,818	1,934	1,994
Railroads	4,670	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	14,585	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,918	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	1,489	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,709	168	167	209	245	239	243	251	239	232	226	237	254
Public construction	169,732	10,391	10,716	11,726	13,081	13,853	15,467	15,997	17,150	17,217	15,874	14,904	13,356
Buildings	79,976	5,453	5,587	5,952	6,322	6,379	7,159	7,347	7,796	7,600	7,124	6,815	6,444
Housing and redevelopment	5,146	377	361	411	422	460	429	434	463	493	459	418	419
Industrial	925	64	69	85	76	83	73	89	70	112	45	72	88
Educational	41,079	2,673	2,671	2,833	3,196	3,245	3,935	4,061	4,383	3,990	3,648	3,368	3,076
Hospital	4,070	306	359	318	293	326	354	350	330	383	353	351	347
Other ³	28,756	2,033	2,127	2,305	2,335	2,265	2,369	2,412	2,550	2,623	2,619	2,605	2,513
Highways and streets	48,900	2,186	2,321	2,748	3,502	4,137	4,738	5,023	5,514	5,613	5,102	4,446	3,571
Military facilities	2,125	147	175	188	179	179	186	195	142	207	150	171	208
Conservation and development	6,121	396	433	468	452	421	504	496	599	783	427	573	568
Other public construction	32,609	2,209	2,202	2,370	2,626	2,737	2,880	2,935	3,100	3,014	3,073	2,899	2,566
Sewer systems	10,525	747	692	807	814	877	957	941	971	966	977	920	856
Water supply facilities	6,967	485	512	541	556	582	609	667	659	636	631	589	503
Miscellaneous public ⁴	15,117	977	998	1,023	1,257	1,277	1,314	1,327	1,470	1,412	1,465	1,391	1,207

See footnotes at end of table.

Table 3b. **Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2000												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	828,768	55,785	55,246	63,319	66,089	71,656	74,998	74,255	78,853	78,182	76,281	71,712	62,391
Private construction	642,633	43,930	43,635	50,105	51,760	56,151	58,270	57,569	59,522	58,775	58,421	55,815	48,681
Residential buildings	374,457	26,074	24,162	29,183	30,783	33,472	35,145	34,347	34,773	34,049	33,981	32,004	26,484
New housing units	265,047	18,625	17,867	21,167	22,036	23,250	24,111	24,199	24,286	23,806	23,335	22,684	19,681
1 unit	236,788	16,492	15,758	18,750	19,585	20,743	21,552	21,882	21,903	21,491	20,961	20,286	17,385
2 units or more	28,259	2,133	2,109	2,417	2,451	2,507	2,559	2,317	2,384	2,315	2,374	2,398	2,296
Improvements	109,410	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	208,241	14,405	15,526	16,359	16,634	17,806	18,098	17,934	18,892	18,744	18,770	18,138	16,933
Industrial	31,801	2,154	2,338	2,498	2,543	2,791	2,859	2,740	2,820	2,793	2,842	2,791	2,633
Office	55,605	3,601	3,935	4,299	4,423	4,822	4,689	4,650	4,970	5,151	5,076	5,111	4,879
Hotels, motels	16,293	1,324	1,318	1,434	1,410	1,421	1,441	1,387	1,376	1,329	1,330	1,310	1,214
Other commercial	60,381	4,180	4,619	4,612	4,727	5,027	5,287	5,274	5,609	5,628	5,613	5,121	4,686
Religious	8,019	579	619	629	625	636	691	717	734	710	761	696	623
Educational	11,375	733	778	842	850	1,012	1,037	1,096	1,207	993	990	961	877
Hospital and institutional	14,434	1,039	1,070	1,134	1,186	1,181	1,204	1,208	1,260	1,271	1,299	1,307	1,276
Miscellaneous ¹	10,332	795	849	913	871	919	890	863	916	870	859	843	745
Farm nonresidential	5,988	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	50,994	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,799	1,229	1,196	1,552	1,277	1,527	1,683	1,403	1,583	1,891	1,655	1,764	2,040
Railroads	4,263	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	22,038	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,891	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	1,003	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,954	174	197	216	204	215	234	246	308	307	310	288	257
Public construction	186,135	11,855	11,611	13,214	14,330	15,505	16,728	16,686	19,332	19,406	17,860	15,898	13,710
Buildings	90,005	6,215	6,318	6,623	7,000	7,392	8,081	8,072	8,778	8,559	8,241	7,549	7,179
Housing and redevelopment	4,927	364	345	409	421	422	434	396	423	437	452	428	396
Industrial	1,158	93	96	92	91	89	97	98	109	125	75	93	100
Educational	45,643	3,130	3,149	3,287	3,401	3,678	4,232	4,350	4,758	4,379	4,027	3,636	3,614
Hospital	4,785	336	333	347	395	433	442	426	430	479	409	418	336
Other ³	33,494	2,292	2,394	2,488	2,691	2,769	2,877	2,802	3,057	3,139	3,279	2,974	2,732
Highways and streets	52,992	2,847	2,319	3,255	3,917	4,503	4,917	5,173	6,608	6,388	5,463	4,404	3,197
Military facilities	2,441	138	210	210	180	200	197	188	211	271	146	280	210
Conservation and development	6,381	442	500	523	488	470	535	464	554	826	522	523	534
Other public construction	34,315	2,213	2,264	2,603	2,744	2,940	2,997	2,789	3,181	3,363	3,488	3,142	2,590
Sewer systems	10,332	719	713	798	933	901	992	877	945	925	938	867	722
Water supply facilities	7,028	503	515	502	568	620	571	549	663	662	696	631	548
Miscellaneous public ⁴	16,955	991	1,036	1,303	1,243	1,418	1,434	1,364	1,573	1,777	1,854	1,644	1,320

See footnotes at end of table.

Table 3b. Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.

[Millions of dollars]

Type of construction	2001												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	852,553	58,227	56,100	63,912	68,523	74,380	79,021	79,668	81,022	78,206	77,046	72,591	63,856
Private construction	652,496	45,543	43,701	50,096	52,827	56,749	60,071	60,498	60,747	58,870	58,379	55,781	49,235
Residential buildings	388,324	25,451	24,091	28,471	30,886	33,901	36,165	37,120	37,298	36,360	35,595	34,394	28,591
New housing units	279,391	18,749	18,290	21,338	22,456	24,083	25,346	26,089	26,475	25,920	25,410	24,367	20,867
1 unit	249,086	16,512	15,992	18,909	19,960	21,437	22,686	23,511	23,797	23,380	22,793	21,761	18,347
2 units or more	30,305	2,237	2,298	2,429	2,495	2,646	2,660	2,578	2,679	2,540	2,617	2,606	2,520
Improvements	108,933	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	202,334	16,304	16,022	17,321	17,274	17,371	18,061	17,810	17,504	17,059	17,040	15,893	14,675
Industrial	29,521	2,632	2,402	2,706	2,622	2,505	2,731	2,661	2,573	2,570	2,271	1,931	1,916
Office	52,260	4,702	4,486	4,911	4,684	4,618	4,709	4,416	4,166	4,031	4,172	3,895	3,471
Hotels, motels	14,490	1,203	1,212	1,226	1,211	1,232	1,286	1,301	1,266	1,212	1,172	1,133	1,036
Other commercial	60,760	4,346	4,538	4,801	5,057	5,173	5,335	5,517	5,483	5,385	5,430	5,121	4,577
Religious	8,385	607	603	637	664	682	703	742	782	765	775	750	675
Educational	12,591	873	847	917	962	1,026	1,141	1,142	1,223	1,148	1,148	1,108	1,056
Hospital and institutional	14,910	1,235	1,199	1,288	1,263	1,299	1,286	1,224	1,218	1,226	1,269	1,186	1,217
Miscellaneous ¹	9,418	706	735	835	812	836	870	809	792	723	803	769	728
Farm nonresidential	5,135	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	53,849	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	19,569	1,466	1,374	1,505	1,607	1,917	1,684	1,590	1,796	1,556	1,749	1,682	1,644
Railroads	4,456	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	23,803	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	5,078	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	943	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,853	205	206	199	210	227	273	267	286	279	253	228	221
Public construction	200,057	12,684	12,399	13,816	15,696	17,630	18,950	19,171	20,276	19,336	18,668	16,810	14,621
Buildings	94,407	6,763	6,557	6,991	7,613	7,901	8,349	8,619	9,068	8,778	8,565	7,825	7,378
Housing and redevelopment	5,096	394	368	383	414	446	444	396	407	434	474	465	472
Industrial	1,556	124	102	114	130	108	126	125	125	211	78	116	198
Educational	50,035	3,291	3,187	3,421	3,773	4,009	4,410	5,032	5,412	4,896	4,656	4,137	3,812
Hospital	4,243	345	326	325	337	360	385	351	356	396	362	355	346
Other ³	33,477	2,609	2,574	2,748	2,960	2,979	2,984	2,715	2,769	2,840	2,996	2,752	2,551
Highways and streets	58,942	2,671	2,619	3,390	4,344	5,671	6,484	6,486	6,796	5,921	6,049	4,925	3,587
Military facilities	2,842	216	195	214	258	232	258	239	269	303	196	245	220
Conservation and development	7,269	562	566	606	525	633	582	548	673	901	512	597	564
Other public construction	36,596	2,472	2,462	2,615	2,957	3,193	3,279	3,279	3,469	3,432	3,346	3,219	2,873
Sewer systems	10,339	712	698	758	853	894	931	885	971	934	974	964	767
Water supply facilities	8,358	491	534	595	696	707	777	778	778	811	766	747	680
Miscellaneous public ⁴	17,899	1,269	1,231	1,263	1,408	1,592	1,571	1,616	1,721	1,688	1,606	1,508	1,426

See footnotes at end of table.

Table 3b. **Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2002												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	860,923	59,631	57,773	64,136	69,637	74,424	77,799	79,790	80,474	79,378	78,219	74,423	65,238
Private construction	650,495	45,870	44,143	50,233	53,782	56,388	58,813	59,745	59,123	57,867	58,460	56,478	49,594
Residential buildings	421,521	27,340	26,118	31,002	33,914	36,854	39,117	39,951	39,966	38,994	38,871	37,496	31,899
New housing units	298,450	19,742	19,375	22,888	24,153	25,615	26,782	27,705	27,606	27,389	27,209	26,535	23,452
1 unit	265,889	17,195	16,928	20,323	21,303	22,684	23,886	24,842	24,715	24,662	24,487	23,943	20,922
2 units or more	32,561	2,547	2,447	2,565	2,850	2,931	2,896	2,863	2,891	2,727	2,722	2,592	2,530
Improvements	123,071	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	167,084	13,764	13,337	13,856	14,461	14,452	14,390	14,067	14,190	14,068	14,355	13,805	12,337
Industrial	16,580	1,588	1,459	1,474	1,451	1,453	1,497	1,400	1,308	1,256	1,276	1,251	1,169
Office	37,578	3,301	3,084	3,178	3,309	3,265	3,115	3,156	3,111	3,074	3,115	3,078	2,792
Hotels, motels	10,285	966	899	895	984	960	876	831	789	783	806	753	745
Other commercial	55,879	4,372	4,365	4,625	4,791	4,762	4,827	4,713	4,873	4,987	4,980	4,634	3,950
Religious	8,217	667	636	657	707	692	683	684	739	693	708	716	636
Educational	12,841	989	965	1,031	1,121	1,153	1,131	1,129	1,155	1,044	1,100	1,066	958
Hospital and institutional	17,434	1,224	1,258	1,321	1,382	1,439	1,532	1,465	1,483	1,548	1,633	1,663	1,487
Miscellaneous ¹	8,269	658	672	676	716	729	730	689	733	683	738	643	601
Farm nonresidential	5,040	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	54,370	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,024	1,351	1,378	1,413	1,525	1,540	1,558	1,620	1,538	1,364	1,650	1,463	1,625
Railroads	4,864	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	24,789	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	5,500	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	1,193	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,481	180	185	199	199	191	212	202	244	238	227	226	179
Public construction	210,428	13,762	13,630	13,903	15,856	18,036	18,986	20,045	21,352	21,511	19,759	17,945	15,644
Buildings	102,071	7,233	7,245	7,313	8,047	8,535	9,039	9,392	9,998	9,617	9,183	8,627	7,842
Housing and redevelopment	5,507	412	419	412	448	444	487	488	496	508	477	469	448
Industrial	1,906	112	173	154	170	166	164	155	187	153	157	160	155
Educational	56,154	3,806	3,830	3,851	4,373	4,729	5,107	5,532	5,907	5,396	5,004	4,541	4,079
Hospital	4,932	393	361	354	377	386	407	426	413	483	428	453	450
Other ³	33,572	2,510	2,462	2,541	2,679	2,810	2,874	2,790	2,996	3,078	3,117	3,004	2,709
Highways and streets	59,613	3,250	3,033	3,020	3,912	5,248	5,819	6,471	6,902	6,917	6,146	4,969	3,928
Military facilities	2,923	187	182	220	214	264	260	283	246	334	181	255	298
Conservation and development	7,937	574	609	656	613	628	619	631	696	1,024	605	648	634
Other public construction	37,883	2,518	2,562	2,694	3,069	3,362	3,249	3,268	3,510	3,620	3,643	3,446	2,943
Sewer systems	11,072	786	782	822	887	983	973	980	1,040	1,034	1,018	952	815
Water supply facilities	8,528	573	593	593	683	764	760	703	746	802	839	765	707
Miscellaneous public ⁴	18,284	1,159	1,187	1,280	1,498	1,615	1,517	1,584	1,724	1,785	1,786	1,728	1,421

NA Not available, but estimates are included in total.

¹Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc. ²Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc. ³Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc.

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

Table 4a. Monthly Value of Construction Put in Place: May 2001-May 2003—Seasonally Adjusted Annual Rate in Current Dollars

[Millions of dollars]

Period	Total construction	Private construction																All other private ⁵	
		Total ¹	Residential buildings						Nonresidential buildings								Public utilities ⁴		
			Total ²	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous ³	Total	Telecommunications		
				Total	1 unit	2 units or more													
2001: May ^f	857,927	650,475	381,661	278,041	247,828	30,214	204,384	29,856	53,236	14,391	61,520	8,307	11,845	15,423	9,806	(NA)	22,580	2,860	
June ^f	866,921	662,910	387,952	280,300	250,217	30,084	209,425	31,545	55,669	15,059	60,966	8,692	12,067	15,278	10,149	(NA)	19,510	3,166	
July ^f	862,027	661,712	395,870	281,658	251,680	29,978	206,108	30,879	52,465	15,455	62,158	8,821	11,829	14,961	9,541	(NA)	18,944	3,016	
August ^f	849,827	654,525	394,575	283,759	253,607	30,152	197,129	29,607	48,114	14,837	59,973	8,708	12,446	14,319	9,126	(NA)	19,342	2,928	
September ^f	840,700	648,611	391,119	283,674	253,672	30,002	194,144	29,317	47,281	14,632	58,581	8,549	13,040	14,336	8,409	(NA)	19,210	2,950	
October ^f	837,739	640,075	385,069	283,134	253,020	30,114	191,601	25,398	47,585	13,744	59,179	8,269	13,712	14,589	9,125	(NA)	18,395	2,663	
November ^f	845,377	646,007	397,795	282,210	251,092	31,118	185,484	22,562	45,379	13,504	59,200	8,348	13,698	13,745	9,049	(NA)	18,299	2,605	
December ^f	858,664	655,483	400,758	281,622	249,623	31,999	183,857	22,741	43,429	12,683	58,676	8,293	14,196	14,791	9,048	(NA)	19,279	2,642	
2002: January ^f	871,052	656,871	400,095	282,752	249,206	33,546	184,497	21,102	42,500	12,098	61,796	8,517	13,927	15,687	8,871	(NA)	19,088	2,560	
February ^f	884,328	664,607	417,403	291,365	258,775	32,590	178,877	19,786	40,055	11,584	60,548	8,549	13,605	15,935	8,817	(NA)	19,664	2,733	
March ^f	864,662	658,514	412,132	294,680	262,517	32,163	175,477	18,536	39,312	11,038	60,068	8,692	13,619	16,031	8,182	(NA)	18,273	2,688	
April ^f	875,342	666,861	420,775	296,694	262,460	34,234	176,401	17,858	39,592	11,428	59,763	8,774	14,115	16,421	8,450	(NA)	18,694	2,629	
May ^f	860,619	648,006	417,187	296,876	263,506	33,370	170,793	17,486	37,740	11,308	56,637	8,702	13,312	17,062	8,546	(NA)	18,115	2,405	
June ^f	851,384	645,747	417,992	296,564	263,686	32,878	167,024	17,443	37,121	10,262	55,216	8,324	11,969	18,183	8,505	(NA)	18,994	2,453	
July ^f	856,654	649,032	426,396	297,829	264,983	32,845	162,228	16,119	37,244	9,767	53,201	8,132	11,730	17,889	8,146	(NA)	18,564	2,282	
August ^f	842,693	634,917	422,193	295,748	262,927	32,821	159,641	15,146	36,239	9,216	53,212	8,160	11,747	17,477	8,445	(NA)	17,091	2,495	
September ^f	843,234	631,796	417,630	298,909	266,858	32,051	159,058	14,398	35,676	9,260	54,062	7,728	11,885	18,105	7,944	(NA)	16,303	2,511	
October ^f	849,484	640,230	421,438	301,828	270,570	31,257	161,071	14,266	35,531	9,382	54,279	7,404	13,108	18,731	8,369	(NA)	17,354	2,398	
November ^f	869,143	653,851	432,591	306,602	275,467	31,135	161,689	14,547	36,180	9,217	53,569	8,146	13,178	19,286	7,567	(NA)	16,455	2,588	
December ^f	879,383	663,273	446,645	316,524	284,329	32,195	154,078	13,603	34,578	9,146	50,646	7,734	12,846	18,079	7,445	(NA)	18,151	2,140	
2003: January ^f	899,300	678,082	456,252	328,588	293,480	35,108	159,761	13,979	33,995	9,781	55,702	8,391	12,916	17,663	7,335	(NA)	15,051	2,259	
February ^f	899,510	680,323	461,211	330,430	295,627	34,803	158,357	13,531	33,643	9,940	54,224	8,385	12,647	18,397	7,591	(NA)	15,053	1,871	
March ^f	890,777	680,800	453,993	326,558	293,116	33,442	159,493	14,229	34,033	10,173	54,334	8,261	12,744	18,344	7,375	(NA)	15,504	2,276	
April ^f	885,040	673,900	449,513	324,462	290,390	34,072	157,601	13,293	32,482	10,449	54,070	8,371	13,067	18,625	7,245	(NA)	15,622	2,303	
May ^p	869,841	662,602	445,405	322,138	287,788	34,350	157,024	13,291	32,221	10,663	54,211	8,526	12,433	18,714	6,965	(NA)	(NA)	2,212	
PERCENT CHANGE																			
April 2003-																			
May 2003	-1.7	-1.7	-0.9	-0.7	-0.9	0.8	-0.4	(Z)	-0.8	2.0	0.3	1.9	-4.9	0.5	-3.9	(NA)	(NA)	-4.0	

See footnotes at end of table.

Table 4a. **Monthly Value of Construction Put in Place: May 2001-May 2003—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 ⁷
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
2001: May ^f	207,452	95,426	5,220	1,369	49,590	4,318	34,928	64,265	2,733	7,587	10,435	8,198	18,808
June ^f	204,011	92,986	5,130	1,473	47,383	4,433	34,566	64,355	2,963	6,761	10,278	8,911	17,758
July ^f	200,315	93,019	4,767	1,498	50,494	4,176	32,084	61,476	2,777	6,557	9,994	8,590	17,902
August ^f	195,302	92,816	4,820	1,502	51,145	4,208	31,140	56,013	3,113	7,103	10,335	8,555	17,367
September ^f	192,089	93,871	4,796	1,897	51,350	4,270	31,557	52,440	2,884	7,520	9,901	8,787	16,685
October ^f	197,665	96,879	5,316	1,024	53,163	4,078	33,298	55,621	2,914	7,170	10,310	7,925	16,846
November ^f	199,370	95,043	5,443	1,403	52,313	4,169	31,716	57,488	2,857	7,003	11,002	8,509	17,468
December ^f	203,180	96,782	5,846	2,354	51,971	4,258	32,354	58,635	2,524	7,371	10,372	8,749	18,747
2002: January ^f	214,180	99,976	5,320	1,459	54,759	4,987	33,449	66,092	2,463	8,143	11,312	8,481	17,713
February ^f	219,721	102,102	5,631	2,312	56,112	4,762	33,286	68,148	2,505	8,627	11,602	8,545	18,191
March ^f	206,148	99,040	5,220	1,871	54,239	4,538	33,172	58,268	2,613	8,628	11,104	8,174	18,321
April ^f	208,481	101,297	5,388	2,096	56,969	4,637	32,207	57,957	2,724	7,755	11,126	8,436	19,186
May ^f	212,613	103,690	5,208	2,091	58,502	4,630	33,258	58,909	3,114	7,479	11,484	8,859	19,078
June ^f	205,636	100,613	5,604	1,920	54,969	4,758	33,362	57,803	2,985	7,496	10,732	8,688	17,321
July ^f	207,622	101,308	5,884	1,859	55,558	4,994	33,013	59,324	3,299	7,348	11,055	7,765	17,521
August ^f	207,776	102,320	5,850	2,228	55,776	4,941	33,525	58,281	2,853	7,599	11,040	8,164	17,519
September ^f	211,438	103,120	5,604	1,376	56,641	5,228	34,271	59,541	3,164	8,393	10,918	8,717	17,585
October ^f	209,253	103,645	5,373	2,079	57,242	4,835	34,116	56,217	2,718	8,630	10,771	8,695	18,577
November ^f	215,292	105,451	5,495	1,947	57,422	5,392	35,195	59,510	2,970	7,777	10,885	8,723	19,977
December ^f	216,110	102,521	5,536	1,851	55,741	5,458	33,935	63,432	3,410	8,054	11,037	9,097	18,559
2003: January ^f	221,218	105,095	6,062	2,233	57,967	4,943	33,890	65,407	3,190	8,078	11,116	9,354	18,977
February ^f	219,187	102,743	5,954	1,838	55,539	5,679	33,733	65,539	3,216	8,198	11,279	9,684	18,528
March ^f	209,977	102,496	5,690	1,877	56,869	5,410	32,650	59,958	2,831	8,011	10,542	8,994	17,145
April ^f	211,140	101,387	5,798	1,866	55,911	5,098	32,714	59,211	3,101	8,630	10,952	8,589	19,269
May ^p	207,240	101,296	5,580	2,454	55,637	5,499	32,125	56,562	3,333	8,671	11,146	8,372	17,860
PERCENT CHANGE													
April 2003- May 2003	-1.8	-0.1	-3.8	31.5	-0.5	7.9	-1.8	-4.5	7.5	0.5	1.8	-2.5	-7.3

NA Not available, but estimates are included in totals. ^PPreliminary. ^RRevised. ^ZLess than 0.05 percent.

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

Table 4b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	737,020	757,029	757,201	748,612	745,923	754,272	767,438	763,066	769,568	777,939	799,924	814,388
Private construction	571,139	585,326	587,644	579,289	579,459	588,772	599,105	595,241	601,078	608,009	622,089	631,305
Residential buildings	325,951	330,651	335,259	336,640	340,490	344,285	349,686	355,198	359,894	366,235	372,581	378,894
New housing units	244,236	246,226	248,054	247,854	248,157	248,445	249,700	251,642	252,652	254,926	259,284	265,519
1 unit	217,740	218,875	220,400	220,397	221,178	221,552	222,278	223,334	224,735	227,430	231,804	237,467
2 units or more	26,496	27,351	27,653	27,458	26,979	26,893	27,422	28,309	27,917	27,496	27,480	28,051
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	197,025	200,988	198,446	195,005	193,915	192,133	193,230	190,607	191,667	190,108	193,283	194,112
Industrial	37,731	36,830	35,529	33,607	32,718	32,458	33,232	31,740	30,950	29,370	29,252	30,162
Office	47,001	48,852	47,122	46,264	46,462	47,413	46,818	48,570	49,711	48,981	47,054	46,864
Hotels, motels	17,126	17,955	17,128	16,219	16,130	15,124	15,886	14,992	14,766	15,351	15,596	15,743
Other commercial	54,566	55,815	57,206	56,758	57,626	56,575	56,812	55,427	56,304	55,898	60,643	59,409
Religious	7,786	7,520	7,383	7,558	7,506	7,598	7,524	7,334	6,895	7,484	7,036	7,218
Educational	8,796	9,187	9,617	10,441	9,246	9,826	9,690	9,384	9,351	9,624	10,028	10,539
Hospital and institutional	13,478	14,070	13,770	13,554	13,599	13,231	13,283	13,342	13,624	13,623	13,491	13,362
Miscellaneous ¹	10,541	10,759	10,690	10,604	10,628	9,908	9,985	9,819	10,065	9,777	10,181	10,815
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	13,330	14,254	17,714	17,762	16,541	16,678	19,323	19,594	19,301	20,563	21,079	21,457
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,361	2,477	2,832	3,244	2,986	2,880	2,794	2,485	2,476	2,359	2,694	2,976
Public construction	165,880	171,703	169,557	169,323	166,464	165,500	168,333	167,825	168,491	169,929	177,835	183,082
Buildings	76,251	79,003	79,605	79,690	77,543	79,263	79,369	80,695	80,757	81,190	82,741	83,198
Housing and redevelopment	4,888	4,919	5,181	5,115	5,334	4,975	5,236	5,553	5,388	5,081	4,917	5,152
Industrial	839	926	1,029	937	1,041	849	1,071	856	998	600	872	1,023
Educational	38,779	39,611	40,188	42,238	40,191	42,159	40,578	41,232	41,781	41,411	42,460	41,521
Hospital	4,030	4,781	3,890	3,567	4,006	4,010	4,143	3,985	4,061	4,106	4,175	4,154
Other ³	27,714	28,767	29,317	27,833	26,970	27,271	28,341	29,069	28,528	29,991	30,317	31,347
Highways and streets	49,117	51,284	49,070	48,814	49,206	46,147	47,990	46,333	48,385	47,866	52,933	56,228
Military facilities	1,901	2,425	2,206	2,266	2,132	2,143	2,293	1,640	1,972	2,190	2,010	2,417
Conservation and development	5,799	6,148	5,857	5,660	5,327	5,775	5,888	6,568	6,308	6,045	6,743	7,107
Other public construction	32,813	32,842	32,819	32,894	32,256	32,172	32,792	32,589	31,069	32,638	33,407	34,132
Sewer systems	10,832	10,416	10,789	10,148	10,301	10,497	10,708	10,323	10,249	10,331	10,489	11,503
Water supply facilities	7,150	7,326	7,542	6,806	6,777	6,995	7,358	7,238	6,932	6,457	6,650	6,586
Miscellaneous public ⁴	14,832	15,100	14,488	15,940	15,178	14,679	14,727	15,028	13,888	15,851	16,269	16,043

See footnotes at end of table.

Table 4b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2000											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	819,629	831,894	841,964	836,489	827,600	820,247	809,891	826,847	837,149	835,954	833,863	836,079
Private construction	629,993	649,582	651,434	647,445	643,759	640,947	632,095	640,112	645,644	646,173	645,801	645,593
Residential buildings	382,358	388,472	387,452	387,270	376,857	376,343	366,294	366,382	364,505	370,461	368,784	370,820
New housing units	269,065	270,070	271,418	270,513	268,687	266,461	261,315	259,915	260,251	260,803	262,168	265,210
1 unit	240,465	242,745	241,672	241,042	240,037	237,706	234,449	233,007	232,967	233,120	233,844	235,994
2 units or more	28,600	27,325	29,746	29,471	28,650	28,755	26,866	26,908	27,284	27,683	28,324	29,216
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	194,321	203,387	204,940	204,280	209,526	208,985	208,590	212,284	213,257	212,156	211,459	211,935
Industrial	29,278	30,068	31,418	31,685	33,254	33,243	32,362	32,106	31,590	32,053	32,577	30,890
Office	47,068	49,190	52,426	53,883	55,317	55,006	55,518	57,401	59,956	58,568	59,599	61,177
Hotels, motels	16,833	16,402	17,105	16,916	16,762	16,417	16,527	15,923	16,065	15,767	15,442	15,259
Other commercial	59,077	64,080	60,022	58,907	59,839	60,309	59,312	61,297	61,392	61,069	59,256	60,140
Religious	7,663	7,970	8,127	7,878	7,882	8,376	8,608	7,920	8,027	8,111	7,633	7,874
Educational	10,399	10,958	11,119	10,697	11,684	10,919	11,306	12,274	11,260	11,860	11,886	11,827
Hospital and institutional	13,309	13,570	13,726	14,074	14,003	14,336	14,777	14,782	14,864	14,947	15,151	15,508
Miscellaneous ¹	10,694	11,149	10,998	10,241	10,785	10,379	10,182	10,581	10,102	9,781	9,914	9,259
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,816	16,148	18,712	16,917	18,053	18,874	17,497	17,062	22,111	18,085	19,510	23,611
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,465	2,914	2,899	2,678	2,695	2,715	2,773	3,169	3,255	3,251	3,299	3,075
Public construction	189,636	182,312	190,530	189,044	183,841	179,300	177,796	186,736	191,505	189,781	188,062	190,486
Buildings	86,746	87,714	88,690	88,536	89,669	89,506	88,220	90,521	91,599	93,004	91,405	94,229
Housing and redevelopment	4,677	4,665	5,195	5,060	4,922	5,024	4,775	5,043	4,802	5,011	5,022	4,897
Industrial	1,207	1,284	1,118	1,121	1,126	1,146	1,188	1,323	1,113	984	1,122	1,181
Educational	45,206	46,316	46,293	44,507	45,544	45,466	43,644	44,931	45,889	45,894	45,971	49,281
Hospital	4,400	4,280	4,286	5,003	5,187	5,018	5,128	5,090	5,140	4,653	4,926	4,152
Other ³	31,257	31,169	31,798	32,844	32,890	32,851	33,486	34,133	34,655	36,462	34,364	34,717
Highways and streets	61,338	50,788	56,698	57,119	51,812	47,702	50,430	54,497	56,196	50,858	51,104	52,770
Military facilities	1,796	2,895	2,515	2,283	2,367	2,262	2,194	2,442	2,576	2,164	3,286	2,420
Conservation and development	6,627	7,018	6,572	6,420	5,605	6,146	5,669	5,933	6,707	7,175	6,140	6,906
Other public construction	33,129	33,898	36,055	34,686	34,388	33,685	31,284	33,343	34,426	36,580	36,126	34,162
Sewer systems	10,344	10,618	10,739	11,653	10,512	10,940	9,947	10,071	9,830	9,920	9,883	9,772
Water supply facilities	7,461	7,369	6,983	6,978	7,208	6,563	6,054	7,306	7,186	7,194	7,150	7,055
Miscellaneous public ⁴	15,324	15,910	18,333	16,055	16,668	16,182	15,283	15,966	17,411	19,466	19,094	17,335

See footnotes at end of table.

Table 4b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2001											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	841,259	849,842	852,375	864,876	857,927	866,921	862,027	849,827	840,700	837,739	845,377	858,664
Private construction	644,797	651,158	649,817	658,329	650,475	662,910	661,712	654,525	648,611	640,075	646,007	655,483
Residential buildings	370,675	384,349	376,314	386,248	381,661	387,952	395,870	394,575	391,119	385,069	397,795	400,758
New housing units	268,614	275,411	273,434	275,327	278,041	280,300	281,658	283,759	283,674	283,134	282,210	281,622
1 unit	239,021	244,768	243,204	245,415	247,828	250,217	251,680	253,607	253,672	253,020	251,092	249,623
2 units or more	29,593	30,643	30,230	29,912	30,214	30,084	29,978	30,152	30,002	30,114	31,118	31,999
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	217,436	214,244	217,488	211,717	204,384	209,425	206,108	197,129	194,144	191,601	185,484	183,857
Industrial	34,862	32,534	34,182	32,873	29,856	31,545	30,879	29,607	29,317	25,398	22,562	22,741
Office	60,414	58,264	60,381	56,546	53,236	55,669	52,465	48,114	47,281	47,585	45,379	43,429
Hotels, motels	15,196	15,605	14,539	14,248	14,391	15,059	15,455	14,837	14,632	13,744	13,504	12,683
Other commercial	61,352	62,952	62,421	63,016	61,520	60,966	62,158	59,973	58,581	59,179	59,200	58,676
Religious	7,913	8,115	8,171	8,372	8,307	8,692	8,821	8,708	8,549	8,269	8,348	8,293
Educational	12,343	11,928	12,106	12,110	11,845	12,067	11,829	12,446	13,040	13,712	13,698	14,196
Hospital and institutional	15,836	15,213	15,612	14,989	15,423	15,278	14,961	14,319	14,336	14,589	13,745	14,791
Miscellaneous ¹	9,519	9,633	10,077	9,563	9,806	10,149	9,541	9,126	8,409	9,125	9,049	9,048
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	20,727	19,579	18,657	20,729	22,580	19,510	18,944	19,342	19,210	18,395	18,299	19,279
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,914	3,041	2,680	2,778	2,860	3,166	3,016	2,928	2,950	2,663	2,605	2,642
Public construction	196,462	198,684	202,558	206,546	207,452	204,011	200,315	195,302	192,089	197,665	199,370	203,180
Buildings	93,709	92,183	93,646	96,034	95,426	92,986	93,019	92,816	93,871	96,879	95,043	96,782
Housing and redevelopment	5,078	4,960	4,857	4,966	5,220	5,130	4,767	4,820	4,796	5,316	5,443	5,846
Industrial	1,610	1,362	1,388	1,600	1,369	1,473	1,498	1,502	1,897	1,024	1,403	2,354
Educational	47,408	46,756	48,170	49,207	49,590	47,383	50,494	51,145	51,350	53,163	52,313	51,971
Hospital	4,384	4,316	4,082	4,209	4,318	4,433	4,176	4,208	4,270	4,078	4,169	4,258
Other ³	35,228	34,788	35,150	36,053	34,928	34,566	32,084	31,140	31,557	33,298	31,716	32,354
Highways and streets	54,980	58,742	61,921	63,027	64,265	64,355	61,476	56,013	52,440	55,621	57,488	58,635
Military facilities	2,839	2,681	2,543	3,276	2,733	2,963	2,777	3,113	2,884	2,914	2,857	2,524
Conservation and development	8,030	8,098	7,940	6,811	7,587	6,761	6,557	7,103	7,520	7,170	7,003	7,371
Other public construction	36,905	36,980	36,507	37,399	37,441	36,946	36,486	36,257	35,373	35,081	36,979	37,868
Sewer systems	10,245	10,363	10,213	10,657	10,435	10,278	9,994	10,335	9,901	10,310	11,002	10,372
Water supply facilities	7,280	7,664	8,230	8,565	8,198	8,911	8,590	8,555	8,787	7,925	8,509	8,749
Miscellaneous public ⁴	19,380	18,953	18,064	18,176	18,808	17,758	17,902	17,367	16,685	16,846	17,468	18,747

See footnotes at end of table.

Table 4b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2002											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	871,052	884,328	864,662	875,342	860,618	851,384	856,653	842,693	843,234	849,484	869,143	879,383
Private construction	656,871	664,607	658,514	666,861	648,006	645,747	649,032	634,917	631,796	640,230	653,850	663,273
Residential buildings	400,095	417,403	412,132	420,775	417,187	417,992	426,396	422,193	417,630	421,438	432,591	446,645
New housing units	282,752	291,365	294,680	296,694	296,876	296,564	297,829	295,748	298,909	301,828	306,602	316,524
1 unit	249,206	258,775	262,517	262,460	263,506	263,686	264,983	262,927	266,858	270,570	275,467	284,329
2 units or more	33,546	32,590	32,163	34,234	33,370	32,878	32,845	32,821	32,051	31,257	31,135	32,195
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	184,497	178,877	175,477	176,401	170,793	167,024	162,228	159,641	159,058	161,071	161,689	154,078
Industrial	21,102	19,786	18,536	17,858	17,486	17,443	16,119	15,146	14,398	14,266	14,547	13,603
Office	42,500	40,055	39,312	39,592	37,740	37,121	37,244	36,239	35,676	35,531	36,180	34,578
Hotels, motels	12,098	11,584	11,038	11,428	11,308	10,262	9,767	9,216	9,260	9,382	9,217	9,146
Other commercial	61,796	60,548	60,068	59,763	56,637	55,216	53,201	53,212	54,062	54,279	53,569	50,646
Religious	8,517	8,549	8,692	8,774	8,702	8,324	8,132	8,160	7,728	7,404	8,146	7,734
Educational	13,927	13,605	13,619	14,115	13,312	11,969	11,730	11,747	11,885	13,108	13,178	12,846
Hospital and institutional	15,687	15,935	16,031	16,421	17,062	18,183	17,889	17,477	18,105	18,731	19,286	18,079
Miscellaneous ¹	8,871	8,817	8,182	8,450	8,546	8,505	8,146	8,445	7,944	8,369	7,567	7,445
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	19,088	19,664	18,273	18,694	18,115	18,994	18,564	17,091	16,303	17,354	16,455	18,151
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,560	2,733	2,688	2,629	2,405	2,453	2,282	2,495	2,511	2,398	2,588	2,140
Public construction	214,180	219,721	206,148	208,481	212,613	205,636	207,622	207,776	211,438	209,253	215,292	216,110
Buildings	99,976	102,102	99,040	101,297	103,690	100,613	101,308	102,320	103,120	103,645	105,451	102,521
Housing and redevelopment	5,320	5,631	5,220	5,388	5,208	5,604	5,884	5,850	5,604	5,373	5,495	5,536
Industrial	1,459	2,312	1,871	2,096	2,091	1,920	1,859	2,228	1,376	2,079	1,947	1,851
Educational	54,759	56,112	54,239	56,969	58,502	54,969	55,558	55,776	56,641	57,242	57,422	55,741
Hospital	4,987	4,762	4,538	4,637	4,630	4,758	4,994	4,941	5,228	4,835	5,392	5,458
Other ³	33,449	33,286	33,172	32,207	33,258	33,362	33,013	33,525	34,271	34,116	35,195	33,935
Highways and streets	66,092	68,148	58,268	57,957	58,909	57,803	59,324	58,281	59,541	56,217	59,510	63,432
Military facilities	2,463	2,505	2,613	2,724	3,114	2,985	3,299	2,853	3,164	2,718	2,970	3,410
Conservation and development	8,143	8,627	8,628	7,755	7,479	7,496	7,348	7,599	8,393	8,630	7,777	8,054
Other public construction	37,507	38,339	37,598	38,748	39,421	36,740	36,341	36,723	37,221	38,043	39,584	38,693
Sewer systems	11,312	11,602	11,104	11,126	11,484	10,732	11,055	11,040	10,918	10,771	10,885	11,037
Water supply facilities	8,481	8,545	8,174	8,436	8,859	8,688	7,765	8,164	8,717	8,695	8,723	9,097
Miscellaneous public ⁴	17,713	18,191	18,321	19,186	19,078	17,321	17,521	17,519	17,585	18,577	19,977	18,559

NA Not available, but estimates are included in total.

¹Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc. ²Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc. ³Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc.⁴Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc.

Table 5a. **Monthly Value of Construction Put in Place: May 2001-May 2003—Seasonally Adjusted Annual Rate in 1996 Dollars**

[Millions of dollars]

Period	Total construction	Private construction																All other private ⁵	
		Total ¹	Residential buildings					Nonresidential buildings									Public utilities ⁴		
			Total ²	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous ³	Total	Telecommunications		
				Total	1 unit	2 units or more													
2001: May ^f	720,242	544,767	316,731	230,740	205,666	25,073	169,754	24,797	44,216	11,952	51,096	6,900	9,838	12,810	8,145	(NA)	21,403	2,491	
June ^f	722,377	551,503	320,621	231,653	206,791	24,863	172,509	25,985	45,856	12,405	50,219	7,160	9,940	12,585	8,360	(NA)	18,268	2,727	
July ^f	715,906	547,686	324,750	231,056	206,464	24,592	169,497	25,394	43,146	12,710	51,117	7,254	9,728	12,303	7,846	(NA)	17,804	2,613	
August ^f	701,055	537,289	319,753	229,951	205,516	24,434	161,317	24,228	39,373	12,142	49,077	7,126	10,185	11,718	7,468	(NA)	18,179	2,542	
September ^f	692,395	531,434	316,183	229,324	205,070	24,254	158,614	23,952	38,628	11,954	47,861	6,984	10,653	11,712	6,870	(NA)	18,037	2,563	
October ^f	686,677	521,969	309,541	227,600	203,392	24,207	155,900	20,666	38,718	11,183	48,152	6,728	11,157	11,870	7,425	(NA)	17,289	2,302	
November ^f	693,279	526,910	319,771	226,857	201,842	25,014	151,046	18,373	36,953	10,997	48,208	6,798	11,155	11,193	7,369	(NA)	17,296	2,255	
December ^f	703,784	535,318	322,932	226,931	201,147	25,785	149,721	18,518	35,366	10,328	47,781	6,753	11,560	12,045	7,368	(NA)	18,051	2,260	
2002: January ^f	715,522	537,563	323,179	228,394	201,297	27,097	150,487	17,212	34,665	9,868	50,405	6,947	11,360	12,795	7,235	(NA)	17,890	2,195	
February ^f	724,914	542,931	337,159	235,352	209,027	26,325	145,666	16,112	32,618	9,433	49,306	6,962	11,079	12,976	7,180	(NA)	18,326	2,334	
March ^f	709,775	538,486	332,902	238,029	212,049	25,980	143,130	15,119	32,065	9,003	48,995	7,090	11,108	13,076	6,674	(NA)	17,109	2,303	
April ^f	717,924	545,312	340,157	239,850	212,175	27,675	143,883	14,566	32,293	9,322	48,746	7,156	11,513	13,394	6,892	(NA)	17,455	2,239	
May ^f	704,258	528,723	336,712	239,610	212,677	26,933	139,195	14,251	30,758	9,216	46,159	7,092	10,849	13,906	6,965	(NA)	16,899	2,040	
June ^f	694,257	525,746	337,090	239,165	212,650	26,514	135,682	14,170	30,155	8,336	44,855	6,762	9,723	14,771	6,909	(NA)	17,538	2,058	
July ^f	699,018	528,703	343,867	240,184	213,696	26,488	132,000	13,116	30,304	7,947	43,288	6,617	9,544	14,556	6,628	(NA)	17,189	1,916	
August ^f	688,109	517,654	341,304	239,085	212,552	26,533	129,895	12,324	29,486	7,498	43,297	6,640	9,558	14,220	6,871	(NA)	15,854	2,093	
September ^f	686,565	513,159	335,715	240,280	214,516	25,764	129,210	11,696	28,981	7,523	43,917	6,277	9,655	14,708	6,453	(NA)	15,151	2,110	
October ^f	688,767	517,345	336,612	241,076	216,110	24,966	130,316	11,542	28,747	7,591	43,915	5,990	10,605	15,154	6,771	(NA)	16,099	2,013	
November ^f	702,822	526,381	343,872	243,722	218,972	24,750	130,605	11,750	29,224	7,445	43,270	6,580	10,644	15,578	6,112	(NA)	15,278	2,177	
December ^f	707,682	531,144	352,800	250,019	224,589	25,431	123,956	10,943	27,818	7,358	40,745	6,222	10,335	14,545	5,990	(NA)	16,775	1,794	
2003: January ^f	717,399	538,250	357,284	257,312	229,820	27,492	127,809	11,183	27,196	7,824	44,561	6,713	10,333	14,130	5,868	(NA)	13,770	1,873	
February ^f	715,448	538,045	359,479	257,545	230,419	27,126	126,483	10,807	26,871	7,940	43,310	6,697	10,101	14,694	6,063	(NA)	13,785	1,553	
March ^f	706,971	537,342	352,479	253,539	227,574	25,964	127,289	11,356	27,161	8,119	43,363	6,593	10,170	14,640	5,886	(NA)	14,172	1,886	
April ^f	702,559	532,027	349,272	252,107	225,633	26,474	125,679	10,600	25,903	8,333	43,118	6,675	10,420	14,853	5,777	(NA)	14,267	1,906	
May ^p	689,614	523,036	346,889	250,886	224,134	26,752	125,019	10,582	25,653	8,489	43,162	6,788	9,899	14,900	5,546	(NA)	(NA)	1,816	
PERCENT CHANGE																			
April 2003-																			
May 2003	-1.8	-1.7	-0.7	-0.5	-0.7	1.1	-0.5	-0.2	-1.0	1.9	0.1	1.7	-5.0	0.3	-4.0	(NA)	(NA)	-4.7	

See footnotes at end of table.

Table 5a. **Monthly Value of Construction Put in Place: May 2001-May 2003—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 ⁷
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
2001: May ^f	175,476	79,254	4,332	1,137	41,188	3,587	29,010	54,278	2,289	6,817	9,375	7,080	16,383
June ^f	170,874	76,609	4,240	1,214	39,031	3,652	28,473	53,809	2,459	5,999	9,120	7,583	15,295
July ^f	168,221	76,486	3,911	1,232	41,525	3,434	26,385	51,835	2,312	5,844	8,907	7,323	15,513
August ^f	163,766	75,916	3,906	1,229	41,853	3,443	25,483	47,349	2,590	6,336	9,219	7,281	15,075
September ^f	160,961	76,651	3,877	1,550	41,952	3,489	25,782	44,403	2,398	6,708	8,832	7,472	14,496
October ^f	164,708	78,776	4,273	834	43,257	3,318	27,094	46,623	2,406	6,396	9,197	6,751	14,560
November ^f	166,369	77,339	4,375	1,142	42,600	3,395	25,827	48,107	2,359	6,281	9,867	7,292	15,123
December ^f	168,466	78,763	4,710	1,917	42,321	3,467	26,347	48,419	2,071	6,540	9,204	7,433	16,037
2002: January ^f	177,958	81,504	4,298	1,190	44,665	4,068	27,283	54,712	2,024	7,245	10,064	7,218	15,191
February ^f	181,983	83,108	4,548	1,883	45,694	3,878	27,106	56,135	2,051	7,641	10,277	7,236	15,535
March ^f	171,289	80,742	4,216	1,526	44,241	3,701	27,057	48,195	2,147	7,676	9,879	6,951	15,699
April ^f	172,613	82,585	4,356	1,710	46,467	3,782	26,270	47,662	2,231	6,851	9,829	7,113	16,343
May ^f	175,535	84,466	4,203	1,704	47,679	3,774	27,106	48,246	2,544	6,578	10,100	7,420	16,182
June ^f	168,511	81,699	4,519	1,560	44,654	3,865	27,102	46,842	2,423	6,512	9,324	7,180	14,531
July ^f	170,315	82,389	4,745	1,513	45,206	4,063	26,862	48,114	2,680	6,390	9,613	6,418	14,711
August ^f	170,455	83,224	4,729	1,813	45,383	4,020	27,278	47,268	2,318	6,608	9,600	6,741	14,697
September ^f	173,407	83,722	4,505	1,118	46,012	4,247	27,840	48,329	2,568	7,304	9,502	7,204	14,777
October ^f	171,422	83,800	4,292	1,682	46,312	3,912	27,602	45,854	2,208	7,465	9,318	7,180	15,597
November ^f	176,441	85,108	4,368	1,573	46,383	4,355	28,429	48,779	2,417	6,716	9,399	7,221	16,801
December ^f	176,537	82,398	4,373	1,489	44,844	4,391	27,301	51,908	2,768	6,919	9,482	7,505	15,557
2003: January ^f	179,150	83,973	4,747	1,787	46,374	3,954	27,112	52,876	2,567	6,881	9,468	7,648	15,736
February ^f	177,403	81,948	4,641	1,468	44,360	4,536	26,943	52,939	2,583	6,995	9,623	7,938	15,376
March ^f	169,629	81,677	4,418	1,498	45,386	4,318	26,058	48,314	2,270	6,824	8,979	7,360	14,205
April ^f	170,531	80,732	4,505	1,488	44,586	4,065	26,088	47,674	2,485	7,345	9,321	7,023	15,951
May ^p	166,578	80,553	4,346	1,954	44,297	4,378	25,577	45,177	2,658	7,323	9,414	6,790	14,663
PERCENT CHANGE													
April 2003- May 2003	-2.3	-0.2	-3.5	31.3	-0.6	7.7	-2.0	-5.2	7.0	-0.3	1.0	-3.3	-8.1

NA Not available, but estimates are included in totals. ^fPreliminary. ^rRevised.

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

**Table 5b. Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996
Dollars**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	680,543	697,867	695,201	684,825	679,259	683,241	694,158	688,378	694,192	698,896	715,727	726,067
Private construction	526,640	538,834	538,905	529,385	527,367	533,301	541,565	536,757	541,874	546,139	556,537	562,745
Residential buildings	300,971	304,747	307,859	307,714	309,818	311,570	315,317	319,998	323,937	328,462	332,661	337,095
New housing units	225,518	226,936	227,781	226,558	225,802	224,837	225,157	226,705	227,409	228,633	231,504	236,226
1 unit	201,052	201,728	202,388	201,460	201,254	200,499	200,431	201,201	202,282	203,973	206,968	211,270
2 units or more	24,466	25,208	25,393	25,098	24,548	24,338	24,727	25,503	25,128	24,660	24,536	24,956
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	179,603	182,716	179,589	175,997	174,384	171,701	172,372	169,428	170,522	168,237	170,294	170,274
Industrial	34,394	33,482	32,153	30,332	29,423	29,006	29,645	28,214	27,536	25,991	25,773	26,458
Office	42,845	44,411	42,645	41,754	41,782	42,371	41,764	43,173	44,227	43,346	41,458	41,109
Hotels, motels	15,611	16,323	15,500	14,638	14,506	13,515	14,171	13,326	13,137	13,585	13,741	13,810
Other commercial	49,741	50,741	51,770	51,226	51,822	50,559	50,680	49,268	50,092	49,467	53,430	52,113
Religious	7,098	6,836	6,681	6,821	6,750	6,790	6,712	6,519	6,135	6,623	6,199	6,332
Educational	8,018	8,352	8,703	9,424	8,314	8,781	8,644	8,341	8,319	8,517	8,836	9,245
Hospital and institutional	12,287	12,791	12,462	12,233	12,229	11,824	11,850	11,859	12,121	12,055	11,887	11,721
Miscellaneous ¹	9,609	9,781	9,674	9,570	9,557	8,854	8,907	8,728	8,955	8,652	8,970	9,487
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	13,069	13,988	17,316	17,586	16,458	16,628	19,342	19,555	19,282	20,563	21,079	21,435
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,231	2,339	2,661	3,032	2,764	2,644	2,572	2,280	2,273	2,156	2,452	2,701
Public construction	153,903	159,033	156,295	155,440	151,893	149,941	152,593	151,620	152,318	152,757	159,190	163,322
Buildings	69,566	71,883	72,110	71,982	69,789	70,890	70,853	71,795	71,904	71,910	72,957	73,045
Housing and redevelopment	4,514	4,533	4,758	4,675	4,854	4,502	4,722	5,003	4,850	4,557	4,390	4,584
Industrial	765	842	931	845	936	759	955	761	888	531	769	897
Educational	35,350	36,010	36,370	38,121	36,143	37,675	36,198	36,651	37,172	36,647	37,410	36,422
Hospital	3,674	4,347	3,520	3,220	3,603	3,584	3,696	3,542	3,613	3,634	3,678	3,644
Other ³	25,263	26,152	26,531	25,120	24,254	24,370	25,282	25,839	25,381	26,541	26,711	27,497
Highways and streets	45,947	47,974	45,689	45,156	45,102	41,952	43,747	42,121	44,027	43,200	47,516	50,294
Military facilities	1,755	2,235	2,026	2,071	1,935	1,931	2,068	1,475	1,775	1,958	1,787	2,141
Conservation and development	5,538	5,861	5,557	5,339	4,983	5,357	5,473	6,082	5,846	5,592	6,226	6,550
Other public construction	31,097	31,080	30,915	30,891	30,084	29,810	30,453	30,148	28,767	30,097	30,703	31,292
Sewer systems	10,346	9,930	10,237	9,573	9,636	9,738	9,952	9,558	9,499	9,556	9,685	10,602
Water supply facilities	6,732	6,892	7,062	6,420	6,394	6,593	6,941	6,803	6,515	6,051	6,215	6,132
Miscellaneous public ⁴	14,018	14,259	13,617	14,898	14,054	13,479	13,561	13,787	12,753	14,489	14,803	14,558

See footnotes at end of table.

Table 5b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996**
Dollars—Con.

[Millions of dollars]

Type of construction	2000											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	723,982	731,562	739,475	730,464	720,271	712,481	700,730	714,662	721,552	718,631	714,564	713,475
Private construction	555,744	570,617	571,256	565,141	560,213	556,466	546,858	553,243	556,803	555,562	553,473	550,602
Residential buildings	336,287	340,466	338,682	337,637	327,417	325,838	316,316	316,119	313,688	317,993	315,470	315,055
New housing units	236,645	236,696	237,254	235,844	233,438	230,702	225,661	224,258	223,968	224,267	225,327	225,327
1 unit	211,491	212,748	211,252	210,150	208,547	205,806	202,460	201,042	200,488	200,103	200,038	200,505
2 units or more	25,154	23,949	26,002	25,694	24,892	24,896	23,200	23,217	23,480	23,762	24,229	24,823
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	169,122	176,398	177,438	175,801	179,851	179,233	177,978	180,821	181,033	179,793	178,597	178,397
Industrial	25,482	26,078	27,201	27,267	28,545	28,510	27,613	27,348	26,817	27,163	27,515	26,002
Office	40,964	42,663	45,390	46,371	47,482	47,175	47,370	48,894	50,896	49,634	50,337	51,496
Hotels, motels	14,650	14,225	14,810	14,558	14,388	14,080	14,102	13,563	13,638	13,362	13,042	12,845
Other commercial	51,416	55,577	51,967	50,695	51,364	51,723	50,607	52,212	52,115	51,754	50,047	50,623
Religious	6,669	6,912	7,036	6,780	6,766	7,183	7,344	6,746	6,814	6,874	6,447	6,628
Educational	9,050	9,504	9,627	9,205	10,029	9,364	9,646	10,454	9,559	10,051	10,039	9,956
Hospital and institutional	11,583	11,770	11,884	12,112	12,020	12,295	12,608	12,591	12,618	12,667	12,797	13,054
Miscellaneous ¹	9,307	9,670	9,522	8,813	9,257	8,901	8,687	9,012	8,575	8,289	8,373	7,794
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,685	15,925	18,453	16,536	17,579	18,395	17,004	16,581	21,343	17,390	18,652	22,508
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,229	2,620	2,609	2,389	2,398	2,417	2,456	2,802	2,860	2,854	2,891	2,697
Public construction	168,237	160,945	168,219	165,323	160,058	156,015	153,872	161,419	164,748	163,069	161,092	162,874
Buildings	75,540	76,117	76,831	76,250	77,021	76,804	75,322	77,160	77,814	78,872	77,255	79,355
Housing and redevelopment	4,114	4,089	4,541	4,412	4,276	4,350	4,123	4,351	4,133	4,301	4,296	4,161
Industrial	1,050	1,114	968	965	966	983	1,014	1,127	945	834	947	994
Educational	39,343	40,170	40,080	38,302	39,094	38,993	37,239	38,272	38,955	38,894	38,827	41,482
Hospital	3,829	3,712	3,711	4,306	4,452	4,304	4,375	4,336	4,363	3,943	4,161	3,495
Other ³	27,204	27,033	27,531	28,265	28,232	28,174	28,571	29,074	29,418	30,900	29,024	29,223
Highways and streets	54,815	45,185	50,533	50,060	45,054	41,408	43,625	47,143	48,320	43,618	43,679	45,103
Military facilities	1,584	2,542	2,210	1,984	2,046	1,952	1,885	2,096	2,200	1,844	2,792	2,052
Conservation and development	6,069	6,380	5,974	5,831	5,105	5,618	5,144	5,369	6,021	6,452	5,521	6,216
Other public construction	30,230	30,721	32,671	31,198	30,833	30,233	27,897	29,651	30,394	32,284	31,844	30,147
Sewer systems	9,472	9,653	9,763	10,584	9,574	10,000	9,026	9,114	8,824	8,921	8,887	8,796
Water supply facilities	6,902	6,760	6,406	6,292	6,430	5,824	5,334	6,420	6,270	6,272	6,223	6,145
Miscellaneous public ⁴	13,855	14,308	16,501	14,322	14,829	14,409	13,536	14,117	15,300	17,091	16,734	15,206

See footnotes at end of table.

Table 5b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996**
Dollars—Con.

[Millions of dollars]

Type of construction	2001											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	713,794	717,704	718,618	728,971	720,242	722,377	715,906	701,055	692,395	686,677	693,279	703,784
Private construction	546,544	549,414	547,537	553,970	544,767	551,503	547,686	537,289	531,434	521,969	526,910	535,318
Residential buildings	312,806	322,983	315,700	322,680	316,731	320,621	324,750	319,753	316,183	309,541	319,771	322,932
New housing units	226,678	231,437	229,391	230,014	230,740	231,653	231,056	229,951	229,324	227,600	226,857	226,931
1 unit	201,706	205,687	204,030	205,025	205,666	206,791	206,464	205,516	205,070	203,392	201,842	201,147
2 units or more	24,973	25,750	25,361	24,990	25,073	24,863	24,592	24,434	24,254	24,207	25,014	25,785
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	182,260	178,835	181,240	176,578	169,754	172,509	169,497	161,317	158,614	155,900	151,046	149,721
Industrial	29,222	27,157	28,485	27,417	24,797	25,985	25,394	24,228	23,952	20,666	18,373	18,518
Office	50,640	48,634	50,318	47,161	44,216	45,856	43,146	39,373	38,628	38,718	36,953	35,366
Hotels, motels	12,737	13,026	12,116	11,883	11,952	12,405	12,710	12,142	11,954	11,183	10,997	10,328
Other commercial	51,427	52,548	52,017	52,557	51,096	50,219	51,117	49,077	47,861	48,152	48,208	47,781
Religious	6,633	6,774	6,809	6,983	6,900	7,160	7,254	7,126	6,984	6,728	6,798	6,753
Educational	10,347	9,957	10,088	10,100	9,838	9,940	9,728	10,185	10,653	11,157	11,155	11,560
Hospital and institutional	13,274	12,699	13,010	12,501	12,810	12,585	12,303	11,718	11,712	11,870	11,193	12,045
Miscellaneous ¹	7,979	8,041	8,397	7,976	8,145	8,360	7,846	7,468	6,870	7,425	7,369	7,368
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	19,758	18,629	17,718	19,723	21,403	18,268	17,804	18,179	18,037	17,289	17,296	18,051
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,543	2,642	2,321	2,420	2,491	2,727	2,613	2,542	2,563	2,302	2,255	2,260
Public construction	167,250	168,290	171,081	175,002	175,476	170,874	168,221	163,766	160,961	164,708	166,369	168,466
Buildings	78,578	76,975	78,066	80,102	79,254	76,609	76,486	75,916	76,651	78,776	77,339	78,763
Housing and redevelopment	4,286	4,168	4,075	4,148	4,332	4,240	3,911	3,906	3,877	4,273	4,375	4,710
Industrial	1,350	1,137	1,157	1,335	1,137	1,214	1,232	1,229	1,550	834	1,142	1,917
Educational	39,738	39,028	40,141	41,040	41,188	39,031	41,525	41,853	41,952	43,257	42,600	42,321
Hospital	3,675	3,603	3,401	3,510	3,587	3,652	3,434	3,443	3,489	3,318	3,395	3,467
Other ³	29,529	29,039	29,292	30,069	29,010	28,473	26,385	25,483	25,782	27,094	25,827	26,347
Highways and streets	46,554	49,321	51,774	53,142	54,278	53,809	51,835	47,349	44,403	46,623	48,107	48,419
Military facilities	2,391	2,244	2,123	2,746	2,289	2,459	2,312	2,590	2,398	2,406	2,359	2,071
Conservation and development	7,234	7,283	7,134	6,136	6,817	5,999	5,844	6,336	6,708	6,396	6,281	6,540
Other public construction	32,493	32,468	31,985	32,875	32,838	31,998	31,743	31,576	30,801	30,507	32,282	32,674
Sewer systems	9,229	9,320	9,177	9,601	9,375	9,120	8,907	9,219	8,832	9,197	9,867	9,204
Water supply facilities	6,353	6,681	7,169	7,441	7,080	7,583	7,323	7,281	7,472	6,751	7,292	7,433
Miscellaneous public ⁴	16,911	16,466	15,640	15,833	16,383	15,295	15,513	15,075	14,496	14,560	15,123	16,037

See footnotes at end of table.

Table 5b. **Monthly Value of Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996**
Dollars—Con.

[Millions of dollars]

Type of construction	2002											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	715,522	724,914	709,775	717,924	704,258	694,257	699,018	688,109	686,565	688,767	702,822	707,682
Private construction	537,563	542,931	538,486	545,312	528,723	525,746	528,703	517,654	513,159	517,345	526,381	531,144
Residential buildings	323,179	337,159	332,902	340,157	336,712	337,090	343,867	341,304	335,715	336,612	343,872	352,800
New housing units	228,394	235,352	238,029	239,850	239,610	239,165	240,184	239,085	240,280	241,076	243,722	250,019
1 unit	201,297	209,027	212,049	212,175	212,677	212,650	213,696	212,552	214,516	216,110	218,972	224,589
2 units or more	27,097	26,325	25,980	27,675	26,933	26,514	26,488	26,533	25,764	24,966	24,750	25,431
Improvements	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	150,487	145,666	143,130	143,883	139,195	135,682	132,000	129,895	129,210	130,316	130,605	123,956
Industrial	17,212	16,112	15,119	14,566	14,251	14,170	13,116	12,324	11,696	11,542	11,750	10,943
Office	34,665	32,618	32,065	32,293	30,758	30,155	30,304	29,486	28,981	28,747	29,224	27,818
Hotels, motels	9,868	9,433	9,003	9,322	9,216	8,336	7,947	7,498	7,523	7,591	7,445	7,358
Other commercial	50,405	49,306	48,995	48,746	46,159	44,855	43,288	43,297	43,917	43,915	43,270	40,745
Religious	6,947	6,962	7,090	7,156	7,092	6,762	6,617	6,640	6,277	5,990	6,580	6,222
Educational	11,360	11,079	11,108	11,513	10,849	9,723	9,544	9,558	9,655	10,605	10,644	10,335
Hospital and institutional	12,795	12,976	13,076	13,394	13,906	14,771	14,556	14,220	14,708	15,154	15,578	14,545
Miscellaneous ¹	7,235	7,180	6,674	6,892	6,965	6,909	6,628	6,871	6,453	6,771	6,112	5,990
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	17,890	18,326	17,109	17,455	16,899	17,538	17,189	15,854	15,151	16,099	15,278	16,775
Railroads	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,195	2,334	2,303	2,239	2,040	2,058	1,916	2,093	2,110	2,013	2,177	1,794
Public construction	177,958	181,983	171,289	172,613	175,535	168,511	170,315	170,455	173,407	171,422	176,441	176,537
Buildings	81,504	83,108	80,742	82,585	84,466	81,699	82,389	83,224	83,722	83,800	85,108	82,398
Housing and redevelopment	4,298	4,548	4,216	4,356	4,203	4,519	4,745	4,729	4,505	4,292	4,368	4,373
Industrial	1,190	1,883	1,526	1,710	1,704	1,560	1,513	1,813	1,118	1,682	1,573	1,489
Educational	44,665	45,694	44,241	46,467	47,679	44,654	45,206	45,383	46,012	46,312	46,383	44,844
Hospital	4,068	3,878	3,701	3,782	3,774	3,865	4,063	4,020	4,247	3,912	4,355	4,391
Other ³	27,283	27,106	27,057	26,270	27,106	27,102	26,862	27,278	27,840	27,602	28,429	27,301
Highways and streets	54,712	56,135	48,195	47,662	48,246	46,842	48,114	47,268	48,329	45,854	48,779	51,908
Military facilities	2,024	2,051	2,147	2,231	2,544	2,423	2,680	2,318	2,568	2,208	2,417	2,768
Conservation and development	7,245	7,641	7,676	6,851	6,578	6,512	6,390	6,608	7,304	7,465	6,716	6,919
Other public construction	32,474	33,048	32,528	33,284	33,701	31,035	30,742	31,039	31,484	32,096	33,421	32,544
Sewer systems	10,064	10,277	9,879	9,829	10,100	9,324	9,613	9,600	9,502	9,318	9,399	9,482
Water supply facilities	7,218	7,236	6,951	7,113	7,420	7,180	6,418	6,741	7,204	7,180	7,221	7,505
Miscellaneous public ⁴	15,191	15,535	15,699	16,343	16,182	14,531	14,711	14,697	14,777	15,597	16,801	15,557

NA Not available, but estimates are included in total.

¹Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc. ²Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc. ³Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc.

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

Table 6a. **Monthly Value of Construction Put in Place: May 2001-May 2003—Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Period	Total construction	Private construction															All other private ⁵	
		Total ¹	Residential buildings					Nonresidential buildings								Public utilities ⁴		
			Total ²	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous ³	Total		Telecommunications
				Total	1 unit	2 units or more												
YEAR TO DATE																		
May 2002	266,964	204,662	125,384	90,284	79,509	10,776	56,964	6,053	13,156	3,835	18,682	2,739	4,287	5,400	2,813	(NA)	6,733	814
May 2003	262,904	201,815	131,845	96,680	85,947	10,733	49,843	4,266	10,746	3,328	16,689	2,591	3,903	5,968	2,350	(NA)	(NA)	665
Percent change	-1.5	-1.4	5.2	7.1	8.1	-0.4	-12.5	-29.5	-18.3	-13.2	-10.7	-5.4	-9.0	10.5	-16.5	(NA)	(NA)	-18.3
MONTHLY DATA																		
2001: May ^f	62,433	47,518	28,134	19,986	17,790	2,196	14,428	2,081	3,836	1,023	4,296	566	852	1,079	694	(NA)	1,817	198
June ^f	65,839	49,969	29,889	20,947	18,749	2,198	14,877	2,250	3,879	1,060	4,394	579	940	1,059	717	(NA)	1,577	235
July ^f	66,166	50,070	30,451	21,402	19,287	2,115	14,646	2,188	3,631	1,070	4,537	610	939	1,007	665	(NA)	1,494	231
August ^f	66,874	49,865	30,226	21,455	19,284	2,171	14,324	2,106	3,409	1,036	4,486	640	1,001	997	648	(NA)	1,688	248
September ^f	64,421	48,195	29,394	20,954	18,901	2,054	13,937	2,100	3,293	990	4,399	625	938	1,001	591	(NA)	1,461	242
October ^f	63,164	47,602	28,614	20,426	18,322	2,104	13,865	1,848	3,394	953	4,418	631	934	1,033	653	(NA)	1,644	219
November ^f	59,544	45,508	27,648	19,588	17,493	2,095	12,942	1,572	3,172	923	4,170	611	903	965	626	(NA)	1,590	197
December ^f	52,393	40,269	23,039	16,815	14,784	2,031	11,950	1,560	2,826	843	3,727	549	860	991	593	(NA)	1,539	189
2002: January ^f	48,960	37,528	22,084	15,947	13,889	2,057	11,227	1,295	2,692	788	3,566	544	807	998	537	(NA)	1,266	154
February ^f	47,376	36,085	21,097	15,650	13,674	1,977	10,861	1,188	2,512	732	3,554	518	786	1,024	547	(NA)	1,284	158
March ^f	52,637	41,081	25,042	18,488	16,416	2,072	11,302	1,202	2,592	730	3,773	536	841	1,078	551	(NA)	1,323	171
April ^f	57,102	43,971	27,416	19,525	17,222	2,304	11,795	1,184	2,699	802	3,908	577	914	1,127	584	(NA)	1,424	169
May ^f	60,889	45,997	29,745	20,674	18,308	2,366	11,779	1,184	2,661	783	3,881	564	939	1,173	594	(NA)	1,436	162
June ^f	63,407	47,857	31,546	21,598	19,263	2,335	11,690	1,216	2,531	711	3,921	555	919	1,244	593	(NA)	1,438	178
July ^f	65,095	48,666	32,219	22,343	20,034	2,309	11,446	1,139	2,568	676	3,835	556	919	1,192	561	(NA)	1,500	170
August ^f	65,697	48,195	32,309	22,317	19,980	2,337	11,546	1,064	2,531	642	3,965	601	940	1,206	597	(NA)	1,427	205
September ^f	64,618	46,972	31,346	22,017	19,825	2,192	11,428	1,020	2,497	636	4,051	563	848	1,258	555	(NA)	1,268	200
October ^f	63,419	47,237	31,047	21,732	19,558	2,174	11,614	1,032	2,520	652	4,029	573	890	1,321	597	(NA)	1,531	191
November ^f	60,181	45,470	29,806	21,093	19,032	2,060	11,151	1,011	2,487	608	3,743	579	861	1,344	520	(NA)	1,358	190
December ^f	52,563	39,786	25,197	18,524	16,526	1,998	9,925	940	2,246	599	3,178	511	771	1,196	483	(NA)	1,501	150
2003: January ^f	48,897	37,362	24,329	17,873	15,781	2,092	9,490	831	2,108	616	3,153	510	736	1,102	435	(NA)	975	132
February ^f	46,562	35,529	22,550	17,029	14,996	2,032	9,433	797	2,067	616	3,118	498	715	1,158	462	(NA)	963	105
March ^f	52,160	40,720	26,307	19,653	17,580	2,073	10,064	891	2,200	675	3,328	508	769	1,205	487	(NA)	1,073	140
April ^f	56,049	42,986	28,283	20,550	18,333	2,217	10,288	868	2,169	698	3,457	530	828	1,245	493	(NA)	1,167	145
May ^p	59,236	45,218	30,376	21,575	19,257	2,319	10,568	879	2,202	723	3,633	545	855	1,258	473	(NA)	(NA)	143
PERCENT CHANGE																		
April 2003-May 2003	5.7	5.2	7.4	5.0	5.0	4.6	2.7	1.3	1.5	3.6	5.1	2.8	3.3	1.0	-4.1	(NA)	(NA)	-1.4

See footnotes at end of table.

Table 6a. **Monthly Value of Construction Put in Place: May 2001-May 2003—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 ⁷
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
YEAR TO DATE													
May 2002	62,302	31,267	1,724	631	16,786	1,526	10,600	15,201	875	2,728	3,771	2,709	5,750
May 2003	61,090	30,996	1,809	649	16,468	1,691	10,377	14,585	995	2,704	3,524	2,763	5,523
Percent change	-1.9	-0.9	4.9	2.9	-1.9	10.8	-2.1	-4.1	13.7	-0.9	-6.5	2.0	-3.9
MONTHLY DATA													
2001: May ^f	14,915	6,562	370	90	3,329	299	2,474	4,790	194	568	803	611	1,387
June ^f	15,870	6,878	367	103	3,633	317	2,458	5,421	214	516	826	661	1,353
July ^f	16,096	7,087	325	103	4,138	289	2,233	5,469	199	488	789	663	1,400
August ^f	17,008	7,418	329	102	4,429	291	2,266	5,745	224	600	866	662	1,494
September ^f	16,227	7,168	351	173	4,000	324	2,320	5,014	252	804	833	689	1,466
October ^f	15,563	6,964	381	63	3,788	294	2,438	5,070	162	457	869	653	1,388
November ^f	14,036	6,367	374	94	3,369	289	2,241	4,121	202	536	864	640	1,305
December ^f	12,125	6,004	380	161	3,104	281	2,077	2,962	180	501	680	577	1,220
2002: January ^f	11,432	5,896	333	91	3,105	320	2,047	2,690	153	511	699	487	994
February ^f	11,291	5,897	338	141	3,119	294	2,005	2,498	149	539	693	502	1,013
March ^f	11,556	5,961	333	125	3,141	289	2,073	2,498	181	584	731	504	1,097
April ^f	13,131	6,561	362	139	3,567	308	2,185	3,217	176	542	784	576	1,276
May ^f	14,892	6,952	358	135	3,854	315	2,290	4,298	216	552	864	640	1,370
June ^f	15,550	7,340	393	133	4,149	331	2,334	4,715	211	538	845	628	1,272
July ^f	16,429	7,639	394	126	4,501	347	2,270	5,248	230	549	852	581	1,330
August ^f	17,502	8,133	401	152	4,806	336	2,437	5,597	200	605	904	616	1,446
September ^f	17,646	7,808	408	124	4,383	392	2,501	5,614	271	891	900	663	1,500
October ^f	16,182	7,425	381	127	4,048	346	2,522	5,013	147	523	881	693	1,500
November ^f	14,712	6,962	373	129	3,668	366	2,427	4,073	208	560	822	634	1,453
December ^f	12,777	6,302	354	125	3,281	362	2,180	3,214	242	545	700	583	1,192
2003: January ^f	11,535	6,063	368	137	3,227	313	2,018	2,578	195	497	656	516	1,029
February ^f	11,034	5,824	346	110	3,031	345	1,991	2,329	186	501	650	548	995
March ^f	11,440	6,026	350	123	3,211	337	2,004	2,512	192	520	664	539	988
April ^f	13,063	6,430	376	121	3,415	334	2,184	3,258	195	595	747	571	1,268
May ^p	14,018	6,653	369	158	3,584	362	2,180	3,908	227	591	807	589	1,243
PERCENT CHANGE													
April 2003-May 2003	7.3	3.5	-1.9	30.6	4.9	8.4	-0.2	20.0	16.4	-0.7	8.0	3.2	-2.0

NA Not available, but estimates are included in totals. ^fPreliminary. ^rRevised.

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

Table 6b. Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	694,326	46,335	45,812	52,128	54,569	58,184	62,576	64,103	65,429	65,547	63,688	61,487	54,468
Private construction	540,220	36,708	35,902	41,328	42,563	45,541	48,563	49,603	49,933	49,971	49,411	48,141	42,556
Residential buildings	317,236	20,439	18,961	23,157	24,457	27,317	29,059	29,650	30,409	30,520	30,274	28,877	24,117
New housing units	227,467	15,478	14,824	17,645	18,364	19,370	20,342	20,927	21,212	21,028	20,591	20,068	17,619
1 unit	202,620	13,672	12,961	15,601	16,285	17,241	18,162	18,774	18,980	18,846	18,460	18,023	15,616
2 units or more	24,848	1,806	1,863	2,044	2,079	2,130	2,180	2,153	2,232	2,182	2,131	2,045	2,003
Improvements	89,769	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	173,429	13,270	13,631	14,282	14,431	14,684	14,929	14,905	15,037	15,148	14,769	14,616	13,729
Industrial	29,206	2,554	2,469	2,559	2,447	2,403	2,548	2,512	2,459	2,437	2,298	2,244	2,275
Office	42,552	3,278	3,412	3,479	3,497	3,611	3,619	3,536	3,706	3,848	3,702	3,538	3,326
Hotels, motels	14,274	1,189	1,281	1,296	1,248	1,217	1,158	1,201	1,135	1,127	1,107	1,168	1,147
Other commercial	50,870	3,490	3,624	3,943	4,094	4,353	4,449	4,523	4,557	4,625	4,551	4,604	4,056
Religious	6,590	521	505	519	542	539	561	560	595	568	602	565	514
Educational	8,621	559	588	654	746	718	845	851	826	737	708	708	680
Hospital and institutional	12,102	962	1,007	1,029	1,034	1,033	991	966	1,011	1,035	1,044	1,024	965
Miscellaneous ¹	9,214	717	744	802	825	810	757	755	747	772	757	765	764
Farm nonresidential	4,519	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	42,534	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,305	863	976	1,429	1,464	1,288	1,467	1,639	1,744	1,692	1,818	1,934	1,992
Railroads	4,311	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	13,892	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,625	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	1,401	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,501	159	158	196	229	221	223	231	220	213	206	216	230
Public construction	154,106	9,628	9,911	10,800	12,006	12,643	14,013	14,500	15,497	15,576	14,276	13,346	11,911
Buildings	71,541	4,975	5,083	5,392	5,710	5,741	6,403	6,558	6,935	6,767	6,309	6,009	5,658
Housing and redevelopment	4,661	348	333	378	386	418	388	392	417	443	412	373	373
Industrial	827	59	63	77	68	75	65	80	62	99	40	63	77
Educational	36,710	2,436	2,428	2,564	2,885	2,919	3,516	3,622	3,896	3,550	3,228	2,968	2,698
Hospital	3,639	279	326	288	264	293	316	312	294	340	312	309	305
Other ³	25,704	1,854	1,934	2,086	2,107	2,037	2,117	2,152	2,266	2,334	2,318	2,295	2,205
Highways and streets	44,601	2,045	2,171	2,559	3,240	3,792	4,307	4,579	5,012	5,107	4,604	3,991	3,194
Military facilities	1,922	136	161	172	163	163	168	176	127	186	134	152	184
Conservation and development	5,713	378	413	444	426	394	468	461	555	726	395	529	524
Other public construction	30,329	2,094	2,083	2,233	2,466	2,552	2,668	2,726	2,867	2,790	2,834	2,664	2,352
Sewer systems	9,826	714	659	765	767	821	888	875	899	895	904	849	789
Water supply facilities	6,547	457	481	506	524	549	574	629	619	598	591	550	468
Miscellaneous public ⁴	13,957	923	942	962	1,174	1,182	1,207	1,222	1,348	1,297	1,339	1,265	1,095

See footnotes at end of page.

Table 6b. **Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2000												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	718,708	49,229	48,564	55,605	57,698	62,365	65,147	64,244	68,166	67,383	65,575	61,463	53,269
Private construction	557,186	38,727	38,327	43,947	45,168	48,863	50,595	49,808	51,457	50,678	50,229	47,841	41,547
Residential buildings	323,977	22,932	21,176	25,509	26,838	29,081	30,429	29,661	30,003	29,302	29,168	27,377	22,501
New housing units	229,324	16,381	15,659	18,502	19,212	20,200	20,875	20,897	20,955	20,487	20,030	19,405	16,721
1 unit	204,867	14,505	13,811	16,390	17,075	18,022	18,660	18,896	18,898	18,495	17,993	17,353	14,771
2 units or more	24,457	1,876	1,848	2,113	2,137	2,178	2,216	2,001	2,057	1,992	2,038	2,051	1,951
Improvements	94,653	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	178,074	12,537	13,465	14,164	14,315	15,284	15,522	15,302	16,092	15,912	15,907	15,320	14,253
Industrial	27,194	1,875	2,028	2,163	2,188	2,395	2,452	2,338	2,402	2,371	2,408	2,357	2,217
Office	47,534	3,134	3,413	3,722	3,806	4,139	4,022	3,967	4,233	4,373	4,302	4,316	4,107
Hotels, motels	13,944	1,152	1,143	1,242	1,213	1,219	1,236	1,183	1,172	1,129	1,127	1,106	1,022
Other commercial	51,635	3,638	4,006	3,993	4,068	4,315	4,534	4,500	4,777	4,777	4,757	4,325	3,944
Religious	6,858	504	537	544	538	546	593	612	625	602	645	588	524
Educational	9,726	638	675	729	731	868	890	935	1,028	843	839	811	738
Hospital and institutional	12,342	904	928	981	1,020	1,014	1,033	1,031	1,073	1,079	1,101	1,104	1,074
Miscellaneous ¹	8,842	692	737	790	750	788	763	736	780	738	728	712	627
Farm nonresidential	5,116	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	47,400	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,255	1,221	1,180	1,530	1,248	1,487	1,640	1,363	1,538	1,825	1,591	1,686	1,945
Railroads	3,782	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	20,090	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,377	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	897	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,619	158	178	194	182	191	208	218	272	269	272	252	225
Public construction	161,523	10,503	10,238	11,658	12,530	13,502	14,552	14,436	16,709	16,704	15,346	13,622	11,722
Buildings	77,003	5,413	5,483	5,737	6,029	6,349	6,935	6,891	7,482	7,271	6,989	6,380	6,046
Housing and redevelopment	4,263	320	303	358	367	367	375	342	365	376	388	366	336
Industrial	991	81	83	79	78	77	83	84	93	106	63	79	84
Educational	39,023	2,725	2,732	2,846	2,927	3,157	3,629	3,711	4,053	3,718	3,413	3,071	3,043
Hospital	4,092	293	289	300	340	372	379	364	366	407	346	353	283
Other ³	28,635	1,995	2,076	2,154	2,316	2,377	2,467	2,390	2,604	2,664	2,778	2,512	2,300
Highways and streets	45,992	2,544	2,063	2,901	3,433	3,916	4,268	4,475	5,716	5,492	4,685	3,764	2,732
Military facilities	2,105	122	184	185	156	173	170	162	181	232	125	238	178
Conservation and development	5,779	405	455	475	444	428	489	421	502	741	469	471	481
Other public construction	30,643	2,019	2,052	2,359	2,469	2,636	2,691	2,487	2,828	2,969	3,078	2,770	2,285
Sewer systems	9,363	658	648	726	848	821	907	796	855	830	844	780	650
Water supply facilities	6,247	465	473	461	512	553	507	484	583	577	607	549	477
Miscellaneous public ⁴	15,033	896	931	1,172	1,109	1,262	1,277	1,208	1,391	1,561	1,628	1,441	1,158

See footnotes at end of table.

Table 6b. **Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2001												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	709,233	49,386	47,380	53,892	57,741	62,433	65,839	66,166	66,874	64,421	63,164	59,544	52,393
Private construction	541,110	38,588	36,872	42,215	44,440	47,518	49,969	50,070	49,865	48,195	47,602	45,508	40,269
Residential buildings	318,803	21,478	20,244	23,885	25,803	28,134	29,889	30,451	30,226	29,394	28,614	27,648	23,039
New housing units	229,426	15,822	15,369	17,901	18,760	19,986	20,947	21,402	21,455	20,954	20,426	19,588	16,815
1 unit	204,522	13,935	13,438	15,863	16,675	17,790	18,749	19,287	19,284	18,901	18,322	17,493	14,784
2 units or more	24,903	1,888	1,931	2,037	2,085	2,196	2,198	2,115	2,171	2,054	2,104	2,095	2,031
Improvements	89,377	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	166,852	13,667	13,374	14,434	14,407	14,428	14,877	14,646	14,324	13,937	13,865	12,942	11,950
Industrial	24,358	2,206	2,005	2,255	2,186	2,081	2,250	2,188	2,106	2,100	1,848	1,572	1,560
Office	43,126	3,941	3,745	4,092	3,907	3,836	3,879	3,631	3,409	3,293	3,394	3,172	2,826
Hotels, motels	11,950	1,008	1,012	1,022	1,010	1,023	1,060	1,070	1,036	990	953	923	843
Other commercial	50,077	3,643	3,788	4,001	4,218	4,296	4,394	4,537	4,486	4,399	4,418	4,170	3,727
Religious	6,908	509	504	531	554	566	579	610	640	625	631	611	549
Educational	10,371	732	707	764	802	852	940	939	1,001	938	934	903	860
Hospital and institutional	12,295	1,035	1,001	1,073	1,053	1,079	1,059	1,007	997	1,001	1,033	965	991
Miscellaneous ¹	7,766	592	613	696	677	694	717	665	648	591	653	626	593
Farm nonresidential	4,230	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	48,752	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	18,473	1,398	1,307	1,429	1,529	1,817	1,577	1,494	1,688	1,461	1,644	1,590	1,539
Railroads	3,861	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	21,120	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,468	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	830	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,473	179	179	172	183	198	235	231	248	242	219	197	189
Public construction	168,123	10,798	10,508	11,677	13,301	14,915	15,870	16,096	17,008	16,227	15,563	14,036	12,125
Buildings	77,774	5,671	5,476	5,828	6,350	6,562	6,878	7,087	7,418	7,168	6,964	6,367	6,004
Housing and redevelopment	4,186	332	309	322	345	370	367	325	329	351	381	374	380
Industrial	1,282	104	85	95	108	90	103	102	102	173	63	94	161
Educational	41,207	2,759	2,661	2,851	3,147	3,329	3,633	4,138	4,429	4,000	3,788	3,369	3,104
Hospital	3,497	290	272	271	281	299	317	289	291	324	294	289	281
Other ³	27,602	2,187	2,149	2,290	2,469	2,474	2,458	2,233	2,266	2,320	2,438	2,241	2,077
Highways and streets	49,549	2,262	2,199	2,835	3,662	4,790	5,421	5,469	5,745	5,014	5,070	4,121	2,962
Military facilities	2,365	182	163	178	216	194	214	199	224	252	162	202	180
Conservation and development	6,503	506	509	544	473	568	516	488	600	804	457	536	501
Other public construction	31,932	2,177	2,162	2,292	2,600	2,801	2,840	2,853	3,022	2,989	2,910	2,810	2,478
Sewer systems	9,249	641	628	681	768	803	826	789	866	833	869	864	680
Water supply facilities	7,173	428	465	518	605	611	661	663	662	689	653	640	577
Miscellaneous public ⁴	15,511	1,107	1,069	1,093	1,227	1,387	1,353	1,400	1,494	1,466	1,388	1,305	1,220

See footnotes at end of table.

Table 6b. **Annual and Monthly Value of Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2002												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	701,943	48,960	47,376	52,637	57,102	60,889	63,407	65,095	65,697	64,618	63,419	60,181	52,563
Private construction	528,844	37,528	36,085	41,081	43,971	45,997	47,857	48,666	48,195	46,972	47,237	45,470	39,786
Residential buildings	338,852	22,084	21,097	25,042	27,416	29,745	31,546	32,219	32,309	31,346	31,047	29,806	25,197
New housing units	239,908	15,947	15,650	18,488	19,525	20,674	21,598	22,343	22,317	22,017	21,732	21,093	18,524
1 unit	213,727	13,889	13,674	16,416	17,222	18,308	19,263	20,034	19,980	19,825	19,558	19,032	16,526
2 units or more	26,182	2,057	1,977	2,072	2,304	2,366	2,335	2,309	2,337	2,192	2,174	2,060	1,998
Improvements	98,944	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings	135,764	11,227	10,861	11,302	11,795	11,779	11,690	11,446	11,546	11,428	11,614	11,151	9,925
Industrial	13,475	1,295	1,188	1,202	1,184	1,184	1,216	1,139	1,064	1,020	1,032	1,011	940
Office	30,536	2,692	2,512	2,592	2,699	2,661	2,531	2,568	2,531	2,497	2,520	2,487	2,246
Hotels, motels	8,359	788	732	730	802	783	711	676	642	636	652	608	599
Other commercial	45,404	3,566	3,554	3,773	3,908	3,881	3,921	3,835	3,965	4,051	4,029	3,743	3,178
Religious	6,676	544	518	536	577	564	555	556	601	563	573	579	511
Educational	10,434	807	786	841	914	939	919	919	940	848	890	861	771
Hospital and institutional	14,161	998	1,024	1,078	1,127	1,173	1,244	1,192	1,206	1,258	1,321	1,344	1,196
Miscellaneous ¹	6,719	537	547	551	584	594	593	561	597	555	597	520	483
Farm nonresidential	4,095	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities	48,036	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications	16,757	1,266	1,284	1,323	1,424	1,436	1,438	1,500	1,427	1,268	1,531	1,358	1,501
Railroads	4,108	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power	21,396	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas	4,747	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines	1,029	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private ²	2,096	154	158	171	169	162	178	170	205	200	191	190	150
Public construction	173,099	11,432	11,291	11,556	13,131	14,892	15,550	16,429	17,502	17,646	16,182	14,712	12,777
Buildings	82,876	5,896	5,897	5,961	6,561	6,952	7,340	7,639	8,133	7,808	7,425	6,962	6,302
Housing and redevelopment	4,427	333	338	333	362	358	393	394	401	408	381	373	354
Industrial	1,548	91	141	125	139	135	133	126	152	124	127	129	125
Educational	45,623	3,105	3,119	3,141	3,567	3,854	4,149	4,501	4,806	4,383	4,048	3,668	3,281
Hospital	4,006	320	294	289	308	315	331	347	336	392	346	366	362
Other ³	27,273	2,047	2,005	2,073	2,185	2,290	2,334	2,270	2,437	2,501	2,522	2,427	2,180
Highways and streets	48,677	2,690	2,498	2,498	3,217	4,298	4,715	5,248	5,597	5,614	5,013	4,073	3,214
Military facilities	2,382	153	149	181	176	216	211	230	200	271	147	208	242
Conservation and development	6,938	511	539	584	542	552	538	549	605	891	523	560	545
Other public construction	32,226	2,181	2,209	2,332	2,636	2,874	2,745	2,764	2,966	3,062	3,073	2,909	2,475
Sewer systems	9,676	699	693	731	784	864	845	852	904	900	881	822	700
Water supply facilities	7,107	487	502	504	576	640	628	581	616	663	693	634	583
Miscellaneous public ⁴	15,443	994	1,013	1,097	1,276	1,370	1,272	1,330	1,446	1,500	1,500	1,453	1,192

NA Not available, but estimates are included in total.

¹Includes amusement and recreational buildings, bus and airline terminals, animal hospitals and shelters, etc. ²Includes privately owned streets and bridges, parking areas, sewer and water facilities, parks and playgrounds, golf courses, airfields, etc. ³Includes general administrative buildings, prisons, police and fire stations, courthouses, civic centers, passenger terminals, space facilities, postal facilities, etc.

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

Table 7a. Monthly Value of Public Construction Put in Place: May 2001-May 2003—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 ²
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹					
2001:	May ^f	16,383	7,494	406	4,006	300	2,781	5,636	253	894	707	1,398
	June ^f	17,648	7,881	408	4,409	300	2,766	6,444	216	931	777	1,400
	July ^f	17,971	8,186	361	5,029	286	2,509	6,444	212	885	778	1,466
	August ^f	18,936	8,632	374	5,409	297	2,553	6,746	240	971	778	1,569
	September ^f	17,522	8,179	402	4,891	300	2,586	5,876	206	934	811	1,517
	October ^f	17,594	8,176	430	4,653	318	2,774	6,005	185	974	766	1,488
	November ^f	15,622	7,451	428	4,136	309	2,578	4,891	206	964	747	1,363
	December ^f	13,408	6,939	432	3,808	310	2,389	3,563	175	767	680	1,285
2002:	January ^f	12,618	6,833	378	3,802	318	2,335	3,231	194	786	573	1,002
	February ^f	12,366	6,792	370	3,828	285	2,309	3,016	195	782	593	988
	March ^f	12,590	6,893	371	3,849	300	2,372	3,000	203	822	593	1,080
	April ^f	14,572	7,597	405	4,368	328	2,496	3,887	222	887	683	1,296
	May ^f	16,663	8,074	411	4,723	323	2,617	5,215	222	983	764	1,405
	June ^f	17,633	8,603	443	5,102	346	2,713	5,782	190	973	760	1,325
	July ^f	18,681	8,950	453	5,528	352	2,617	6,431	215	980	703	1,402
	August ^f	19,948	9,527	442	5,904	339	2,843	6,858	218	1,040	746	1,559
	September ^f	19,611	9,097	456	5,390	398	2,853	6,875	222	1,034	802	1,582
	October ^f	18,571	8,750	432	5,003	380	2,934	6,106	186	1,018	839	1,672
	November ^f	16,591	8,169	425	4,539	379	2,827	4,938	182	952	765	1,584
	December ^f	14,271	7,414	410	4,076	391	2,537	3,905	161	815	707	1,270
2003:	January ^f	12,971	7,159	430	4,029	351	2,349	3,170	152	771	631	1,088
	February ^f	12,374	6,916	419	3,793	378	2,326	2,867	119	761	669	1,042
	March ^f	12,881	7,156	414	4,021	371	2,350	3,098	125	779	659	1,065
	April ^f	14,747	7,718	455	4,276	378	2,608	4,020	152	878	699	1,280
	May ^p	15,955	7,891	440	4,499	368	2,583	4,859	159	956	726	1,365
		Federally owned public construction										
		Total federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction ⁴	
			Total	Housing	Industrial	Educational	Hospital					Other buildings ³
2001:	May ^f	1,247	407	40	108	2	59	197	(NA)	232	380	194
	June ^f	1,302	468	37	126	2	85	219	(NA)	258	366	171
	July ^f	1,200	433	34	125	3	65	206	(NA)	239	336	150
	August ^f	1,340	436	33	125	3	59	216	(NA)	269	432	152
	September ^f	1,814	599	32	211	5	97	254	(NA)	303	696	171
	October ^f	1,073	389	44	78	3	44	221	(NA)	196	327	118
	November ^f	1,188	373	37	116	1	46	174	(NA)	245	391	145
	December ^f	1,213	439	40	198	3	36	162	(NA)	220	389	141
2002:	January ^f	1,144	401	34	112	5	75	175	(NA)	187	380	158
	February ^f	1,264	453	49	173	2	76	153	(NA)	182	414	199
	March ^f	1,313	420	41	154	2	54	169	(NA)	220	453	201
	April ^f	1,283	451	44	170	5	49	183	(NA)	214	391	202
	May ^f	1,373	461	33	166	6	64	193	(NA)	264	406	210
	June ^f	1,353	436	44	164	5	61	161	(NA)	260	429	192
	July ^f	1,364	442	36	155	4	74	174	(NA)	283	416	182
	August ^f	1,404	471	54	187	3	74	153	(NA)	246	478	165
	September ^f	1,901	520	51	153	6	85	225	(NA)	334	802	203
	October ^f	1,188	433	44	157	1	48	183	(NA)	181	419	114
	November ^f	1,354	458	45	160	3	74	177	(NA)	255	466	144
	December ^f	1,373	427	38	155	3	59	172	(NA)	298	473	152
2003:	January ^f	1,276	430	40	171	5	40	173	(NA)	242	432	153
	February ^f	1,261	387	26	138	3	54	167	(NA)	232	469	157
	March ^f	1,279	407	37	154	3	52	161	(NA)	239	485	128
	April ^f	1,424	357	29	152	6	41	130	(NA)	243	546	251
	May ^p	1,485	476	33	199	3	86	155	(NA)	284	542	150

NA Not available, but estimates are included in totals. ^pPreliminary. ^fRevised.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers, etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 7b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	155,706	9,401	9,587	10,582	11,929	12,820	14,281	14,789	15,981	15,633	14,903	13,669	12,130
Total buildings	74,507	5,053	5,120	5,487	5,894	5,959	6,706	6,868	7,380	7,009	6,703	6,362	5,967
Housing and redevelopment	4,722	350	335	374	380	427	390	396	429	447	428	380	386
Educational	41,064	2,670	2,670	2,833	3,195	3,245	3,934	4,058	4,379	3,989	3,648	3,368	3,076
Hospital	3,219	224	236	236	233	259	283	264	284	309	303	308	279
Other ¹	25,502	1,809	1,880	2,044	2,086	2,028	2,099	2,150	2,287	2,263	2,325	2,305	2,227
Highways and streets	48,649	2,174	2,310	2,734	3,484	4,117	4,713	4,997	5,485	5,584	5,075	4,424	3,553
Conservation and development	2,087	152	137	135	158	148	163	161	199	200	192	232	211
Other state and local construction	30,464	2,023	2,020	2,226	2,393	2,596	2,700	2,764	2,918	2,841	2,934	2,650	2,399
Sewer systems	10,525	747	692	807	814	877	957	941	971	966	977	920	856
Water supply facilities	6,967	485	512	541	556	582	609	667	659	636	631	589	503
Miscellaneous nonbuilding ²	12,972	790	817	879	1,023	1,137	1,135	1,155	1,288	1,239	1,326	1,142	1,040
Federal construction	14,025	990	1,129	1,144	1,152	1,033	1,185	1,208	1,169	1,584	971	1,235	1,226
Total buildings	5,469	400	466	465	428	420	453	479	416	592	420	453	476
Housing	424	27	26	37	42	32	39	39	34	46	32	38	33
Industrial	925	64	69	85	76	83	73	89	70	112	45	72	88
Educational	15	3	1	1	1	1	1	3	4	1	-	-	1
Hospital	850	82	123	82	60	67	71	86	46	73	49	43	68
Other federal buildings ³	3,255	225	247	260	248	237	270	263	263	360	295	301	287
Highways and streets	251	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,125	147	175	188	179	179	186	195	142	207	150	171	208
Conservation and development	4,035	244	296	333	294	274	341	336	401	584	235	341	357
Miscellaneous nonbuilding ⁴	2,145	187	181	144	233	140	180	172	182	173	139	248	167

See footnotes at end of table.

Table 7b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2000												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	171,969	10,879	10,534	11,960	13,236	14,396	15,480	15,625	18,041	17,714	16,859	14,693	12,552
Total buildings	84,847	5,817	5,919	6,192	6,573	6,989	7,630	7,684	8,316	7,997	7,822	7,146	6,761
Housing and redevelopment	4,544	339	318	377	392	392	402	365	392	403	421	393	350
Educational	45,613	3,130	3,149	3,287	3,394	3,677	4,229	4,348	4,756	4,375	4,027	3,631	3,610
Hospital	4,062	269	270	299	315	386	371	376	368	397	364	359	289
Other ¹	30,627	2,078	2,181	2,229	2,473	2,535	2,628	2,595	2,801	2,823	3,009	2,763	2,512
Highways and streets	52,656	2,830	2,303	3,235	3,894	4,474	4,883	5,139	6,569	6,351	5,427	4,375	3,175
Conservation and development	2,320	162	192	172	172	176	177	184	182	220	249	221	213
Other state and local construction	32,146	2,070	2,120	2,360	2,596	2,756	2,790	2,617	2,974	3,146	3,361	2,952	2,403
Sewer systems	10,332	719	713	798	933	901	992	877	945	925	938	867	722
Water supply facilities	7,028	503	515	502	568	620	571	549	663	662	696	631	548
Miscellaneous nonbuilding ²	14,787	848	892	1,060	1,095	1,235	1,227	1,191	1,366	1,560	1,727	1,454	1,133
Federal construction	14,166	976	1,077	1,254	1,094	1,109	1,248	1,061	1,291	1,692	1,001	1,205	1,158
Total buildings	5,159	398	399	431	426	402	452	387	462	562	419	403	418
Housing	382	25	27	32	29	30	32	32	31	34	31	35	46
Industrial	1,158	93	96	92	91	89	97	98	109	125	75	93	100
Educational	29	-	-	-	7	1	3	1	2	5	-	5	4
Hospital	722	67	62	48	81	47	71	50	63	83	44	59	48
Other federal buildings ³	2,867	214	213	259	218	235	249	207	256	316	269	211	220
Highways and streets	336	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,441	138	210	210	180	200	197	188	211	271	146	280	210
Conservation and development	4,061	280	309	351	316	294	359	280	372	606	273	303	321
Miscellaneous nonbuilding ⁴	2,169	142	144	243	149	184	207	172	207	217	127	190	187

See footnotes at end of table.

Table 7b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2001												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	184,976	11,512	11,278	12,588	14,514	16,383	17,648	17,971	18,936	17,522	17,594	15,622	13,408
Total buildings	89,197	6,336	6,175	6,544	7,204	7,494	7,881	8,186	8,632	8,179	8,176	7,451	6,939
Housing and redevelopment	4,675	357	335	353	388	406	408	361	374	402	430	428	432
Educational	50,001	3,289	3,185	3,416	3,769	4,006	4,409	5,029	5,409	4,891	4,653	4,136	3,808
Hospital	3,579	303	289	274	294	300	300	286	297	300	318	309	310
Other ¹	30,942	2,386	2,366	2,501	2,753	2,781	2,766	2,509	2,553	2,586	2,774	2,578	2,389
Highways and streets	58,545	2,653	2,602	3,369	4,317	5,636	6,444	6,444	6,746	5,876	6,005	4,891	3,563
Conservation and development	2,582	224	215	233	217	253	216	212	240	206	185	206	175
Other state and local construction	34,651	2,298	2,287	2,442	2,776	2,999	3,108	3,129	3,317	3,262	3,229	3,074	2,731
Sewer systems	10,339	712	698	758	853	894	931	885	971	934	974	964	767
Water supply facilities	8,358	491	534	595	696	707	777	778	778	811	766	747	680
Miscellaneous nonbuilding ²	15,953	1,095	1,055	1,090	1,228	1,398	1,400	1,466	1,569	1,517	1,488	1,363	1,285
Federal construction	15,081	1,172	1,121	1,227	1,183	1,247	1,302	1,200	1,340	1,814	1,073	1,188	1,213
Total buildings	5,210	427	382	447	409	407	468	433	436	599	389	373	439
Housing	421	36	33	30	26	40	37	34	33	32	44	37	40
Industrial	1,556	124	102	114	130	108	126	125	125	211	78	116	198
Educational	35	2	2	5	4	2	2	3	3	5	3	1	3
Hospital	664	42	37	51	43	59	85	65	59	97	44	46	36
Other federal buildings ³	2,535	223	209	247	207	197	219	206	216	254	221	174	162
Highways and streets	397	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,842	216	195	214	258	232	258	239	269	303	196	245	220
Conservation and development	4,686	337	351	373	308	380	366	336	432	696	327	391	389
Miscellaneous nonbuilding ⁴	1,945	173	176	173	181	194	171	150	152	171	118	145	141

See footnotes at end of table.

Table 7b. Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in Current Dollars—Con.

[Millions of dollars]

Type of construction	2002												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	194,115	12,618	12,366	12,590	14,572	16,663	17,633	18,681	19,948	19,611	18,571	16,591	14,271
Total buildings	96,699	6,833	6,792	6,893	7,597	8,074	8,603	8,950	9,527	9,097	8,750	8,169	7,414
Housing and redevelopment	4,995	378	370	371	405	411	443	453	442	456	432	425	410
Educational	56,110	3,802	3,828	3,849	4,368	4,723	5,102	5,528	5,904	5,390	5,003	4,539	4,076
Hospital	4,139	318	285	300	328	323	346	352	339	398	380	379	391
Other ¹	31,455	2,335	2,309	2,372	2,496	2,617	2,713	2,617	2,843	2,853	2,934	2,827	2,537
Highways and streets	59,242	3,231	3,016	3,000	3,887	5,215	5,782	6,431	6,858	6,875	6,106	4,938	3,905
Conservation and development	2,409	194	195	203	222	222	190	215	218	222	186	182	161
Other state and local construction	35,764	2,360	2,363	2,494	2,867	3,152	3,058	3,086	3,345	3,417	3,529	3,302	2,791
Sewer systems	11,072	786	782	822	887	983	973	980	1,040	1,034	1,018	952	815
Water supply facilities	8,528	573	593	593	683	764	760	703	746	802	839	765	707
Miscellaneous nonbuilding ²	16,164	1,002	988	1,080	1,296	1,405	1,325	1,402	1,559	1,582	1,672	1,584	1,270
Federal construction	16,313	1,144	1,264	1,313	1,283	1,373	1,353	1,364	1,404	1,901	1,188	1,354	1,373
Total buildings	5,372	401	453	420	451	461	436	442	471	520	433	458	427
Housing	512	34	49	41	44	33	44	36	54	51	44	45	38
Industrial	1,906	112	173	154	170	166	164	155	187	153	157	160	155
Educational	44	5	2	2	5	6	5	4	3	6	1	3	3
Hospital	793	75	76	54	49	64	61	74	74	85	48	74	59
Other federal buildings ³	2,118	175	153	169	183	193	161	174	153	225	183	177	172
Highways and streets	371	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,923	187	182	220	214	264	260	283	246	334	181	255	298
Conservation and development	5,528	380	414	453	391	406	429	416	478	802	419	466	473
Miscellaneous nonbuilding ⁴	2,119	158	199	201	202	210	192	182	165	203	114	144	152

- Represents zero or rounds to zero. NA Not available, but estimates are included in total.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 8a. Monthly Value of Public Construction Put in Place: May 2001-May 2003—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 ²	
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹						
2001:	May ^f	192,211	90,286	4,721	49,560	3,569	32,436	63,869	2,974	10,435	8,198	16,449	
	June ^f	188,798	87,497	4,699	47,361	3,436	32,002	63,958	2,422	10,278	8,911	15,731	
	July ^f	185,800	87,813	4,354	50,460	3,390	29,608	61,078	2,319	9,994	8,590	16,006	
	August ^f	180,195	87,581	4,424	51,109	3,501	28,547	55,601	2,407	10,335	8,555	15,715	
	September ^f	176,654	88,495	4,511	51,303	3,403	29,278	52,042	2,079	9,901	8,787	15,350	
	October ^f	181,984	91,741	4,736	53,128	3,502	30,376	55,217	1,859	10,310	7,925	14,932	
	November ^f	185,249	90,515	4,996	52,303	3,607	29,608	57,091	2,380	11,002	8,509	15,751	
	December ^f	188,147	91,570	5,375	51,933	3,836	30,427	58,243	2,307	10,372	8,749	16,907	
	2002:	January ^f	198,868	94,756	4,874	54,699	4,013	31,171	65,705	3,024	11,312	8,481	15,589
		February ^f	202,554	96,059	4,979	56,086	3,750	31,243	67,766	3,063	11,602	8,545	15,518
		March ^f	189,883	93,926	4,726	54,213	3,876	31,111	57,882	2,979	11,104	8,174	15,818
		April ^f	192,397	95,750	4,853	56,912	4,030	29,954	57,587	2,848	11,126	8,436	16,651
May ^f		195,934	97,870	4,795	58,423	3,829	30,823	58,538	2,618	11,484	8,859	16,564	
June ^f		189,454	95,523	5,086	54,908	4,046	31,482	57,435	2,144	10,732	8,688	14,932	
July ^f		191,477	96,014	5,458	55,513	4,105	30,938	58,958	2,349	11,055	7,765	15,336	
August ^f		191,669	96,712	5,206	55,741	4,060	31,704	57,910	2,188	11,040	8,164	15,655	
September ^f		195,520	98,429	5,141	56,587	4,460	32,241	59,180	2,247	10,918	8,717	16,029	
October ^f		191,825	97,911	4,786	57,232	4,199	31,695	55,851	1,860	10,771	8,695	16,737	
November ^f		198,927	99,865	4,950	57,389	4,493	33,032	59,139	2,089	10,885	8,723	18,227	
December ^f		199,379	97,422	5,081	55,706	4,754	31,881	63,061	2,111	11,037	9,097	16,652	
2003:	January ^f	204,311	99,491	5,536	57,905	4,418	31,632	65,017	2,370	11,116	9,354	16,962	
	February ^f	201,979	97,583	5,614	55,503	4,961	31,505	65,152	1,868	11,279	9,684	16,414	
	March ^f	193,970	97,535	5,238	56,830	4,781	30,687	59,573	1,815	10,542	8,994	15,513	
	April ^f	193,473	96,987	5,439	55,840	4,598	31,109	58,831	1,927	10,952	8,589	16,187	
	May ^p	188,938	95,419	5,168	55,603	4,434	30,215	56,169	1,856	11,146	8,372	15,976	
		Federally owned public construction											
		Total federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction ⁴		
			Total	Housing	Industrial	Educational	Hospital					Other buildings ³	
2001:	May ^f	15,241	5,140	499	1,369	30	749	2,492	(NA)	2,733	4,613	2,359	
	June ^f	15,213	5,489	432	1,473	22	997	2,564	(NA)	2,963	4,339	2,026	
	July ^f	14,515	5,206	413	1,498	34	786	2,476	(NA)	2,777	4,238	1,896	
	August ^f	15,107	5,234	396	1,502	36	707	2,593	(NA)	3,113	4,696	1,652	
	September ^f	15,435	5,376	285	1,897	47	867	2,280	(NA)	2,884	5,440	1,335	
	October ^f	15,681	5,138	580	1,024	36	576	2,923	(NA)	2,914	5,311	1,914	
	November ^f	14,121	4,528	447	1,403	10	562	2,108	(NA)	2,857	4,623	1,716	
	December ^f	15,033	5,212	471	2,354	38	421	1,928	(NA)	2,524	5,064	1,840	
	2002:	January ^f	15,312	5,220	447	1,459	60	975	2,279	(NA)	2,463	5,119	2,124
		February ^f	17,167	6,043	651	2,312	25	1,012	2,042	(NA)	2,505	5,564	2,673
		March ^f	16,265	5,114	493	1,871	27	662	2,061	(NA)	2,613	5,649	2,502
		April ^f	16,084	5,547	535	2,096	57	607	2,252	(NA)	2,724	4,907	2,535
May ^f		16,679	5,820	413	2,091	79	801	2,435	(NA)	3,114	4,861	2,514	
June ^f		16,183	5,090	518	1,920	61	712	1,880	(NA)	2,985	5,351	2,389	
July ^f		16,145	5,294	426	1,859	44	889	2,076	(NA)	3,299	4,999	2,185	
August ^f		16,107	5,608	643	2,228	35	881	1,821	(NA)	2,853	5,411	1,864	
September ^f		15,918	4,691	463	1,376	54	768	2,030	(NA)	3,164	6,146	1,556	
October ^f		17,428	5,734	587	2,079	11	636	2,421	(NA)	2,718	6,770	1,840	
November ^f		16,366	5,586	544	1,947	33	898	2,163	(NA)	2,970	5,688	1,750	
December ^f		16,730	5,099	454	1,851	36	704	2,054	(NA)	3,410	5,942	1,907	
2003:	January ^f	16,907	5,604	525	2,233	63	525	2,258	(NA)	3,190	5,708	2,015	
	February ^f	17,207	5,160	340	1,838	36	718	2,228	(NA)	3,216	6,331	2,114	
	March ^f	16,006	4,961	452	1,877	39	629	1,963	(NA)	2,831	6,197	1,633	
	April ^f	17,667	4,400	358	1,866	71	500	1,605	(NA)	3,101	6,703	3,082	
	May ^p	18,301	5,876	413	2,454	35	1,065	1,909	(NA)	3,333	6,815	1,884	

NA Not available, but estimates are included in totals. ^PPreliminary. ^rRevised.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers, etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 8b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	152,385	156,302	155,869	154,986	153,389	151,775	153,797	154,189	155,435	155,330	163,099	168,598
Total buildings	71,023	72,767	73,953	74,402	72,277	73,974	73,624	75,583	75,466	75,559	77,242	77,654
Housing and redevelopment	4,542	4,567	4,728	4,592	4,928	4,517	4,775	5,140	4,982	4,660	4,455	4,769
Educational	38,741	39,601	40,179	42,225	40,182	42,146	40,547	41,186	41,773	41,410	42,459	41,514
Hospital	2,962	3,140	2,892	2,822	3,163	3,188	3,112	3,420	3,405	3,444	3,657	3,359
Other ¹	24,778	25,459	26,154	24,763	24,005	24,123	25,191	25,837	25,306	26,046	26,671	28,011
Highways and streets	48,847	51,041	48,820	48,563	48,968	45,904	47,742	46,089	48,135	47,613	52,671	55,945
Conservation and development	2,344	2,123	1,965	2,016	1,733	1,811	1,753	2,000	2,032	1,939	2,712	2,853
Other state and local construction	30,170	30,371	31,132	30,004	30,411	30,087	30,678	30,518	29,802	30,219	30,474	32,146
Sewer systems	10,832	10,416	10,789	10,148	10,301	10,497	10,708	10,323	10,249	10,331	10,489	11,503
Water supply facilities	7,150	7,326	7,542	6,806	6,777	6,995	7,358	7,238	6,932	6,457	6,650	6,586
Miscellaneous nonbuilding ²	12,188	12,629	12,801	13,051	13,333	12,594	12,613	12,957	12,620	13,432	13,335	14,058
Federal construction	13,496	15,401	13,688	14,338	13,075	13,725	14,536	13,635	13,056	14,599	14,736	14,484
Total buildings	5,227	6,237	5,652	5,288	5,265	5,289	5,745	5,112	5,291	5,630	5,499	5,544
Housing	346	352	453	523	406	457	462	413	407	422	461	383
Industrial	839	926	1,029	937	1,041	849	1,071	856	998	600	872	1,023
Educational	38	9	10	14	9	13	31	47	8	1	1	7
Hospital	1,068	1,641	998	745	844	822	1,031	565	656	662	518	795
Other federal buildings ³	2,936	3,308	3,162	3,070	2,966	3,148	3,150	3,232	3,222	3,946	3,646	3,336
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	1,901	2,425	2,206	2,266	2,132	2,143	2,293	1,640	1,972	2,190	2,010	2,417
Conservation and development	3,454	4,025	3,892	3,643	3,595	3,965	4,136	4,568	4,275	4,106	4,032	4,254
Miscellaneous nonbuilding ⁴	2,643	2,471	1,687	2,890	1,845	2,085	2,114	2,071	1,267	2,419	2,933	1,985

See footnotes at end of table.

Table 8b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2000											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	176,096	167,878	175,562	174,990	170,321	164,823	164,675	171,992	177,510	174,904	173,739	176,277
Total buildings	81,558	82,389	83,440	83,282	84,605	84,189	83,529	84,936	86,586	87,491	86,540	89,277
Housing and redevelopment	4,357	4,302	4,804	4,703	4,542	4,653	4,392	4,664	4,500	4,609	4,602	4,356
Educational	45,204	46,312	46,290	44,417	45,532	45,437	43,629	44,903	45,846	45,892	45,910	49,230
Hospital	3,527	3,447	3,703	4,009	4,596	4,180	4,525	4,334	4,403	4,070	4,210	3,586
Other ¹	28,470	28,329	28,643	30,154	29,935	29,919	30,983	31,034	31,837	32,920	31,818	32,105
Highways and streets	60,972	50,437	56,349	56,783	51,478	47,372	50,099	54,176	55,870	50,523	50,768	52,407
Conservation and development	2,523	3,019	2,520	2,216	2,064	1,981	2,015	1,826	2,230	2,493	2,556	2,812
Other state and local construction	31,044	32,033	33,252	32,708	32,174	31,280	29,033	31,055	32,824	34,397	33,874	31,781
Sewer systems	10,344	10,618	10,739	11,653	10,512	10,940	9,947	10,071	9,830	9,920	9,883	9,772
Water supply facilities	7,461	7,369	6,983	6,978	7,208	6,563	6,054	7,306	7,186	7,194	7,150	7,055
Miscellaneous nonbuilding ²	13,239	14,046	15,530	14,077	14,454	13,777	13,032	13,678	15,809	17,282	16,842	14,954
Federal construction	13,540	14,434	14,968	14,054	13,520	14,478	13,121	14,744	13,994	14,877	14,323	14,210
Total buildings	5,188	5,325	5,250	5,253	5,064	5,317	4,691	5,585	5,013	5,513	4,865	4,952
Housing	321	363	391	357	380	371	383	379	302	401	420	542
Industrial	1,207	1,284	1,118	1,121	1,126	1,146	1,188	1,323	1,113	984	1,122	1,181
Educational	1	4	2	90	13	29	15	28	43	3	62	51
Hospital	873	833	583	994	591	838	603	756	737	583	716	566
Other federal buildings ³	2,787	2,840	3,155	2,691	2,955	2,932	2,503	3,099	2,818	3,542	2,546	2,612
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	1,796	2,895	2,515	2,283	2,367	2,262	2,194	2,442	2,576	2,164	3,286	2,420
Conservation and development	4,104	3,999	4,052	4,204	3,541	4,165	3,654	4,107	4,478	4,682	3,583	4,094
Miscellaneous nonbuilding ⁴	2,085	1,865	2,803	1,978	2,214	2,405	2,251	2,289	1,602	2,184	2,252	2,381

See footnotes at end of table.

Table 8b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2001											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	180,815	183,426	187,559	191,477	192,211	188,798	185,800	180,195	176,654	181,984	185,249	188,147
Total buildings	88,143	87,074	88,197	90,995	90,286	87,497	87,813	87,581	88,495	91,741	90,515	91,570
Housing and redevelopment	4,605	4,526	4,492	4,647	4,721	4,699	4,354	4,424	4,511	4,736	4,996	5,375
Educational	47,381	46,725	48,110	49,163	49,560	47,361	50,460	51,109	51,303	53,128	52,303	51,933
Hospital	3,835	3,821	3,457	3,680	3,569	3,436	3,390	3,501	3,403	3,502	3,607	3,836
Other ¹	32,321	32,002	32,138	33,505	32,436	32,002	29,608	28,547	29,278	30,376	29,608	30,427
Highways and streets	54,609	58,360	61,538	62,635	63,869	63,958	61,078	55,601	52,042	55,217	57,091	58,243
Conservation and development	3,491	3,375	3,414	2,798	2,974	2,422	2,319	2,407	2,079	1,859	2,380	2,307
Other state and local construction	34,572	34,616	34,410	35,048	35,082	34,920	34,590	34,605	34,038	33,167	35,263	36,028
Sewer systems	10,245	10,363	10,213	10,657	10,435	10,278	9,994	10,335	9,901	10,310	11,002	10,372
Water supply facilities	7,280	7,664	8,230	8,565	8,198	8,911	8,590	8,555	8,787	7,925	8,509	8,749
Miscellaneous nonbuilding ²	17,047	16,589	15,966	15,826	16,449	15,731	16,006	15,715	15,350	14,932	15,751	16,907
Federal construction	15,647	15,258	14,999	15,070	15,241	15,213	14,515	15,107	15,435	15,681	14,121	15,033
Total buildings	5,566	5,109	5,449	5,039	5,140	5,489	5,206	5,234	5,376	5,138	4,528	5,212
Housing	473	434	365	319	499	432	413	396	285	580	447	471
Industrial	1,610	1,362	1,388	1,600	1,369	1,473	1,498	1,502	1,897	1,024	1,403	2,354
Educational	27	31	60	43	30	22	34	36	47	36	10	38
Hospital	549	496	624	529	749	997	786	707	867	576	562	421
Other federal buildings ³	2,907	2,786	3,012	2,548	2,492	2,564	2,476	2,593	2,280	2,923	2,108	1,928
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,839	2,681	2,543	3,276	2,733	2,963	2,777	3,113	2,884	2,914	2,857	2,524
Conservation and development	4,539	4,723	4,526	4,013	4,613	4,339	4,238	4,696	5,440	5,311	4,623	5,064
Miscellaneous nonbuilding ⁴	2,333	2,364	2,098	2,351	2,359	2,026	1,896	1,652	1,335	1,914	1,716	1,840

See footnotes at end of table.

Table 8b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	2002											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	198,868	202,554	189,883	192,397	195,934	189,454	191,477	191,669	195,520	191,825	198,927	199,379
Total buildings	94,756	96,059	93,926	95,750	97,870	95,523	96,014	96,712	98,429	97,911	99,865	97,422
Housing and redevelopment	4,874	4,979	4,726	4,853	4,795	5,086	5,458	5,206	5,141	4,786	4,950	5,081
Educational	54,699	56,086	54,213	56,912	58,423	54,908	55,513	55,741	56,587	57,232	57,389	55,706
Hospital	4,013	3,750	3,876	4,030	3,829	4,046	4,105	4,060	4,460	4,199	4,493	4,754
Other ¹	31,171	31,243	31,111	29,954	30,823	31,482	30,938	31,704	32,241	31,695	33,032	31,881
Highways and streets	65,705	67,766	57,882	57,587	58,538	57,435	58,958	57,910	59,180	55,851	59,139	63,061
Conservation and development	3,024	3,063	2,979	2,848	2,618	2,144	2,349	2,188	2,247	1,860	2,089	2,111
Other state and local construction	35,383	35,666	35,096	36,213	36,907	34,352	34,156	34,859	35,664	36,204	37,834	36,785
Sewer systems	11,312	11,602	11,104	11,126	11,484	10,732	11,055	11,040	10,918	10,771	10,885	11,037
Water supply facilities	8,481	8,545	8,174	8,436	8,859	8,688	7,765	8,164	8,717	8,695	8,723	9,097
Miscellaneous nonbuilding ²	15,589	15,518	15,818	16,651	16,564	14,932	15,336	15,655	16,029	16,737	18,227	16,652
Federal construction	15,312	17,167	16,265	16,084	16,679	16,183	16,145	16,107	15,918	17,428	16,366	16,730
Total buildings	5,220	6,043	5,114	5,547	5,820	5,090	5,294	5,608	4,691	5,734	5,586	5,099
Housing	447	651	493	535	413	518	426	643	463	587	544	454
Industrial	1,459	2,312	1,871	2,096	2,091	1,920	1,859	2,228	1,376	2,079	1,947	1,851
Educational	60	25	27	57	79	61	44	35	54	11	33	36
Hospital	975	1,012	662	607	801	712	889	881	768	636	898	704
Other federal buildings ³	2,279	2,042	2,061	2,252	2,435	1,880	2,076	1,821	2,030	2,421	2,163	2,054
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,463	2,505	2,613	2,724	3,114	2,985	3,299	2,853	3,164	2,718	2,970	3,410
Conservation and development	5,119	5,564	5,649	4,907	4,861	5,351	4,999	5,411	6,146	6,770	5,688	5,942
Miscellaneous nonbuilding ⁴	2,124	2,673	2,502	2,535	2,514	2,389	2,185	1,864	1,556	1,840	1,750	1,907

NA Not available, but estimates are included in total.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 9a. Monthly Value of Public Construction Put in Place: May 2001-May 2003—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 ²
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹					
2001:	May ^f	162,384	74,985	3,918	41,163	2,964	26,940	53,943	2,672	9,375	7,080	14,329
	June ^f	157,966	72,086	3,883	39,012	2,830	26,361	53,477	2,149	9,120	7,583	13,550
	July ^f	155,872	72,206	3,572	41,497	2,788	24,349	51,499	2,067	8,907	7,323	13,870
	August ^f	150,925	71,635	3,585	41,824	2,865	23,361	47,000	2,147	9,219	7,281	13,642
	September ^f	147,822	72,261	3,646	41,914	2,781	23,920	44,066	1,855	8,832	7,472	13,336
	October ^f	151,396	74,601	3,807	43,228	2,849	24,716	46,284	1,659	9,197	6,751	12,906
	November ^f	154,363	73,657	4,016	42,592	2,937	24,111	47,775	2,135	9,867	7,292	13,638
	December ^f	155,763	74,523	4,331	42,290	3,124	24,777	48,095	2,047	9,204	7,433	14,462
2002:	January ^f	164,985	77,250	3,937	44,616	3,273	25,425	54,392	2,691	10,064	7,218	13,370
	February ^f	167,489	78,191	4,022	45,673	3,054	25,442	55,821	2,713	10,277	7,236	13,252
	March ^f	157,485	76,574	3,818	44,219	3,162	25,376	47,876	2,650	9,879	6,951	13,555
	April ^f	159,062	78,064	3,923	46,421	3,287	24,433	47,357	2,516	9,829	7,113	14,183
	May ^f	161,541	79,726	3,870	47,614	3,121	25,121	47,943	2,303	10,100	7,420	14,049
	June ^f	155,005	77,568	4,102	44,605	3,287	25,574	46,544	1,863	9,324	7,180	12,527
	July ^f	156,851	78,085	4,402	45,169	3,340	25,173	47,816	2,042	9,613	6,418	12,877
	August ^f	157,008	78,664	4,209	45,355	3,304	25,797	46,967	1,903	9,600	6,741	13,134
	September ^f	160,082	79,915	4,133	45,968	3,623	26,191	48,035	1,956	9,502	7,204	13,470
	October ^f	156,882	79,166	3,822	46,304	3,397	25,643	45,556	1,609	9,318	7,180	14,053
	November ^f	162,831	80,602	3,935	46,356	3,629	26,682	48,475	1,804	9,399	7,221	15,329
	December ^f	162,666	78,302	4,014	44,816	3,824	25,648	51,604	1,814	9,482	7,505	13,958
2003:	January ^f	165,260	79,499	4,336	46,324	3,534	25,306	52,561	2,019	9,468	7,648	14,065
	February ^f	163,237	77,833	4,376	44,331	3,963	25,164	52,627	1,594	9,623	7,938	13,622
	March ^f	156,468	77,727	4,066	45,355	3,815	24,491	48,004	1,546	8,979	7,360	12,852
	April ^f	155,982	77,231	4,226	44,529	3,667	24,808	47,368	1,640	9,321	7,023	13,400
	May ^p	151,632	75,881	4,025	44,270	3,530	24,057	44,863	1,567	9,414	6,790	13,116
		Federally owned public construction										
		Total federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction ⁴	
			Total	Housing	Industrial	Educational	Hospital					Other buildings ³
2001:	May ^f	13,092	4,269	414	1,137	25	622	2,070	(NA)	2,289	4,145	2,055
	June ^f	12,908	4,522	357	1,214	18	821	2,112	(NA)	2,459	3,850	1,745
	July ^f	12,348	4,280	339	1,232	28	646	2,036	(NA)	2,312	3,777	1,643
	August ^f	12,841	4,280	321	1,229	29	578	2,122	(NA)	2,590	4,189	1,434
	September ^f	13,138	4,390	231	1,550	38	708	1,863	(NA)	2,398	4,853	1,160
	October ^f	13,312	4,175	466	834	29	468	2,378	(NA)	2,406	4,737	1,654
	November ^f	12,006	3,683	359	1,142	8	457	1,716	(NA)	2,359	4,146	1,486
	December ^f	12,703	4,240	380	1,917	31	343	1,570	(NA)	2,071	4,494	1,574
2002:	January ^f	12,974	4,254	361	1,190	49	795	1,859	(NA)	2,024	4,554	1,822
	February ^f	14,494	4,916	526	1,883	21	824	1,663	(NA)	2,051	4,928	2,283
	March ^f	13,804	4,168	399	1,526	22	540	1,681	(NA)	2,147	5,026	2,144
	April ^f	13,550	4,521	433	1,710	46	495	1,837	(NA)	2,231	4,334	2,160
	May ^f	13,995	4,740	333	1,704	65	653	1,985	(NA)	2,544	4,275	2,132
	June ^f	13,506	4,132	417	1,560	49	578	1,527	(NA)	2,423	4,649	2,004
	July ^f	13,464	4,305	343	1,513	36	723	1,689	(NA)	2,680	4,347	1,835
	August ^f	13,447	4,560	520	1,813	28	717	1,482	(NA)	2,318	4,705	1,564
	September ^f	13,324	3,807	372	1,118	44	624	1,649	(NA)	2,568	5,349	1,308
	October ^f	14,541	4,633	469	1,682	9	515	1,959	(NA)	2,208	5,857	1,545
	November ^f	13,610	4,505	433	1,573	27	726	1,747	(NA)	2,417	4,912	1,472
	December ^f	13,871	4,096	359	1,489	29	566	1,653	(NA)	2,768	5,105	1,599
2003:	January ^f	13,889	4,474	411	1,787	50	420	1,806	(NA)	2,567	4,862	1,671
	February ^f	14,166	4,115	265	1,468	29	574	1,779	(NA)	2,583	5,402	1,754
	March ^f	13,161	3,949	351	1,498	31	502	1,567	(NA)	2,270	5,278	1,353
	April ^f	14,549	3,501	278	1,488	57	398	1,280	(NA)	2,485	5,705	2,551
	May ^p	14,946	4,672	321	1,954	28	848	1,520	(NA)	2,658	5,756	1,547

NA Not available, but estimates are included in totals. ^pPreliminary. ^rRevised.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers, etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 9b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996 Dollars**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	141,328	144,726	143,637	142,220	139,929	137,464	139,379	139,245	140,478	139,573	145,926	150,337
Total buildings	64,797	66,209	66,988	67,203	65,050	66,158	65,724	67,246	67,192	66,922	68,107	68,177
Housing and redevelopment	4,194	4,209	4,342	4,198	4,484	4,088	4,305	4,631	4,484	4,179	3,978	4,243
Educational	35,315	36,001	36,361	38,109	36,135	37,664	36,171	36,609	37,164	36,646	37,409	36,416
Hospital	2,700	2,854	2,617	2,547	2,844	2,849	2,776	3,040	3,029	3,048	3,222	2,947
Other ¹	22,587	23,144	23,669	22,349	21,587	21,558	22,472	22,966	22,514	23,050	23,498	24,571
Highways and streets	45,694	47,746	45,456	44,924	44,884	41,731	43,521	41,899	43,799	42,972	47,281	50,040
Conservation and development	2,239	2,024	1,864	1,902	1,621	1,680	1,629	1,852	1,883	1,794	2,504	2,629
Other state and local construction	28,598	28,747	29,329	28,191	28,375	27,896	28,507	28,248	27,603	27,886	28,034	29,490
Sewer systems	10,346	9,930	10,237	9,573	9,636	9,738	9,952	9,558	9,499	9,556	9,685	10,602
Water supply facilities	6,732	6,892	7,062	6,420	6,394	6,593	6,941	6,803	6,515	6,051	6,215	6,132
Miscellaneous nonbuilding ²	11,520	11,926	12,031	12,197	12,345	11,565	11,614	11,887	11,589	12,278	12,134	12,757
Federal construction	12,574	14,307	12,658	13,220	11,963	12,476	13,214	12,376	11,840	13,183	13,264	12,985
Total buildings	4,769	5,674	5,121	4,779	4,739	4,731	5,129	4,549	4,711	4,988	4,850	4,868
Housing	320	324	416	478	370	414	416	372	366	378	412	341
Industrial	765	842	931	845	936	759	955	761	888	531	769	897
Educational	35	9	9	12	8	11	28	41	7	1	1	6
Hospital	974	1,492	903	673	759	735	920	502	584	585	456	697
Other federal buildings ³	2,676	3,008	2,862	2,771	2,667	2,813	2,810	2,872	2,866	3,492	3,212	2,926
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	1,755	2,235	2,026	2,071	1,935	1,931	2,068	1,475	1,775	1,958	1,787	2,141
Conservation and development	3,299	3,837	3,693	3,437	3,363	3,678	3,844	4,230	3,962	3,798	3,723	3,921
Miscellaneous nonbuilding ⁴	2,498	2,333	1,586	2,701	1,709	1,915	1,947	1,900	1,164	2,211	2,669	1,802

See footnotes at end of table.

Table 9b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2000											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	156,164	148,158	154,944	152,937	148,176	143,266	142,385	148,543	152,582	150,134	148,702	150,565
Total buildings	71,021	71,496	72,282	71,725	72,670	72,241	71,316	72,399	73,555	74,195	73,141	75,183
Housing and redevelopment	3,832	3,771	4,199	4,100	3,946	4,029	3,793	4,024	3,872	3,957	3,937	3,701
Educational	39,342	40,166	40,078	38,225	39,083	38,968	37,226	38,248	38,919	38,891	38,775	41,439
Hospital	3,069	2,990	3,206	3,450	3,945	3,585	3,861	3,692	3,737	3,449	3,556	3,019
Other ¹	24,778	24,569	24,799	25,950	25,695	25,660	26,436	26,434	27,027	27,898	26,874	27,024
Highways and streets	54,488	44,873	50,222	49,766	44,764	41,122	43,338	46,865	48,040	43,330	43,391	44,792
Conservation and development	2,311	2,744	2,291	2,013	1,880	1,811	1,828	1,653	2,002	2,242	2,299	2,531
Other state and local construction	28,345	29,044	30,148	29,433	28,863	28,092	25,903	27,627	28,986	30,366	29,871	28,058
Sewer systems	9,472	9,653	9,763	10,584	9,574	10,000	9,026	9,114	8,824	8,921	8,887	8,796
Water supply facilities	6,902	6,760	6,406	6,292	6,430	5,824	5,334	6,420	6,270	6,272	6,223	6,145
Miscellaneous nonbuilding ²	11,970	12,631	13,978	12,558	12,859	12,268	11,543	12,094	13,892	15,173	14,760	13,118
Federal construction	12,073	12,787	13,275	12,386	11,882	12,749	11,487	12,875	12,166	12,936	12,389	12,309
Total buildings	4,518	4,621	4,549	4,525	4,351	4,563	4,007	4,761	4,259	4,677	4,114	4,172
Housing	282	318	342	311	330	321	330	327	260	344	359	460
Industrial	1,050	1,114	968	965	966	983	1,014	1,127	945	834	947	994
Educational	1	3	2	77	11	25	12	24	36	2	52	43
Hospital	760	722	505	856	507	719	515	644	626	494	605	476
Other federal buildings ³	2,426	2,464	2,731	2,316	2,537	2,515	2,136	2,640	2,392	3,002	2,150	2,199
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	1,584	2,542	2,210	1,984	2,046	1,952	1,885	2,096	2,200	1,844	2,792	2,052
Conservation and development	3,758	3,636	3,683	3,818	3,225	3,807	3,315	3,716	4,019	4,210	3,222	3,685
Miscellaneous nonbuilding ⁴	1,885	1,677	2,523	1,765	1,970	2,141	1,994	2,023	1,408	1,917	1,974	2,089

See footnotes at end of table.

Table 9b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2001											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	153,752	155,159	158,212	162,060	162,384	157,966	155,872	150,925	147,822	151,396	154,363	155,763
Total buildings	73,909	72,708	73,523	75,899	74,985	72,086	72,206	71,635	72,261	74,601	73,657	74,523
Housing and redevelopment	3,886	3,803	3,769	3,882	3,918	3,883	3,572	3,585	3,646	3,807	4,016	4,331
Educational	39,715	39,003	40,092	41,004	41,163	39,012	41,497	41,824	41,914	43,228	42,592	42,290
Hospital	3,215	3,189	2,881	3,069	2,964	2,830	2,788	2,865	2,781	2,849	2,937	3,124
Other ¹	27,093	26,713	26,782	27,944	26,940	26,361	24,349	23,361	23,920	24,716	24,111	24,777
Highways and streets	46,240	49,001	51,453	52,812	53,943	53,477	51,499	47,000	44,066	46,284	47,775	48,095
Conservation and development	3,145	3,035	3,067	2,521	2,672	2,149	2,067	2,147	1,855	1,659	2,135	2,047
Other state and local construction	30,458	30,414	30,169	30,828	30,784	30,253	30,100	30,142	29,641	28,853	30,797	31,099
Sewer systems	9,229	9,320	9,177	9,601	9,375	9,120	8,907	9,219	8,832	9,197	9,867	9,204
Water supply facilities	6,353	6,681	7,169	7,441	7,080	7,583	7,323	7,281	7,472	6,751	7,292	7,433
Miscellaneous nonbuilding ²	14,876	14,413	13,824	13,785	14,329	13,550	13,870	13,642	13,336	12,906	13,638	14,462
Federal construction	13,498	13,132	12,869	12,942	13,092	12,908	12,348	12,841	13,138	13,312	12,006	12,703
Total buildings	4,668	4,267	4,543	4,203	4,269	4,522	4,280	4,280	4,390	4,175	3,683	4,240
Housing	399	365	306	267	414	357	339	321	231	466	359	380
Industrial	1,350	1,137	1,157	1,335	1,137	1,214	1,232	1,229	1,550	834	1,142	1,917
Educational	23	26	50	36	25	18	28	29	38	29	8	31
Hospital	460	414	520	441	622	821	646	578	708	468	457	343
Other federal buildings ³	2,437	2,326	2,510	2,125	2,070	2,112	2,036	2,122	1,863	2,378	1,716	1,570
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,391	2,244	2,123	2,746	2,289	2,459	2,312	2,590	2,398	2,406	2,359	2,071
Conservation and development	4,089	4,248	4,066	3,615	4,145	3,850	3,777	4,189	4,853	4,737	4,146	4,494
Miscellaneous nonbuilding ⁴	2,036	2,054	1,816	2,048	2,055	1,745	1,643	1,434	1,160	1,654	1,486	1,574

See footnotes at end of table.

Table 9b. **Monthly Value of Public Construction Put in Place: 1999-2002—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2002											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	164,985	167,489	157,485	159,062	161,541	155,005	156,851	157,008	160,082	156,882	162,831	162,666
Total buildings	77,250	78,191	76,574	78,064	79,726	77,568	78,085	78,664	79,915	79,166	80,602	78,302
Housing and redevelopment	3,937	4,022	3,818	3,923	3,870	4,102	4,402	4,209	4,133	3,822	3,935	4,014
Educational	44,616	45,673	44,219	46,421	47,614	44,605	45,169	45,355	45,968	46,304	46,356	44,816
Hospital	3,273	3,054	3,162	3,287	3,121	3,287	3,340	3,304	3,623	3,397	3,629	3,824
Other ¹	25,425	25,442	25,376	24,433	25,121	25,574	25,173	25,797	26,191	25,643	26,682	25,648
Highways and streets	54,392	55,821	47,876	47,357	47,943	46,544	47,816	46,967	48,035	45,556	48,475	51,604
Conservation and development	2,691	2,713	2,650	2,516	2,303	1,863	2,042	1,903	1,956	1,609	1,804	1,814
Other state and local construction	30,652	30,765	30,384	31,125	31,569	29,031	28,907	29,475	30,176	30,551	31,949	30,945
Sewer systems	10,064	10,277	9,879	9,829	10,100	9,324	9,613	9,600	9,502	9,318	9,399	9,482
Water supply facilities	7,218	7,236	6,951	7,113	7,420	7,180	6,418	6,741	7,204	7,180	7,221	7,505
Miscellaneous nonbuilding ²	13,370	13,252	13,555	14,183	14,049	12,527	12,877	13,134	13,470	14,053	15,329	13,958
Federal construction	12,974	14,494	13,804	13,550	13,995	13,506	13,464	13,447	13,324	14,541	13,610	13,871
Total buildings	4,254	4,916	4,168	4,521	4,740	4,132	4,305	4,560	3,807	4,633	4,505	4,096
Housing	361	526	399	433	333	417	343	520	372	469	433	359
Industrial	1,190	1,883	1,526	1,710	1,704	1,560	1,513	1,813	1,118	1,682	1,573	1,489
Educational	49	21	22	46	65	49	36	28	44	9	27	29
Hospital	795	824	540	495	653	578	723	717	624	515	726	566
Other federal buildings ³	1,859	1,663	1,681	1,837	1,985	1,527	1,689	1,482	1,649	1,959	1,747	1,653
Highways and streets	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,024	2,051	2,147	2,231	2,544	2,423	2,680	2,318	2,568	2,208	2,417	2,768
Conservation and development	4,554	4,928	5,026	4,334	4,275	4,649	4,347	4,705	5,349	5,857	4,912	5,105
Miscellaneous nonbuilding ⁴	1,822	2,283	2,144	2,160	2,132	2,004	1,835	1,564	1,308	1,545	1,472	1,599

NA Not available, but estimates are included in total.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 10a. Monthly Value of Public Construction Put in Place: May 2001-May 2003—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 ²
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹					
2001:	May ^f	13,844	6,224	337	3,327	250	2,310	4,760	227	803	611	1,218
	June ^f	14,765	6,493	337	3,631	247	2,278	5,388	191	826	661	1,206
	July ^f	15,076	6,731	296	4,136	235	2,064	5,433	189	789	663	1,270
	August ^f	15,868	7,061	303	4,426	243	2,089	5,703	214	866	662	1,362
	September ^f	14,678	6,679	325	3,996	245	2,113	4,976	183	833	689	1,318
	October ^f	14,655	6,648	346	3,786	259	2,257	5,033	165	869	653	1,286
	November ^f	13,025	6,063	344	3,368	251	2,100	4,093	185	864	640	1,180
	December ^f	11,101	5,647	348	3,101	253	1,945	2,942	156	680	577	1,099
2002:	January ^f	10,463	5,570	305	3,101	259	1,905	2,674	173	699	487	859
	February ^f	10,224	5,529	299	3,117	232	1,881	2,484	173	693	502	844
	March ^f	10,442	5,619	300	3,140	245	1,935	2,482	181	731	504	925
	April ^f	12,050	6,193	327	3,563	267	2,036	3,197	196	784	576	1,104
	May ^f	13,739	6,577	332	3,849	263	2,133	4,271	195	864	640	1,192
	June ^f	14,422	6,986	357	4,145	281	2,204	4,685	165	845	628	1,112
	July ^f	15,292	7,279	365	4,498	286	2,129	5,216	187	852	581	1,177
	August ^f	16,329	7,750	357	4,804	276	2,313	5,562	189	904	616	1,308
	September ^f	16,051	7,386	367	4,378	323	2,318	5,580	193	900	663	1,329
	October ^f	15,194	7,075	345	4,048	307	2,374	4,981	161	881	693	1,404
	November ^f	13,586	6,593	337	3,666	306	2,284	4,048	157	822	634	1,332
	December ^f	11,640	5,959	324	3,279	315	2,041	3,195	138	700	583	1,064
2003:	January ^f	10,487	5,720	337	3,223	281	1,879	2,562	130	656	516	902
	February ^f	9,995	5,516	326	3,029	302	1,858	2,316	101	650	548	865
	March ^f	10,389	5,702	322	3,209	296	1,876	2,496	106	664	539	883
	April ^f	11,890	6,145	354	3,410	302	2,080	3,237	130	747	571	1,060
	May ^p	12,806	6,275	343	3,582	293	2,057	3,881	134	807	589	1,120
		Federally owned public construction										
		Total federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction ⁴	
			Total	Housing	Industrial	Educational	Hospital					Other buildings ³
2001:	May ^f	1,072	338	33	90	2	49	164	(NA)	194	341	169
	June ^f	1,105	386	30	103	2	70	180	(NA)	214	325	147
	July ^f	1,020	356	28	103	2	54	169	(NA)	199	299	130
	August ^f	1,141	357	27	102	2	48	177	(NA)	224	386	132
	September ^f	1,548	489	26	173	4	79	208	(NA)	252	621	148
	October ^f	908	316	35	63	2	35	180	(NA)	162	291	102
	November ^f	1,011	304	30	94	1	38	141	(NA)	202	351	126
	December ^f	1,024	357	32	161	3	29	132	(NA)	180	345	121
2002:	January ^f	969	326	28	91	4	61	143	(NA)	153	338	135
	February ^f	1,067	368	39	141	2	62	125	(NA)	149	366	170
	March ^f	1,114	342	33	125	2	44	138	(NA)	181	403	172
	April ^f	1,081	367	35	139	4	40	149	(NA)	176	346	172
	May ^f	1,153	376	26	135	5	52	157	(NA)	216	357	178
	June ^f	1,128	354	36	133	4	49	131	(NA)	211	373	161
	July ^f	1,137	360	29	126	3	60	141	(NA)	230	362	153
	August ^f	1,173	383	44	152	2	60	124	(NA)	200	416	138
	September ^f	1,595	422	41	124	5	69	183	(NA)	271	698	171
	October ^f	988	350	35	127	1	39	148	(NA)	147	363	96
	November ^f	1,126	369	35	129	2	59	143	(NA)	208	403	121
	December ^f	1,137	343	30	125	2	47	139	(NA)	242	406	127
2003:	January ^f	1,048	343	32	137	4	32	139	(NA)	195	368	126
	February ^f	1,038	308	20	110	2	43	133	(NA)	186	400	130
	March ^f	1,051	324	29	123	3	41	128	(NA)	192	413	106
	April ^f	1,173	284	23	121	5	32	104	(NA)	195	465	208
	May ^p	1,212	378	26	158	2	69	123	(NA)	227	458	123

NA Not available, but estimates are included in totals. ^PPreliminary. ^rRevised.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers, etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Table 10b. Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	141,310	8,706	8,862	9,742	10,944	11,698	12,936	13,402	14,435	14,136	13,402	12,234	10,813
Total buildings	66,645	4,610	4,659	4,971	5,324	5,363	5,997	6,130	6,565	6,240	5,937	5,610	5,239
Housing and redevelopment	4,277	323	309	343	347	389	353	357	387	402	384	339	343
Educational	36,697	2,434	2,427	2,563	2,884	2,918	3,515	3,620	3,893	3,549	3,228	2,968	2,698
Hospital	2,877	204	215	214	210	233	253	236	253	275	268	272	245
Other ¹	22,795	1,649	1,709	1,850	1,883	1,824	1,876	1,918	2,033	2,013	2,057	2,031	1,953
Highways and streets	44,372	2,033	2,161	2,546	3,223	3,774	4,284	4,555	4,986	5,081	4,580	3,972	3,178
Conservation and development	1,947	145	131	128	149	138	151	149	184	185	177	214	195
Other state and local construction	28,346	1,917	1,912	2,097	2,248	2,422	2,503	2,568	2,700	2,631	2,707	2,439	2,201
Sewer systems	9,826	714	659	765	767	821	888	875	899	895	904	849	789
Water supply facilities	6,547	457	481	506	524	549	574	629	619	598	591	550	468
Miscellaneous nonbuilding ²	11,974	747	771	826	956	1,052	1,042	1,064	1,182	1,138	1,212	1,039	944
Federal construction	12,796	922	1,048	1,058	1,062	945	1,078	1,098	1,062	1,440	875	1,112	1,099
Total buildings	4,896	365	424	421	387	378	406	428	370	527	372	400	418
Housing	384	24	24	34	39	29	35	35	30	41	28	34	29
Industrial	827	59	63	77	68	75	65	80	62	99	40	63	77
Educational	14	3	1	1	1	1	1	2	3	1	-	-	1
Hospital	762	74	112	74	54	61	63	77	41	65	44	38	60
Other federal buildings ³	2,909	205	225	235	224	213	241	234	234	321	261	265	251
Highways and streets	229	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	1,922	136	161	172	163	163	168	176	127	186	134	152	184
Conservation and development	3,766	233	282	316	277	256	317	312	371	541	218	315	329
Miscellaneous nonbuilding ⁴	1,983	177	171	136	218	130	165	158	167	159	127	226	151

See footnotes at end of table.

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2000												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	149,106	9,634	9,283	10,545	11,567	12,527	13,454	13,508	15,581	15,230	14,478	12,580	10,720
Total buildings	72,587	5,066	5,136	5,364	5,661	6,004	6,547	6,560	7,088	6,793	6,633	6,039	5,694
Housing and redevelopment	3,932	298	279	330	342	341	348	315	338	347	361	336	297
Educational	38,998	2,724	2,731	2,846	2,921	3,156	3,627	3,710	4,051	3,713	3,413	3,066	3,039
Hospital	3,473	234	234	259	271	331	318	321	313	337	309	303	243
Other ¹	26,183	1,809	1,892	1,930	2,128	2,176	2,254	2,214	2,386	2,396	2,550	2,334	2,115
Highways and streets	45,700	2,529	2,049	2,884	3,413	3,891	4,239	4,446	5,682	5,461	4,654	3,739	2,714
Conservation and development	2,101	148	174	156	156	161	161	167	165	197	224	198	192
Other state and local construction	28,718	1,891	1,923	2,140	2,336	2,472	2,506	2,335	2,645	2,778	2,967	2,603	2,121
Sewer systems	9,363	658	648	726	848	821	907	796	855	830	844	780	650
Water supply facilities	6,247	465	473	461	512	553	507	484	583	577	607	549	477
Miscellaneous nonbuilding ²	13,108	767	802	954	976	1,098	1,093	1,055	1,207	1,371	1,516	1,274	994
Federal construction	12,417	869	955	1,113	963	975	1,099	928	1,128	1,475	868	1,042	1,002
Total buildings	4,417	347	346	373	367	346	387	331	394	477	355	341	352
Housing	331	22	24	28	25	26	27	27	27	29	26	30	39
Industrial	991	81	83	79	78	77	83	84	93	106	63	79	84
Educational	25	-	-	-	6	1	2	1	2	4	-	4	4
Hospital	618	58	54	41	69	40	61	42	53	70	38	50	40
Other federal buildings ³	2,452	186	185	224	188	201	214	176	218	268	228	178	185
Highways and streets	292	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,105	122	184	185	156	173	170	162	181	232	125	238	178
Conservation and development	3,679	257	281	319	287	267	328	254	337	544	245	272	289
Miscellaneous nonbuilding ⁴	1,925	129	129	218	133	163	184	153	183	190	112	167	164

See footnotes at end of table.

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2001												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	155,252	9,787	9,543	10,624	12,286	13,844	14,765	15,076	15,868	14,678	14,655	13,025	11,101
Total buildings	73,480	5,313	5,156	5,456	6,009	6,224	6,493	6,731	7,061	6,679	6,648	6,063	5,647
Housing and redevelopment	3,840	302	282	296	324	337	337	296	303	325	346	344	348
Educational	41,178	2,757	2,659	2,846	3,144	3,327	3,631	4,136	4,426	3,996	3,786	3,368	3,101
Hospital	2,950	254	241	228	245	250	247	235	243	245	259	251	253
Other ¹	25,511	2,000	1,975	2,084	2,296	2,310	2,278	2,064	2,089	2,113	2,257	2,100	1,945
Highways and streets	49,216	2,246	2,185	2,817	3,640	4,760	5,388	5,433	5,703	4,976	5,033	4,093	2,942
Conservation and development	2,311	202	193	209	196	227	191	189	214	183	165	185	156
Other state and local construction	30,246	2,025	2,009	2,142	2,442	2,632	2,693	2,723	2,890	2,841	2,808	2,684	2,357
Sewer systems	9,249	641	628	681	768	803	826	789	866	833	869	864	680
Water supply facilities	7,173	428	465	518	605	611	661	663	662	689	653	640	577
Miscellaneous nonbuilding ²	13,824	956	916	943	1,070	1,218	1,206	1,270	1,362	1,318	1,286	1,180	1,099
Federal construction	12,871	1,011	965	1,053	1,015	1,072	1,105	1,020	1,141	1,548	908	1,011	1,024
Total buildings	4,294	358	319	373	341	338	386	356	357	489	316	304	357
Housing	345	31	27	25	22	33	30	28	27	26	35	30	32
Industrial	1,282	104	85	95	108	90	103	103	102	173	63	94	161
Educational	29	2	2	4	3	2	2	2	2	4	2	1	3
Hospital	547	35	31	43	36	49	70	54	48	79	35	38	29
Other federal buildings ³	2,091	187	174	206	172	164	180	169	177	208	180	141	132
Highways and streets	334	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,365	182	163	178	216	194	214	199	224	252	162	202	180
Conservation and development	4,192	304	316	335	278	341	325	299	386	621	291	351	345
Miscellaneous nonbuilding ⁴	1,686	151	153	150	157	169	147	130	132	148	102	126	121

See footnotes at end of table.

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1999-2002—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	2002												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction . . .	159,431	10,463	10,224	10,442	12,050	13,739	14,422	15,292	16,329	16,051	15,194	13,586	11,640
Total buildings	78,516	5,570	5,529	5,619	6,193	6,577	6,986	7,279	7,750	7,386	7,075	6,593	5,959
Housing and redevelopment	4,015	305	299	300	327	332	357	365	357	367	345	337	324
Educational	45,587	3,101	3,117	3,140	3,563	3,849	4,145	4,498	4,804	4,378	4,048	3,666	3,279
Hospital	3,362	259	232	245	267	263	281	286	276	323	307	306	315
Other ¹	25,552	1,905	1,881	1,935	2,036	2,133	2,204	2,129	2,313	2,318	2,374	2,284	2,041
Highways and streets	48,374	2,674	2,484	2,482	3,197	4,271	4,685	5,216	5,562	5,580	4,981	4,048	3,195
Conservation and development	2,108	173	173	181	196	195	165	187	189	193	161	157	138
Other state and local construction	30,433	2,046	2,039	2,160	2,464	2,696	2,585	2,611	2,828	2,891	2,978	2,788	2,347
Sewer systems	9,676	699	693	731	784	864	845	852	904	900	881	822	700
Water supply facilities	7,107	487	502	504	576	640	628	581	616	663	693	634	583
Miscellaneous nonbuilding ²	13,650	859	844	925	1,104	1,192	1,112	1,177	1,308	1,329	1,404	1,332	1,064
Federal construction	13,668	969	1,067	1,114	1,081	1,153	1,128	1,137	1,173	1,595	988	1,126	1,137
Total buildings	4,360	326	368	342	367	376	354	360	383	422	350	369	343
Housing	412	28	39	33	35	26	36	29	44	41	35	35	30
Industrial	1,548	91	141	125	139	135	133	126	152	124	127	129	125
Educational	36	4	2	2	4	5	4	3	2	5	1	2	2
Hospital	644	61	62	44	40	52	49	60	60	69	39	59	47
Other federal buildings ³	1,721	143	125	138	149	157	131	141	124	183	148	143	139
Highways and streets	303	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities	2,382	153	149	181	176	216	211	230	200	271	147	208	242
Conservation and development	4,830	338	366	403	346	357	373	362	416	698	363	403	406
Miscellaneous nonbuilding ⁴	1,793	135	170	172	172	178	161	153	138	171	96	121	127

- Represents zero or rounds to zero. NA Not available, but estimates are included in total.

¹Includes general administrative buildings, prisons, police and fire stations, courthouses, passenger terminals, civic centers etc. ²Includes open amusement and recreational facilities, power generating facilities, transit systems, airfields, open parking facilities, etc. ³Includes federal office buildings, prisons, courthouses, space facilities, postal facilities, etc. ⁴Includes federal airport facilities, fish and wildlife preservation facilities, VA cemeteries, etc.

Appendix A.

Definitions

CONSTRUCTION

In this publication, construction includes the following:

1. New buildings and structures.
2. Additions, alterations, conversions, expansions, reconstruction, renovations, rehabilitations, and major replacements (such as the complete replacement of a roof or heating system).
3. Mechanical and electrical installations such as plumbing, heating, electrical work, elevators, escalators, central air-conditioning, and other similar building services.
4. Site preparation and outside construction of fixed structures or facilities such as sidewalks, highways and streets, parking lots, utility connections, outdoor lighting, railroad tracks, airfields, piers, wharves and docks, telephone and telegraph lines, radio and television towers, water supply lines, sewers, water and signal towers, electric light and power distribution and transmission lines, petroleum and gas pipelines, and similar facilities which are built into or fixed to the land.
5. Installation of the following types of equipment: boilers, overhead hoists and cranes, and blast furnaces.
6. Fixed, largely site-fabricated equipment not housed in a building, primarily for petroleum refineries and chemical plants, but also including storage tanks, refrigeration systems, etc.
7. Cost and installation of construction materials placed inside a building and used to support production machinery; for example, concrete platforms, overhead steel girders, and pipes to carry paint, etc. from storage tanks.

The following are excluded from construction:

1. Maintenance and repairs to existing structures or service facilities.
2. Cost and installation of production machinery and equipment items not specifically covered above, such as heavy industrial machinery, printing presses, stamping machines, bottling machines,

and packaging machines; special purpose equipment designed to prepare the structure for a specific use, such as steam tables in restaurants, pews in churches, lockers in school buildings, beds or X-ray machines in hospitals, and display cases and shelving in stores.

3. Drilling of gas and oil wells, including construction of offshore drilling platforms; digging and shoring of mines (construction of buildings at mine sites is included); work which is an integral part of farming operations such as plowing and planting of crops.
4. Land acquisition.

VALUE OF CONSTRUCTION PUT IN PLACE

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. Cost of architectural and engineering work.
5. Miscellaneous overhead and office costs chargeable to the project on the owner’s books.
6. Interest and taxes paid during construction (except for state and locally owned projects).

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, published estimates represent payments made during a period rather than the value of work actually done during that period. For other categories, estimates are derived by distributing the total construction cost of the project by means of historic construction progress patterns.

CLASSIFICATION OF CONSTRUCTION

The following descriptions are used in classifying construction projects. Projects are classified as privately owned or government owned (state, local, or federal government). The distinction is made on the basis of ownership during the construction period.

Categories of Private Construction

Residential Buildings

New housing units includes new houses, apartments, condominiums, and townhouses. The classification excludes residential units in buildings which are primarily nonresidential. It also excludes manufactured homes and houseboats.

Improvements includes remodeling, additions, and major replacements to properties subsequent to completion of original building. It includes construction of additional housing units in existing residential structures, finishing of basements and attics, modernization of kitchens, bathrooms, etc. Also included are improvements outside of residential structures, such as the addition of swimming pools and garages, and replacement of major equipment items such as water heaters, furnaces and central air-conditioners. Maintenance and repair work is not included.

Nonresidential Buildings

Industrial includes all buildings and structures at manufacturing sites. Office buildings and warehouses owned by industrial companies but not constructed at an industrial site are classified as “office” and “other commercial” respectively.

Office includes office and professional buildings used primarily for office space. Office buildings built by public utilities for their own use are included in “public utilities.” Office buildings at industrial sites are classified as “industrial”; however, an office building owned by an industrial company and not located at an industrial site is classified as “office.”

Hotels, motels includes hotels, motels, resort lodging, tourist courts and cabins, and similar facilities.

Other commercial includes buildings and structures which are intended for use by wholesale, retail, or service trade establishments. For example, shopping centers or malls, department stores, low-rise banks and financial institutions, drug stores, parking garages, auto service stations and repair garages, beauty schools, grocery stores, restaurants, and dry cleaning stores are included in this category. Also included are warehouses and storage buildings, cold storage plants, grain elevators and silos, except such facilities at industrial sites.

Religious includes houses of worship and other religious buildings. Certain buildings, although owned by religious organizations, are not included in this category. These include educational or charitable institutions, hospitals, and publishing houses.

Educational includes schools, universities and other academic buildings, and associated buildings (libraries, cafeteria, dormitories, student unions, etc.). Also included are noncommercial museums, art galleries, and similar establishments. Beauty schools and dance schools are classified as “other commercial.”

Hospital and institutional includes health care and institutional facilities. Also included are sanatoria, convalescent and rest homes, nursing homes, orphanages, and similar establishments for prolonged care. Surgical or outpatient clinics affiliated with a hospital are also part of this category. Buildings which are used primarily for doctors’ offices are classified as “office.”

Miscellaneous nonresidential includes nonresidential buildings which are not classified in any of the above categories. Motion picture studios, theatres, casinos, health clubs, and buildings which provide amusement and recreational services are included. Also included are radio and television studios and bus and airline terminal buildings. Farm buildings and buildings owned by public utility companies for their own use are included in the “farm nonresidential” and “public utilities” categories, respectively.

Farm Nonresidential

Farm nonresidential construction includes buildings and structures such as barns, storage houses, smokehouses, and fences which are constructed on establishments having annual agricultural sales of \$1,000 or more. Also included are land improvements such as land leveling, terracing, tile drainage, and the construction of dikes, ponds, flood control systems, and roads and lanes.

Public Utilities

For each of the public utility categories, construction expenditures are classified in terms of the industry rather than the function of the building or structure. Construction expenditures made by the following privately owned public utility companies or cooperatives are included in this category:

Railroad	Petroleum pipelines
Telephone	Electric light and power
Telegraph	Gas (manufacturing, transmission, and distribution)
Television cable	

The estimates include not only the type of construction peculiar to the operation of the utility, but also other types of nonresidential building and nonbuilding construction built by these companies for their own use, such as office buildings.

All Other Private

All other private construction includes all privately owned nonbuilding projects (other than built for public utility companies) which are not classified elsewhere, such as streets and bridges, parking areas not associated with a building project, dams and reservoirs, sewer and water facilities, golf courses, parks and playgrounds, and airfields.

Categories of Public Construction

Public construction is composed of two parts: state and local construction and federal construction.

State and local Construction

Housing and redevelopment includes houses, apartment buildings, and all other residential structures.

Educational includes primary, secondary, college and university level educational buildings and associated buildings (libraries, dining halls, dormitories, student unions, etc.). Also included are buildings which serve an educational purpose, i.e., public libraries, museums, art galleries, planetariums, observatories, arboreta, botanical and zoological gardens, archives, conservatories, etc. This category does not include institutions for the handicapped or teaching hospitals which are classified as “hospitals.”

Hospital includes health care and institutional facilities such as hospitals, clinics, and infirmaries. Also included are rest homes, nursing homes, sanatoria, psychiatric institutions, schools for the handicapped, orphanages, half-way homes, outpatient clinics, etc.

Other buildings includes general administrative buildings; police, fire, and rescue buildings; courthouses, jails and prisons; bus, streetcar, subway and railroad garages and barns, stations and related buildings; enclosed parking facilities; airport buildings; maritime transport, storage and terminal buildings; electric power generating buildings; amusement-recreational buildings; and other commercial, industrial, and miscellaneous buildings not elsewhere classified.

Highways and streets includes highways, streets, bridges, overpasses, tunnels, toll facilities, street lighting, and miscellaneous road construction.

Conservation and development includes all construction intended for water resources protection and control such as erosion control systems, fish hatcheries, spillways, levees, seawalls, waterfront bulkheads, jetties, river and harbor development, dredging and drainage, canals, irrigation facilities, docks, piers, wharves, berths, and reservoirs built other than for potable water supply.

Sewer systems includes storm drainage and sewerage system lines, interceptors, dry waste disposal plants, nonpotable water treatment plants and pumping stations, tunnels, outfalls, and all other sewer construction.

Water supply facilities includes potable water distribution systems and storage facilities such as water lines, aqueducts, water pumping stations, treatment plants, dams, reservoirs, artificial lakes, brooks, ponds, and water wells.

Miscellaneous nonbuilding construction includes open amusement and recreational facilities; power generating facilities; and other open construction (subway and streetcar construction, airport runways, open parking facilities, etc.).

Federal Construction

The value-in-place estimates for federal construction are classified into nine separate categories defined below. In general, classification is based on the agency responsible for the work; for example, Veterans Administration expenditures are classified as “hospital” and Bureau of Reclamation expenditures are classified as “conservation and development.” However, the expenditures reported by a few agencies are subdivided into two or more types of construction.

Housing includes new family housing units and the rehabilitation of existing units constructed for the armed services. Military barracks, bachelor officers’ quarters and family housing for Coast Guard personnel are classified under “military facilities.” Housing for forest rangers and national park employees is classified under “conservation and development.”

Industrial includes construction done at Department of Energy research and development facilities. It also includes manufacturing, assembling and processing buildings and their related facilities such as arsenals, ordnance works, and shipyards.

Educational includes academic and associated buildings, laboratories and science buildings, libraries, art galleries, and museums. Educational facilities built by the Department of Defense for its personnel are included under “military facilities.” Federally owned schools on Indian reservations are included in this category.

Hospital includes health care and institutional facilities such as veterans’ hospitals and clinics.

Other buildings includes general office buildings, customs houses, courthouses, jails and prisons, except such buildings owned by the Department of Defense.

Military facilities, with the specific exceptions noted below, covers construction owned by the Department of Defense and the Coast Guard. This category includes troop housing, administration and training buildings, warehouses, mess halls, recreation centers, educational facilities, airfields and airport buildings, missile sites, etc. The following specific types of construction owned by the Department of Defense are classified in the categories indicated in parentheses:

Family housing for the armed services (Residential)
Civil Works—Construction by Army Corps of Engineers (Conservation and development)
Department of Defense owned industrial facilities (Industrial)
Military hospitals (Hospitals)
Soldiers' Home (Miscellaneous construction)

Highways and streets includes streets, bridges, vehicular tunnels, viaducts, and forest and park roads owned by federal agencies other than the Department of Defense. Also included are the following built in connection with a federal road: culverts, drainage, erosion control, lighting, guard rails, and earthwork protective structures.

Conservation and development includes construction work done by agencies which are primarily engaged in the maintenance and supervision of natural resources such as the Army Corps of Engineers, Tennessee Valley Authority, and Bureau of Reclamation.

Miscellaneous construction includes federal airport facilities, fish and wildlife preservation facilities, Veterans Administration cemeteries, etc.

Appendix B.

Data Sources, Assumptions, and Methods

INTRODUCTION

This appendix describes the sample design and estimation procedures used to develop current estimates of value of construction put in place.

Value-in-place estimates are not published separately for individual series until data for the series are available. Therefore, publication of separate estimates is limited to quarterly data if the series is quarterly, and to annual data if the series is annual; however, projected or interpolated monthly estimates from these series are included in the monthly totals but are not shown separately.

PRIVATE RESIDENTIAL BUILDINGS

New One-Unit Housing

Construction cost of new one-unit houses started each month is estimated using housing starts and sales data from the U.S. Census Bureau's Survey of Construction (SOC) at www.census.gov/const/www/newresconstindex.html (for starts) or www.census.gov/const/www/newressalesindex.html (for sales) The estimated cost of all single units started is then distributed into monthly value put in place by applying fixed patterns of monthly construction progress. The patterns are shown in Table B-1.

Construction cost is estimated separately for units built to be sold or rented and units built by the owner or for the owner on contract. In both cases, the total cost is obtained by multiplying the number of units started by an average construction cost per unit. For units built to be sold or rented, the average construction cost is the average sales price at the time of start multiplied by the factor .8424. This factor eliminates an estimate of the cost of "nonconstruction" items such as raw land, marketing costs, closing costs, and movable appliances. The average construction cost for units built for the owner on contract is the average contract value at time of start increased by the factor 1.102 to eliminate "nonconstruction" items and add the value of land development not already accounted for.

New Two-Or-More-Unit Buildings

A subsample of new residential building projects with two units or more is selected from the SOC.

Once a project is selected, monthly construction progress reports are requested from the owner until the project is completed. About 2,500 projects are in the survey each month. This number includes newly selected projects as well as projects carried over from the previous months. Estimates of value put in place are obtained by multiplying the final weight of each project by the reported value and summing all projects. The final weight can be expressed as follows:

Final weight = (basic weight) x (unit adjustment factor)
x (adjustment factor for architectural,
engineering, and miscellaneous costs).

- a. **Basic weight.** The basic weight is the reciprocal of the probability of selection. Since the projects in the Two Plus Survey are a subsample of the SOC sample, the basic weight includes the reciprocal of the sampling rate used in the SOC.
- b. **Unit adjustment factor.** The unit adjustment factor is the ratio of the unbiased estimate obtained from the Census Bureau's Building Permits Survey of the number of multi-family units authorized in a month to the unbiased estimate from the Two Plus Survey of the number of multi-family units authorized in a month.
- c. **Adjustment for architectural, engineering, and miscellaneous costs.** The value put in place for the construction of a project includes the total construction cost and fees for architectural and engineering services and miscellaneous costs. However, monthly reports from sample projects do not include architectural, engineering, and miscellaneous costs. Each month's reported value is inflated to account for these costs so that the sum of the values put in place each month is the total cost of the project. This adjustment factor is defined as the ratio of the total estimated value of the project reported by the owner (construction cost and architectural, engineering, and miscellaneous costs) to the estimated construction cost of the project reported by the owner.

Improvements

Data for this series are obtained by the Census Bureau from household interviews in a representative sample of owner-occupied units and a mail survey of owners of a sample of rental or vacant properties. Prior to 1985, these data were collected as part of the Census

Bureau's Quarterly Household Survey of Residential Alterations and Repairs. Beginning with January 1984 statistics, estimates of expenditures on owner-occupied properties are based on data from the Consumer Expenditure Survey (CES) conducted by the Census Bureau for the Department of Labor's Bureau of Labor Statistics. A detailed description of this survey and the mail survey and a comparison of the old and new series for 1984 appear in Construction Reports, C50-85-Q1, *Residential Alterations and Repairs*, issued in October 1985. The CES was designed to provide the Bureau of Labor Statistics with a database for purposes relating to the Consumer Price Index. This survey was not designed to provide monthly estimates of residential improvements. As a result, these estimates have high variances and are not shown separately in the tables of monthly estimates.

Data from owner-occupied units are collected through a rotating panel survey design. There are three panels: one panel is interviewed during the first month of a quarter, another panel during the second month and a third panel during the last month. Each panel reports on improvements done since the previous interview 3 months ago; thus, an expenditure may be reported in the month of interview, the month before, 2 months before or 3 months before, but after the previous interview. Data collection for expenditures in a month will not be completed until 3 months after the month and an estimate based on all of the data will not be available until approximately 5 months after the month.

Data from the mail survey of owners of a sample of rental or vacant properties are collected after the end of each quarter. The expenditures are not reported for each month of the quarter but only for the entire quarter. For this report, monthly estimates need to be made by apportioning the quarterly expenditures to the months in the quarter. The quarterly estimate is available 4 months after the end of the quarter and accounts for about 20 percent of the estimate.

The estimates of total residential improvements are usually forecasted data at least 1 or 2 months in advance. The revised estimates are still based on incomplete data and in many cases are still forecasts. Estimates based on complete data are first used in the May publication for revisions to the previous year. The total improvements estimates are subject to substantial revisions from the preliminary estimates due to the necessity of forecasting. For estimates beginning in 1993, time series techniques with the X-12-ARIMA Program have been used to remove the irregular effect.

PRIVATE NONRESIDENTIAL BUILDINGS

The Census Bureau conducts a monthly Construction Progress Reporting Survey for estimating the value of

private nonresidential building construction in the United States. This survey uses three sources of information for identifying nonresidential building projects:

1. Data from the F.W. Dodge Division of the McGraw-Hill Information Systems Company on projects valued at \$75,000 or more in the United States except Hawaii.
2. Building permit notifications for a sample of projects in the permit-issuing places of Honolulu, Maui, Kauai and Hawaii county in Hawaii.
3. Projects in a sample of areas not covered by building permit systems or reported by Dodge.

Projects from sources 1 and 2 are stratified by type of construction and construction value. Sixty-six strata are created and each stratum is assigned a specific sampling rate. Of the 66 strata, 16 are certainty strata and have a sampling rate of 1-in-1. Within each of the remaining 50 noncertainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Projects from source 3 (nonpermit areas) are selected with virtual certainty. Once a project is selected, monthly construction progress reports are requested from the owner until the project is completed. About 8,500 projects are in the survey at any one time.

Estimates of value put in place are obtained by multiplying the final weight of each project by the monthly reported value and summing all projects. The final weight can be expressed as the product of the following:

Final weight=(basic weight) x (outlier adjustment factor) x (adjustment factor for architectural, engineering, and miscellaneous costs)

a. **Basic weight.** The basic weight varies with each source and project.

1. For projects from sources 1 and 2, the basic weight is the reciprocal of the probability of selecting a project.
2. For projects from source 3, the basic weight is the reciprocal of the probability of selecting a nonpermit segment.

a. **Outlier adjustment factor.** This factor reduces the influence on the VIP of an extreme noncertainty observation that reports an extremely large total construction value.

b. **Adjustment factor for architectural, engineering, and miscellaneous costs.** This factor is computed in the same manner as in the Two Plus Survey (see above).

Imputations are made for projects which have not reported at the time of the monthly tabulation, based on estimated total construction value and month of start of the project. Weighted data are summed overall sample projects by type of construction. The results are increased by 25 percent to account for undercoverage of construction projects not reported by F.W. Dodge. The adjustment for undercoverage results from comparison studies, conducted by the Census Bureau, of Dodge reports with building permits for a sample of projects for which permits were issued.

The industrial buildings category is further adjusted by benchmarking the tabulated estimates to the latest detailed structures data from the Census Bureau's Annual Capital Expenditures Survey (ACES). The 1992, 1994, and 1998 levels for industrial buildings are based upon actual ACES data. Estimates for other years are extrapolations from the 1992, 1994, and 1998 levels.

FARM NONRESIDENTIAL CONSTRUCTION

Value-in-place estimates for new farm nonresidential construction are extrapolated from the annual U.S. Department of Agriculture (USDA) report, *Income and Balance Sheet Statistics*. Monthly or quarterly estimates are not available.

To estimate monthly values, including projections for the current and following year, the USDA data are developed using the trend of the "all other private" construction put-in-place estimates.

PUBLIC UTILITIES

Value-in-place estimates for the telephone component of telecommunications construction are based on reports of actual monthly construction progress. For the electric light and power, gas, railroad, petroleum pipeline categories, and the TV cable component of telecommunications, construction put in place estimates are based on annual capital expenditure reports compiled by Federal regulatory agencies and private organizations.

Pending availability of annual data, monthly estimates for railroads are obtained by distributing Surface Transportation Board quarterly construction expenditures estimates into monthly values. Preliminary monthly estimates for TV cable, electric, and gas construction are based on annual forecasts from Paul Kagan Associates, Inc., the Edison Electric Institute, and the American Gas Association; and petroleum pipeline estimates are projections from the latest final year of Federal Energy Regulatory Commission data. Monthly estimates are published only for telecommunications; however, estimates for other public utilities are included in the appropriate totals.

ALL OTHER PRIVATE CONSTRUCTION

Beginning with data for May 1995, estimates for this series are based upon a monthly sample survey of projects. The information for creating the sampling frame is obtained from the same F.W. Dodge data used for private nonresidential buildings (see above). Once a project is selected it remains in the survey until completion of the project, and monthly progress reports are requested from the owner. Tabulation of data is the same as for private nonresidential buildings. The results are also increased by 25 percent to account for projects not reported by F.W. Dodge.

Prior to May 1995, monthly estimates for this series are indirectly measured using Dodge contract awards statistics and construction progress patterns.

PUBLIC CONSTRUCTION

Public construction is composed of two parts: State and local construction and Federal construction.

State and Local

The information for creating the sampling frame for the state and local survey is obtained from the same F.W. Dodge data used for private nonresidential buildings (see above).

The projects are stratified by type of construction and value according to the information from Dodge. Seventy-two strata are created and a sampling rate is assigned to each stratum. Of the 72 strata, 15 are certainty strata. Within each of the remaining 57 non-certainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Once a project is selected it remains in the survey until completion of the project, and monthly construction progress reports are requested from the appropriate agency in charge of the project or its designated agent, such as the builder or architect responsible for the project. The average number of projects in the survey at any one time is about 8,500. These include newly selected projects as well as projects carried over from previous months.

Tabulation of data is the same as for private nonresidential buildings. The results are increased by 5 percent to account for construction projects not reported by F.W. Dodge. This adjustment results from a comparison study of Dodge reports with state and local agency reports for a sample of projects for which contracts were awarded or force account work started.

All data are further adjusted by benchmarking the tabulated estimates to annual construction expenditures data collected in the Census Bureau's Annual Survey of Government Finances.

Federal

Monthly value-in-place estimates for federally owned construction are based on monthly data which, with few exceptions, are supplied to the Census Bureau by

each federal agency involved in construction activities. Information is obtained from federal budget documents for a small number of agencies where information cannot be directly supplied. These budget totals are prorated over the fiscal year to derive monthly estimates.

Table B-1. Monthly Progress Patterns for Private One-Unit Residential Buildings by Month of Start

[Percent of the value of units started monthly]

Month of activity ¹	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1st	15.8	15.8	15.8	15.8	15.9	16.9	16.9	16.9	16.9	16.9	16.9	15.8
2nd	21.7	23.2	22.5	22.5	22.9	23.8	23.8	23.8	23.8	23.8	21.7	21.7
3rd	21.0	20.1	20.8	20.8	20.8	20.8	20.8	20.8	20.8	18.3	18.3	18.3
4th	16.3	16.0	16.0	16.0	16.0	16.0	16.0	16.0	13.7	13.7	13.7	16.8
5th	10.6	10.3	10.3	10.3	10.3	9.5	9.5	8.8	8.8	8.8	11.7	11.7
6th	6.1	6.1	6.1	6.1	6.1	5.8	5.8	5.1	5.1	7.4	7.6	6.7
7th	3.5	3.5	3.5	3.5	3.5	2.7	2.7	2.7	4.3	4.8	4.3	4.0
8th	2.0	2.0	2.0	2.0	1.5	1.5	1.5	2.5	2.8	3.3	2.8	2.0
9th	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6	2.0	1.2	1.2	1.2
10th	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
11th	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
12th	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

¹Month of start is first month of activity.

Appendix C.

Reliability of the Estimates

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

On an annual basis, the estimates for series directly measured monthly, quarterly, or annually accounted for about 70 percent of total construction in 2002 (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 which 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 Table C-1. 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 Table C-1, 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.

Table C-1 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 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, 47 percent; state and locally owned public construction, 32 percent; private residential construction of 2 units or more, 57 percent; and private residential improvements, 17 percent. Each of these imputation rates is not an explicit indication of the potential error in statistics, but the degree of uncertainty regarding the accuracy of the statistics increases as the percentage of imputation increases.

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

For state and locally owned construction, construction outlays from the Survey of Government Finances are

available only through fiscal year 2001. (Outlays are included if a government agency's fiscal year ending date falls within July 2000 to June 2001 inclusive, and for three state agencies with fiscal years ending in August or September 2001.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 3 years from 2001 through April 2004. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12-month period but result from capital outlays made over a 26-month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

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

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

MONTHLY REVISIONS TO ESTIMATES

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

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -0.5 percent to 1.6 percent with a median of 0.2 percent (see Table C-2). The range of the difference between first revision and second revision was from -0.8 to 1.0 percent, with a median of 0.0 percent.

Table C-1. Relative Standard Errors and Coefficients for Standard Errors of Changes

Type of construction	Relative standard error (percent)			Coefficient for changes	
	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	2	1	.03	.02
Private construction	3	2	1	.04	.03
Residential buildings	5	3	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	1	1	.02	.01
Industrial	3	2	2	.04	.03
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	5	5	.10	.07
Hospital and institutional	6	5	5	.07	.07
Miscellaneous buildings	7	5	4	.09	.07
Public construction	2	1	1	.03	.01
Housing and redevelopment	8	5	4	.11	.07
Industrial	(NA)	(NA)	(NA)	(NA)	(NA)
Educational	3	2	2	.04	.03
Hospital	6	5	4	.08	.07
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	2	2	.04	.03
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	10	9	.23	.14
Sewer systems	6	4	3	.08	.06
Water supply facilities	8	5	3	.11	.07
Miscellaneous public	9	6	4	.12	.09
Federal construction	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Note: All statistics are based upon 2002 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

Table C-2. Analysis of Revisions to Monthly Seasonally Adjusted Annual Rate Estimates in Current Dollars

Type of construction	Percent changes between estimates - last 12 months					
	Preliminary versus second revision			First revision versus second revision		
	Range		Median	Range		Median
	From	To		From	To	
Total construction	-0.5	1.6	0.2	-0.8	1.0	0.0
Private construction	-0.7	1.8	0.0	-0.8	1.3	0.0
Residential buildings	-0.6	1.6	0.9	-1.0	1.6	-0.1
New housing units	-0.5	0.5	-0.2	-0.8	0.7	0.0
1 unit	-0.3	0.8	0.2	-10.8	0.6	0.0
2 units or more	-5.3	1.8	-2.2	-3.4	1.3	-0.7
Nonresidential buildings	-1.9	1.9	0.7	-1.8	1.6	0.6
Industrial	-6.7	5.6	-1.9	-4.6	3.5	-0.2
Office	0.3	5.0	1.7	-1.7	4.3	0.5
Hotel, motel	-4.4	7.2	-2.4	-2.5	5.9	-1.1
Other commercial	-5.3	3.8	1.5	-1.9	2.1	0.8
Religious	-3.4	3.7	0.0	-1.6	3.6	-0.3
Educational	-7.1	5.0	-1.4	-4.3	3.2	-1.3
Hospital and institutional	-4.0	3.4	1.7	-2.1	2.0	-0.1
Miscellaneous buildings	-2.7	3.2	-1.9	-3.5	2.5	-1.3
Telecommunications	-5.6	9.9	-0.1	-0.7	8.4	-0.1
All other private	-23.8	4.2	-5.6	-18.3	3.6	-3.6
Public construction	-1.8	1.7	0.2	-0.9	1.1	-0.2
Housing and redevelopment	-15.3	4.5	-7.8	-8.0	2.8	-3.6
Industrial	-15.4	23.1	0.2	-0.5	28.0	0.0
Educational	-3.9	3.3	-0.4	-2.4	2.0	-0.4
Hospital	-8.8	8.2	0.2	-5.1	2.2	-1.6
Other public buildings	-3.0	6.9	0.3	-1.7	3.0	0.5
Highways and streets	-3.1	5.2	0.6	-1.3	3.3	0.2
Military facilities	-2.5	11.2	0.4	-0.7	0.9	0.0
Conservation and development	-7.1	2.9	-1.7	-7.2	1.3	-1.1
Sewer systems	-5.8	6.5	-0.9	-2.8	1.9	-0.8
Water supply facilities	-5.1	11.4	3.0	-3.0	6.5	1.5
Miscellaneous public	-12.4	5.9	-0.6	-4.4	5.2	0.2

Appendix D.

Adjustments for Seasonal Variations and Cost Changes

ADJUSTMENT FOR SEASONAL VARIATIONS

Seasonally adjusted estimates result by removing normal seasonal movement from the unadjusted data to bring out underlying trends and business cycles. Seasonal adjustment accounts for month-to-month variations resulting from normal or average changes in any phenomena affecting the data such as weather conditions, the differing lengths of months, and the varying number of weekdays and weekends within each month. It neither adjusts for abnormal conditions within each month nor for year-to-year variations in weather. The relationship between unadjusted estimates and seasonally adjusted estimates can best be explained with the following scenario. Suppose the normal month-to-month change in an unadjusted series between February and March is 20 percent. Then an increase in the unadjusted series of less than 20 percent will be seen as a decrease in the seasonally adjusted series; an increase of exactly 20 percent will result in no change in the adjusted series; and an increase of more than 20 percent will be shown as an increase in the adjusted series.

An assumption underlying the seasonal adjustment process is that the original series can be separated into a seasonal component, a trend-cycle component, a trading day component, and an irregular component. The seasonally adjusted series consists of the trend-cycle and the irregular components taken together. The trend-cycle component includes the long-term and business cycle. The irregular component is made up of residual variations such as the sudden impact of political events, the effects of strikes, unusual weather conditions, reporting errors, and sampling errors. The trading-day component represents the effect due to the varying number of weekdays and weekends in each month. The seasonally adjusted monthly rate is found by dividing the unadjusted monthly estimate by its seasonal component and trading day components.

The seasonally adjusted annual rate is the seasonally adjusted monthly rate multiplied by 12. It is neither a forecast nor a projection. Rather it is a description of the annual rate at which construction is put in place in that particular month. Changes in the seasonally adjusted estimates may indicate changes in the trend or rate of construction put in place, but changes in the unadjusted estimates may be strictly due to seasonal variation. Seasonally adjusted annual rates facilitate

comparisons with previous annual data as well as with the seasonally adjusted annual rates for prior months.

The seasonally adjusted estimates or seasonal factors are obtained by running the unadjusted data through X-12-ARIMA. The X-12-ARIMA is a seasonal adjustment program developed at the U.S. Census Bureau. The program is based on the Bureau's earlier X-11 program and the X-11-ARIMA/88 program developed at Statistics Canada. Table D-1 provides a description of the components found in seasonally adjusted series. Further information on X-12-ARIMA is available on the Internet at www.census.gov/pub/ts. Also, a list of frequently asked questions (FAQ) on seasonal adjustment may be seen at www.census.gov/const/www/faq2.html.

Each monthly series is run through the X-12-ARIMA program every month as new data become available. This procedure, known as concurrent seasonal adjustment, utilizes the current month estimate to calculate that month's seasonal adjustment factor. Several studies indicate that use of the most current data to estimate seasonal factors is generally effective; the seasonal factors are subject to less revision. Table D-2 shows the past 11 months and the year ago seasonal factors. Seasonal factors that are shown in this table are the combined factors of the seasonal and trading data where appropriate.

As the unadjusted data are revised, so are the seasonal factors. Thus, changes in seasonally adjusted estimates will not only reflect changes in the unadjusted data, but also changes to the seasonal factors. In addition, the seasonally adjusted data are revised back for 3 years each year with the release of May data.

ADJUSTMENT FOR COST CHANGES

The monthly value-in-place estimates in current dollars are converted to a constant 1996 dollar series using cost indexes derived for each category of construction. The deflators for the various categories are related indexes or combinations of related indexes from private companies and federal agencies. The selection of the indexes and procedures used for developing the

deflators for each category resulted primarily from recommendations made jointly by the Bureau of Economic Analysis and the Census Bureau.¹

The index or combinations of indexes which apply to the individual categories of construction are shown in Table D-3. These indexes are indicated in the column headed "Applicable deflating index."

Since most of the indexes were originally compiled for different base years, all indexes were converted to the 1996 dollar base (1996=100).

Indexes which are available quarterly or semiannually are linked with a "monthly trend index" shown in Table D-3. The results are monthly indexes which have the movement of the monthly trend index and the level of the quarterly or semiannual index.

Table D-4 shows the indexes used to deflate value put in place. The source and description of each index follow:

U.S. Census Bureau Composite Fixed-Weighted Price Index (Source: U.S. Census Bureau, U.S. Department of Commerce, Washington, DC)

The composite index is a weighted average of the individual price index series used to deflate the value-in-place series. In calculating the index each month, the weights (the composition of current dollar value-in-place in 1996 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The composite index is calculated using the U.S. Census Bureau Single-Family Houses Under Construction Fixed-Weighted Price Index.

The annual index is an average of the monthly indexes. Monthly and annual indexes are shown in Table D-5.

U.S. Census Bureau Implicit Price Deflator (Source: U.S. Census Bureau, U.S. Department of Commerce, Washington, DC)

The implicit price deflator is a derived ratio of total current to constant dollar value put in place (multiplied by 100). It is the average of the individual price indexes used in the deflation of value put in place, but the indexes are weighted by the changing composition of value put in place each month. Consequently, the implicit price deflator reflects not only changes in prices, but also changes in the composition of value put in place, and its use as a measure of price change is discouraged. Monthly and annual deflators are shown in Table D-6.

¹A description of the deflators and their development appears in Part 1 of the August 1974 issue of the *Survey of Current Business*, U.S. Department of Commerce.

Engineering News-Record Indexes (Source: *Engineering News-Record*, McGraw-Hill Publishing Company, New York, NY)

Engineering News-Record (ENR) compiles monthly national cost indexes with 1913 as the base period for total construction and for buildings.

Both the construction index and the building index have four components—three materials items plus labor. The materials items for both indexes are as follows: 1) the base price of structural steel, which is a 20-city average of wholesale prices; 2) consumers' net price of cement, which is a 20-city average of f.o.b. bulk prices; 3) lumber, which is 2" x 4" S4Spine and fir in carload lots (ENR 20-city average). The labor component of the construction cost index, which is designed to show the movement of construction cost in general, is the common labor rate (ENR 20-city average), while the labor component of the building cost index is the skilled labor rate (ENR 20-city average).

The component series are weighted according to their relative importance as determined by the compilers. As a step in arriving at the weights, the average production of steel and cement in the years 1913, 1916, and 1919; average production of lumber for 1913 and 1916; and the number of common industrial laborers according to the 1919 Census were placed on a dollar-value basis using 1913 average prices as compiled by ENR wherever possible.

A complete description of the quantities and unit prices or labor rates used in developing the weights for the materials and labor components of both indexes is published in *Business Statistics*, 1963 Edition, a supplement to the *Survey of Current Business*, published by the Office of Business Economics (now the Bureau of Economic Analysis), U.S. Department of Commerce.

Annual indexes are averages of the monthly indexes.

More information about the indexes can be found on the ENR Internet site at www.enr.com.

Federal Highway Administration Composite Index (Source: Federal Highway Administration, U.S. Department of Transportation, Washington, DC)

The composite index is compiled quarterly with 1987 as the base period. The index is derived from average unit bid prices for fixed amounts of the following items put in place: common excavation, surfacing (portland cement concrete and bituminous concrete), and structures (reinforcing steel, structural steel, and structural concrete).

To eliminate erratic quarter-to-quarter movement in the Federal Highway Administration composite index, the quarterly index is adjusted with the application of 12-quarter phasing patterns based upon highway construction activity.

The annual index is a weighted average of the indicator items for the composite index.

U.S. Census Bureau Single-Family Houses Under Construction Fixed-Weighted Price Index (Source: U.S. Census Bureau, U.S. Department of Commerce, Washington, DC)

This price index is designed to measure changes over time in the price of new single-family houses under construction each month and year. It is calculated using the “hedonic” or regression methodology whereby physical characteristics of new houses are regressed against house values to obtain “prices” of those characteristics. These prices can then be used in an index calculation such that “quality” of new houses is kept constant and inflation measured.

The index is based on the Laspeyres index methodology which compares the current period construction value of the kinds of houses built in the base year (1996) to the actual houses built in 1996. In effect, a fixed market basket of goods is repriced each time period, and the index reflects only changes in prices.

The price index is computed from information on the physical characteristics and transaction prices obtained from the Census Bureau’s Survey of Construction. The annual index is computed independently of the monthly indexes, and may not equal the average of the monthly indexes.

Detailed information on the methodology used to calculate this index is available upon request.

U.S. Census Bureau Single-Family Houses Under Construction Price Deflator (Source: U.S. Census Bureau, U.S. Department of Commerce, Washington, DC)

The index is calculated based on the same data and regression analysis described above under the U.S. Census Bureau Single-Family Houses Under Construction Fixed-Weighted Price Index. In the calculation of the deflator index series, however, the Fisher ideal chain-type annual-weighted index methodology is employed in place of the Laspeyres.

Monthly Fisher ideal indexes are derived directly. The annual Fisher Ideal index is computed indirectly as a weighted average of the monthly Fisher Ideal indexes.

Bureau of Reclamation Composite Index (Source: Bureau of Reclamation, U.S. Department of Interior, Denver, CO)

The index is compiled quarterly with 1977 as the base period. The Bureau of Reclamation composite index for dams and reclamation projects reflects the Bureau of Reclamation’s cost of constructing these projects in 17 Western States. The index is a weighted average of

costs of labor, materials, and equipment furnished by contractors and the government. When possible, labor and materials costs are based on unit bid prices from contracts let by the Bureau of Reclamation. These data are supplemented by components of the Federal Highway Administration index, Bureau of Labor Statistics wholesale indexes, quotations of wage rates published in *Engineering News-Record* and judgment of Bureau of Reclamation analysts.

For 11 categories of reclamation work listed below, basic cost components have been defined and relative weights for each of these components derived from contracts awarded during the period 1930-46. This is a fixed weight index with weights determined within each category for labor, materials, and equipment furnished by contractors and the government.

The major categories of work which make up the composite index are—dams, pumping plants, steel penstocks and discharge pipes, canals and conduits, laterals and drains, hydroelectric power plants, concrete pipelines, switchyards and substations, transmission lines, general property (buildings), and roads and bridges.

The Census Bureau computes an annual index by averaging the quarterly indexes.

This index is available on the Internet at www.usbr.gov/tsc/costtrend.html.

Turner Construction Company Index (Source: Turner Construction Company, New York, NY)

This index is compiled quarterly with 1967 as the base period. The index is a price index for national building construction costs and is derived from the firm’s current cost experience with respect to the following factors considered on a nationwide basis: labor rates and productivity, material prices, and the competitive condition of the market place.

The annual index is an average of the quarterly indexes.

This index is available on the Internet at www.turnerconstruction.com.

Handy-Whitman Indexes (Source: Computed by the U.S. Census Bureau from data compiled by Whitman, Requardt and Associates, Baltimore, MD)

Whitman, Requardt and Associates compile semiannual (January and July) cost indexes for various elements for four types of construction—utility buildings, electric light and power plants, gas plants, and water—within six geographical regions. The base period for the utility indexes is 1973. The Census Bureau computes semiannual national average indexes for the types of construction as follows:

Utility buildings. The national average is a simple average of indexes for reinforced concrete buildings and brick buildings in each of the six regions.

Electric light and power plants. The national average is a simple average of indexes for total construction and equipment for steam operated electric plants in each of the six regions.

Gas. The national average is a simple average of indexes for total gas plant in each of the six regions.

Water. The national average is a simple average of indexes for structures and improvements at water facilities in each of the six regions.

Each of the original source indexes is based on prices for materials, labor costs, and prices of mechanical and electrical equipment. Prices of basic materials such as cement, sand, stone, castiron pipe, wire, and the like are obtained from standard publications such as *Engineering News-Record* and checked against prices actually being paid for such materials. Labor cost trends are computed from labor rates obtained from sources such as the Construction Labor Research Council. Mechanical

and electrical equipment prices and trends are obtained from nationally known manufacturers and operating utilities.

C.A. Turner Telephone Plant Index (Source: Computed by U.S. Census Bureau from data compiled by AUS Consultants Inc., Harrisburg, PA)

AUS Consultants developed an independent telephone plant index in 1977. This index had been published since then through affiliation with Whitman, Requardt and Associates as the Handy-Whitman Index of Public Utility Construction Cost for the telephone industry. As of January 1, 1990, Handy-Whitman no longer publishes the index which is now available only through C.A. Turner, the publications division of AUS Consultants. The telephone plant index numbers cover each major FCC plant account and are published with 1973 as the base period at January 1 and July 1 price levels each year. Data from many operating companies and suppliers related to construction methods, plant investment, and component costs are analyzed and summarized as a basis for preparing the index.

The Census Bureau computes a semiannual national index by averaging the weighted component indexes published for the six geographic regions.

Table D-1. **Average Percentage Changes and Related Measures of Variability for the Value of Construction Put in Place**

Type of construction	Average percentage change				\bar{I}/\bar{C}	MCD
	\bar{O}	\bar{C}	\bar{I}	\bar{C}		
Total construction	5.85	1.11	0.89	0.59	1.51	2
Private construction	4.85	1.15	0.88	0.64	1.38	2
Residential buildings	6.33	1.23	0.68	0.90	0.76	1
Nonresidential buildings	3.95	2.03	1.72	0.92	1.88	2
Public construction	8.91	2.19	1.97	0.75	2.62	4
Buildings	5.36	2.48	2.26	0.88	2.57	3
Military facilities	17.91	11.28	10.99	2.26	4.78	5
Highways	18.29	4.04	3.68	1.08	3.41	5
Conservation and development	15.52	7.67	7.51	1.60	4.68	5
All other public	7.67	4.25	3.94	1.09	3.60	4

DEFINITIONS OF SUMMARY MEASURES

Summary measures of the seasonal, cyclical, and irregular components of the construction put in place series provide a rough guide for use in interpreting current percentage changes in the seasonally adjusted data. Detailed explanations of the basic method and definitions of the measures used appear in Electronic Computers and Business Indicators, Occasional Paper 57, National Bureau of Economic Research, New York, 1957.

The following are brief descriptions of the measures shown in Table D-1:

- \bar{O} is the average month-to-month percentage change (without regard to sign) in the original series before seasonal adjustment.
- \bar{C} is the average month-to-month percentage change (without regard to sign) in the seasonally adjusted figures.
- \bar{I} is the average month-to-month percentage change (without regard to sign) for the irregular component. The irregular component is obtained by dividing the cyclical component into the seasonally adjusted series.
- \bar{C} is the average month-to-month percentage change (without regard to sign) for the cyclical component, which is a smooth, flexible moving average.
- \bar{I}/\bar{C} is the average month-to-month percentage change (without regard to sign) of the irregular component divided by the average month-to-month percentage change (without regard to sign) of the cyclical component. It serves as an indication of the series' relative smoothness (small values) or irregularity (large values).
- MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average percentage changes (without regard to sign) in the irregular and in the cyclical component are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.), 2-month spans (Jan.-Mar., Feb.-Apr., etc.), up to 12-month spans. MCD is the shortest span for which the average percentage change (without regard to sign) in the cyclical component is larger than the average percentage change (without regard to sign) in the irregular component; thus, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements.

Table D-2. Factors Used to Seasonally Adjust Estimates of the Value of Construction Put in Place

[Percent]

Type of construction	May 2003 ^P	Apr. 2003 ^r	Mar. 2003 ^r	Feb. 2003 ^r	Jan. 2003 ^r	Dec. 2002 ^r	Nov. 2002 ^r	Oct. 2002 ^r	Sep. 2002 ^r	Aug. 2002 ^r	July 2002 ^r	May 2002 ^r
PRIVATE CONSTRUCTION												
Residential buildings:												
New housing units:												
1 unit	103.1	97.5	92.7	78.1	82.4	88.3	104.3	108.6	110.9	112.8	112.5	103.3
2 units or more	104.0	100.5	95.8	89.9	91.3	94.3	99.9	104.5	102.1	105.7	104.6	105.4
Nonresidential buildings:												
Industrial	99.7	98.3	94.2	88.5	89.2	103.1	103.2	107.3	104.7	103.6	104.2	99.7
Office	103.0	100.5	97.2	92.3	93.0	96.9	102.1	105.2	103.4	103.0	101.7	103.8
Hotels, motels	102.2	100.5	99.7	93.1	94.4	97.7	98.0	103.1	101.4	102.7	102.1	101.9
Other commercial	101.0	96.2	92.1	86.4	84.9	93.6	103.8	110.1	110.7	109.9	106.3	100.9
Religious	96.4	95.3	92.5	89.3	91.1	98.6	105.5	114.7	107.6	108.7	100.9	95.4
Educational	103.7	95.4	90.7	85.0	85.5	89.5	97.1	100.7	105.4	118.0	115.5	103.9
Hospital and institutional	101.3	100.6	98.8	94.6	93.6	98.7	103.5	104.6	102.6	101.8	98.3	101.2
Miscellaneous nonresidential	102.3	102.3	99.3	91.5	88.9	96.8	102.0	105.8	103.2	104.2	101.5	102.4
Telecommunications	99.0	98.2	90.9	83.8	85.0	107.4	106.7	114.1	100.4	108.0	104.7	102.0
All other private	94.4	91.1	89.3	81.2	84.3	100.2	104.7	113.6	113.9	117.5	106.4	95.1
PUBLIC CONSTRUCTION												
State and Local												
Buildings:												
Housing and redevelopment	102.2	100.4	94.9	89.5	93.2	96.8	102.9	108.4	106.5	101.9	99.5	102.9
Educational	97.1	91.9	84.9	82.0	83.5	87.8	94.9	104.9	114.3	127.1	119.5	97.0
Hospital	99.6	98.7	93.0	91.5	95.4	98.8	101.3	108.6	107.0	100.1	102.9	101.1
Other buildings	102.6	100.6	91.9	88.6	89.1	95.5	102.7	111.1	106.2	107.6	101.5	101.9
Highways and streets	103.8	82.0	62.4	52.8	58.5	74.3	100.2	131.2	139.4	142.1	130.9	106.9
Conservation and development	102.5	94.9	82.4	76.2	77.0	91.5	104.3	119.9	118.4	119.5	109.7	101.8
Sewer systems	102.9	96.2	88.7	81.0	83.2	88.6	105.0	113.4	113.6	113.0	106.4	102.7
Water supply facilities	104.1	97.6	87.9	82.9	81.0	93.2	105.3	115.8	110.4	109.7	108.7	103.5
Miscellaneous construction	102.5	94.9	82.4	76.2	77.0	91.5	104.3	119.9	118.4	119.5	109.7	101.8
Federal												
Buildings:												
Housing and redevelopment	97.1	97.5	98.4	89.9	92.1	100.6	98.3	90.7	133.0	100.7	100.3	95.1
Industrial	97.1	97.5	98.4	89.9	92.1	100.6	98.3	90.7	133.0	100.7	100.3	95.1
Educational	97.1	97.5	98.4	89.9	92.1	100.6	98.3	90.7	133.0	100.7	100.3	95.1
Hospital	97.1	97.5	98.4	89.9	92.1	100.6	98.3	90.7	133.0	100.7	100.3	95.1
Other buildings	97.1	97.5	98.4	89.9	92.1	100.6	98.3	90.7	133.0	100.7	100.3	95.1
Military	102.3	94.1	101.3	86.5	91.1	104.8	103.1	80.0	126.5	103.6	103.0	101.7
Conservation and development	95.4	97.8	94.0	88.9	90.8	95.5	98.4	74.3	156.6	106.1	99.9	100.1
Miscellaneous construction	95.4	97.8	94.0	88.9	90.8	95.5	98.4	74.3	156.6	106.1	99.9	100.1

^PPreliminary. ^rRevised.

Table D-3. Sources of Cost Indexes Used to Derive Estimates of the Value of Construction Put in Place in 1996 Dollars

Type of construction	Applicable deflating index		Monthly trend index
	Name of index	Availability	
Residential buildings	U.S. Census Bureau Single-Family Houses Under Construction	Monthly	
Industrial buildings	Unweighted average of— Turner Construction Company U.S. Census Bureau Single-Family Houses Under Construction	Quarterly	Engineering News-Record-buildings
Office buildings			
Hotels and motels		Monthly	
Other commercial buildings			
Educational buildings			
Hospital and institutional buildings			
Religious buildings			
Miscellaneous nonresidential buildings			
Farm nonresidential			
Railroads	Unweighted average of— Federal Highway Admin.-composite Bureau of Reclamation	Quarterly	Engineering News-Record-construction
		Quarterly	Engineering News-Record-construction
Telecommunications	C.A. Turner Telephone Plant	Semiannually	Engineering News-Record-construction
Electric light and power	Weighted average of— Handy-Whitman-electric (weight 9) Handy-Whitman-utility building (weight 1)	Semiannually	Engineering News-Record-construction
		Semiannually	Engineering News-Record-buildings
Gas and petroleum pipelines	Handy-Whitman-gas	Semiannually	Engineering News-Record-construction
Military facilities	Weighted average of— Federal Highway Admin.-composite (weight 2). U.S. Census Bureau Single-Family Houses Under Construction (weight 1) Turner Construction Company (weight 1)	Quarterly	Engineering News-Record-construction
		Monthly	
		Quarterly	Engineering News-Record-buildings
Highways and streets	Federal Highway Admin.-composite	Quarterly	Engineering News-Record-construction
Sewer systems and conservation and development	Bureau of Reclamation	Quarterly	Engineering News-Record-construction
Water supply facilities	Handy-Whitman-water	Semiannually	Engineering News-Record-construction
All other private and public	Unweighted average of— Federal Highway Admin.-composite Bureau of Reclamation	Quarterly	Engineering News-Record-construction
		Quarterly	Engineering News-Record-construction

Note: Federal Highway Administration composite index, adjusted with the application of 12-quarter phasing patterns, is used before the monthly indexes are developed.

Table D-4. **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													
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	111.9	107	113	107	105	107	107	101
2000.....	115.3	115.3	110.5	110.7	115.4	115.5	119.3	111	118	110	109	111	112	103
2001.....	120.2	120.2	111.6	112.7	121.2	121.3	118.7	112	121	114	113	114	116	106
2002.....	122.7	122.6	113.1	116.3	124.4	124.4	121.2	114	123	116	116	116	120	108
	Monthly indexes						Quarterly indexes			Semiannual indexes				
2001: January	117.9	117.9	110.7	111.7	118.4	118.5								
February	118.4	118.4	110.4	111.6	118.9	119.0	123.9	112	121					
March.....	118.8	118.6	110.5	111.7	119.3	119.2				112	111	113	115	105
April.....	118.9	118.7	110.5	111.8	119.8	119.7								
May.....	119.3	119.1	110.7	111.8	120.4	120.5	111.9	112	121					
June.....	120.0	120.0	111.5	112.4	120.7	121.0								
July.....	120.3	120.4	113.2	113.9	121.5	121.9								
August.....	121.0	121.2	112.6	113.6	122.8	123.4	115.2	112	122					
September	121.3	121.4	112.3	113.7	123.2	123.7				114	112	114	117	106
October.....	122.0	122.0	112.4	113.8	124.1	124.4								
November.....	122.2	121.9	112.3	114.0	124.4	124.4	127.1	113	122					
December.....	122.3	121.9	111.7	113.7	124.1	124.1								
2002: January	122.1	121.8	111.8	114.9	124.0	123.8								
February.....	122.3	121.9	111.8	114.9	123.9	123.8	121.6	113	122					
March.....	122.0	121.8	112.3	115.6	123.7	123.8				115	114	115	117	107
April.....	121.9	122.0	111.8	115.3	123.3	123.7								
May.....	122.1	122.2	112.8	115.8	123.6	123.9	129.1	113	122					
June.....	122.6	122.7	113.1	116.2	123.8	124.0								
July.....	122.5	122.6	114.0	117.5	123.8	124.0								
August.....	122.4	122.5	113.9	117.2	123.6	123.7	121.8	115	123					
September.....	123.0	122.8	114.1	117.2	124.6	124.4				116	116	116	120	108
October.....	123.5	123.3	114.0	117.0	125.4	125.2								
November.....	123.8	123.7	114.1	117.0	125.9	125.8	112.8	116	123					
December.....	124.4	124.1	113.6	116.7	126.7	126.6								
2003: January	^r 125.3	^r 125.4	113.9	117.0	^r 127.7	^r 127.7								
February.....	^r 125.6	^r 125.7	114.1	118.1	^r 128.2	^r 128.3	132.5	117	123					
March.....	^r 125.9	^r 126.0	113.9	117.9	^r 128.6	^r 128.8				116	118	117	122	109
April.....	^r 125.9	^r 126.0	114.0	118.0	^r 128.5	^r 128.7								
May.....	^p 126.1	^p 126.2	114.3	118.1	^p 128.4	^p 128.4	(NA)	118	123					
June.....			114.8	119.1										

NA Not available. ^pPreliminary. ^rRevised.

Table D-5. Monthly U.S. Census Bureau Composite Fixed-Weighted Price Index: 1964 to 2003

[1996=100]

Year	Month												Annual composite index
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	
1964	18.7	18.3	18.0	18.3	18.5	18.6	18.5	18.4	18.4	18.7	18.8	18.9	18.5
1965	18.9	18.8	18.8	18.8	19.0	19.1	19.0	19.0	19.0	19.4	19.6	19.7	19.1
1966	19.5	19.3	19.3	19.8	20.2	20.2	20.1	20.0	19.9	20.2	20.3	20.5	19.9
1967	20.3	20.2	20.3	20.3	20.4	20.4	20.5	20.6	20.7	20.8	20.9	21.1	20.5
1968	21.2	21.3	21.4	21.5	21.6	21.6	21.5	21.6	21.7	22.0	22.4	22.8	21.7
1969	22.6	22.7	22.9	23.0	23.3	23.1	23.3	23.2	23.2	23.5	23.7	23.8	23.2
1970	23.7	23.8	24.0	24.5	24.8	25.2	24.7	24.4	24.4	24.6	24.7	25.1	24.5
1971	25.0	25.6	25.8	25.9	25.9	26.1	26.2	26.7	26.6	26.8	27.0	27.2	26.2
1972	27.3	27.3	27.5	27.5	27.5	27.6	27.8	28.1	28.3	28.6	28.8	29.2	28.0
1973	29.2	29.2	29.5	29.8	30.0	30.1	30.5	30.9	31.1	31.4	31.6	31.7	30.4
1974	32.3	32.5	33.3	33.1	33.5	34.5	34.9	34.9	35.1	35.4	35.8	36.0	34.3
1975	36.4	36.3	36.4	36.7	37.1	37.4	37.4	37.1	37.5	37.6	37.8	38.1	37.2
1976	38.0	38.0	38.1	38.5	39.1	39.4	39.5	39.4	39.5	39.8	40.0	40.2	39.1
1977	40.8	41.0	41.2	41.4	41.9	42.5	42.6	42.9	43.3	43.5	43.9	44.4	42.5
1978	44.8	45.1	45.4	45.9	46.2	46.7	47.1	47.6	48.1	48.7	49.3	49.7	47.1
1979	50.2	50.7	50.9	51.3	52.2	53.0	53.4	54.1	54.4	54.9	55.5	55.9	53.0
1980	56.7	57.2	57.5	57.8	58.5	59.3	59.9	60.2	60.4	60.9	61.4	61.7	59.3
1981	62.1	62.4	63.1	63.4	63.6	63.9	64.2	64.4	64.4	65.0	65.2	65.3	63.9
1982	65.4	65.3	65.4	65.4	65.6	65.9	65.6	65.7	65.8	65.7	66.1	66.2	65.7
1983	66.6	66.5	66.4	66.2	66.8	67.2	67.3	67.4	67.4	67.9	68.1	68.3	67.2
1984	68.5	68.8	69.0	69.0	69.3	69.5	69.7	70.2	70.5	70.9	71.0	71.0	69.8
1985	71.3	71.2	71.3	71.2	71.4	71.6	71.7	71.8	72.1	72.4	72.6	73.0	71.8
1986	73.4	73.5	73.7	73.9	74.3	74.7	75.0	75.1	75.4	75.8	76.1	76.5	74.8
1987	76.7	76.9	77.0	77.2	77.3	77.6	77.8	77.9	78.0	78.1	78.7	79.0	77.7
1988	79.5	79.7	79.7	79.7	80.0	80.1	80.3	80.5	80.8	81.1	81.4	81.5	80.4
1989	81.7	82.2	82.3	82.7	83.0	83.1	83.4	83.7	83.9	84.0	84.1	84.2	83.2
1990	84.5	84.6	84.8	84.9	85.1	85.4	85.8	86.0	86.0	86.0	86.3	86.3	85.5
1991	86.3	86.2	85.9	85.8	86.0	86.4	86.5	86.5	86.4	86.2	86.1	86.0	86.2
1992	86.0	86.2	86.2	86.4	86.3	86.4	86.5	86.7	86.9	87.4	87.7	88.2	86.7
1993	88.4	88.8	89.4	89.8	89.5	89.4	89.9	90.4	90.7	91.0	91.5	91.9	90.1
1994	92.2	92.4	92.5	92.6	93.0	93.4	93.8	94.2	94.7	95.2	95.9	96.6	93.9
1995	97.1	97.1	97.1	97.1	97.4	97.8	97.8	97.9	98.2	98.5	98.4	98.4	97.7
1996	98.8	99.0	99.1	99.0	99.2	99.6	100.2	100.4	100.7	100.9	100.9	101.3	100.0
1997	101.7	101.8	102.2	102.5	102.7	102.9	103.3	103.5	103.9	104.2	104.7	104.8	103.2
1998	104.9	104.7	104.8	105.0	105.3	105.9	106.2	106.5	106.6	106.9	107.3	107.9	106.0
1999	108.3	108.6	109.0	109.4	109.8	110.5	110.7	110.8	110.9	111.4	111.9	112.3	110.3
2000	113.3	113.7	114.0	114.5	114.8	115.1	115.6	115.8	116.2	116.5	116.8	117.3	115.3
2001	117.9	118.4	118.8	118.9	119.3	120.0	120.3	121.0	121.3	122.0	122.2	122.3	120.2
2002	122.1	122.3	122.0	121.9	122.1	122.6	122.5	122.4	123.0	123.5	123.8	124.4	122.7
2003	^r 125.3	^r 125.6	^r 125.9	^r 125.9	^p 126.1								

^pPreliminary. ^rRevised.

Table D-6. Monthly U.S. Census Bureau Implicit Price Deflator: 1964 to 2003

[1996=100]

Year	Month												Annual deflator
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	
1964	18.6	18.2	17.9	18.3	18.5	18.6	18.6	18.5	18.5	18.6	18.8	18.8	18.5
1965	18.9	18.8	18.8	18.8	19.0	19.1	19.1	19.0	19.0	19.3	19.6	19.6	19.1
1966	19.4	19.2	19.3	19.7	20.2	20.2	20.0	19.9	19.9	20.2	20.3	20.4	19.9
1967	20.3	20.2	20.3	20.3	20.4	20.4	20.6	20.6	20.7	20.8	20.9	21.1	20.6
1968	21.1	21.3	21.4	21.4	21.6	21.6	21.5	21.6	21.7	22.0	22.4	22.7	21.7
1969	22.6	22.6	22.8	22.9	23.2	23.1	23.3	23.2	23.2	23.6	23.8	24.0	23.2
1970	23.8	23.8	24.1	24.6	24.9	25.3	24.9	24.7	24.7	24.9	24.9	25.2	24.7
1971	25.0	25.7	25.8	25.9	25.9	26.1	26.2	26.7	26.7	26.8	27.0	27.2	26.3
1972	27.2	27.3	27.5	27.5	27.5	27.5	27.7	28.1	28.1	28.5	28.7	29.1	27.9
1973	29.0	29.1	29.3	29.8	29.9	30.0	30.4	30.8	31.0	31.3	31.6	31.7	30.4
1974	32.2	32.7	33.4	33.2	33.7	34.7	35.0	35.1	35.3	35.8	36.2	36.5	34.5
1975	36.9	36.9	36.9	37.2	37.6	38.0	38.0	37.8	38.1	38.2	38.4	38.6	37.8
1976	38.3	38.3	38.4	38.9	39.5	39.8	39.9	39.9	40.0	40.1	40.2	40.4	39.5
1977	40.7	41.0	41.1	41.2	41.8	42.6	42.7	43.2	43.5	43.7	44.0	44.3	42.6
1978	44.7	45.1	45.6	46.2	46.4	47.3	47.6	48.2	48.3	48.9	49.2	49.5	47.5
1979	49.7	50.1	50.4	50.9	52.2	53.1	53.5	54.4	54.4	55.2	55.4	55.6	53.1
1980	56.1	56.7	57.0	57.4	58.2	59.1	59.7	59.7	60.1	60.8	61.0	61.1	59.0
1981	61.5	61.8	62.6	62.7	63.0	63.5	63.9	64.1	64.2	64.7	64.6	64.6	63.5
1982	64.8	64.8	65.2	65.1	65.7	66.2	66.1	66.5	66.6	66.3	66.4	66.4	65.9
1983	66.8	66.7	66.6	66.4	66.7	67.0	67.1	67.1	67.1	67.6	67.6	67.7	67.1
1984	68.1	68.5	68.6	68.6	68.7	68.8	69.2	69.7	69.8	70.0	70.0	70.1	69.3
1985	70.5	70.6	70.8	70.6	70.7	70.8	70.9	71.1	71.3	71.6	71.7	71.8	71.1
1986	72.3	72.4	72.6	72.8	73.1	73.4	73.7	73.9	74.2	74.5	74.7	75.0	73.6
1987	75.3	75.4	75.4	75.7	75.8	76.2	76.5	76.6	76.7	76.9	77.3	77.5	76.3
1988	78.1	78.4	78.5	78.6	78.8	78.9	79.1	79.3	79.6	79.9	80.1	80.3	79.2
1989	80.7	81.1	81.3	81.8	82.3	82.4	82.6	82.8	83.0	83.1	83.2	83.5	82.4
1990	84.0	84.1	84.2	84.4	84.6	84.9	85.3	85.6	85.5	85.7	85.7	85.7	85.0
1991	85.6	85.6	85.2	85.4	85.6	86.0	86.2	86.3	86.3	86.2	85.9	85.9	85.9
1992	86.0	86.3	86.3	86.4	86.4	86.6	86.8	86.9	87.2	87.6	88.0	88.4	86.9
1993	88.7	89.0	89.6	89.9	89.6	89.5	90.0	90.5	90.8	91.0	91.5	91.8	90.2
1994	92.2	92.4	92.5	92.7	92.9	93.3	93.6	94.1	94.6	95.2	95.8	96.4	93.9
1995	96.9	97.0	97.0	97.2	97.4	97.8	97.9	98.0	98.4	98.5	98.6	98.7	97.8
1996	98.8	99.0	99.1	99.0	99.2	99.6	100.2	100.4	100.7	100.9	101.0	101.3	100.0
1997	101.8	101.8	102.3	102.5	102.7	102.9	103.3	103.6	103.9	104.2	104.7	104.8	103.3
1998	105.0	104.9	104.9	105.0	105.2	105.9	106.1	106.4	106.6	107.0	107.4	107.9	106.1
1999	108.4	108.6	109.0	109.3	109.8	110.4	110.5	110.8	110.8	111.3	111.8	112.1	110.4
2000	113.3	113.8	113.9	114.5	114.9	115.1	115.6	115.7	116.0	116.3	116.7	117.1	115.3
2001	117.9	118.4	118.6	118.7	119.1	120.0	120.4	121.2	121.4	122.0	121.9	121.9	120.2
2002	121.8	121.9	121.8	122.0	122.2	122.7	122.6	122.5	122.8	123.3	123.7	124.1	122.6
2003	^r 125.4	^r 125.7	^r 126.0	^r 126.0	^P 126.2								

^PPreliminary. ^rRevised.