

Value of Construction Put in Place

April
2000
Issued June 2000

C30/00-4

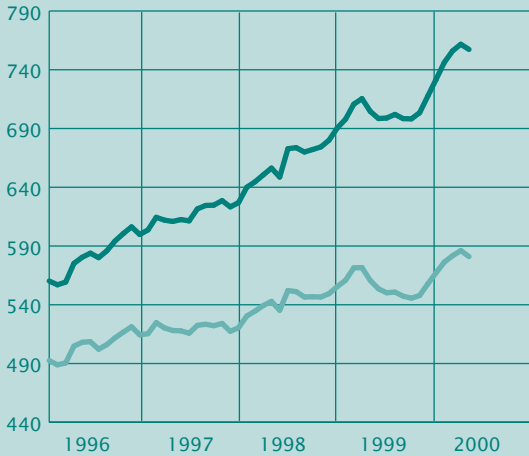
Current Construction Reports

Monthly Value of Construction Put in Place

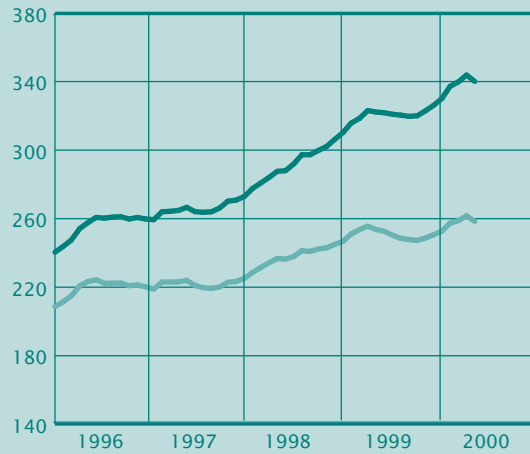
Seasonally adjusted annual rate in billions of dollars

— Current dollars
— 1992 dollars

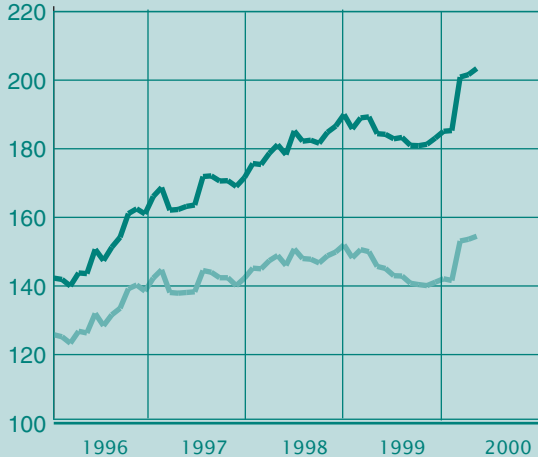
Total Construction



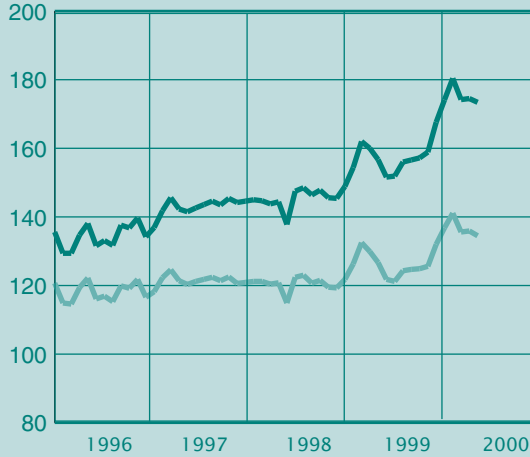
Private Residential Construction



Private Nonresidential Construction



Public Construction



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

Questions regarding these data may be directed to **Michael Davis**, Construction Expenditures Branch, Manufacturing and Construction Division, telephone: 301-457-1605.

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VALUE OF CONSTRUCTION PUT IN PLACE

Construction put in place during April 2000 was estimated at a seasonally adjusted annual rate of \$757.3 billion, 1 (±5) percent below the revised March estimate of \$761.7 billion. The April figure represents a 7 percent increase over April 1999.

During the first 4 months of this year \$215.2 billion of construction was put in place, 7 percent above the \$200.8 billion for the same period in 1999.

In constant (1992) dollars, the April annual rate was \$581.0 billion, 1 (±5) percent below the revised estimate of \$586.1 billion for March.

Spending on new residential housing units was at a seasonally adjusted annual rate of \$258.3 billion in April, 1 (±2) percent below the revised March estimate of \$260.7 billion. Nonresidential building construction was at a rate of \$203.4 billion, 1 (±3) percent above the revised March estimate of \$201.6 billion.

In April, the estimated seasonally adjusted annual rate of public construction put in place was \$173.4 billion, 1 (±5) percent below the revised March estimate of \$174.5 billion.

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

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

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

ADDITIONAL DATA

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

- Current Construction Reports, *Value of Construction Put in Place: May 1999*, C30/99-5, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1999; contains annual data for 1994 to 1998 and monthly data for 1996 to 1998.
- Current Construction Reports, *Value of Construction Put in Place: June 1999*, C30/99-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1999; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1994 to 1998.
- Current Construction Reports, *Value of New Construction Put in Place: October 1992*, C30/92-10,

U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1992; contains total time and monthly progress from start to completion for private nonresidential buildings and for state and local construction.

- Current Construction Reports, *Value of New Construction Put in Place in the United States, 1964 to 1980*, C30-80 supplement, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1981; contains annual data for 1915 to 1963.
- Current Construction Reports Special Study, *Expenditures for Nonresidential Improvements and Repairs: 1992*, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1994.

Table 1. Annual Value of Construction Put in Place: 1995-1999

[Millions of dollars]

Type of construction	Current dollars					Constant (1992) dollars				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total construction	537,409	583,445	618,225	665,446	705,268	477,386	506,485	520,123	544,729	555,534
Private construction	407,477	448,969	475,123	520,073	547,097	360,040	388,324	398,699	424,345	429,124
Residential buildings	230,688	256,460	265,863	294,326	321,667	201,677	220,017	221,756	239,201	250,689
New housing units	162,898	179,448	187,328	213,909	240,384	142,413	153,966	156,248	173,828	187,354
1 unit	145,009	159,124	164,444	189,453	212,695	126,773	136,516	137,156	153,937	165,760
2 units or more	17,889	20,324	22,883	24,457	27,688	15,640	17,450	19,092	19,891	21,594
Improvements	67,790	77,012	78,535	80,417	(NA)	59,264	66,052	65,509	65,372	(NA)
Nonresidential buildings	135,022	150,350	167,610	181,915	183,927	120,627	131,188	141,129	148,017	143,866
Industrial	32,505	32,657	31,359	32,270	26,700	29,043	28,503	26,405	26,269	20,890
Office	25,613	27,886	34,305	41,541	47,188	22,891	24,329	28,876	33,803	36,909
Hotels, motels	7,112	10,912	12,898	14,904	15,566	6,351	9,521	10,864	12,121	12,185
Other commercial	42,654	48,188	51,809	53,783	55,793	38,098	42,042	43,628	43,749	43,622
Religious	4,326	4,534	5,777	6,729	7,088	3,864	3,955	4,861	5,472	5,544
Educational	5,493	6,742	8,693	9,629	9,361	4,908	5,880	7,316	7,840	7,318
Hospital and institutional	11,248	11,780	13,546	13,663	12,307	10,051	10,280	11,413	11,121	9,630
Miscellaneous ¹	6,071	7,650	9,223	9,395	9,925	5,421	6,677	7,767	7,643	7,768
Farm nonresidential	3,014	3,658	3,815	3,891	(NA)	2,692	3,192	3,210	3,165	(NA)
Public utilities	35,859	36,070	35,544	37,267	(NA)	32,401	31,771	30,644	31,705	(NA)
Telecommunications	11,093	11,772	11,698	12,441	13,368	10,073	10,245	9,985	10,612	11,391
Other public utilities	24,766	24,298	23,846	24,826	(NA)	22,328	21,525	20,659	21,093	(NA)
Railroads	3,509	4,398	4,922	5,320	(NA)	3,201	3,894	4,204	4,489	(NA)
Electric light and power	14,049	11,211	11,260	11,574	(NA)	12,656	9,914	9,783	9,827	(NA)
Gas	6,279	7,674	6,695	6,667	(NA)	5,637	6,814	5,828	5,697	(NA)
Petroleum pipelines	929	1,015	969	1,265	(NA)	834	903	843	1,080	(NA)
All other private ²	2,893	2,431	2,292	2,674	3,022	2,643	2,156	1,960	2,256	2,475
Public construction	129,933	134,476	143,102	145,373	158,171	117,346	118,161	121,424	120,384	126,410
Buildings	57,754	60,047	63,489	66,137	70,539	51,506	52,348	53,424	53,810	55,128
Housing and redevelopment ..	4,698	4,113	3,795	4,047	3,806	4,108	3,532	3,165	3,291	2,968
Industrial	1,508	1,389	999	1,012	929	1,348	1,214	843	824	726
Educational	25,783	27,148	28,915	29,916	33,974	23,027	23,693	24,340	24,336	26,549
Hospital	4,236	4,472	4,934	3,978	4,047	3,785	3,905	4,157	3,239	3,166
Other ³	21,528	22,924	24,846	27,183	27,783	19,238	20,004	20,919	22,119	21,719
Highways and streets	37,616	39,860	44,292	44,792	49,766	34,501	35,258	37,833	37,525	40,200
Military facilities	3,011	2,591	2,556	2,578	2,127	2,728	2,280	2,169	2,131	1,693
Conservation and development ..	6,308	5,910	5,612	5,511	6,201	5,724	5,245	4,801	4,681	5,143
Sewer systems	8,420	9,142	9,166	8,707	9,598	7,640	8,110	7,842	7,398	7,962
Water supply facilities	4,709	5,234	5,662	5,871	6,575	4,186	4,550	4,817	4,903	5,342
Miscellaneous public ⁴	12,116	11,691	12,325	11,777	13,365	11,060	10,370	10,537	9,936	10,943

NA Not available, but estimates are included in totals.

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: 1995-1999

[Millions of dollars]

Type of construction	Current dollars					Constant (1992) dollars				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total public construction	129,933	134,476	143,102	145,373	158,171	117,346	118,161	121,424	120,384	126,410
State and local construction	114,181	119,151	129,009	130,950	144,245	103,132	104,680	109,475	108,422	115,216
Total buildings	51,711	53,817	57,382	60,109	65,046	46,117	46,917	48,287	48,904	50,831
Housing and redevelopment	4,122	3,432	3,118	3,504	3,376	3,605	2,947	2,600	2,849	2,632
Educational	25,757	27,135	28,895	29,901	33,958	23,003	23,683	24,324	24,324	26,536
Hospital	3,195	3,313	3,683	2,968	3,184	2,854	2,892	3,103	2,417	2,488
Other ¹	18,638	19,936	21,685	23,736	24,528	16,654	17,395	18,260	19,313	19,175
Highways and streets	37,308	39,492	44,031	44,440	49,382	34,218	34,933	37,610	37,230	39,890
Conservation and development ..	2,140	2,066	2,244	1,939	2,128	1,943	1,833	1,919	1,648	1,764
Sewer systems	8,420	9,142	9,166	8,707	9,598	7,640	8,110	7,842	7,398	7,962
Water supply facilities	4,709	5,234	5,662	5,871	6,575	4,186	4,550	4,817	4,903	5,342
Miscellaneous nonbuilding ²	9,893	9,401	10,525	9,884	11,517	9,029	8,336	8,999	8,339	9,427
Federal construction	15,751	15,325	14,093	14,423	13,926	14,214	13,482	11,949	11,962	11,194
Total buildings	6,043	6,230	6,107	6,028	5,493	5,390	5,430	5,137	4,906	4,296
Housing	576	681	677	543	430	503	585	565	442	336
Industrial	1,508	1,389	999	1,012	929	1,348	1,214	843	824	726
Educational	27	12	19	15	16	24	11	16	12	13
Hospital	1,041	1,159	1,251	1,010	863	931	1,013	1,053	823	677
Other ³	2,891	2,989	3,161	3,448	3,255	2,584	2,608	2,659	2,806	2,544
Highways and streets	308	368	261	352	(NA)	283	326	223	295	(NA)
Military facilities	3,011	2,591	2,556	2,578	2,127	2,728	2,280	2,169	2,131	1,693
Conservation and development ..	4,167	3,845	3,368	3,572	4,073	3,781	3,412	2,882	3,034	3,379
Miscellaneous public ⁴	2,223	2,291	1,800	1,893	1,849	2,032	2,034	1,538	1,596	1,516

NA Not available, but estimates are included in totals.

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

[Millions of dollars]

Period	Total construction	Private construction															All other private 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																			
April 1999	200,810	159,241	90,586	69,283	60,622	8,661	57,742	8,852	14,739	5,380	16,458	2,225	2,679	4,074	3,336	(NA)	4,041	854	
April 2000	215,229	169,010	96,892	75,394	66,430	8,965	61,260	9,088	16,304	5,311	17,671	2,358	3,098	4,144	3,285	(NA)	(NA)	902	
Percent change	7	6	7	9	10	4	6	3	11	-1	7	6	16	2	-2	(NA)	(NA)	6	
MONTHLY DATA																			
1998: April	52,069	41,205	23,129	16,629	14,573	2,056	14,780	2,691	3,374	1,158	4,211	497	848	1,177	824	(NA)	1,001	195	
May	55,171	43,601	25,110	17,564	15,513	2,051	14,857	2,651	3,481	1,105	4,392	466	876	1,135	751	(NA)	1,031	210	
June	61,912	48,111	27,123	18,965	16,864	2,101	16,074	2,792	3,704	1,336	4,841	525	908	1,147	821	(NA)	1,100	276	
July	63,150	48,683	28,197	20,126	17,965	2,162	15,692	2,630	3,498	1,299	4,915	546	857	1,116	830	(NA)	1,050	227	
August	64,367	49,363	28,703	20,449	18,376	2,073	16,232	2,881	3,455	1,371	4,976	615	903	1,188	844	(NA)	1,059	246	
September	63,973	48,479	28,062	20,575	18,443	2,132	16,291	2,907	3,555	1,416	4,950	633	822	1,186	822	(NA)	1,085	246	
October	62,127	48,132	27,865	20,408	18,213	2,196	16,441	2,766	3,761	1,466	5,034	659	745	1,159	852	(NA)	1,186	246	
November	58,458	46,219	26,609	19,855	17,784	2,071	16,070	2,666	3,746	1,362	4,886	678	741	1,163	829	(NA)	1,046	252	
December	52,435	41,630	22,846	17,249	15,287	1,962	15,504	2,654	3,658	1,328	4,463	645	740	1,184	833	(NA)	1,085	229	
1999: January	46,432	37,053	20,871	16,050	14,125	1,925	13,643	2,242	3,489	1,238	3,802	560	592	952	768	(NA)	877	178	
February	46,034	36,329	19,899	15,447	13,391	2,056	14,069	2,199	3,638	1,307	3,916	537	632	1,045	796	(NA)	873	182	
March	52,392	41,734	23,941	18,480	16,161	2,319	14,950	2,281	3,772	1,426	4,297	553	684	1,055	882	(NA)	1,187	231	
April	55,951	44,125	25,875	19,306	16,945	2,361	15,080	2,130	3,840	1,409	4,442	575	772	1,023	890	(NA)	1,104	263	
May	59,622	46,873	28,114	20,430	18,034	2,396	15,461	2,069	3,964	1,383	4,797	573	770	1,037	868	(NA)	973	271	
June	64,500	50,119	29,867	21,514	19,097	2,417	15,847	2,179	4,017	1,239	5,058	610	910	1,018	815	(NA)	1,108	277	
July	65,584	50,543	30,367	22,200	19,805	2,395	15,774	2,196	3,979	1,282	4,989	580	923	987	838	(NA)	1,177	270	
August	67,293	51,121	30,756	22,499	20,014	2,485	16,194	2,236	4,279	1,287	4,976	652	922	1,015	827	(NA)	1,225	290	
September	66,145	49,828	29,815	22,318	19,872	2,446	16,225	2,301	4,317	1,278	4,979	623	827	1,064	837	(NA)	1,099	263	
October	64,160	49,085	29,532	21,880	19,535	2,345	15,975	2,259	4,161	1,169	5,028	660	809	1,073	815	(NA)	1,202	256	
November	61,712	47,529	28,288	21,437	19,118	2,319	15,746	2,261	3,977	1,282	4,991	610	774	1,046	805	(NA)	1,190	267	
December	55,442	42,759	24,342	18,824	16,599	2,224	14,964	2,347	3,755	1,265	4,518	555	747	993	784	(NA)	1,352	273	
2000: January	49,618	38,680	22,488	17,667	15,528	2,139	13,566	1,942	3,499	1,182	3,994	549	709	950	741	(NA)	1,074	178	
February ^f	49,577	38,947	21,402	16,919	14,840	2,079	15,151	2,305	3,967	1,259	4,439	589	760	997	836	(NA)	993	222	
March ^f	56,189	44,460	25,594	20,028	17,655	2,373	16,011	2,395	4,345	1,432	4,522	608	789	1,089	832	(NA)	1,295	260	
April ^p	59,845	46,923	27,408	20,780	18,407	2,374	16,532	2,446	4,493	1,439	4,717	613	840	1,108	876	(NA)	(NA)	243	
PERCENT CHANGE																			
March 2000-																			
April 2000	7	6	7	4	4	(Z)	3	2	3	(Z)	4	1	6	2	5	(NA)	(NA)	-7	

See footnotes at end of table.

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

[Millions of dollars]

Period	Public construction												
	Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public ⁷
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
YEAR TO DATE													
April 1999	41,569	20,257	1,164	296	9,175	1,289	8,333	10,630	697	1,781	2,714	1,864	3,626
April 2000	46,220	23,457	1,183	372	11,361	1,358	9,183	11,463	704	1,888	2,786	2,015	3,907
Percent change	11	16	2	26	24	5	10	8	1	6	3	8	8
MONTHLY DATA													
1998: April	10,864	5,175	338	84	2,255	299	2,199	3,113	216	387	640	464	867
May	11,570	5,327	324	81	2,384	337	2,201	3,549	215	421	647	488	922
June	13,801	6,067	368	78	2,910	338	2,374	4,633	225	498	759	476	1,143
July	14,467	6,390	406	93	3,130	322	2,439	4,872	279	478	790	529	1,130
August	15,004	6,386	341	88	3,161	312	2,484	5,342	241	501	819	523	1,192
September	15,494	6,323	350	108	2,886	400	2,579	5,411	225	771	859	562	1,342
October	13,995	5,721	338	58	2,548	345	2,433	5,228	162	379	889	600	1,017
November	12,239	5,426	346	92	2,325	310	2,353	3,734	194	467	847	565	1,006
December	10,805	5,246	336	80	2,339	312	2,179	2,746	199	433	746	512	923
1999: January	9,379	4,751	278	64	2,162	310	1,936	2,161	147	400	652	431	839
February	9,705	4,889	273	70	2,166	363	2,018	2,282	182	436	607	447	862
March	10,658	5,185	286	85	2,299	327	2,187	2,735	187	472	723	475	882
April	11,826	5,432	327	76	2,548	290	2,192	3,453	181	475	732	510	1,044
May	12,749	5,511	328	83	2,616	316	2,168	4,167	181	419	812	542	1,117
June	14,381	6,248	320	72	3,266	336	2,254	4,791	188	511	890	579	1,175
July	15,041	6,481	307	89	3,343	341	2,401	5,081	197	507	940	624	1,211
August	16,172	6,815	338	70	3,598	323	2,487	5,782	145	616	867	640	1,306
September	16,317	6,754	354	112	3,301	386	2,602	5,802	207	802	884	608	1,261
October	15,076	6,444	335	45	3,084	356	2,625	5,251	141	438	881	643	1,278
November	14,183	6,131	323	74	2,848	348	2,537	4,618	164	564	829	576	1,302
December	12,684	5,898	337	89	2,744	352	2,376	3,646	207	562	782	501	1,089
2000: January	10,939	5,554	279	92	2,687	322	2,173	2,812	137	435	640	477	884
February ^f	10,630	5,662	263	96	2,718	320	2,265	2,233	205	490	621	512	906
March ^f	11,729	5,897	307	92	2,885	334	2,279	2,881	194	505	715	471	1,067
April ^p	12,922	6,344	334	91	3,071	383	2,465	3,537	168	458	810	555	1,051
PERCENT CHANGE													
March 2000- April 2000	10	8	9	-1	6	15	8	23	-13	-9	13	18	-1

NA Not available, but estimates are included in totals. ^pPreliminary. ^rRevised. ^zLess than 0.5 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 4. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in Current Dollars

[Millions of dollars]

Period		Total construction	Private construction															All other private ⁵	
			Residential buildings						Nonresidential buildings								Public utilities ⁴		
			Total ¹	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												
1998:	April	656,271	511,838	287,556	207,391	182,540	24,851	181,214	33,182	40,370	13,294	53,639	6,229	10,748	14,196	9,555	(NA)	12,185	2,510
	May	648,673	510,851	287,972	207,482	184,134	23,348	178,315	31,967	40,955	13,669	52,860	5,971	10,317	13,540	9,036	(NA)	12,780	2,614
	June	672,757	525,287	291,887	211,247	187,730	23,518	185,215	32,814	43,366	14,980	55,014	6,492	9,326	13,673	9,550	(NA)	12,201	3,298
	July	673,703	525,240	297,318	216,810	191,965	24,845	182,172	31,495	40,835	15,764	55,275	6,774	8,567	13,746	9,717	(NA)	12,000	2,506
	August	670,007	523,652	297,314	216,194	193,095	23,099	182,487	33,177	40,450	16,219	53,315	6,809	8,979	13,764	9,774	(NA)	12,334	2,568
	September	672,053	524,270	299,752	218,957	194,476	24,481	181,554	32,423	41,138	16,827	52,148	6,749	9,131	13,755	9,382	(NA)	12,252	2,677
	October	674,253	528,694	302,056	221,585	196,539	25,046	184,778	30,928	43,775	17,396	53,930	6,977	9,005	13,247	9,520	(NA)	12,928	2,509
	November	680,117	534,743	306,299	226,053	201,327	24,726	186,605	30,845	43,730	16,185	56,101	7,364	9,333	13,440	9,607	(NA)	12,327	2,877
	December	690,462	541,591	310,261	230,494	205,655	24,839	190,044	30,327	44,697	15,758	56,908	7,357	10,345	14,353	10,299	(NA)	12,090	2,786
1999:	January	697,858	543,471	315,828	235,142	208,739	26,403	185,816	29,895	45,658	16,923	54,506	7,702	8,538	12,131	10,462	(NA)	13,326	2,509
	February	710,657	548,682	318,483	238,146	210,328	27,818	189,040	28,967	46,788	16,822	56,014	7,466	8,962	13,307	10,714	(NA)	12,539	2,727
	March	715,396	555,362	323,133	241,524	212,412	29,113	189,297	29,052	46,430	16,422	57,553	7,210	8,985	12,835	10,810	(NA)	14,158	3,073
	April	704,582	547,885	322,213	241,193	212,924	28,269	184,411	26,217	45,890	16,277	56,290	7,374	9,766	12,356	10,241	(NA)	13,105	3,376
	May	698,461	546,880	321,803	239,910	212,582	27,329	184,245	24,975	46,912	16,259	57,222	7,092	9,031	12,369	10,384	(NA)	12,371	3,307
	June	698,852	546,931	320,913	238,490	211,410	27,080	182,945	25,465	47,304	14,430	57,153	7,575	9,309	12,182	9,526	(NA)	12,393	3,280
	July	701,961	545,992	320,350	238,886	211,253	27,632	183,307	26,246	47,514	15,293	55,841	7,135	9,295	12,181	9,801	(NA)	13,690	2,998
	August	698,439	541,793	319,656	238,566	210,669	27,896	180,987	25,703	48,905	15,086	53,502	7,157	9,195	11,813	9,626	(NA)	13,527	2,998
	September	698,168	540,939	320,048	239,145	211,029	28,116	180,878	25,566	49,710	14,857	53,018	6,585	9,200	12,317	9,625	(NA)	12,682	2,860
	October	703,447	544,532	322,876	240,292	213,492	26,800	181,336	25,387	48,294	14,725	54,452	7,215	9,765	12,252	9,246	(NA)	13,571	2,734
	November	717,585	550,018	326,091	244,608	216,835	27,774	183,146	26,136	46,789	14,981	57,419	6,539	9,754	12,081	9,446	(NA)	13,345	3,090
	December	731,771	557,688	330,141	251,307	223,060	28,246	185,138	26,771	46,495	15,461	57,677	6,654	10,345	12,015	9,721	(NA)	15,037	3,311
2000:	January	746,204	565,804	337,230	256,539	227,238	29,301	185,293	25,954	46,396	15,380	57,811	7,306	10,266	12,115	10,065	(NA)	16,476	2,490
	February	756,004	581,807	339,786	258,768	230,672	28,096	200,862	30,267	49,429	15,716	63,183	7,715	10,758	12,674	11,121	(NA)	13,580	3,295
	March	761,738	587,202	343,770	260,697	231,037	29,660	201,574	30,030	52,939	16,798	60,092	7,976	10,448	13,188	10,104	(NA)	15,029	3,388
	April ^P	757,259	583,821	340,062	258,326	229,843	28,483	203,437	30,105	54,738	17,080	59,705	7,830	10,602	13,306	10,071	(NA)	(NA)	3,077
PERCENT CHANGE																			
March 2000-																			
April 2000		-1	-1	-1	-1	-1	-4	1	(Z)	3	2	-1	-2	1	1	(Z)	(NA)	(NA)	-9

See footnotes at end of table.

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

[Millions of dollars]

Period		Public construction												
		Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public ⁷
			Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings ⁶						
1998:	April	144,433	65,250	4,094	1,042	29,480	3,628	27,006	46,527	2,725	4,898	8,277	5,834	10,922
	May	137,822	64,081	3,864	1,007	29,310	4,177	25,723	41,588	2,530	5,129	7,820	5,711	10,962
	June	147,470	67,247	4,197	899	31,038	3,891	27,221	45,346	2,610	5,710	8,505	5,448	12,603
	July	148,463	69,109	4,778	1,104	30,913	3,812	28,501	44,026	3,231	5,358	8,932	5,809	12,000
	August	146,355	67,191	4,203	1,106	29,760	3,886	28,236	44,700	2,760	5,470	8,623	5,732	11,880
	September	147,783	67,080	3,784	947	30,342	4,051	27,957	45,057	2,103	5,920	8,822	6,158	12,643
	October	145,559	65,405	3,802	799	29,366	4,029	27,409	46,301	2,407	5,321	9,121	5,989	11,015
	November	145,374	65,831	4,034	1,114	29,650	3,763	27,271	43,929	2,296	5,639	9,537	6,236	11,905
	December	148,871	67,875	4,093	920	32,002	3,674	27,185	44,583	2,306	5,406	9,770	6,532	12,398
1999:	January	154,387	66,634	3,666	886	31,445	4,099	26,539	50,538	1,881	6,018	9,658	6,465	13,192
	February	161,975	68,570	3,650	919	32,001	4,772	27,227	54,880	2,636	6,271	9,394	6,739	13,486
	March	160,033	68,786	3,623	1,012	32,080	3,982	28,089	53,099	2,223	6,194	10,017	6,767	12,947
	April	156,697	68,268	3,935	920	33,016	3,625	26,773	50,897	2,268	6,016	9,553	6,453	13,242
	May	151,581	66,449	3,910	1,042	32,266	3,895	25,335	48,542	2,128	5,101	9,775	6,379	13,207
	June	151,921	68,932	3,709	821	34,588	3,868	25,946	45,518	2,137	5,845	9,921	6,649	12,919
	July	155,969	69,840	3,671	1,044	33,209	4,052	27,863	47,822	2,275	5,820	10,443	6,820	12,947
	August	156,646	71,009	4,051	848	34,113	3,924	28,073	48,182	1,682	6,598	9,190	6,953	13,031
	September	157,229	71,942	3,853	975	34,868	4,026	28,220	49,031	1,947	6,268	9,100	6,614	12,327
	October	158,915	74,034	3,808	625	35,787	4,028	29,787	47,058	2,090	6,283	9,081	6,445	13,924
	November	167,566	74,765	3,705	874	36,635	4,093	29,458	53,487	1,961	6,555	9,259	6,386	15,152
	December	174,083	76,510	4,024	1,007	37,633	4,135	29,712	56,887	2,362	7,104	10,045	6,445	14,730
2000:	January	180,401	77,798	3,727	1,273	38,898	4,200	29,699	63,677	1,775	6,629	9,462	7,046	14,013
	February ^f	174,197	79,285	3,504	1,280	39,772	4,238	30,492	53,495	2,860	7,114	9,631	7,683	14,129
	March ^f	174,535	78,519	3,890	1,108	40,117	4,097	29,306	55,225	2,278	6,674	9,810	6,674	15,356
	April ^p	173,438	79,957	4,109	1,138	39,794	4,697	30,220	54,273	2,129	6,078	10,465	6,998	13,537
PERCENT CHANGE														
	March 2000- April 2000	-1	2	6	3	-1	15	3	-2	-7	-9	7	5	-12

NA Not available, but estimates are included in totals. ^pPreliminary. ^rRevised. ^zLess than 0.5 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 5. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in 1992 Dollars

[Millions of dollars]

Period		Total construction	Private construction																All other private ⁵
			Residential buildings						Nonresidential buildings								Public utilities ⁴		
			Total ¹	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												
1998:	April	542,912	422,142	236,671	170,692	150,239	20,453	148,902	27,265	33,172	10,924	44,075	5,119	8,832	11,665	7,851	(NA)	10,335	2,134
	May	535,326	420,387	236,431	170,346	151,177	19,169	146,040	26,181	33,542	11,195	43,293	4,890	8,450	11,089	7,400	(NA)	10,923	2,219
	June	552,098	429,648	237,886	172,166	152,999	19,167	150,826	26,721	35,315	12,199	44,799	5,287	7,594	11,134	7,777	(NA)	10,473	2,787
	July	551,246	428,270	241,330	175,982	155,816	20,166	147,987	25,585	33,172	12,806	44,903	5,502	6,959	11,166	7,894	(NA)	10,345	2,116
	August	546,564	425,881	240,935	175,197	156,479	18,718	147,763	26,864	32,753	13,133	43,170	5,513	7,270	11,145	7,914	(NA)	10,615	2,158
	September	546,822	425,302	242,322	177,007	157,216	19,791	146,651	26,190	33,229	13,592	42,123	5,451	7,376	11,111	7,578	(NA)	10,526	2,242
	October	546,608	427,133	243,006	178,266	158,117	20,150	148,775	24,902	35,246	14,006	43,422	5,617	7,251	10,666	7,665	(NA)	11,078	2,103
	November	549,530	430,245	245,039	180,843	161,062	19,781	149,884	24,775	35,124	13,000	45,061	5,915	7,496	10,796	7,716	(NA)	10,563	2,418
	December	555,484	433,652	246,827	183,368	163,608	19,761	152,035	24,261	35,758	12,606	45,526	5,886	8,276	11,482	8,240	(NA)	10,334	2,341
1999:	January	560,780	434,508	251,056	186,917	165,930	20,988	148,178	23,839	36,410	13,495	43,466	6,142	6,809	9,674	8,343	(NA)	11,400	2,108
	February	571,380	438,922	253,569	189,607	167,459	22,148	150,629	23,082	37,282	13,404	44,633	5,949	7,141	10,603	8,537	(NA)	10,735	2,292
	March	571,609	441,683	255,643	191,079	168,047	23,032	149,998	23,021	36,790	13,013	45,605	5,713	7,120	10,170	8,566	(NA)	12,070	2,555
	April	560,726	434,006	253,711	189,916	167,657	22,259	145,664	20,708	36,248	12,857	44,463	5,825	7,714	9,760	8,089	(NA)	11,191	2,794
	May	553,552	431,734	252,593	188,312	166,861	21,451	145,075	19,666	36,939	12,803	45,057	5,585	7,111	9,739	8,176	(NA)	10,511	2,715
	June	550,207	429,039	250,323	186,030	164,907	21,123	143,037	19,910	36,985	11,282	44,685	5,922	7,279	9,525	7,448	(NA)	10,476	2,673
	July	550,828	426,483	248,526	185,326	163,889	21,437	142,874	20,457	37,034	11,920	43,524	5,561	7,245	9,495	7,639	(NA)	11,543	2,448
	August	547,284	422,614	247,795	184,935	163,310	21,625	140,846	20,003	38,058	11,740	41,636	5,570	7,156	9,193	7,491	(NA)	11,357	2,443
	September	545,563	420,694	247,332	184,811	163,083	21,728	140,434	19,849	38,595	11,535	41,163	5,112	7,143	9,563	7,473	(NA)	10,621	2,327
	October	547,912	422,327	248,749	185,125	164,478	20,647	140,136	19,619	37,321	11,379	42,080	5,576	7,547	9,469	7,145	(NA)	11,560	2,215
	November	557,783	425,734	250,646	188,016	166,668	21,348	141,099	20,136	36,047	11,541	44,237	5,038	7,514	9,307	7,278	(NA)	11,534	2,494
	December	567,218	430,424	252,788	192,425	170,797	21,628	142,086	20,545	35,683	11,865	44,264	5,107	7,939	9,221	7,461	(NA)	13,133	2,666
2000:	January	576,328	435,261	257,428	195,831	173,464	22,367	141,553	19,827	35,444	11,749	44,165	5,582	7,843	9,255	7,689	(NA)	14,415	1,995
	February	581,705	446,142	258,786	197,081	175,683	21,398	153,096	23,069	37,675	11,979	48,158	5,880	8,199	9,660	8,476	(NA)	11,871	2,624
	March	586,140	450,247	261,621	198,400	175,827	22,572	153,639	22,889	40,350	12,803	45,802	6,079	7,963	10,052	7,701	(NA)	13,172	2,700
	April ^P	580,953	446,478	258,406	196,297	174,653	21,644	154,470	22,858	41,563	12,969	45,334	5,945	8,050	10,103	7,647	(NA)	(NA)	2,442
PERCENT CHANGE																			
	March 2000- April 2000	-1	-1	-1	-1	-1	-4	1	(Z)	3	1	-1	-2	1	1	-1	(NA)	(NA)	-10

See footnotes at end of table.

Table 5. **Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in 1992 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						
1998:	April	120,769	53,621	3,370	856	24,224	2,981	22,191	39,429	2,275	4,179	7,062	4,915	9,288
	May	114,939	52,490	3,172	825	24,005	3,421	21,067	35,214	2,107	4,362	6,650	4,811	9,306
	June	122,450	54,764	3,420	732	25,276	3,169	22,167	38,267	2,164	4,831	7,196	4,574	10,654
	July	122,977	56,137	3,879	897	25,112	3,097	23,153	37,028	2,670	4,548	7,582	4,877	10,135
	August	120,682	54,408	3,406	896	24,097	3,146	22,863	37,312	2,268	4,627	7,295	4,788	9,983
	September	121,520	54,187	3,059	765	24,509	3,272	22,582	37,454	1,722	4,996	7,445	5,127	10,589
	October	119,475	52,659	3,059	643	23,644	3,244	22,068	38,424	1,967	4,509	7,729	4,954	9,233
	November	119,285	52,863	3,227	895	23,815	3,022	21,904	36,486	1,874	4,799	8,117	5,141	10,004
	December	121,832	54,282	3,256	736	25,602	2,939	21,748	36,968	1,878	4,605	8,322	5,359	10,418
1999:	January	126,272	53,128	2,914	707	25,076	3,268	21,163	41,871	1,528	5,131	8,233	5,295	11,086
	February	132,457	54,635	2,906	732	25,499	3,803	21,695	45,468	2,141	5,351	8,015	5,514	11,332
	March	129,926	54,501	2,866	802	25,420	3,155	22,258	43,775	1,796	5,187	8,390	5,515	10,762
	April	126,720	53,915	3,099	726	26,079	2,863	21,148	41,719	1,825	5,035	7,994	5,272	10,962
	May	121,818	52,312	3,069	821	25,406	3,067	19,949	39,401	1,701	4,241	8,125	5,195	10,843
	June	121,168	53,888	2,893	642	27,043	3,024	20,286	36,649	1,694	4,827	8,192	5,388	10,529
	July	124,345	54,422	2,848	814	25,884	3,159	21,717	38,597	1,804	4,806	8,624	5,523	10,569
	August	124,670	55,248	3,140	660	26,547	3,054	21,847	38,856	1,333	5,435	7,570	5,607	10,620
	September	124,869	55,842	2,978	757	27,071	3,126	21,910	39,509	1,539	5,150	7,478	5,321	10,030
	October	125,585	57,204	2,934	483	27,656	3,112	23,019	37,616	1,643	5,158	7,456	5,223	11,284
	November	132,049	57,594	2,848	673	28,224	3,153	22,695	42,517	1,535	5,377	7,596	5,200	12,230
	December	136,795	58,711	3,081	773	28,882	3,173	22,803	45,077	1,841	5,818	8,226	5,261	11,860
2000:	January	141,068	59,431	2,845	973	29,716	3,209	22,688	50,179	1,377	5,403	7,712	5,738	11,229
	February ^f	135,563	60,429	2,668	975	30,314	3,230	23,241	41,891	2,209	5,760	7,798	6,226	11,249
	March ^f	135,893	59,842	2,961	845	30,577	3,123	22,337	43,280	1,760	5,409	7,950	5,417	12,236
	April ^p	134,474	60,714	3,122	864	30,215	3,567	22,946	42,368	1,639	4,906	8,447	5,657	10,744
PERCENT CHANGE														
	March 2000- April 2000	-1	1	5	2	-1	14	3	-2	-7	-9	6	4	-12

NA Not available, but estimates are included in totals. ^pPreliminary. ^rRevised. ^zLess than 0.5 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 6. Monthly Value of Construction Put in Place—Not Seasonally Adjusted in 1992 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																			
April 1999	160,532	126,777	71,749	54,878	48,019	6,861	45,848	7,030	11,703	4,271	13,067	1,767	2,126	3,235	2,649	(NA)	3,452	712	
April 2000	165,452	129,520	73,771	57,404	50,578	6,826	46,667	6,923	12,420	4,046	13,462	1,797	2,360	3,157	2,502	(NA)	(NA)	718	
Percent change	3	2	3	5	5	-1	2	-2	6	-5	3	2	11	-2	-6	(NA)	(NA)	1	
MONTHLY DATA																			
1998: April	43,056	33,979	19,036	13,687	11,994	1,693	12,145	2,211	2,773	951	3,460	409	697	967	677	(NA)	849	165	
May	45,526	35,876	20,616	14,420	12,737	1,684	12,168	2,171	2,851	905	3,597	382	718	930	615	(NA)	881	178	
June	50,840	39,373	22,105	15,457	13,744	1,712	13,090	2,274	3,016	1,088	3,942	427	739	934	669	(NA)	944	233	
July	51,711	39,718	22,887	16,336	14,582	1,754	12,747	2,136	2,842	1,055	3,993	444	697	906	674	(NA)	905	192	
August	52,541	40,157	23,260	16,572	14,892	1,680	13,144	2,333	2,798	1,110	4,029	498	731	962	683	(NA)	911	207	
September	52,091	39,333	22,685	16,633	14,909	1,723	13,159	2,348	2,872	1,144	3,998	511	664	958	664	(NA)	932	206	
October	50,384	38,885	22,418	16,419	14,652	1,766	13,238	2,227	3,028	1,180	4,053	531	600	933	686	(NA)	1,016	206	
November	47,229	37,182	21,287	15,884	14,227	1,657	12,908	2,141	3,009	1,094	3,924	545	595	934	666	(NA)	896	212	
December	42,177	33,343	18,175	13,723	12,161	1,561	12,403	2,123	2,926	1,062	3,570	516	592	947	667	(NA)	927	192	
1999: January	37,261	29,610	16,591	12,758	11,228	1,530	10,880	1,788	2,782	987	3,032	446	472	759	613	(NA)	750	149	
February	36,959	29,046	15,843	12,299	10,662	1,637	11,210	1,752	2,899	1,041	3,121	428	503	832	634	(NA)	747	153	
March	41,809	33,174	18,941	14,620	12,786	1,835	11,846	1,807	2,989	1,130	3,405	439	542	836	699	(NA)	1,012	192	
April	44,503	34,947	20,374	15,201	13,343	1,859	11,912	1,683	3,033	1,113	3,509	454	609	808	703	(NA)	943	218	
May	47,239	36,992	22,068	16,036	14,155	1,881	12,174	1,629	3,121	1,089	3,777	451	606	816	683	(NA)	827	223	
June	50,815	39,341	23,297	16,782	14,897	1,885	12,390	1,704	3,141	968	3,955	477	711	796	637	(NA)	937	226	
July	51,499	39,503	23,558	17,222	15,365	1,858	12,295	1,712	3,102	999	3,888	452	720	769	653	(NA)	993	220	
August	52,770	39,887	23,842	17,441	15,514	1,926	12,602	1,740	3,330	1,002	3,872	507	717	790	644	(NA)	1,029	237	
September	51,736	38,754	23,041	17,247	15,357	1,890	12,597	1,786	3,351	992	3,866	484	642	826	650	(NA)	921	214	
October	49,989	38,062	22,752	16,856	15,050	1,807	12,345	1,746	3,216	904	3,885	510	625	829	630	(NA)	1,024	208	
November	47,970	36,786	21,743	16,477	14,695	1,783	12,131	1,742	3,064	988	3,845	470	596	806	620	(NA)	1,028	216	
December	42,983	33,021	18,639	14,413	12,710	1,703	11,484	1,801	2,881	971	3,467	426	574	762	602	(NA)	1,181	220	
2000: January	38,267	29,730	17,167	13,486	11,853	1,633	10,363	1,484	2,673	903	3,051	420	542	726	566	(NA)	939	142	
February ^f	38,107	29,848	16,300	12,886	11,302	1,583	11,548	1,757	3,023	959	3,383	449	579	760	637	(NA)	868	176	
March ^f	43,200	34,077	19,478	15,242	13,436	1,806	12,204	1,825	3,312	1,091	3,447	463	601	830	634	(NA)	1,135	207	
April ^p	45,878	35,865	20,826	15,790	13,987	1,804	12,552	1,857	3,412	1,093	3,581	465	638	841	665	(NA)	(NA)	193	
PERCENT CHANGE																			
March 2000- April 2000	6	5	7	4	4	(Z)	3	2	3	(Z)	4	(Z)	6	1	5	(NA)	(NA)	-7	

See footnotes at end of table.

Table 6. **Monthly Value of Construction Put in Place—Not Seasonally Adjusted in 1992 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													
April 1999	33,755	16,082	923	235	7,283	1,024	6,616	8,765	563	1,505	2,292	1,523	3,026
April 2000	35,933	17,869	901	283	8,655	1,034	6,995	8,984	543	1,529	2,258	1,634	3,113
Percent change	6	11	-2	20	19	1	6	2	-4	2	-1	7	3
MONTHLY DATA													
1998: April	9,077	4,253	279	69	1,853	246	1,806	2,638	181	330	546	391	737
May	9,650	4,364	266	66	1,952	276	1,802	3,005	179	358	550	411	783
June	11,467	4,941	300	64	2,369	275	1,933	3,910	187	422	642	399	966
July	11,993	5,190	329	76	2,542	261	1,981	4,098	230	406	670	444	955
August	12,383	5,171	276	71	2,560	252	2,011	4,459	198	424	693	437	1,002
September	12,758	5,108	283	87	2,331	323	2,083	4,498	184	651	725	468	1,124
October	11,500	4,606	272	47	2,051	278	1,959	4,339	132	321	753	496	852
November	10,047	4,357	277	74	1,868	249	1,890	3,101	158	398	721	466	846
December	8,834	4,196	268	64	1,871	250	1,743	2,277	162	369	635	420	776
1999: January	7,651	3,788	221	51	1,724	247	1,544	1,790	119	341	556	353	705
February	7,914	3,896	218	56	1,725	289	1,608	1,891	148	372	518	366	724
March	8,634	4,108	227	68	1,822	259	1,733	2,254	151	395	605	387	733
April	9,556	4,290	257	60	2,012	229	1,731	2,830	145	397	613	417	864
May	10,247	4,339	257	66	2,060	249	1,707	3,382	145	348	675	441	917
June	11,474	4,884	250	56	2,553	263	1,762	3,857	149	422	735	469	957
July	11,996	5,050	238	70	2,605	266	1,871	4,101	156	419	776	505	989
August	12,883	5,303	262	54	2,800	252	1,935	4,663	115	508	714	516	1,065
September	12,981	5,243	273	87	2,563	300	2,020	4,675	164	659	726	489	1,026
October	11,927	4,979	258	35	2,383	275	2,028	4,197	111	360	723	521	1,036
November	11,184	4,723	249	57	2,194	268	1,955	3,671	128	463	680	469	1,051
December	9,962	4,526	258	68	2,106	270	1,824	2,889	161	460	640	409	877
2000: January	8,538	4,243	213	71	2,053	246	1,660	2,216	106	354	521	389	708
February ^f	8,259	4,315	200	73	2,071	244	1,726	1,749	158	397	503	415	721
March ^f	9,123	4,494	234	70	2,199	254	1,737	2,258	150	409	580	382	850
April ^p	10,013	4,817	254	69	2,332	290	1,872	2,761	129	369	654	448	834
PERCENT CHANGE													
March 2000- April 2000	10	7	9	-1	6	14	8	22	-14	-10	13	17	-2

NA Not available, but estimates are included in totals. ^pPreliminary. ^rRevised. ^zLess than 0.5 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 7. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in Current Dollars

[Millions of dollars]

Period		State- and locally-owned public construction										
		Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction ²
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹					
1998:	April	9,777	4,687	300	2,254	236	1,897	3,091	141	640	464	752
	May	10,463	4,844	282	2,383	248	1,932	3,520	165	647	488	799
	June	12,598	5,579	324	2,908	256	2,091	4,597	202	759	476	985
	July	13,107	5,810	345	3,128	226	2,111	4,833	163	790	529	983
	August	13,755	5,880	284	3,159	225	2,213	5,298	182	819	523	1,053
	September	13,655	5,633	294	2,883	253	2,204	5,367	177	859	562	1,057
	October	13,068	5,288	304	2,547	257	2,180	5,186	183	889	600	923
	November	11,012	4,948	298	2,325	247	2,078	3,703	148	847	565	801
	December	9,577	4,745	296	2,338	258	1,854	2,723	134	746	512	718
1999:	January	8,394	4,345	252	2,159	223	1,712	2,145	150	652	431	672
	February	8,577	4,419	247	2,165	236	1,770	2,266	136	607	447	703
	March	9,519	4,716	249	2,298	242	1,927	2,716	134	723	475	755
	April	10,696	5,004	284	2,547	230	1,943	3,427	178	732	510	846
	May	11,715	5,091	295	2,616	248	1,932	4,134	143	812	542	994
	June	13,203	5,795	281	3,265	266	1,984	4,751	168	890	579	1,020
	July	13,837	6,002	269	3,340	255	2,138	5,038	169	940	624	1,065
	August	15,005	6,399	304	3,594	277	2,224	5,736	212	867	640	1,151
	September	14,734	6,158	308	3,300	308	2,242	5,757	211	884	608	1,117
	October	14,109	6,021	300	3,084	307	2,330	5,207	200	881	643	1,157
	November	12,982	5,677	287	2,848	305	2,237	4,586	223	829	576	1,091
	December	11,474	5,419	299	2,743	288	2,090	3,622	205	782	501	945
2000:	January	9,997	5,162	249	2,687	267	1,960	2,796	153	640	477	770
	February ^f	9,597	5,269	236	2,718	264	2,052	2,217	185	621	512	793
	March ^f	10,549	5,474	275	2,885	294	2,021	2,862	158	715	471	869
	April ^p	11,851	5,895	304	3,064	314	2,214	3,511	143	810	555	938
		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
1998:	April	1,087	488	39	84	1	63	301	(NA)	216	246	115
	May	1,107	483	42	81	1	90	269	(NA)	215	256	123
	June	1,204	488	44	78	2	82	283	(NA)	225	297	158
	July	1,360	580	61	93	2	95	329	(NA)	279	315	148
	August	1,249	506	57	88	3	87	271	(NA)	241	319	139
	September	1,839	690	57	108	3	148	375	(NA)	225	595	285
	October	927	433	34	58	-	88	253	(NA)	162	196	94
	November	1,228	478	48	92	1	63	275	(NA)	194	320	206
	December	1,228	501	41	80	1	55	325	(NA)	199	299	205
1999:	January	985	406	27	64	3	87	225	(NA)	147	249	167
	February	1,127	471	26	70	1	127	247	(NA)	182	300	159
	March	1,140	468	37	85	1	85	260	(NA)	187	338	127
	April	1,130	428	42	76	1	60	249	(NA)	181	297	198
	May	1,034	420	32	83	1	67	237	(NA)	181	277	123
	June	1,178	453	39	72	1	71	270	(NA)	188	343	155
	July	1,203	479	39	89	3	86	263	(NA)	197	338	146
	August	1,167	416	34	70	4	46	263	(NA)	145	404	155
	September	1,583	596	46	112	1	78	360	(NA)	207	591	145
	October	967	423	35	45	-	49	295	(NA)	141	238	121
	November	1,201	454	36	74	-	43	301	(NA)	164	342	210
	December	1,210	479	38	89	1	64	287	(NA)	207	357	144
2000:	January	941	392	30	92	-	55	214	(NA)	137	282	115
	February ^f	1,032	393	27	96	-	56	213	(NA)	205	306	113
	March ^f	1,180	423	32	92	-	40	259	(NA)	194	347	198
	April ^p	1,071	448	30	91	7	69	251	(NA)	168	315	113

- Less than \$0.5 million. 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 8. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate in Current Dollars

[Millions of dollars]

Period		State- and locally-owned public construction										
		Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction ²
			Total	Housing and redevelopment	Educational	Hospital	Other buildings ¹					
1998:	April	130,760	59,213	3,617	29,463	2,853	23,281	46,198	1,775	8,277	5,834	9,463
	May	124,220	58,066	3,337	29,293	3,060	22,376	41,248	1,942	7,820	5,711	9,432
	June	133,510	61,629	3,693	31,018	2,952	23,967	44,994	2,197	8,505	5,448	10,736
	July	132,659	62,246	4,056	30,894	2,683	24,612	43,673	1,709	8,932	5,809	10,290
	August	131,590	60,855	3,488	29,729	2,800	24,839	44,331	1,775	8,623	5,732	10,274
	September	133,139	61,029	3,288	30,317	2,758	24,667	44,691	1,781	8,822	6,158	10,659
	October	131,696	59,449	3,337	29,364	2,820	23,929	45,929	1,852	9,121	5,989	9,357
	November	130,493	60,031	3,453	29,643	3,000	23,936	43,565	1,734	9,537	6,236	9,390
	December	134,430	62,101	3,623	31,988	3,046	23,444	44,210	1,853	9,770	6,532	9,963
1999:	January	140,524	61,050	3,301	31,405	2,896	23,448	50,164	2,410	9,658	6,465	10,778
	February	146,523	62,381	3,304	31,992	3,107	23,977	54,495	2,187	9,394	6,739	11,327
	March	146,132	63,221	3,180	32,071	2,972	24,999	52,730	2,020	10,017	6,767	11,376
	April	142,595	63,093	3,424	33,003	2,896	23,770	50,514	2,252	9,553	6,453	10,732
	May	138,863	61,191	3,505	32,257	3,053	22,376	48,157	1,676	9,775	6,379	11,685
	June	138,416	63,772	3,261	34,575	3,065	22,870	45,138	1,826	9,921	6,649	11,110
	July	141,893	64,235	3,220	33,179	3,047	24,790	47,417	1,775	10,443	6,820	11,201
	August	143,261	65,944	3,642	34,066	3,365	24,871	47,798	2,081	9,190	6,953	11,295
	September	144,551	66,731	3,455	34,860	3,344	25,071	48,651	2,139	9,100	6,614	11,317
	October	144,123	68,131	3,324	35,785	3,345	25,676	46,664	2,034	9,081	6,445	11,768
	November	153,475	69,403	3,278	36,634	3,585	25,905	53,116	2,596	9,259	6,386	12,715
	December	159,902	71,066	3,592	37,617	3,406	26,452	56,512	2,825	10,045	6,445	13,009
2000:	January	166,980	72,401	3,309	38,897	3,444	26,752	63,315	2,442	9,462	7,046	12,314
	February ^f	160,012	74,075	3,143	39,768	3,497	27,667	53,111	2,929	9,631	7,683	12,583
	March ^f	159,996	73,420	3,503	40,114	3,616	26,186	54,861	2,344	9,810	6,674	12,889
	April ^p	159,524	74,354	3,735	39,702	3,837	27,079	53,874	1,826	10,465	6,998	12,006
		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
1998:	April	13,673	6,037	478	1,042	17	776	3,725	(NA)	2,725	3,123	1,459
	May	13,602	6,015	527	1,007	17	1,117	3,347	(NA)	2,530	3,187	1,530
	June	13,960	5,618	503	899	21	940	3,255	(NA)	2,610	3,512	1,867
	July	15,804	6,863	722	1,104	19	1,129	3,889	(NA)	3,231	3,649	1,710
	August	14,765	6,336	715	1,106	31	1,086	3,397	(NA)	2,760	3,695	1,606
	September	14,644	6,051	496	947	25	1,293	3,290	(NA)	2,103	4,139	1,984
	October	13,863	5,956	465	799	3	1,210	3,480	(NA)	2,407	3,469	1,658
	November	14,880	5,800	581	1,114	7	763	3,335	(NA)	2,296	3,905	2,515
	December	14,441	5,774	470	920	14	629	3,742	(NA)	2,306	3,553	2,434
1999:	January	13,863	5,584	365	886	40	1,203	3,091	(NA)	1,881	3,609	2,414
	February	15,452	6,189	346	919	9	1,665	3,250	(NA)	2,636	4,084	2,159
	March	13,901	5,565	443	1,012	10	1,010	3,090	(NA)	2,223	4,173	1,571
	April	14,102	5,176	511	920	13	729	3,003	(NA)	2,268	3,765	2,510
	May	12,718	5,258	405	1,042	9	842	2,959	(NA)	2,128	3,425	1,522
	June	13,505	5,160	448	821	13	803	3,076	(NA)	2,137	4,019	1,809
	July	14,077	5,605	450	1,044	30	1,006	3,074	(NA)	2,275	4,045	1,747
	August	13,385	5,065	409	848	46	560	3,202	(NA)	1,682	4,517	1,736
	September	12,679	5,212	398	975	8	683	3,149	(NA)	1,947	4,129	1,010
	October	14,792	5,904	484	625	1	682	4,111	(NA)	2,090	4,249	2,156
	November	14,091	5,363	427	874	1	508	3,553	(NA)	1,961	3,959	2,437
	December	14,181	5,444	432	1,007	16	729	3,260	(NA)	2,362	4,279	1,721
2000:	January	13,421	5,397	419	1,273	1	756	2,947	(NA)	1,775	4,187	1,700
	February ^f	14,186	5,210	361	1,280	4	741	2,825	(NA)	2,860	4,186	1,546
	March ^f	14,539	5,099	387	1,108	2	481	3,120	(NA)	2,278	4,330	2,467
	April ^p	13,915	5,604	374	1,138	91	860	3,141	(NA)	2,129	4,252	1,531

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 9. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate in 1992 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					
1998:	April	109,349	48,660	2,977	24,209	2,344	19,130	39,151	1,514	7,062	4,915	8,047
	May	103,609	47,563	2,740	23,991	2,506	18,326	34,926	1,652	6,650	4,811	8,007
	June	110,863	50,189	3,010	25,259	2,404	19,517	37,970	1,859	7,196	4,574	9,075
	July	109,895	50,563	3,293	25,097	2,180	19,994	36,731	1,451	7,582	4,877	8,691
	August	108,501	49,278	2,827	24,072	2,267	20,112	37,004	1,501	7,295	4,788	8,634
	September	109,450	49,299	2,658	24,488	2,228	19,925	37,149	1,503	7,445	5,127	8,927
	October	108,074	47,864	2,685	23,642	2,270	19,266	38,115	1,569	7,729	4,954	7,843
	November	107,014	48,207	2,762	23,810	2,410	19,225	36,183	1,476	8,117	5,141	7,891
	December	109,955	49,664	2,882	25,591	2,436	18,755	36,658	1,579	8,322	5,359	8,373
1999:	January	114,876	48,676	2,624	25,044	2,309	18,699	41,561	2,054	8,233	5,295	9,057
	February	119,767	49,704	2,631	25,492	2,476	19,105	45,149	1,866	8,015	5,514	9,518
	March	118,616	50,092	2,516	25,413	2,355	19,809	43,471	1,692	8,390	5,515	9,456
	April	115,266	49,828	2,696	26,068	2,287	18,776	41,405	1,884	7,994	5,272	8,884
	May	111,569	48,173	2,751	25,399	2,404	17,619	39,089	1,393	8,125	5,195	9,594
	June	110,341	49,854	2,544	27,033	2,396	17,881	36,343	1,508	8,192	5,388	9,055
	July	113,081	50,055	2,498	25,860	2,375	19,322	38,271	1,466	8,624	5,523	9,143
	August	113,951	51,307	2,823	26,511	2,618	19,355	38,547	1,714	7,570	5,607	9,205
	September	114,764	51,797	2,670	27,065	2,596	19,465	39,203	1,757	7,478	5,321	9,208
	October	113,830	52,643	2,561	27,655	2,585	19,842	37,301	1,670	7,456	5,223	9,537
	November	120,874	53,463	2,520	28,223	2,762	19,958	42,223	2,129	7,596	5,200	10,263
	December	125,590	54,534	2,750	28,869	2,614	20,301	44,780	2,314	8,226	5,261	10,474
2000:	January	130,508	55,308	2,526	29,715	2,631	20,437	49,893	1,990	7,712	5,738	9,867
	February ^f	124,462	56,458	2,394	30,311	2,665	21,088	41,591	2,371	7,798	6,226	10,018
	March ^f	124,486	55,956	2,666	30,575	2,756	19,959	42,994	1,899	7,950	5,417	10,270
	April ^p	123,622	56,459	2,838	30,146	2,914	20,561	42,056	1,474	8,447	5,657	9,529
		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
1998:	April	11,420	4,961	393	856	14	637	3,061	(NA)	2,275	2,665	1,241
	May	11,331	4,927	432	825	14	914	2,741	(NA)	2,107	2,710	1,298
	June	11,587	4,575	410	732	17	765	2,650	(NA)	2,164	2,972	1,579
	July	13,082	5,574	586	897	15	917	3,159	(NA)	2,670	3,097	1,444
	August	12,181	5,131	580	896	25	879	2,751	(NA)	2,268	3,126	1,350
	September	12,070	4,888	401	765	21	1,044	2,657	(NA)	1,722	3,493	1,662
	October	11,401	4,795	374	643	2	974	2,802	(NA)	1,977	2,940	1,390
	November	12,271	4,656	464	895	6	613	2,679	(NA)	1,874	3,324	2,113
	December	11,877	4,617	374	736	11	503	2,993	(NA)	1,878	3,026	2,046
1999:	January	11,396	4,452	290	707	32	959	2,465	(NA)	1,528	3,076	2,029
	February	12,690	4,931	275	732	7	1,327	2,590	(NA)	2,141	3,484	1,814
	March	11,310	4,409	351	802	8	800	2,449	(NA)	1,796	3,495	1,306
	April	11,454	4,087	403	726	11	576	2,372	(NA)	1,825	3,150	2,078
	May	10,249	4,139	318	821	7	663	2,330	(NA)	1,701	2,847	1,250
	June	10,827	4,034	349	642	10	628	2,405	(NA)	1,694	3,319	1,474
	July	11,264	4,367	349	814	24	784	2,396	(NA)	1,804	3,340	1,426
	August	10,719	3,941	317	660	36	436	2,492	(NA)	1,333	3,721	1,415
	September	10,105	4,045	307	757	6	530	2,445	(NA)	1,539	3,393	822
	October	11,755	4,561	373	483	1	527	3,177	(NA)	1,643	3,489	1,747
	November	11,175	4,131	328	673	1	392	2,737	(NA)	1,535	3,248	1,967
	December	11,205	4,177	331	773	12	560	2,502	(NA)	1,841	3,504	1,386
2000:	January	10,559	4,122	320	973	1	578	2,251	(NA)	1,377	3,413	1,362
	February ^f	11,100	3,971	275	975	3	565	2,153	(NA)	2,209	3,389	1,231
	March ^f	11,407	3,886	295	845	2	367	2,378	(NA)	1,760	3,509	1,966
	April ^p	10,852	4,255	284	864	69	653	2,385	(NA)	1,639	3,432	1,215

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 10. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in 1992 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					
1998:	April	8,169	3,852	247	1,852	194	1,559	2,620	120	546	391	640
	May	8,728	3,968	232	1,951	203	1,582	2,980	140	550	411	679
	June	10,468	4,544	264	2,368	209	1,703	3,879	171	642	399	833
	July	10,867	4,719	280	2,541	184	1,714	4,065	139	670	444	830
	August	11,352	4,762	230	2,558	182	1,792	4,422	154	693	437	885
	September	11,239	4,550	237	2,328	204	1,780	4,461	149	725	468	885
	October	10,739	4,257	244	2,051	207	1,755	4,304	155	753	496	774
	November	9,034	3,974	239	1,867	198	1,669	3,076	126	721	466	673
	December	7,825	3,795	235	1,870	206	1,483	2,258	114	635	420	604
1999:	January	6,842	3,464	200	1,722	177	1,365	1,777	128	556	353	565
	February	6,988	3,521	197	1,725	188	1,411	1,877	116	518	366	591
	March	7,708	3,737	197	1,821	192	1,527	2,239	112	605	387	627
	April	8,639	3,952	224	2,012	181	1,535	2,809	149	613	417	700
	May	9,414	4,008	232	2,059	196	1,521	3,355	119	675	441	816
	June	10,530	4,530	219	2,552	208	1,551	3,825	138	735	469	832
	July	11,033	4,677	209	2,603	199	1,666	4,066	139	776	505	869
	August	11,948	4,979	236	2,797	216	1,731	4,626	175	714	516	938
	September	11,716	4,780	238	2,562	239	1,741	4,639	173	726	489	909
	October	11,161	4,652	231	2,383	237	1,801	4,162	164	723	521	938
	November	10,231	4,373	221	2,194	235	1,723	3,645	183	680	469	881
	December	9,007	4,158	229	2,105	221	1,604	2,870	168	640	409	761
2000:	January	7,798	3,943	190	2,053	204	1,497	2,204	124	521	389	617
	February ^f	7,451	4,016	180	2,071	201	1,564	1,736	149	503	415	631
	March ^f	8,197	4,172	209	2,199	224	1,540	2,243	128	580	382	692
	April ^P	9,179	4,477	231	2,326	238	1,681	2,741	115	654	448	744
		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
1998:	April	908	401	32	69	1	52	247	(NA)	181	210	98
	May	922	396	35	66	1	73	220	(NA)	179	218	104
	June	999	397	36	64	1	66	230	(NA)	187	251	133
	July	1,126	471	50	76	1	77	267	(NA)	230	267	125
	August	1,031	410	46	71	2	70	220	(NA)	198	270	117
	September	1,519	558	46	87	2	119	303	(NA)	184	502	239
	October	761	349	27	47	-	71	204	(NA)	132	166	79
	November	1,012	383	38	74	-	50	221	(NA)	158	272	173
	December	1,009	401	32	64	1	44	260	(NA)	162	255	172
1999:	January	809	324	21	51	2	70	179	(NA)	119	213	140
	February	926	375	21	56	1	101	197	(NA)	148	256	133
	March	927	371	30	68	1	67	206	(NA)	151	283	106
	April	917	338	33	60	1	48	196	(NA)	145	249	164
	May	833	331	25	66	1	53	186	(NA)	145	230	101
	June	944	354	31	56	1	55	211	(NA)	149	283	126
	July	963	373	30	70	2	67	205	(NA)	156	279	119
	August	936	324	26	54	3	36	205	(NA)	115	333	127
	September	1,265	463	35	87	1	61	280	(NA)	164	485	118
	October	766	327	27	35	-	38	228	(NA)	111	196	98
	November	953	349	28	57	-	33	232	(NA)	128	280	170
	December	955	367	29	68	1	49	220	(NA)	161	292	116
2000:	January	740	299	23	71	-	42	163	(NA)	106	230	92
	February ^f	808	299	21	73	-	43	162	(NA)	158	248	90
	March ^f	926	322	24	70	-	30	197	(NA)	150	281	157
	April ^P	834	340	23	69	6	52	191	(NA)	129	254	90

- Less than \$0.5 million. 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 11. Indexes Used in Deriving Estimates of the Value of Construction Put in Place in Constant Dollars

[1992 = 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													
1995.....	112.5	112.6	109.8	109.8	114.4	114.3	115.9	110	109	115	111	111	112	110
1996.....	115.0	115.2	113.0	112.8	116.4	116.5	116.1	112	112	118	112	112	115	115
1997.....	118.7	118.9	118.7	116.9	119.9	119.9	124.7	116	117	122	115	115	118	117
1998.....	122.0	122.2	119.7	118.8	123.3	123.0	122.2	118	122	123	117	117	120	117
1999.....	126.9	127.0	121.9	121.5	129.2	131.1	130.8	120	127	126	119	119	123	117
	Monthly indexes						Quarterly indexes			Semiannual indexes				
1998: January.....	120.9	120.7	118.7	117.4	122.0	121.4								
February.....	120.5	120.7	119.0	117.8	121.5	121.3	113.8	118	120					
March.....	120.5	120.7	118.9	117.9	121.3	121.2				122	116	116	118	118
April.....	120.9	120.9	119.1	118.0	121.9	121.5								
May.....	121.1	121.2	119.1	118.0	122.0	121.8	119.5	118	121					
June.....	121.8	121.8	119.2	118.3	123.0	122.7								
July.....	122.2	122.1	119.4	118.8	123.7	123.2								
August.....	122.6	122.5	119.7	118.9	123.9	123.4	130.2	118	123					
September.....	122.8	122.8	120.5	119.6	124.0	123.7				124	117	117	119	117
October.....	123.1	123.3	120.8	120.1	124.3	124.3								
November.....	123.4	123.8	120.8	120.3	125.0	125.0	125.0	119	124					
December.....	124.1	124.3	120.7	120.2	126.0	125.7								
1999: January.....	124.5	124.6	120.9	120.4	126.4	125.8								
February.....	124.8	124.6	120.6	120.2	126.8	125.6	124.4	118	125					
March.....	125.7	125.3	120.4	120.1	127.8	126.4				125	118	118	122	117
April.....	125.6	125.7	120.7	120.5	127.6	127.0								
May.....	125.9	126.2	120.8	120.5	127.6	127.4	136.4	119	126					
June.....	126.9	126.9	121.1	121.2	128.6	128.2								
July.....	127.5	127.4	122.1	121.9	129.6	128.9								
August.....	127.5	127.5	122.6	122.2	129.5	129.0	125.4	121	127					
September.....	128.0	127.9	123.3	122.7	130.1	129.4				126	119	120	123	118
October.....	128.4	128.3	123.7	123.1	130.6	129.8								
November.....	128.7	128.6	123.5	122.9	130.9	130.1	137.1	122	129					
December.....	128.8	129.0	123.4	122.9	131.0	130.6								
2000: January.....	129.2	129.7	123.6	123.0	131.2	131.0								
February.....	^r 129.5	^r 130.1	124.3	123.6	^r 131.3	^r 131.3	(NA)	122	130					
March.....	^r 129.5	^r 130.1	124.7	124.4	^r 131.4	^r 131.4				128	119	120	123	115
April.....	^p 129.8	^p 130.4	124.6	124.3	^p 131.6	^p 131.6								
May.....			125.2	124.8			(NA)	(NA)	(NA)					

NA Not available. ^pPreliminary. ^rRevised.

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

Type of construction	Apr. 2000 ^P	Mar. 2000 ^r	Feb. 2000 ^r	Jan. 2000	Dec. 1999	Nov. 1999	Oct. 1999	Sep. 1999	Aug. 1999	July 1999	June 1999	Apr. 1999
PRIVATE CONSTRUCTION												
Residential buildings:												
New housing units:												
1 unit	96.1	91.7	77.2	82.0	89.3	105.8	109.8	113.0	114.0	112.5	108.4	95.5
2 units or more	100.0	96.0	88.8	87.6	94.5	100.2	105.0	104.4	106.9	104.0	107.1	100.2
Nonresidential buildings:												
Industrial	97.5	95.7	91.4	89.8	105.2	103.8	106.8	108.0	104.4	100.4	102.7	97.5
Office	98.5	98.5	96.3	90.5	96.9	102.0	103.4	104.2	105.0	100.5	101.9	100.4
Hotels, motels	101.1	102.3	96.1	92.2	98.2	102.7	95.3	103.2	102.4	100.6	103.0	103.9
Other commercial	94.8	90.3	84.3	82.9	94.0	104.3	110.8	112.7	111.6	107.2	106.2	94.7
Religious	93.9	91.4	91.6	90.2	100.0	111.9	109.7	113.5	109.3	97.6	96.7	93.6
Educational	95.1	90.6	84.8	82.9	86.7	95.2	99.4	107.8	120.3	119.2	117.3	94.8
Hospital and institutional	99.9	99.1	94.4	94.1	99.2	103.9	105.1	103.7	103.1	97.2	100.3	99.3
Miscellaneous nonresidential	104.4	98.8	90.2	88.3	96.8	102.3	105.8	104.3	103.1	102.6	102.7	104.3
Telecommunications	92.6	103.4	87.7	78.2	107.9	107.0	106.3	104.0	108.7	103.2	107.3	101.1
All other private	94.6	91.9	80.7	85.7	98.9	103.8	112.5	110.3	116.2	108.1	101.5	93.6
PUBLIC CONSTRUCTION												
State and local												
Buildings:												
Housing and redevelopment	97.8	94.2	90.0	90.2	99.9	105.2	108.3	107.0	100.2	100.2	103.4	99.6
Educational	92.6	86.3	82.0	82.9	87.5	93.3	103.4	113.6	126.6	120.8	113.3	92.6
Hospital	98.1	97.5	90.7	92.9	101.3	102.1	110.2	110.5	98.9	100.4	104.0	95.1
Other buildings	98.1	92.6	89.0	87.9	94.8	103.6	108.9	107.3	107.3	103.5	104.1	98.1
Highways and streets	78.2	62.6	50.1	53.0	76.9	103.6	133.9	142.0	144.0	127.5	126.3	81.4
Conservation and development	93.7	80.9	75.6	75.0	87.2	103.0	118.0	118.4	122.3	114.1	110.2	94.6
Sewer systems	92.9	87.5	77.4	81.1	93.4	107.4	116.4	116.5	113.2	108.0	107.7	92.0
Water supply facilities	95.1	84.6	80.0	81.3	93.3	108.2	119.7	110.3	110.4	109.7	104.5	94.9
Miscellaneous construction	93.7	80.9	75.6	75.0	87.2	103.0	118.0	118.4	122.3	114.1	110.2	94.6
Federal												
Buildings:												
Housing and redevelopment	96.0	99.5	90.4	87.1	105.5	101.5	86.0	137.3	98.6	102.6	105.3	99.3
Industrial	96.0	99.5	90.4	87.1	105.5	101.5	86.0	137.3	98.6	102.6	105.3	99.3
Educational	96.0	99.5	90.4	87.1	105.5	101.5	86.0	137.3	98.6	102.6	105.3	99.3
Hospital	96.0	99.5	90.4	87.1	105.5	101.5	86.0	137.3	98.6	102.6	105.3	99.3
Other buildings	96.0	99.5	90.4	87.1	105.5	101.5	86.0	137.3	98.6	102.6	105.3	99.3
Military	94.8	102.2	86.0	92.3	104.9	100.4	80.8	127.6	103.5	104.0	105.3	95.6
Conservation and development	88.9	96.1	87.7	80.9	100.1	103.5	67.3	171.6	107.4	100.3	102.5	94.7
Miscellaneous construction	88.9	96.1	87.7	80.9	100.1	103.5	67.3	171.6	107.4	100.3	102.5	94.7

^PPreliminary. ^rRevised.

Appendix.

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 71 percent of total construction in 1998 (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 55 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 the following table. The relative standard error equals the standard error divided by the estimated value to which it refers.

The sample estimate and an estimate of its standard error allow us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples with the same size and design. A 90-percent confidence interval is defined to be from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate. If all possible samples were selected and surveyed under essentially the same conditions and all the respective 90-percent confidence intervals were generated, then approximately nine-tenths of the intervals would include the average value of all sample estimates and approximately one-tenth would not include this estimate. For example, suppose Table 3 of this report showed that the monthly VIP estimate for “total private nonresidential buildings” was \$10.0 billion in a particular month. According to the following table, the relative standard error of this estimate is 2 percent. Multiplying \$10.0 billion by 0.02, we obtain \$200 million as the standard error. To obtain a 90-percent confidence interval, multiply \$200 million by 1.6 and add and subtract the result from \$10.0 billion, yielding limits of \$9.68 billion and \$10.32 billion. The average value of the monthly VIP estimate for “total private nonresidential buildings” may or may not be contained in this computed interval, but one can say that the average is included in the constructed interval with a specified confidence of 90 percent.

The following table also presents coefficients necessary to compute standard errors for the month-to-month and year-to-date changes. To derive a specific standard error of a change, look up an appropriate coefficient (k1 or k2) for the change and apply the following formula:

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

Once the standard error is available, one can construct a 90-percent confidence interval of the change by multiplying the standard error by 1.6.

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

NONSAMPLING ERRORS

As calculated for this report, the coefficient of variation estimates sampling variation but does not measure all 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, 41 percent; state and locally owned public construction, 31 percent; private residential construction of 2 units or more, 42 percent; and private residential improvements, 13 percent. Each of these imputation rates is not an explicit indication of the potential error in statistics, but the degree of uncertainty regarding the accuracy of the statistics increases as the percentage of imputation increases.

Other potential sources of bias are the upward adjustment of 28 percent made to the private nonresidential construction and the adjustment of the state and local owned public construction to the construction outlays from the Annual Survey of Government Finances in order to account for construction projects not included in their respective sampling frames. The adjustment for the nonresidential construction results from a coverage evaluation sample; hence, the estimated percentage adjustment is subject to sampling error and nonsampling errors associated with the evaluation study. In addition, the percentage was estimated from data collected during a limited time period; therefore, these adjustments do not reflect any recent changes in the proportion of projects not included in the frame.

For state and locally owned construction, construction outlays from the Survey of Government Finances are available only through fiscal year 1996. (Outlays are included if a government agency's fiscal year ending date falls within July 1995 to June 1996 inclusive, and for three state agencies with fiscal years ending in August or September 1996.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1996 through April 2000. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12 month period but result from capital outlays made over a 26 month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

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

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

MONTHLY REVISIONS TO ESTIMATES

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

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -1.3 percent to 1.6 percent with a median of 0.5 percent. The range of the difference between first revision and second revision was from -0.8 to 1.0 percent, with a median of 0.3 percent.

Relative Standard Errors and Coefficients for Standard Errors of Changes

Type of construction	Relative standard error (percent)			Coefficient for changes	
	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	2	1	.03	.03
Private construction	3	2	1	.04	.03
Residential buildings	5	4	2	.06	.05
New housing units	2	2	1	.01	.02
1 unit	2	2	2	.01	.02
2 units or more	4	4	3	.03	.04
Nonresidential buildings	2	2	1	.02	.03
Industrial	3	3	2	.04	.04
Office	4	3	2	.05	.04
Hotels, motels	7	6	5	.09	.08
Other commercial	5	3	2	.06	.04
Religious	9	8	5	.12	.11
Educational	7	6	5	.10	.09
Hospital and institutional	6	6	5	.07	.08
Miscellaneous buildings	7	6	4	.09	.09
Public construction	2	1	1	.03	.01
Housing and redevelopment	8	5	4	.11	.07
Industrial	(NA)	(NA)	(NA)	(NA)	(NA)
Educational	3	3	2	.04	.04
Hospital	6	6	4	.08	.09
Other public buildings	3	2	2	.04	.03
Highways and streets	4	3	2	.05	.04
Military facilities	(NA)	(NA)	(NA)	(NA)	(NA)
Conservation and development	4	3	2	.06	.04
Sewer systems	6	4	3	.08	.06
Water supply facilities	8	5	3	.11	.07
Miscellaneous public	8	5	4	.11	.07
State and local construction	2	1	1	.03	.01
Housing and redevelopment	8	5	5	.11	.07
Educational	3	3	2	.04	.04
Hospital	8	7	5	.11	.10
Other public buildings	4	3	2	.05	.04
Highways and streets	4	3	2	.05	.04
Conservation and development	16	11	9	.23	.16
Sewer systems	6	4	3	.08	.06
Water supply facilities	8	5	3	.11	.07
Miscellaneous public	9	6	4	.12	.09
Federal construction	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Note: All statistics are based upon 1999 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.