



U.S. Department of Commerce  
 Economics and Statistics Administration  
 BUREAU OF THE CENSUS

# Value of Construction Put in Place

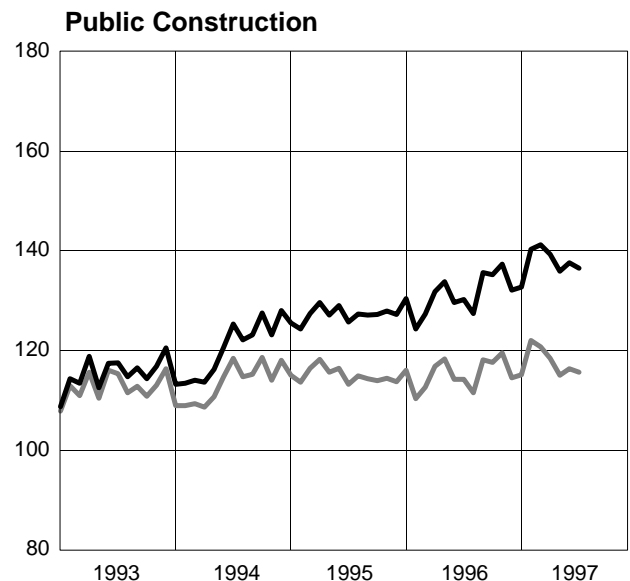
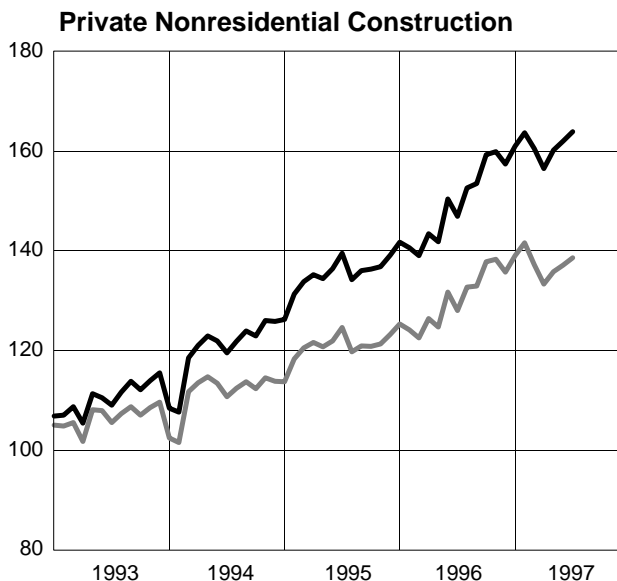
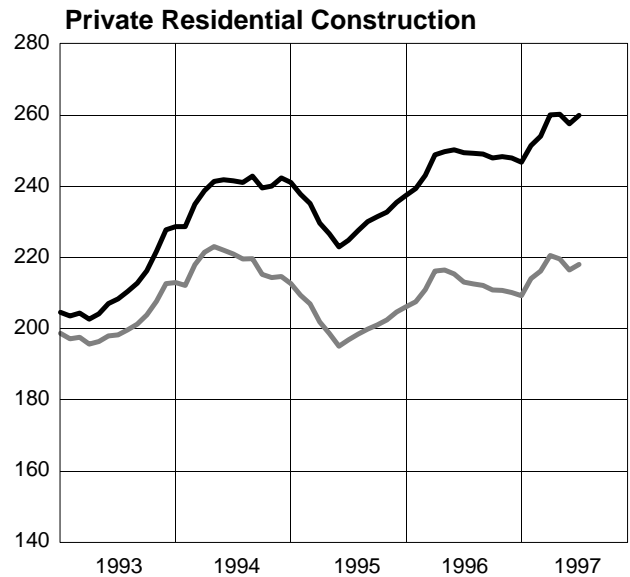
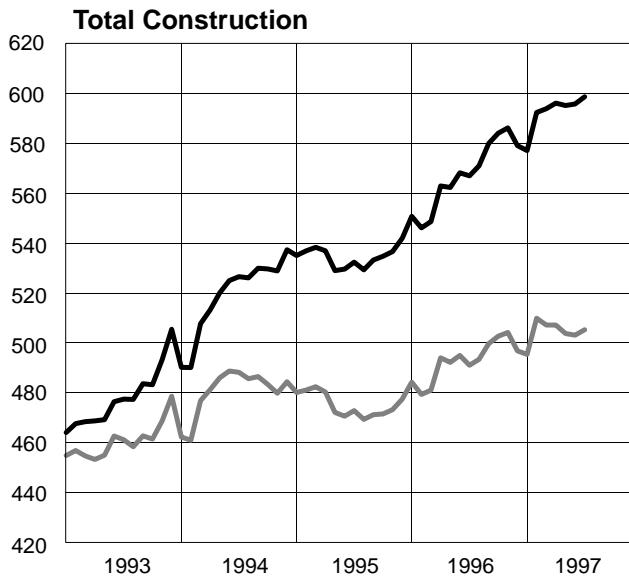
JULY 1997

C30/97-7  
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This issue includes a special supplement on the annual value of privately owned nonresidential building construction put in place by geographic area and detailed types of construction: 1973 to 96.

## Monthly Value of Construction Put in Place (Seasonally adjusted annual rate in billions of dollars)

— Current dollars  
 — 1992 dollars



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

## VALUE OF CONSTRUCTION PUT IN PLACE

Construction put in place during July 1997 was estimated at a seasonally adjusted annual rate of \$598.7 billion, nearly the same ( $\pm 5$ ) percent as the revised June estimate of \$595.8 billion. The July figure represents a 6 percent increase over July 1996.

During the first 7 months of this year \$329.5 billion of construction was put in place, 6 percent above the \$310.6 billion for the same period in 1996.

In constant (1992) dollars, the July annual rate was \$505.2 billion, nearly the same ( $\pm 5$ ) percent as the revised estimate of \$503.0 billion for June.

Spending on new residential housing units was at a seasonally adjusted annual rate of \$183.6 billion in July, 1( $\pm 2$ ) percent above the revised June estimate of \$182.6 billion. Nonresidential building construction was at a rate of \$163.9 billion, 1( $\pm 3$ ) percent above the revised June estimate of \$162.0 billion.

In July, the estimated seasonally adjusted annual rate of public construction put in place was \$136.5 billion, 1( $\pm 5$ ) percent below the revised June estimate of \$137.6 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 1997*, C30/97-5, U.S. Department of Commerce, Bureau of the Census, Washington, DC, 1997; contains annual data for 1992-1996 and monthly data for 1994 to 1996.
- Current Construction Reports, *Value of Construction Put in Place: July 1997*, C30/97-7, U.S. Department of Commerce, Bureau of the Census, Washington, DC, 1997; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction: 1973 to 96.
- Current Construction Reports, *Value of New Construction Put in Place: October 1992*, C30/92-10,

U.S. Department of Commerce, Bureau of the Census, 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, Bureau of the Census, 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, Bureau of the Census, Washington, DC, 1994.

Table 1. Annual Value of Construction Put in Place: 1992-1996

[Millions of dollars]

Type of construction	Current dollars					Constant (1992) dollars				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
<b>Total construction</b> .....	<b>452,086</b>	<b>478,648</b>	<b>519,896</b>	<b>534,068</b>	<b>568,585</b>	<b>451,998</b>	<b>461,078</b>	<b>480,965</b>	<b>474,426</b>	<b>493,587</b>
<b>Private construction</b> .....	<b>336,239</b>	<b>362,688</b>	<b>399,366</b>	<b>406,776</b>	<b>437,079</b>	<b>336,126</b>	<b>347,851</b>	<b>367,265</b>	<b>359,411</b>	<b>378,150</b>
Residential buildings .....	187,819	210,455	238,874	230,688	247,177	187,687	200,502	218,005	201,682	212,069
New housing units .....	129,600	144,071	167,919	162,898	179,448	129,522	137,243	153,250	142,413	153,965
1 unit .....	116,505	133,282	153,838	145,009	159,124	116,419	126,960	140,416	126,773	136,516
2 or more units .....	13,094	10,788	14,081	17,889	20,324	13,103	10,283	12,833	15,640	17,449
Improvements .....	58,219	66,384	70,955	67,790	67,729	58,165	63,259	64,755	59,268	58,104
Nonresidential buildings .....	105,646	110,635	120,285	135,022	149,376	105,615	106,729	111,416	120,627	130,394
Industrial .....	29,029	26,482	28,947	32,505	32,069	29,027	25,554	26,803	29,043	28,003
Office .....	20,271	20,920	22,178	25,613	27,609	20,271	20,197	20,553	22,891	24,099
Hotels, motels .....	3,691	4,565	4,648	7,112	11,758	3,690	4,405	4,308	6,351	10,263
Other commercial .....	29,197	32,453	37,551	42,654	47,319	29,172	31,292	34,756	38,098	41,301
Religious .....	3,485	3,887	3,869	4,326	4,539	3,483	3,748	3,584	3,864	3,961
Educational .....	4,474	4,649	4,822	5,493	6,638	4,475	4,484	4,471	4,908	5,790
Hospital and institutional .....	11,487	12,492	12,268	11,248	11,982	11,485	12,050	11,377	10,051	10,460
Miscellaneous <sup>1</sup> .....	4,012	5,188	6,002	6,071	7,462	4,011	5,000	5,565	5,421	6,516
Farm nonresidential .....	2,398	3,392	3,246	3,014	3,135	2,396	3,271	3,008	2,693	2,736
Public utilities .....	36,807	34,925	34,071	35,158	35,010	36,859	34,120	32,074	31,767	30,842
Telecommunications .....	8,993	9,619	10,121	11,093	11,960	9,005	9,468	9,785	10,071	10,420
Other public utilities .....	27,814	25,306	23,950	24,065	23,050	27,854	24,652	22,289	21,696	20,422
Railroads .....	2,928	3,108	3,340	3,509	4,560	2,926	3,056	3,186	3,202	4,030
Electric light and power .....	17,136	15,567	14,918	14,049	12,654	17,184	15,096	13,877	12,656	11,191
Gas .....	6,901	5,645	4,694	5,578	4,814	6,895	5,536	4,308	5,004	4,291
Petroleum pipelines .....	849	986	998	929	1,022	849	965	918	834	910
All other private <sup>2</sup> .....	3,570	3,281	2,890	2,893	2,381	3,569	3,229	2,763	2,644	2,109
<b>Public construction</b> .....	<b>115,847</b>	<b>115,960</b>	<b>120,530</b>	<b>127,292</b>	<b>131,506</b>	<b>115,872</b>	<b>113,227</b>	<b>113,700</b>	<b>115,014</b>	<b>115,437</b>
Buildings .....	49,986	48,559	48,841	53,622	56,685	49,988	46,813	45,177	47,832	49,415
Housing and redevelopment ..	4,138	4,011	3,647	4,293	4,522	4,136	3,833	3,326	3,754	3,881
Industrial .....	1,876	1,718	1,465	1,508	1,392	1,875	1,658	1,358	1,348	1,216
Educational .....	20,647	19,129	19,002	21,534	23,064	20,645	18,465	17,593	19,237	20,131
Hospital .....	3,383	3,710	4,085	4,312	4,558	3,383	3,579	3,787	3,854	3,981
Other <sup>3</sup> .....	19,943	19,991	20,642	21,974	23,148	19,949	19,279	19,114	19,638	20,207
Highways and streets .....	33,106	34,299	37,346	36,508	37,774	33,132	34,164	36,151	33,500	33,297
Military facilities .....	2,502	2,453	2,318	3,011	2,534	2,502	2,405	2,196	2,729	2,225
Conservation and development ..	5,952	5,937	6,464	6,362	5,909	5,946	5,771	6,091	5,773	5,244
Sewer systems .....	9,663	8,863	9,120	9,895	10,207	9,658	8,622	8,592	8,975	9,060
Water supply facilities .....	5,162	5,085	4,875	5,539	5,887	5,170	4,868	4,443	4,923	5,121
Miscellaneous public <sup>4</sup> .....	9,477	10,765	11,566	12,355	12,510	9,475	10,583	11,050	11,282	11,075

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

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

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

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

Table 2. Annual Value of Public Construction Put in Place: 1992-1996

[Millions of dollars]

Type of construction	Current dollars					Constant (1992) dollars				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
<b>Total public construction . . . .</b>	<b>115,847</b>	<b>115,960</b>	<b>120,530</b>	<b>127,292</b>	<b>131,506</b>	<b>115,872</b>	<b>113,227</b>	<b>113,700</b>	<b>115,014</b>	<b>115,437</b>
<b>State and local construction . . . . .</b>	<b>101,471</b>	<b>101,535</b>	<b>106,090</b>	<b>111,417</b>	<b>115,917</b>	<b>101,497</b>	<b>99,200</b>	<b>100,130</b>	<b>100,686</b>	<b>101,730</b>
Total buildings . . . . .	44,022	42,865	43,699	47,580	50,412	44,022	41,323	40,422	42,442	43,946
Housing and redevelopment . . . . .	3,977	3,775	3,201	3,717	3,842	3,975	3,608	2,920	3,251	3,296
Educational . . . . .	20,617	19,108	18,975	21,507	23,052	20,616	18,445	17,568	19,213	20,120
Hospital . . . . .	2,626	2,804	3,234	3,271	3,359	2,626	2,703	2,998	2,923	2,933
Other <sup>1</sup> . . . . .	16,801	17,177	18,289	19,084	20,160	16,805	16,567	16,936	17,054	17,597
Highways and streets . . . . .	32,886	33,961	36,918	36,076	37,339	32,912	33,827	35,736	33,104	32,913
Conservation and development . . . . .	1,419	1,719	2,088	2,194	2,066	1,417	1,670	1,966	1,992	1,833
Sewer systems . . . . .	9,663	8,863	9,120	9,895	10,207	9,658	8,622	8,592	8,975	9,060
Water supply facilities . . . . .	5,162	5,085	4,875	5,539	5,887	5,170	4,868	4,443	4,923	5,121
Miscellaneous nonbuilding <sup>2</sup> . . . . .	8,320	9,043	9,390	10,132	10,006	8,318	8,890	8,970	9,250	8,857
<b>Federal construction . . . . .</b>	<b>14,376</b>	<b>14,424</b>	<b>14,440</b>	<b>15,875</b>	<b>15,589</b>	<b>14,375</b>	<b>14,027</b>	<b>13,569</b>	<b>14,328</b>	<b>13,707</b>
Total buildings . . . . .	5,964	5,695	5,142	6,043	6,273	5,966	5,490	4,755	5,390	5,469
Housing . . . . .	161	236	446	576	681	161	225	406	503	585
Industrial . . . . .	1,876	1,718	1,465	1,508	1,392	1,875	1,658	1,358	1,348	1,216
Educational . . . . .	30	21	26	27	12	30	20	24	24	11
Hospital . . . . .	757	906	851	1,041	1,199	757	875	789	931	1,048
Other <sup>3</sup> . . . . .	3,141	2,814	2,354	2,891	2,989	3,144	2,713	2,178	2,584	2,609
Highways and streets . . . . .	220	338	428	432	435	220	336	414	396	383
Military facilities . . . . .	2,502	2,453	2,318	3,011	2,534	2,502	2,405	2,196	2,729	2,225
Conservation and development . . . . .	4,533	4,217	4,376	4,167	3,843	4,529	4,102	4,124	3,781	3,411
Miscellaneous public <sup>4</sup> . . . . .	1,157	1,722	2,176	2,223	2,504	1,157	1,693	2,080	2,032	2,218

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

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

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

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

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

[Millions of dollars]

Period	Total construction	Private construction																All other private <sup>5</sup>
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings								Public utilities <sup>4</sup>		
			Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications	
				Total	1 unit	2 units or more												
<b>YEAR TO DATE</b>																		
July 1996 . . . . .	310,600	240,298	136,509	98,998	87,204	11,794	81,191	17,882	15,017	6,322	25,387	2,373	3,437	6,538	4,235	(NA)	6,383	1,367
July 1997 . . . . .	329,503	255,105	142,235	101,516	88,720	12,795	90,869	17,718	17,681	7,695	27,146	3,086	4,436	7,936	5,171	(NA)	(NA)	1,121
Percent change . . . . .	6	6	4	3	2	8	12	-1	18	22	7	30	29	21	22	(NA)	(NA)	-18
<b>MONTHLY DATA</b>																		
1995: July . . . . .	48,730	36,757	21,324	14,646	13,053	1,593	11,853	2,808	2,325	568	3,796	385	586	902	483	(NA)	991	297
August . . . . .	50,871	37,591	22,035	15,341	13,645	1,696	11,961	2,718	2,286	588	3,902	415	624	924	503	(NA)	1,023	265
September . . . . .	50,414	37,227	21,563	15,452	13,843	1,609	12,181	2,848	2,183	607	4,109	419	495	971	551	(NA)	946	283
October . . . . .	49,486	37,297	21,548	15,358	13,754	1,605	12,232	2,844	2,088	641	4,118	440	435	1,010	657	(NA)	984	259
November . . . . .	46,441	35,522	20,373	14,816	13,258	1,558	11,818	2,782	2,045	767	3,833	389	437	977	590	(NA)	970	195
December . . . . .	41,022	31,936	17,451	12,711	11,134	1,578	11,354	2,844	2,012	795	3,487	327	363	948	579	(NA)	885	226
1996: January . . . . .	37,393	29,152	15,684	11,719	10,283	1,437	10,446	2,514	1,808	794	3,175	317	359	929	551	(NA)	840	203
February . . . . .	36,234	28,592	14,936	11,205	9,749	1,457	10,600	2,444	1,902	863	3,236	314	386	873	583	(NA)	845	186
March . . . . .	40,063	31,634	17,617	13,217	11,629	1,588	10,859	2,501	1,921	868	3,338	307	423	883	619	(NA)	870	191
April . . . . .	44,566	34,672	19,695	14,255	12,457	1,798	11,699	2,610	2,123	981	3,664	340	437	912	633	(NA)	972	199
May . . . . .	48,485	36,967	21,648	15,316	13,427	1,889	12,055	2,531	2,348	899	3,859	350	510	976	584	(NA)	1,001	194
June . . . . .	51,339	39,433	23,243	16,389	14,475	1,914	12,866	2,713	2,480	971	4,054	384	640	994	631	(NA)	908	208
July . . . . .	52,521	39,846	23,686	16,897	15,184	1,713	12,667	2,570	2,437	948	4,062	362	681	972	635	(NA)	948	186
August . . . . .	54,492	41,360	24,170	17,290	15,536	1,754	13,492	2,573	2,498	1,093	4,522	414	731	1,057	603	(NA)	1,086	243
September . . . . .	54,767	40,796	23,390	17,083	15,381	1,702	13,776	2,866	2,589	1,064	4,499	432	655	1,061	611	(NA)	966	192
October . . . . .	54,095	41,080	23,080	16,698	14,961	1,737	14,249	3,129	2,539	1,072	4,662	438	642	1,082	686	(NA)	1,128	217
November . . . . .	50,564	38,950	21,695	15,970	14,217	1,753	13,781	2,895	2,551	1,072	4,397	446	624	1,115	681	(NA)	1,131	190
December . . . . .	44,066	34,596	18,334	13,410	11,826	1,584	12,886	2,724	2,414	1,135	3,852	435	550	1,130	646	(NA)	1,266	172
1997: January . . . . .	39,285	30,899	16,281	12,189	10,750	1,439	11,916	2,380	2,364	983	3,647	363	508	1,070	601	(NA)	825	140
February . . . . .	38,947	30,458	15,714	11,861	10,183	1,678	12,082	2,412	2,518	1,021	3,500	375	527	1,090	641	(NA)	809	134
March . . . . .	43,351	33,976	18,446	13,818	12,087	1,731	12,437	2,353	2,402	1,076	3,739	437	549	1,158	723	(NA)	888	157
April . . . . .	47,328	36,842	20,665	14,633	12,795	1,838	12,763	2,435	2,405	1,069	3,763	467	658	1,204	763	(NA)	1,012	180
May <sup>f</sup> . . . . .	51,122	39,526	22,625	15,665	13,589	2,076	13,490	2,534	2,565	1,160	4,068	500	683	1,139	842	(NA)	979	164
June <sup>f</sup> . . . . .	54,235	41,392	23,919	16,350	14,307	2,044	14,079	2,712	2,738	1,206	4,232	461	755	1,160	817	(NA)	973	170
July <sup>p</sup> . . . . .	55,235	42,013	24,584	16,999	15,010	1,989	14,102	2,893	2,690	1,181	4,198	484	755	1,116	785	(NA)	(NA)	177
<b>PERCENT CHANGE</b>																		
June 1997-July 1997 . . . . .	2	2	3	4	5	-3	(Z)	7	-2	-2	-1	5	(Z)	-4	-4	(NA)	(NA)	4

See footnotes at end of table.

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

[Millions of dollars]

Period	Public construction												
	Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
July 1996.....	70,303	31,039	2,483	836	12,503	2,602	12,615	18,771	1,492	3,168	5,517	3,180	7,136
July 1997.....	74,398	33,570	2,624	630	13,802	2,851	13,664	20,434	1,411	2,979	5,489	3,361	7,154
Percent change.....	6	8	6	-25	10	10	8	9	-5	-6	-1	6	(Z)
<b>MONTHLY DATA</b>													
1995: July.....	11,973	4,830	358	123	2,176	359	1,814	3,980	256	552	832	516	1,008
August.....	13,280	5,070	377	123	2,337	316	1,917	4,709	262	648	932	551	1,110
September.....	13,187	5,031	390	180	2,097	439	1,924	4,292	361	758	961	484	1,302
October.....	12,188	4,512	390	97	1,853	344	1,827	4,369	156	344	957	560	1,290
November.....	10,918	4,406	372	117	1,720	367	1,829	3,191	269	483	930	540	1,099
December.....	9,086	3,997	358	111	1,554	340	1,634	2,244	295	459	752	441	897
1996: January.....	8,241	4,039	362	104	1,516	340	1,717	1,644	248	376	683	358	894
February.....	7,641	3,686	314	103	1,421	359	1,489	1,637	202	369	639	372	738
March.....	8,429	4,053	314	124	1,593	382	1,640	1,776	206	432	712	384	866
April.....	9,894	4,325	323	120	1,690	392	1,799	2,465	214	483	862	502	1,042
May.....	11,517	4,866	413	128	1,922	396	2,007	3,305	220	490	902	527	1,207
June.....	11,906	4,906	355	129	2,062	369	1,991	3,707	210	506	870	523	1,185
July.....	12,675	5,165	402	129	2,299	365	1,971	4,238	191	513	850	515	1,204
August.....	13,132	5,347	373	133	2,495	323	2,025	4,323	193	574	1,021	506	1,167
September.....	13,971	5,554	462	185	2,237	457	2,214	4,502	271	877	951	540	1,278
October.....	13,016	5,068	419	60	2,073	392	2,123	4,521	175	420	1,080	658	1,093
November.....	11,615	5,088	424	91	2,005	363	2,205	3,275	203	478	918	546	1,106
December.....	9,470	4,589	361	88	1,751	423	1,966	2,382	200	392	721	457	731
1997: January.....	8,387	4,307	335	90	1,653	400	1,829	1,641	199	411	655	419	757
February.....	8,489	4,327	337	79	1,683	395	1,832	1,673	170	385	643	426	866
March.....	9,375	4,547	345	88	1,800	394	1,920	2,022	192	443	719	501	951
April.....	10,486	4,830	375	114	1,924	431	1,987	2,760	191	416	790	474	1,026
May <sup>f</sup> .....	11,596	4,851	417	74	2,016	388	1,956	3,544	215	444	873	499	1,171
June <sup>f</sup> .....	12,843	5,315	406	94	2,321	437	2,057	4,278	219	438	899	507	1,186
July <sup>p</sup> .....	13,222	5,394	408	91	2,404	406	2,084	4,516	226	443	911	536	1,196
<b>PERCENT CHANGE</b>													
June 1997-July 1997.....	3	1	(Z)	-3	4	-7	1	6	3	1	1	6	1

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>f</sup>Revised. Z Less than 0.5 percent.

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

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

[Millions of dollars]

Period	Total construction	Private construction																		
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings										Public utilities <sup>4</sup>		All other private <sup>5</sup>
			Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications			
				Total	1 unit	2 units or more														
1995: July	532,329	406,669	224,801	157,573	139,727	17,847	139,528	34,274	28,264	6,851	42,887	4,672	5,787	11,045	5,749	(NA)	12,265	3,421		
August	529,154	401,824	227,549	161,327	142,881	18,446	134,173	31,887	26,324	6,934	41,697	4,520	6,056	10,841	5,914	(NA)	10,765	3,018		
September	533,200	406,111	229,968	163,724	145,336	18,387	135,992	32,239	25,330	7,271	43,286	4,593	5,607	11,318	6,348	(NA)	11,134	3,074		
October	534,727	407,541	231,355	165,562	147,361	18,201	136,332	31,630	24,564	7,589	43,998	4,661	5,148	11,465	7,278	(NA)	10,831	2,794		
November	536,617	408,739	232,742	166,588	148,135	18,453	136,782	32,345	23,960	9,357	43,643	4,219	5,370	11,231	6,656	(NA)	10,729	2,147		
December	541,887	414,690	235,441	169,225	149,444	19,781	139,069	32,104	25,095	9,653	44,420	3,957	5,192	11,482	7,165	(NA)	10,724	2,839		
1996: January	550,748	420,298	237,392	171,124	151,215	19,909	141,679	33,414	23,501	10,500	45,305	4,193	5,306	11,896	7,564	(NA)	11,999	2,742		
February	546,059	421,747	239,296	173,454	153,318	20,136	140,617	32,081	23,752	10,888	45,419	4,162	5,408	11,105	7,803	(NA)	11,685	2,695		
March	548,550	421,244	242,957	176,542	155,924	20,618	138,982	31,355	23,664	10,446	45,357	4,082	5,900	10,818	7,359	(NA)	11,258	2,552		
April	562,889	431,083	248,755	181,387	159,027	22,360	143,384	31,888	25,198	11,260	46,679	4,274	5,603	11,112	7,370	(NA)	11,754	2,521		
May	562,287	428,467	249,677	181,834	160,162	21,672	141,795	30,161	26,525	10,146	46,026	4,315	5,928	11,544	7,149	(NA)	11,625	2,248		
June	568,189	438,624	250,201	182,395	161,133	21,262	150,364	31,978	29,822	11,212	46,864	4,820	6,584	11,738	7,346	(NA)	10,786	2,361		
July	566,999	436,845	249,401	181,169	161,964	19,206	146,896	30,537	28,891	11,487	45,428	4,343	6,713	11,918	7,579	(NA)	10,906	2,137		
August	570,996	443,553	249,211	181,092	161,978	19,114	152,620	30,968	28,988	12,888	48,581	4,571	7,084	12,388	7,154	(NA)	11,861	2,785		
September	579,959	444,388	248,957	180,650	161,197	19,453	153,539	32,845	29,646	12,701	47,067	4,666	7,228	12,347	7,040	(NA)	11,489	2,099		
October	584,140	448,952	247,901	179,886	160,153	19,733	159,310	34,738	29,961	12,684	49,903	4,609	7,556	12,291	7,568	(NA)	11,893	2,347		
November	586,226	448,907	248,259	180,036	159,293	20,743	159,895	33,244	29,987	13,054	50,157	4,948	7,972	12,832	7,702	(NA)	12,995	2,101		
December	579,109	447,045	247,899	179,112	159,267	19,845	157,371	30,752	29,532	13,816	48,863	5,122	7,635	13,650	8,002	(NA)	14,640	2,157		
1997: January	577,116	444,391	246,661	178,271	158,284	19,987	161,045	31,871	30,607	12,937	51,372	4,878	7,464	13,657	8,258	(NA)	11,675	1,869		
February	592,365	452,037	251,402	183,408	160,152	23,256	163,721	32,161	32,388	12,891	50,719	5,245	7,848	13,792	8,676	(NA)	11,737	1,911		
March	593,908	452,728	253,974	184,118	161,516	22,602	160,545	30,520	30,144	12,997	50,871	5,699	7,424	14,148	8,741	(NA)	11,393	2,090		
April	596,241	456,944	259,964	185,264	162,477	22,786	156,465	29,450	28,653	12,311	47,835	6,045	8,650	14,611	8,910	(NA)	12,279	2,257		
May <sup>f</sup>	595,182	459,330	260,165	185,594	161,933	23,660	160,188	30,531	29,794	13,110	49,060	6,202	7,908	13,531	10,051	(NA)	11,571	1,951		
June <sup>f</sup>	595,847	458,277	257,524	182,645	160,000	22,645	161,994	31,902	31,896	13,833	47,906	5,746	7,603	13,723	9,385	(NA)	11,356	1,976		
July <sup>p</sup>	598,730	462,183	259,852	183,621	161,250	22,370	163,863	34,072	31,802	14,189	47,521	5,861	7,392	13,705	9,322	(NA)	(NA)	2,019		
<b>PERCENT CHANGE</b>																				
June 1997-July 1997	(Z)	1	1	1	1	-1	1	7	(Z)	3	-1	2	-3	(Z)	-1	(NA)	(NA)	2		

See footnotes at end of table.

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

[Millions of dollars]

Period	Public construction												
	Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
1995: July . . . . .	125,660	53,027	4,309	1,423	21,474	4,257	21,563	36,600	3,073	6,476	9,652	5,639	11,193
August . . . . .	127,330	52,712	4,412	1,515	21,448	3,916	21,421	37,670	3,088	7,013	9,562	5,974	11,311
September . . . . .	127,088	53,790	4,226	1,636	22,164	4,572	21,193	36,319	3,309	6,031	9,873	5,378	12,387
October . . . . .	127,186	52,526	4,481	1,462	21,578	4,040	20,966	37,883	2,265	4,717	10,077	5,714	14,003
November . . . . .	127,877	53,111	4,374	1,444	21,483	4,511	21,298	36,782	3,133	5,866	10,236	6,009	12,742
December . . . . .	127,196	52,314	4,423	1,348	21,533	4,125	20,885	37,822	3,335	6,028	10,058	5,632	12,008
1996: January . . . . .	130,450	55,999	4,702	1,321	22,321	4,380	23,275	37,649	3,128	5,301	9,730	5,198	13,445
February . . . . .	124,312	50,549	4,107	1,358	21,154	4,625	19,305	39,520	2,923	5,317	9,436	5,531	11,035
March . . . . .	127,306	53,791	4,007	1,522	22,196	4,736	21,331	37,385	2,415	5,807	9,770	5,366	12,770
April . . . . .	131,807	54,202	4,021	1,469	22,336	4,617	21,758	38,119	2,721	6,017	11,138	6,367	13,243
May . . . . .	133,820	57,140	4,815	1,414	23,415	4,677	22,820	37,166	2,640	5,733	10,864	6,115	14,162
June . . . . .	129,565	54,616	4,034	1,468	22,217	4,181	22,716	37,227	2,463	5,960	9,779	5,863	13,656
July . . . . .	130,154	56,390	4,781	1,519	22,778	4,272	23,041	37,614	2,301	5,706	9,795	5,625	12,724
August . . . . .	127,443	55,986	4,385	1,583	23,066	4,068	22,884	35,196	2,278	6,154	10,549	5,479	11,801
September . . . . .	135,572	59,637	5,108	1,713	23,547	4,796	24,472	38,338	2,482	7,177	9,750	5,997	12,192
October . . . . .	135,188	58,348	4,671	878	24,068	4,659	24,072	38,367	2,531	5,573	11,155	6,693	12,521
November . . . . .	137,319	61,588	4,947	1,122	24,964	4,425	26,129	38,610	2,365	5,710	10,269	6,080	12,697
December . . . . .	132,064	59,626	4,446	1,090	24,343	5,064	24,684	39,585	2,241	5,223	9,704	5,854	9,831
1997: January . . . . .	132,725	59,515	4,320	1,128	24,219	5,197	24,651	37,869	2,542	5,807	9,508	6,106	11,377
February . . . . .	140,328	60,984	4,638	1,108	24,999	5,262	24,976	41,060	2,564	5,727	10,082	6,591	13,320
March . . . . .	141,180	60,311	4,507	1,021	25,080	4,785	24,918	41,473	2,232	6,114	9,992	7,044	14,014
April . . . . .	139,297	60,570	4,661	1,430	25,201	5,087	24,190	42,410	2,433	5,069	10,114	5,957	12,744
May <sup>f</sup> . . . . .	135,851	57,124	4,790	788	24,605	4,669	22,272	40,655	2,559	5,237	10,443	5,785	14,047
June <sup>e</sup> . . . . .	137,570	59,128	4,726	1,069	24,896	4,972	23,466	41,874	2,583	5,013	10,206	5,702	13,064
July <sup>p</sup> . . . . .	136,547	58,746	4,779	1,114	23,986	4,845	24,021	40,442	2,679	5,053	10,458	5,868	13,302
<b>PERCENT CHANGE</b>													
June 1997-July 1997 . . . . .	-1	-1	1	4	-4	-3	2	-3	4	1	2	3	2

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised. <sup>z</sup>Less than 0.5 percent.

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



**Table 5. Monthly Value of Construction Put in Place—Seasonally Adjusted Annual Rate in 1992 Dollars**

[Millions of dollars]

Period		Private construction																		
		Total construction	Residential buildings						Nonresidential buildings									Public utilities <sup>4</sup>		All other private <sup>5</sup>
			Total <sup>1</sup>	Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications		
					Total	1 unit	2 units or more													
1995:	July	472,711	359,496	196,849	137,980	122,353	15,627	124,579	30,602	25,236	6,117	38,292	4,171	5,167	9,862	5,133	(NA)	11,020	3,104	
	August	469,154	354,235	198,386	140,651	124,569	16,082	119,691	28,445	23,483	6,185	37,196	4,032	5,403	9,671	5,276	(NA)	9,672	2,751	
	September	471,059	356,756	199,798	142,245	126,270	15,975	120,881	28,657	22,516	6,463	38,477	4,082	4,984	10,060	5,643	(NA)	9,950	2,795	
	October	471,409	357,459	201,003	143,842	128,029	15,813	120,755	28,016	21,757	6,721	38,971	4,129	4,559	10,155	6,446	(NA)	9,636	2,528	
	November	473,080	358,712	202,385	144,859	128,813	16,046	121,261	28,675	21,241	8,295	38,690	3,740	4,761	9,957	5,901	(NA)	9,512	1,940	
	December	477,310	363,660	204,554	147,024	129,839	17,186	123,179	28,436	22,228	8,550	39,345	3,505	4,599	10,170	6,347	(NA)	9,490	2,563	
1996:	January	484,138	368,090	206,069	148,545	131,263	17,283	125,268	29,544	20,779	9,284	40,057	3,708	4,691	10,518	6,688	(NA)	10,581	2,462	
	February	479,163	368,890	207,542	150,437	132,974	17,464	124,110	28,315	20,963	9,610	40,087	3,673	4,773	9,802	6,887	(NA)	10,286	2,411	
	March	480,862	368,244	210,900	153,248	135,350	17,898	122,451	27,626	20,849	9,204	39,962	3,597	5,198	9,532	6,484	(NA)	9,876	2,275	
	April	493,871	377,113	216,121	157,590	138,164	19,426	126,441	28,120	22,220	9,930	41,163	3,769	4,941	9,799	6,499	(NA)	10,311	2,249	
	May	492,125	373,823	216,358	157,569	138,788	18,780	124,710	26,527	23,329	8,924	40,480	3,795	5,214	10,153	6,287	(NA)	10,179	2,002	
	June	494,882	380,650	215,319	156,966	138,669	18,298	131,667	28,002	26,114	9,818	41,036	4,221	5,765	10,278	6,432	(NA)	9,436	2,099	
	July	490,878	376,661	212,981	154,713	138,312	16,401	127,958	26,600	25,167	10,006	39,571	3,783	5,848	10,381	6,601	(NA)	9,500	1,893	
	August	493,282	381,760	212,456	154,384	138,089	16,295	132,713	26,928	25,207	11,207	42,245	3,974	6,160	10,772	6,221	(NA)	10,287	2,456	
	September	499,575	381,523	212,058	153,875	137,306	16,569	132,934	28,437	25,668	10,996	40,750	4,040	6,258	10,690	6,095	(NA)	9,904	1,840	
	October	502,583	385,003	210,800	152,965	136,185	16,780	137,811	30,050	25,918	10,972	43,169	3,987	6,536	10,632	6,546	(NA)	10,271	2,057	
	November	504,085	384,631	210,746	152,832	135,223	17,609	138,318	28,758	25,940	11,292	43,388	4,280	6,896	11,100	6,663	(NA)	11,251	1,843	
	December	496,676	382,146	210,084	151,790	134,972	16,818	135,665	26,510	25,458	11,910	42,123	4,416	6,582	11,767	6,899	(NA)	12,676	1,887	
1997:	January	495,257	380,158	209,212	151,205	134,252	16,953	138,951	27,499	26,408	11,162	44,324	4,209	6,440	11,783	7,125	(NA)	10,117	1,633	
	February	509,850	387,879	213,959	156,092	136,300	19,792	141,627	27,821	28,018	11,151	43,874	4,537	6,789	11,931	7,505	(NA)	10,206	1,673	
	March	507,140	386,485	216,148	156,696	137,461	19,235	137,218	26,086	25,764	11,109	43,479	4,871	6,346	12,093	7,471	(NA)	9,847	1,787	
	April	507,088	388,669	220,495	157,136	137,810	19,327	133,275	25,085	24,407	10,486	40,745	5,149	7,368	12,446	7,590	(NA)	10,549	1,916	
	May <sup>f</sup>	503,713	388,744	219,549	156,619	136,653	19,967	135,753	25,874	25,249	11,110	41,576	5,256	6,701	11,467	8,518	(NA)	9,898	1,651	
	June <sup>f</sup>	503,000	386,684	216,407	153,483	134,454	19,029	137,051	26,990	26,984	11,703	40,530	4,861	6,432	11,610	7,940	(NA)	9,706	1,671	
	July <sup>p</sup>	505,202	389,650	217,996	154,044	135,277	18,767	138,632	28,826	26,905	12,004	40,204	4,958	6,254	11,595	7,887	(NA)	(NA)	1,710	
<b>PERCENT CHANGE</b>																				
	June 1997-July 1997	(Z)	1	1	(Z)	1	-1	1	7	(Z)	3	-1	2	-3	(Z)	-1	(NA)	(NA)	2	

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 <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
1995: July . . . . .	113,215	47,271	3,773	1,271	19,173	3,801	19,253	33,485	2,776	5,834	8,696	4,995	10,157
August . . . . .	114,919	46,933	3,846	1,352	19,133	3,493	19,109	34,559	2,792	6,352	8,661	5,310	10,311
September . . . . .	114,303	47,729	3,671	1,454	19,702	4,064	18,838	33,198	2,984	5,448	8,919	4,764	11,260
October . . . . .	113,946	46,449	3,893	1,295	19,112	3,578	18,570	34,377	2,032	4,261	9,103	5,052	12,673
November . . . . .	114,367	47,010	3,804	1,280	19,045	3,999	18,882	33,196	2,802	5,299	9,247	5,304	11,510
December . . . . .	113,651	46,262	3,843	1,194	19,073	3,653	18,499	34,074	2,980	5,446	9,085	4,967	10,837
1996: January . . . . .	116,049	49,437	4,082	1,168	19,735	3,872	20,579	33,645	2,780	4,776	8,765	4,576	12,069
February . . . . .	110,273	44,553	3,562	1,198	18,671	4,082	17,039	35,129	2,589	4,781	8,486	4,865	9,870
March . . . . .	112,619	47,341	3,478	1,341	19,556	4,172	18,794	33,084	2,134	5,208	8,762	4,707	11,381
April . . . . .	116,758	47,745	3,494	1,296	19,697	4,072	19,187	33,823	2,406	5,396	9,990	5,585	11,813
May . . . . .	118,302	50,193	4,172	1,243	20,594	4,113	20,070	32,949	2,332	5,132	9,726	5,359	12,611
June . . . . .	114,232	47,764	3,471	1,286	19,454	3,661	19,892	32,974	2,169	5,321	8,731	5,134	12,138
July . . . . .	114,217	49,039	4,083	1,323	19,841	3,721	20,070	33,228	2,019	5,063	8,691	4,908	11,270
August . . . . .	111,522	48,609	3,738	1,377	20,057	3,538	19,899	31,010	1,995	5,431	9,311	4,760	10,406
September . . . . .	118,052	51,562	4,351	1,483	20,387	4,152	21,188	33,630	2,162	6,290	8,545	5,178	10,686
October . . . . .	117,581	50,405	3,972	759	20,820	4,030	20,823	33,567	2,201	4,889	9,785	5,760	10,974
November . . . . .	119,454	53,197	4,200	971	21,596	3,828	22,603	33,779	2,058	5,022	9,031	5,228	11,138
December . . . . .	114,529	51,337	3,768	939	20,985	4,365	21,279	34,542	1,943	4,582	8,512	5,012	8,601
1997: January . . . . .	115,099	51,287	3,664	973	20,897	4,484	21,269	33,016	2,205	5,089	8,333	5,224	9,945
February . . . . .	121,971	52,689	3,947	958	21,626	4,552	21,606	35,860	2,230	5,028	8,851	5,648	11,664
March . . . . .	120,655	51,532	3,836	872	21,436	4,090	21,297	35,477	1,908	5,225	8,540	5,995	11,978
April . . . . .	118,419	51,576	3,954	1,218	21,466	4,333	20,605	36,032	2,069	4,303	8,585	5,036	10,818
May <sup>f</sup> . . . . .	114,968	48,393	4,042	667	20,852	3,957	18,875	34,395	2,167	4,427	8,828	4,874	11,884
June <sup>f</sup> . . . . .	116,316	49,997	3,971	905	21,062	4,206	19,853	35,426	2,185	4,238	8,627	4,800	11,043
July <sup>p</sup> . . . . .	115,552	49,666	4,009	943	20,293	4,099	20,322	34,273	2,269	4,279	8,855	4,947	11,263
<b>PERCENT CHANGE</b>													
June 1997-July 1997 . . . . .	-1	-1	1	4	-4	-3	2	-3	4	1	3	3	2

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>f</sup>Revised. <sup>Z</sup> Less than 0.5 percent.

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

Table 6. Monthly Value of Construction Put in Place—Not Seasonally Adjusted in 1992 Dollars

[Millions of dollars]

Period	Total construction	Private construction																All other private <sup>5</sup>
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings								Public utilities <sup>4</sup>		
			Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications	
				Total	1 unit	2 units or more												
<b>YEAR TO DATE</b>																		
July 1996 . . . . .	271,502	209,377	117,960	85,554	75,358	10,196	71,378	15,724	13,200	5,561	22,317	2,087	3,019	5,748	3,724	(NA)	5,596	1,220
July 1997 . . . . .	280,166	216,739	120,226	85,826	75,005	10,819	77,506	15,115	15,085	6,563	23,153	2,631	3,782	6,772	4,408	(NA)	(NA)	959
Percent change . . . . .	3	4	2	(Z)	(Z)	6	9	-4	14	18	4	26	25	18	18	(NA)	(NA)	-21
<b>MONTHLY DATA</b>																		
1995: July . . . . .	43,271	32,474	18,672	12,825	11,430	1,395	10,583	2,507	2,076	507	3,389	344	524	805	431	(NA)	891	270
August . . . . .	45,125	33,122	19,211	13,375	11,896	1,478	10,670	2,425	2,039	525	3,481	370	557	824	448	(NA)	919	241
September . . . . .	44,567	32,691	18,734	13,425	12,027	1,398	10,827	2,531	1,940	540	3,652	372	440	863	490	(NA)	846	257
October . . . . .	43,639	32,706	18,721	13,344	11,949	1,394	10,834	2,519	1,849	567	3,647	389	386	895	582	(NA)	875	234
November . . . . .	40,938	31,172	17,715	12,883	11,529	1,355	10,477	2,466	1,813	680	3,398	344	387	866	523	(NA)	860	176
December . . . . .	36,130	28,018	15,162	11,044	9,673	1,371	10,057	2,519	1,782	704	3,089	289	322	840	512	(NA)	783	204
1996: January . . . . .	32,871	25,545	13,615	10,173	8,926	1,247	9,236	2,223	1,598	702	2,807	280	317	821	487	(NA)	741	183
February . . . . .	31,805	25,031	12,954	9,718	8,455	1,263	9,355	2,157	1,679	762	2,856	277	341	770	514	(NA)	744	167
March . . . . .	35,119	27,664	15,292	11,473	10,095	1,378	9,568	2,203	1,692	765	2,941	271	373	778	546	(NA)	763	171
April . . . . .	39,100	30,337	17,111	12,385	10,823	1,562	10,316	2,301	1,872	865	3,231	300	385	804	558	(NA)	852	177
May . . . . .	42,434	32,252	18,759	13,272	11,635	1,637	10,603	2,226	2,065	791	3,394	308	448	858	514	(NA)	876	173
June . . . . .	44,707	34,210	20,002	14,104	12,457	1,647	11,266	2,375	2,172	850	3,550	336	561	870	552	(NA)	794	185
July . . . . .	45,466	34,338	20,227	14,429	12,967	1,462	11,034	2,239	2,122	826	3,538	315	594	847	553	(NA)	826	164
August . . . . .	47,078	35,580	20,605	14,740	13,245	1,495	11,732	2,237	2,172	951	3,932	360	635	919	525	(NA)	942	214
September . . . . .	47,191	35,016	19,923	14,551	13,101	1,450	11,928	2,481	2,242	921	3,895	374	567	918	529	(NA)	833	168
October . . . . .	46,547	35,221	19,625	14,199	12,722	1,477	12,326	2,707	2,197	927	4,033	379	555	936	593	(NA)	974	190
November . . . . .	43,474	33,369	18,417	13,557	12,069	1,488	11,921	2,504	2,207	927	3,804	386	540	965	589	(NA)	979	167
December . . . . .	37,795	29,587	15,537	11,364	10,022	1,343	11,109	2,348	2,081	979	3,321	375	474	974	557	(NA)	1,096	151
1997: January . . . . .	33,714	26,447	13,809	10,339	9,118	1,221	10,281	2,053	2,040	848	3,147	313	438	923	518	(NA)	715	123
February . . . . .	33,527	26,155	13,374	10,095	8,666	1,428	10,452	2,087	2,178	883	3,027	324	456	943	554	(NA)	703	117
March . . . . .	37,023	29,012	15,698	11,760	10,287	1,473	10,629	2,011	2,053	919	3,196	374	470	990	618	(NA)	767	134
April . . . . .	40,256	31,341	17,528	12,412	10,853	1,559	10,871	2,074	2,048	911	3,205	397	561	1,026	650	(NA)	869	152
May <sup>f</sup> . . . . .	43,266	33,452	19,093	13,219	11,467	1,752	11,432	2,148	2,174	983	3,447	424	579	965	713	(NA)	837	139
June <sup>f</sup> . . . . .	45,780	34,921	20,100	13,740	12,022	1,717	11,911	2,294	2,316	1,020	3,580	390	639	981	691	(NA)	831	144
July <sup>p</sup> . . . . .	46,600	35,411	20,624	14,261	12,592	1,669	11,930	2,448	2,276	999	3,551	409	639	944	664	(NA)	(NA)	150
<b>PERCENT CHANGE</b>																		
June 1997-July 1997 . . . . .	2	1	3	4	5	-3	(Z)	7	-2	-2	-1	5	(Z)	-4	-4	(NA)	(NA)	4

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 <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
July 1996.....	62,126	27,247	2,146	735	10,986	2,288	11,089	16,641	1,318	2,835	4,938	2,788	6,359
July 1997.....	63,428	28,610	2,218	538	11,766	2,432	11,656	17,411	1,205	2,550	4,692	2,848	6,110
Percent change.....	2	5	3	-27	7	6	5	5	-9	-10	-5	2	-4
<b>MONTHLY DATA</b>													
1995: July.....	10,797	4,306	313	110	1,943	321	1,620	3,642	231	497	749	457	915
August.....	12,003	4,515	329	109	2,085	282	1,710	4,320	237	587	844	489	1,012
September.....	11,876	4,464	339	160	1,864	390	1,710	3,923	326	684	868	428	1,183
October.....	10,932	3,990	339	86	1,642	305	1,619	3,965	140	310	865	495	1,168
November.....	9,766	3,900	324	104	1,525	325	1,622	2,880	241	436	840	476	993
December.....	8,113	3,535	311	98	1,377	301	1,447	2,022	264	414	679	389	810
1996: January.....	7,325	3,565	314	92	1,340	300	1,518	1,469	221	338	615	315	802
February.....	6,775	3,248	272	91	1,254	316	1,314	1,455	179	332	574	327	661
March.....	7,455	3,567	273	109	1,403	337	1,445	1,572	182	387	639	337	772
April.....	8,763	3,810	281	106	1,490	346	1,587	2,187	189	433	773	440	930
May.....	10,182	4,274	358	112	1,691	348	1,765	2,930	194	439	807	462	1,075
June.....	10,498	4,291	305	113	1,806	323	1,743	3,284	185	451	776	458	1,053
July.....	11,128	4,492	343	112	2,002	318	1,717	3,744	168	455	754	449	1,066
August.....	11,498	4,643	318	115	2,169	281	1,761	3,809	169	507	901	440	1,029
September.....	12,174	4,802	393	160	1,937	395	1,917	3,949	236	769	833	466	1,120
October.....	11,326	4,378	357	52	1,794	339	1,837	3,955	152	369	948	566	958
November.....	10,104	4,395	360	79	1,735	314	1,907	2,866	177	420	808	469	970
December.....	8,208	3,950	306	76	1,509	364	1,695	2,078	173	343	632	391	639
1997: January.....	7,267	3,711	284	77	1,426	345	1,578	1,431	172	360	574	358	661
February.....	7,372	3,738	287	69	1,456	342	1,584	1,461	148	338	564	365	758
March.....	8,011	3,885	294	75	1,539	336	1,641	1,730	164	379	615	426	813
April.....	8,915	4,113	318	97	1,639	367	1,692	2,345	162	353	670	400	871
May <sup>f</sup> .....	9,814	4,109	352	63	1,708	329	1,658	2,998	182	375	738	420	991
June <sup>f</sup> .....	10,859	4,494	341	80	1,964	369	1,740	3,619	186	370	760	427	1,003
July <sup>p</sup> .....	11,190	4,560	342	77	2,034	344	1,763	3,827	191	375	771	452	1,013
<b>PERCENT CHANGE</b>													
June 1997-July 1997.....	3	1	(Z)	-4	4	-7	1	6	3	1	1	6	1

NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised. Z Less than 0.5 percent.

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

**Table 7. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Period		State and locally owned public construction										
		Total State and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
			Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1995:	July	10,658	4,365	310	2,174	284	1,597	3,933	163	832	516	849
	August	11,867	4,571	325	2,335	237	1,674	4,654	204	932	551	956
	September	11,185	4,316	326	2,091	315	1,584	4,241	158	961	484	1,026
	October	11,300	4,154	333	1,851	292	1,677	4,317	165	957	560	1,146
	November	9,604	3,898	293	1,720	276	1,610	3,153	167	930	540	917
	December	7,801	3,513	306	1,551	251	1,405	2,218	155	752	441	722
1996:	January	7,050	3,551	309	1,515	277	1,450	1,625	121	683	358	713
	February	6,510	3,214	270	1,421	253	1,270	1,618	135	639	372	534
	March	7,189	3,540	269	1,592	260	1,419	1,756	144	712	384	653
	April	8,591	3,818	270	1,689	269	1,590	2,437	157	862	502	815
	May	10,102	4,279	333	1,921	256	1,770	3,267	157	902	527	970
	June	10,593	4,371	297	2,062	293	1,719	3,664	178	870	523	988
	July	11,392	4,626	337	2,298	267	1,724	4,189	192	850	515	1,021
	August	11,871	4,865	316	2,494	250	1,806	4,273	207	1,021	506	999
	September	11,966	4,841	394	2,236	335	1,876	4,451	202	951	540	983
	October	11,990	4,679	373	2,072	318	1,917	4,469	221	1,080	658	882
	November	10,314	4,562	363	2,003	275	1,920	3,237	203	918	546	848
	December	8,346	4,066	310	1,750	306	1,699	2,354	149	721	457	600
1997:	January	7,265	3,808	264	1,653	274	1,618	1,620	140	655	419	624
	February	7,399	3,830	279	1,682	260	1,609	1,649	136	643	426	716
	March	8,162	4,075	293	1,796	296	1,690	2,001	168	719	501	699
	April	9,287	4,340	325	1,923	343	1,749	2,727	190	790	474	766
	May <sup>r</sup>	10,357	4,401	369	2,015	290	1,727	3,503	156	873	499	927
	June <sup>f</sup>	11,617	4,801	347	2,320	321	1,814	4,233	181	899	507	995
	July <sup>p</sup>	11,987	4,923	354	2,403	322	1,844	4,462	168	911	536	987
		Federally owned public construction										
		Total Federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>	
			Total	Housing	Industrial	Educational	Hospital					Other buildings <sup>3</sup>
1995:	July	1,316	465	48	123	1	75	218	(NA)	256	389	159
	August	1,413	499	53	123	2	79	243	(NA)	262	444	154
	September	2,002	715	65	180	6	124	340	(NA)	361	600	275
	October	889	358	57	97	2	52	150	(NA)	156	178	145
	November	1,314	508	80	117	-	91	220	(NA)	269	316	183
	December	1,285	485	52	111	4	89	230	(NA)	295	304	175
1996:	January	1,191	488	53	104	1	63	268	(NA)	248	255	181
	February	1,131	472	44	103	-	105	219	(NA)	202	234	204
	March	1,239	513	45	124	1	122	221	(NA)	206	288	212
	April	1,303	507	53	120	1	123	209	(NA)	214	326	228
	May	1,415	586	80	128	1	141	237	(NA)	220	333	237
	June	1,313	535	58	129	1	76	272	(NA)	210	328	197
	July	1,283	538	64	129	1	98	247	(NA)	191	321	183
	August	1,260	482	57	133	1	73	219	(NA)	193	367	168
	September	2,005	713	68	185	1	121	338	(NA)	271	676	295
	October	1,025	389	46	60	2	74	207	(NA)	175	199	210
	November	1,300	527	61	91	2	87	285	(NA)	203	275	258
	December	1,124	523	51	88	-	116	267	(NA)	200	242	131
1997:	January	1,122	499	71	90	-	127	211	(NA)	199	271	132
	February	1,090	497	58	79	2	135	223	(NA)	170	249	150
	March	1,213	472	52	88	4	98	230	(NA)	192	275	252
	April	1,200	491	50	114	1	89	237	(NA)	191	225	260
	May <sup>r</sup>	1,239	450	49	74	1	98	229	(NA)	215	288	245
	June <sup>f</sup>	1,226	514	59	94	2	116	243	(NA)	219	257	191
	July <sup>p</sup>	1,235	470	54	91	1	84	241	(NA)	226	275	210

- Represent zero or rounds to zero. NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

**Table 8. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Period		State and locally owned public construction										
		Total State and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
			Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1995:	July	110,150	47,645	3,752	21,458	3,389	19,046	36,167	1,778	9,652	5,639	9,269
	August	110,946	46,539	3,761	21,422	2,942	18,414	37,230	2,051	9,562	5,974	9,591
	September	110,379	47,303	3,640	22,111	3,446	18,106	35,887	1,588	9,873	5,378	10,349
	October	113,551	47,137	3,623	21,548	3,260	18,707	37,432	1,664	10,077	5,714	11,526
	November	111,795	46,847	3,392	21,480	3,384	18,591	36,344	1,905	10,236	6,009	10,454
	December	111,301	46,404	3,791	21,491	3,039	18,084	37,384	2,089	10,058	5,632	9,735
1996:	January	114,785	49,769	4,027	22,307	3,577	19,859	37,214	1,867	9,730	5,198	11,007
	February	108,635	44,342	3,525	21,152	3,239	16,425	39,062	2,065	9,436	5,531	8,199
	March	111,940	47,486	3,454	22,188	3,233	18,611	36,964	2,225	9,770	5,366	10,129
	April	115,653	48,001	3,369	22,322	3,114	19,196	37,686	2,015	11,138	6,367	10,446
	May	117,597	50,643	3,928	23,402	3,119	20,194	36,739	1,846	10,864	6,115	11,391
	June	114,291	48,527	3,373	22,206	3,320	19,627	36,795	2,031	9,779	5,863	11,296
	July	115,232	50,031	4,021	22,769	3,118	20,123	37,179	1,996	9,795	5,625	10,607
	August	113,030	50,230	3,707	23,056	3,199	20,268	34,789	2,057	10,549	5,479	9,926
	September	118,668	53,022	4,477	23,537	3,670	21,338	37,903	2,043	9,750	5,997	9,953
	October	119,707	52,651	3,997	24,042	3,569	21,043	37,926	2,263	11,155	6,693	9,019
	November	121,343	55,087	4,193	24,935	3,348	22,610	38,162	2,273	10,269	6,080	9,473
	December	117,938	53,149	3,813	24,339	3,624	21,374	39,120	2,015	9,704	5,854	8,096
1997:	January	117,964	53,228	3,422	24,215	3,599	21,991	37,385	2,143	9,508	6,106	9,594
	February	124,444	54,039	3,822	24,976	3,378	21,864	40,471	2,114	10,082	6,591	11,147
	March	126,298	54,852	3,903	25,034	3,654	22,261	41,042	2,587	9,992	7,044	10,781
	April	124,437	54,392	4,029	25,191	3,967	21,205	41,903	2,403	10,114	5,957	9,668
	May <sup>f</sup>	121,818	52,329	4,269	24,597	3,628	19,835	40,185	1,879	10,443	5,785	11,196
	June <sup>e</sup>	123,403	53,297	4,057	24,874	3,654	20,713	41,433	1,967	10,206	5,702	10,797
	July <sup>p</sup>	121,960	52,980	4,121	23,970	3,817	21,072	39,958	1,845	10,458	5,868	10,852
		Federally owned public construction										
		Total Federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>	
			Total	Housing	Industrial	Educational	Hospital					Other buildings <sup>3</sup>
1995:	July	15,510	5,382	558	1,423	16	868	2,517	(NA)	3,073	4,698	1,924
	August	16,383	6,173	651	1,515	26	974	3,007	(NA)	3,088	4,962	1,720
	September	16,709	6,487	585	1,636	54	1,126	3,086	(NA)	3,309	4,443	2,037
	October	13,635	5,389	858	1,462	30	780	2,258	(NA)	2,265	3,053	2,477
	November	16,083	6,264	983	1,444	2	1,127	2,707	(NA)	3,133	3,961	2,287
	December	15,895	5,910	633	1,348	43	1,085	2,801	(NA)	3,335	3,940	2,273
1996:	January	15,665	6,230	675	1,321	14	803	3,416	(NA)	3,128	3,434	2,438
	February	15,677	6,208	582	1,358	3	1,386	2,880	(NA)	2,923	3,251	2,836
	March	15,365	6,305	553	1,522	7	1,502	2,720	(NA)	2,415	3,583	2,641
	April	16,153	6,201	652	1,469	15	1,503	2,561	(NA)	2,721	4,002	2,797
	May	16,223	6,498	886	1,414	13	1,558	2,626	(NA)	2,640	3,887	2,771
	June	15,274	6,090	661	1,468	10	861	3,089	(NA)	2,463	3,929	2,359
	July	14,922	6,359	761	1,519	8	1,154	2,917	(NA)	2,301	3,710	2,117
	August	14,413	5,756	678	1,583	10	869	2,616	(NA)	2,278	4,096	1,875
	September	16,904	6,614	631	1,713	10	1,126	3,134	(NA)	2,482	5,134	2,239
	October	15,482	5,697	674	878	26	1,090	3,029	(NA)	2,531	3,310	3,502
	November	15,976	6,501	754	1,122	30	1,077	3,519	(NA)	2,365	3,437	3,225
	December	14,126	6,477	633	1,090	4	1,440	3,310	(NA)	2,241	3,208	1,735
1997:	January	14,761	6,287	897	1,128	4	1,598	2,660	(NA)	2,542	3,663	1,783
	February	15,884	6,944	816	1,108	24	1,885	3,112	(NA)	2,564	3,613	2,173
	March	14,882	5,459	605	1,021	46	1,131	2,657	(NA)	2,232	3,527	3,232
	April	14,860	6,178	632	1,430	10	1,119	2,986	(NA)	2,433	2,666	3,076
	May <sup>f</sup>	14,033	4,795	520	788	9	1,041	2,437	(NA)	2,559	3,358	2,851
	June <sup>e</sup>	14,167	5,831	669	1,069	22	1,318	2,753	(NA)	2,583	3,046	2,267
	July <sup>p</sup>	14,588	5,766	658	1,114	16	1,028	2,949	(NA)	2,679	3,209	2,450

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

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

**Table 9. Monthly Value of Public Construction Put in Place—Seasonally Adjusted Annual Rate in 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 <sup>2</sup>
		Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1995: July	99,269	42,475	3,285	19,159	3,026	17,005	33,090	1,601	8,696	4,995	8,411
August	100,167	41,439	3,279	19,110	2,625	16,426	34,156	1,858	8,661	5,310	8,743
September	99,304	41,974	3,163	19,654	3,063	16,094	32,804	1,435	8,919	4,764	9,408
October	101,747	41,690	3,148	19,086	2,887	16,570	33,968	1,503	9,103	5,052	10,431
November	99,989	41,473	2,949	19,043	3,000	16,482	32,801	1,721	9,247	5,304	9,444
December	99,442	41,038	3,293	19,035	2,692	16,017	33,679	1,887	9,085	4,967	8,786
1996: January	102,100	43,940	3,496	19,723	3,162	17,559	33,256	1,682	8,765	4,576	9,881
February	96,345	39,082	3,058	18,669	2,859	14,497	34,721	1,857	8,486	4,865	7,334
March	98,997	41,793	2,998	19,549	2,849	16,397	32,712	1,995	8,762	4,707	9,027
April	102,425	42,285	2,927	19,684	2,746	16,928	33,439	1,808	9,990	5,585	9,319
May	103,940	44,490	3,404	20,582	2,743	17,760	32,570	1,652	9,726	5,359	10,143
June	100,752	42,442	2,903	19,445	2,908	17,187	32,591	1,813	8,731	5,134	10,041
July	101,121	43,512	3,434	19,834	2,716	17,529	32,843	1,771	8,691	4,908	9,395
August	98,906	43,615	3,160	20,049	2,782	17,624	30,651	1,816	9,311	4,760	8,753
September	103,330	45,844	3,813	20,378	3,178	18,475	33,249	1,790	8,545	5,178	8,723
October	104,102	45,487	3,399	20,797	3,087	18,204	33,181	1,985	9,785	5,760	7,905
November	105,540	47,585	3,559	21,570	2,896	19,559	33,387	1,999	9,031	5,228	8,309
December	102,274	45,763	3,231	20,982	3,124	18,426	34,136	1,768	8,512	5,012	7,083
1997: January	102,291	45,875	2,903	20,893	3,105	18,974	32,593	1,879	8,333	5,224	8,386
February	108,155	46,693	3,253	21,605	2,922	18,913	35,346	1,856	8,851	5,648	9,761
March	107,937	46,868	3,321	21,397	3,123	19,027	35,109	2,211	8,540	5,995	9,215
April	105,786	46,316	3,418	21,457	3,379	18,062	35,602	2,039	8,585	5,036	8,207
May <sup>f</sup>	103,092	44,331	3,603	20,845	3,074	16,809	33,998	1,588	8,828	4,874	9,472
June <sup>f</sup>	104,338	45,068	3,409	21,044	3,091	17,524	35,054	1,663	8,627	4,800	9,127
July <sup>p</sup>	103,209	44,793	3,457	20,279	3,229	17,827	33,863	1,562	8,855	4,947	9,189
Period	Federally owned public construction										
	Total Federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>	
		Total	Housing	Industrial	Educational	Hospital					Other buildings <sup>3</sup>
1995: July	13,946	4,796	488	1,271	14	775	2,247	(NA)	2,776	4,233	1,746
August	14,752	5,494	567	1,352	23	869	2,683	(NA)	2,792	4,495	1,568
September	14,999	5,755	509	1,454	48	1,001	2,743	(NA)	2,984	4,014	1,852
October	12,199	4,758	746	1,295	27	691	2,000	(NA)	2,032	2,758	2,242
November	14,378	5,536	855	1,280	2	999	2,400	(NA)	2,802	3,578	2,066
December	14,209	5,224	550	1,194	38	961	2,481	(NA)	2,980	3,559	2,051
1996: January	13,949	5,497	586	1,168	12	710	3,020	(NA)	2,780	3,094	2,188
February	13,928	5,470	504	1,198	2	1,223	2,542	(NA)	2,589	2,924	2,537
March	13,621	5,548	480	1,341	6	1,324	2,396	(NA)	2,134	3,213	2,354
April	14,333	5,459	566	1,296	13	1,326	2,259	(NA)	2,406	3,589	2,495
May	14,362	5,703	768	1,243	12	1,370	2,310	(NA)	2,332	3,480	2,468
June	13,479	5,323	569	1,286	9	754	2,705	(NA)	2,169	3,508	2,097
July	13,096	5,526	650	1,323	7	1,005	2,541	(NA)	2,019	3,292	1,875
August	12,616	4,994	578	1,377	8	756	2,275	(NA)	1,995	3,615	1,653
September	14,723	5,718	538	1,483	9	975	2,714	(NA)	2,162	4,500	1,962
October	13,478	4,918	573	759	23	943	2,620	(NA)	2,201	2,904	3,069
November	13,914	5,612	640	971	26	931	3,044	(NA)	2,058	3,023	2,829
December	12,256	5,574	536	939	3	1,242	2,854	(NA)	1,943	2,814	1,518
1997: January	12,808	5,412	761	973	3	1,379	2,295	(NA)	2,205	3,211	1,559
February	13,815	5,996	694	958	21	1,630	2,692	(NA)	2,230	3,172	1,903
March	12,717	4,664	515	872	40	966	2,271	(NA)	1,908	3,015	2,763
April	12,634	5,260	536	1,218	9	954	2,543	(NA)	2,069	2,263	2,611
May <sup>f</sup>	11,877	4,061	439	667	7	882	2,066	(NA)	2,167	2,838	2,412
June <sup>f</sup>	11,978	4,929	562	905	18	1,115	2,329	(NA)	2,185	2,575	1,916
July <sup>p</sup>	12,344	4,873	552	943	13	870	2,495	(NA)	2,269	2,717	2,075

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

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

Table 10. Monthly Value of Public Construction Put in Place—Not Seasonally Adjusted in 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 <sup>2</sup>
			Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1995:	July	9,614	3,892	271	1,941	254	1,426	3,599	147	749	457	770
	August	10,730	4,071	283	2,083	212	1,493	4,269	185	844	489	871
	September	10,078	3,830	283	1,859	280	1,408	3,876	142	868	428	933
	October	10,137	3,673	289	1,640	259	1,486	3,918	149	865	495	1,037
	November	8,592	3,451	255	1,525	244	1,427	2,845	151	840	476	828
	December	6,964	3,106	266	1,374	222	1,244	1,998	140	679	389	652
1996:	January	6,265	3,134	269	1,340	245	1,282	1,452	109	615	315	640
	February	5,770	2,832	234	1,254	223	1,121	1,438	121	574	327	478
	March	6,356	3,116	234	1,403	229	1,250	1,554	129	639	337	582
	April	7,607	3,364	235	1,489	237	1,402	2,162	141	773	440	727
	May	8,929	3,759	288	1,689	225	1,557	2,896	141	807	462	864
	June	9,339	3,823	255	1,805	257	1,505	3,246	158	776	458	878
	July	10,002	4,024	288	2,002	233	1,502	3,700	170	754	449	904
	August	10,394	4,225	269	2,169	217	1,570	3,765	183	901	440	881
	September	10,427	4,186	335	1,936	290	1,624	3,904	177	833	466	861
	October	10,434	4,042	318	1,792	275	1,658	3,910	194	948	566	773
	November	8,972	3,940	308	1,733	238	1,661	2,832	179	808	469	744
	December	7,233	3,500	263	1,509	264	1,465	2,054	131	632	391	525
1997:	January	6,294	3,282	223	1,426	236	1,396	1,412	122	574	358	546
	February	6,425	3,309	237	1,455	225	1,392	1,440	119	564	365	627
	March	6,975	3,481	249	1,535	253	1,444	1,712	143	615	426	597
	April	7,895	3,695	275	1,638	292	1,490	2,317	162	670	400	650
	May <sup>f</sup>	8,765	3,728	311	1,708	246	1,464	2,963	131	738	420	784
	June <sup>f</sup>	9,823	4,060	292	1,962	271	1,535	3,581	153	760	427	841
	July <sup>p</sup>	10,145	4,163	297	2,033	273	1,560	3,781	142	771	452	835
		Federally owned public construction										
		Total Federal	Buildings					Highways and streets	Military facilities	Conservation and development	Miscellaneous construction <sup>4</sup>	
			Total	Housing	Industrial	Educational	Hospital					Other buildings <sup>3</sup>
1995:	July	1,183	414	42	110	1	67	194	(NA)	231	350	144
	August	1,273	444	46	109	2	70	217	(NA)	237	402	140
	September	1,798	634	56	160	5	110	302	(NA)	326	542	250
	October	795	316	50	86	2	46	133	(NA)	140	161	131
	November	1,175	449	69	104	-	81	195	(NA)	241	286	165
	December	1,148	428	45	98	3	79	203	(NA)	264	274	158
1996:	January	1,060	431	46	92	1	56	237	(NA)	221	229	162
	February	1,004	416	38	91	-	93	193	(NA)	179	211	183
	March	1,099	451	39	109	1	108	195	(NA)	182	258	189
	April	1,156	446	46	106	1	108	185	(NA)	189	292	203
	May	1,252	515	69	112	1	124	208	(NA)	194	298	211
	June	1,159	468	50	113	1	66	238	(NA)	185	293	175
	July	1,126	468	55	112	1	85	215	(NA)	168	285	162
	August	1,104	418	48	115	1	63	191	(NA)	169	324	148
	September	1,747	616	58	160	1	105	292	(NA)	236	592	258
	October	892	336	39	52	2	64	179	(NA)	152	174	184
	November	1,132	455	52	79	2	75	247	(NA)	177	242	226
	December	975	450	43	76	-	100	230	(NA)	173	212	115
1997:	January	973	429	60	77	-	109	182	(NA)	172	238	115
	February	947	429	50	69	1	117	193	(NA)	148	218	131
	March	1,036	403	45	75	3	84	196	(NA)	164	235	216
	April	1,020	418	43	97	1	76	202	(NA)	162	191	221
	May <sup>f</sup>	1,049	381	41	63	1	83	194	(NA)	182	244	207
	June <sup>f</sup>	1,037	434	49	80	2	98	205	(NA)	186	217	162
	July <sup>p</sup>	1,045	398	45	77	1	71	204	(NA)	191	233	178

- Represent zero or rounds to zero. NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>f</sup>Revised.

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



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

[1992 = 100]

Period	Bureau of the Census		Engineering News-Record		Bureau of the Census 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														
1992.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	100	100	100	100	100	100
1993.....	103.7	103.8	105.7	104.5	104.9	104.8	103.0	103	102	105	103	103	104	102
1994.....	108.0	108.1	109.8	108.5	109.7	109.5	109.5	106	105	112	107	109	109	103
1995.....	112.5	112.4	109.8	109.8	114.4	114.3	116.2	110	109	115	111	111	112	110
1996.....	115.0	115.2	113.0	112.8	116.4	116.5	116.0	112	112	118	112	112	115	115
Monthly indexes							Quarterly indexes			Semiannual indexes				
1996: January .....	113.6	113.8	110.3	110.8	115.0	115.2								
February .....	113.8	113.9	110.5	111.0	115.2	115.3	122.3	111	111					
March.....	113.8	114.1	110.7	111.1	114.9	115.2				117	112	110	114	113
April.....	113.7	114.0	111.1	111.3	114.8	115.1								
May.....	114.1	114.3	111.5	111.8	115.3	115.4	112.7	112	112					
June.....	114.5	114.8	112.2	112.3	115.9	116.2								
July.....	115.2	115.5	112.6	112.7	116.8	117.1								
August.....	115.5	115.7	113.7	113.4	117.1	117.3	118.7	112	112					
September .....	116.0	116.1	114.6	114.0	117.4	117.4				118	112	113	115	115
October.....	116.3	116.2	115.9	114.7	117.9	117.6								
November.....	116.4	116.3	116.6	115.1	118.1	117.8	117.6	114	113					
December.....	116.7	116.6	116.9	115.2	118.4	118.0								
1997: January .....	116.9	116.5	117.6	115.6	118.3	117.8								
February .....	116.8	116.2	117.6	115.7	118.0	117.5	127.1	114	114					
March.....	117.2	117.1	117.3	115.5	117.8	117.5				121	114	114	117	115
April.....	117.5	117.6	118.7	116.3	117.9	117.9								
May.....	<sup>r</sup> 118.2	<sup>r</sup> 118.2	119.2	117.1	<sup>r</sup> 118.6	<sup>r</sup> 118.5	(NA)	116	116					
June.....	<sup>r</sup> 118.3	<sup>r</sup> 118.5	119.9	117.6	<sup>r</sup> 118.9	<sup>r</sup> 119.0								
July.....	<sup>p</sup> 118.3	<sup>p</sup> 118.5	119.7	117.6	<sup>p</sup> 119.0	<sup>p</sup> 119.2								
August.....			119.5	117.4			(NA)	(NA)	(NA)					

NA Not available. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

[Percent]

Type of construction	July 1997 <sup>P</sup>	June 1997 <sup>f</sup>	May 1997 <sup>f</sup>	Apr. 1997	Mar. 1997	Feb. 1997	Jan. 1997	Dec. 1996	Nov. 1996	Oct. 1996	Sep. 1996	July 1996
<b>PRIVATE CONSTRUCTION</b>												
Residential buildings:												
New housing units:												
1 unit .....	111.7	107.3	100.7	94.5	89.8	76.3	81.5	89.1	107.1	112.1	114.5	112.5
2 units or more.....	106.7	108.3	105.3	96.8	91.9	86.6	86.4	95.8	101.4	105.6	105.0	107.0
Nonresidential buildings:												
Industrial .....	101.9	102.0	99.6	99.2	92.5	90.0	89.6	106.3	104.5	108.1	104.7	101.0
Office .....	101.5	103.0	103.3	100.7	95.6	93.3	92.7	98.1	102.1	101.7	104.8	101.2
Hotels, motels .....	99.9	104.6	106.2	104.2	99.3	95.0	91.2	98.6	98.5	101.4	100.5	99.0
Other commercial .....	106.0	106.0	99.5	94.4	88.2	82.8	85.2	94.6	105.2	112.1	114.7	107.3
Religious .....	99.1	96.3	96.7	92.6	92.1	85.7	89.2	102.0	108.2	114.0	111.2	100.0
Educational.....	122.6	119.2	103.6	91.3	88.8	80.6	81.7	86.4	93.9	101.9	108.8	121.8
Hospital and institutional .....	97.7	101.4	101.0	98.9	98.2	94.8	94.0	99.3	104.3	105.6	103.1	97.9
Miscellaneous nonresidential .....	101.0	104.4	100.5	102.8	99.3	88.6	87.3	96.9	106.1	108.7	104.1	100.5
Telecommunications .....	106.1	102.8	101.5	98.9	93.5	82.7	84.8	103.8	104.4	113.8	100.9	104.3
All other private .....	105.0	103.1	100.8	95.5	89.9	83.9	90.1	95.9	108.6	110.8	109.7	104.2
<b>PUBLIC CONSTRUCTION</b>												
<b>State and Local</b>												
Buildings:												
Housing and redevelopment .....	103.2	102.7	103.6	96.7	90.0	87.6	92.4	97.5	104.0	112.1	105.5	100.7
Educational.....	120.3	111.9	98.3	91.6	86.1	80.8	81.9	86.3	96.4	103.4	114.0	121.1
Hospital .....	101.3	105.3	96.0	103.6	97.1	92.4	91.2	101.4	98.7	106.8	109.6	102.8
Other buildings.....	105.0	105.1	104.5	99.0	91.1	88.3	88.3	95.4	101.9	109.3	105.5	102.8
Highways and streets.....	134.0	122.6	104.6	78.1	58.5	48.9	52.0	72.2	101.8	141.4	140.9	135.2
Conservation and development .....	109.1	110.6	99.3	95.1	77.8	77.1	78.1	88.9	107.4	117.4	118.5	115.5
Sewer systems.....	104.5	105.7	100.3	93.7	86.4	76.5	82.6	89.1	107.3	116.2	117.0	104.1
Water supply facilities.....	109.7	106.7	103.4	95.4	85.3	77.5	82.3	93.7	107.7	118.0	108.0	109.8
Miscellaneous construction .....	109.1	110.6	99.3	95.1	77.8	77.1	78.1	88.9	107.4	117.4	118.5	115.5
<b>Federal</b>												
Buildings:												
Housing and redevelopment .....	97.9	105.7	112.6	95.3	103.8	85.9	95.2	96.9	97.2	81.9	129.3	101.6
Industrial .....	97.9	105.7	112.6	95.3	103.8	85.9	95.2	96.9	97.2	81.9	129.3	101.6
Educational.....	97.9	105.7	112.6	95.3	103.8	85.9	95.2	96.9	97.2	81.9	129.3	101.6
Hospital .....	97.9	105.7	112.6	95.3	103.8	85.9	95.2	96.9	97.2	81.9	129.3	101.6
Other buildings.....	97.9	105.7	112.6	95.3	103.8	85.9	95.2	96.9	97.2	81.9	129.3	101.6
Military .....	101.0	101.9	100.9	94.2	103.1	79.6	93.7	107.0	103.1	83.1	131.0	99.8
Conservation and development .....	102.8	101.2	103.0	101.4	93.7	82.6	88.9	90.6	95.9	72.1	157.9	103.8
Miscellaneous construction .....	102.8	101.2	103.0	101.4	93.7	82.6	88.9	90.6	95.9	72.1	157.9	103.8

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

## 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 72 percent of total construction in 1996 (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 .02, we obtain \$200 million as the standard error. To obtain a 90-percent confidence interval, multiply \$200 million by 1.6 and add and subtract the result from \$10.0 billion, yielding limits of \$9.68 billion and \$10.32 billion. The average value of the monthly VIP estimate for "total private nonresidential buildings" may or may not be contained in this computed interval, but one can say that the average is included in the constructed interval with a specified confidence of 90 percent.

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

$$\text{Standard error of a change} = k (100 + (\% \text{ change shown in tables 3 thru 6}))$$

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. Non-sampling 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, 44 percent; state and locally owned public construction, 33 percent; private residential construction of 2 units or more, 48 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 1994. (Outlays are included if a government agency's fiscal year ending date falls within July 1993 to June 1994 inclusive, and

for three state agencies with fiscal years ending in August or September 1994.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1994 through April 1998. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12 month period but result from capital outlays made over a 26 month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

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

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

## **MONTHLY REVISIONS TO ESTIMATES**

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

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -0.8 percent to 0.7 percent with a median of 0.0 percent. The range of the difference between first revision and second revision was from -0.6 to 0.3 percent, with a median of 0.1 percent.