

# Value of Construction Put in Place

May  
2000

Issued July 2000

C30/00-5

## Current Construction Reports



U S C E N S U S B U R E A U

*Helping You Make Informed Decisions*

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



## ACKNOWLEDGMENTS

This report was developed in the U.S. Census Bureau's Manufacturing and Construction Division. It was prepared under the general direction of **Michael Davis**, Chief, Construction Expenditures Branch. **Joe Huesman, Delsey Newman, Linda Mersch, John P. Hill, Edna Free, Brenda Swann-Newman, Amy Wilder, Brenda Jordan**, and **Maryellen Buffington** performed specific activities related to the development, presentation and review of the data.

**Kim Ottenstein, Theodora Forgione, Joyce Chamberlain**, and **Laurene V. Qualls** of the Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publications and printing management, graphics design and composition, and editorial review for print and electronic media. General direction and production management were provided by **Michael G. Garland**, Assistant Chief, and **Gary J. Lauffer**, Chief, Publications Services Branch.

The U.S. Census Bureau is indebted to thousands of respondents included in the samples. Without their cooperation in providing information, this report would not have been possible. The Bureau also extends its appreciation to the National Processing Center staff responsible for collecting much of the basic data.

# Value of Construction Put in Place

May  
2000

Issued July 2000

C30/00-5

## Current Construction Reports



**U.S. Department of Commerce**  
**William M. Daley,**  
Secretary

**Robert L. Mallett,**  
Deputy Secretary

**Economics  
and Statistics Administration**  
**Robert J. Shapiro,**  
Under Secretary  
for Economic Affairs

**U.S. CENSUS BUREAU**  
**Kenneth Prewitt,**  
Director

SUGGESTED CITATION

U.S. Census Bureau,  
Current Construction Reports,  
C30/00-5  
*Value of Construction Put in Place:  
July 2000*  
U.S. Government Printing Office,  
Washington DC 20202



**Economics  
and Statistics  
Administration**

**Robert J. Shapiro,**  
Under Secretary  
for Economic Affairs



**U.S. CENSUS BUREAU**

**Kenneth Prewitt,**  
Director

**William G. Barron,**  
Deputy Director

**Paula J. Schneider,**  
Principal Associate Director  
for Programs

**Frederick T. Knickerbocker,**  
Associate Director  
for Economic Programs

**Thomas L. Mesenbourg,**  
Assistant Director  
for Economic Programs

**William G. Bostic Jr.,**  
Chief, Manufacturing  
and Construction Division

## CONTENTS

### INTRODUCTION

Description of Current Revisions . . . . .	1
Relationship of Value of Construction Put in Place to Structures in GDP . . . . .	1
Additional Data . . . . .	3

### CHARTS

Annual Value of Construction Put in Place: 1964-1999 . . . . .	4
--	---

### TABLES

1. Annual Value of Construction Put in Place: 1995-1999 . . . . .	5
2. Annual Value of Public Construction Put in Place: 1995-1999 . . . . .	6

#### Value of Construction Put in Place

3a. Monthly—Not Seasonally Adjusted in Current Dollars: May 1998-May 2000 . . . . .	7
3b. Annual and Monthly—Not Seasonally Adjusted in Current Dollars: 1997-1999 . . . . .	9
4a. Monthly—Seasonally Adjusted Annual Rate in Current Dollars: May 1998-May 2000 . . . . .	12
4b. Monthly—Seasonally Adjusted Annual Rate in Current Dollars: 1997-1999 . . . . .	14
5a. Monthly—Seasonally Adjusted Annual Rate in 1996 Dollars: May 1998-May 2000 . . . . .	17
5b. Monthly—Seasonally Adjusted Annual Rate in 1996 Dollars: 1997-1999 . . . . .	19
6a. Monthly—Not Seasonally Adjusted in 1996 Dollars: May 1998-May 2000 . . . . .	22
6b. Annual and Monthly—Not Seasonally Adjusted in 1996 Dollars: 1997-1999 . . . . .	24

#### Value of Public Construction Put in Place

7a. Monthly—Not Seasonally Adjusted in Current Dollars: May 1998-May 2000 . . . . .	27
7b. Annual and Monthly—Not Seasonally Adjusted in Current Dollars: 1997-1999 . . . . .	28
8a. Monthly—Seasonally Adjusted Annual Rate in Current Dollars: May 1998-May 2000 . . . . .	31
8b. Monthly—Seasonally Adjusted Annual Rate in Current Dollars: 1997-1999 . . . . .	32
9a. Monthly—Seasonally Adjusted Annual Rate in 1996 Dollars: May 1998-May 2000 . . . . .	35
9b. Monthly—Seasonally Adjusted Annual Rate in 1996 Dollars: 1997-1999 . . . . .	36
10a. Monthly—Not Seasonally Adjusted in 1996 Dollars: May 1998-May 2000 . . . . .	39
10b. Annual and Monthly—Not Seasonally Adjusted in 1996 Dollars: 1997-1999 . . . . .	40

APPENDIXES

A.	Definitions . . . . .	A-1
B.	Data Sources, Assumptions, and Methods . . . . .	B-1
C.	Reliability of the Estimates . . . . .	C-1
D.	Adjustments for Seasonal Variations and Cost Changes . . . . .	D-1

# Introduction

---

## **ANNUAL DATA BACK TO 1995 AND MONTHLY DATA BACK TO 1997 ARE SHOWN IN THIS REPORT**

Construction put in place during May 2000 was estimated at a seasonally adjusted annual rate of \$809.3 billion, nearly the same ( $\pm 5$  percent) as the revised April estimate of \$808.2 billion. The May figure represents a 7 percent increase over May 1999.

In constant (1996) dollars, the May annual rate was \$711.0 billion, nearly the same ( $\pm 5$  percent) as the revised estimate of \$711.5 billion for April.

### **DESCRIPTION OF CURRENT REVISIONS**

In each May report, unadjusted value-in-place estimates are revised to incorporate additional data not previously available. Seasonally adjusted statistics are also revised using newly computed seasonal factors. The revised factors for January 1997-December 1999 were computed using data through April 2000. The revised factors for January-May 2000 were computed using data through May 2000. See Appendix D, Adjustments for Seasonal Variations and Cost Changes.

In addition to the normal revisions, the following significant changes have been made to the series beginning with this report:

1. The base year for the constant dollar series has been updated from 1992 to 1996.
2. Estimates for new one-unit housing have been revised back to 1983 to reflect new estimating methodologies including:
  - a. Elimination of the adjustment factor applied to the number of one-unit housing starts to account for non-permitted starts.
  - b. Introduction of new adjustment factors which are used to calculate the average construction cost per unit for units built to be sold or rented and units built by the owner or for the owner on contract.
3. Estimates for residential improvements have been revised back to 1984 to reflect new outlier and item imputation procedures.
4. Estimates for private industrial buildings have been revised back to 1994 to incorporate and benchmark to the 1998 detailed structures data from the Census Bureau's Annual Capital Expenditures Survey.

For comparison, the Table on page 3 shows the previously published and revised data for selected series back to 1983.

Annual statistics reflecting all revisions back to 1995 are shown in Tables 1 and 2. Monthly estimates for January 1997 through May 2000 are presented in Tables 3-10. Monthly and annual data back to 1964 are available upon request or on the Internet at: [www.census.gov/const/www/c30index.html](http://www.census.gov/const/www/c30index.html).

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

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

#### **Coverage Differences**

GDP estimates of the structures components of gross private domestic fixed investment exclude the imputed interest amount of the allowances for funds used during construction of public utility plants; these amounts are included in the value-in-place estimates. In addition, GDP estimates include the following items not included in the value-in-place series:

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

---

## Estimation Procedures Differences

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

### Private Structures

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

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

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

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

### Government Structures

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

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

### Residential Improvements

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

### Classification Differences

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

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

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

### Timing of Revisions

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

---

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



Table A. **Comparison of Previously Published Data With Revised Data for Selected Construction Categories, 1983-1999**

Year	Total residential buildings		New one-unit housing		Residential improvements	
	Previous published	Revised	Previous published	Revised	Previous published	Revised
1983.....	125,521	125,833	72,203	72,514	30,872	30,872
1984.....	153,849	155,015	85,605	86,395	40,023	40,399
1985.....	158,474	160,520	86,123	87,350	43,812	44,632
1986.....	187,148	190,677	102,154	104,131	53,956	55,508
1987.....	194,656	199,652	114,463	117,216	54,741	56,984
1988.....	198,101	204,496	116,649	120,093	59,154	62,105
1989.....	196,551	204,255	116,898	120,929	57,349	61,023
1990.....	182,856	191,103	108,737	112,886	54,869	58,966
1991.....	157,835	166,251	95,444	99,427	47,243	51,676
1992.....	187,819	199,393	116,505	121,976	58,219	64,323
1993.....	210,455	225,067	133,282	140,123	66,384	74,156
1994.....	238,874	258,561	153,838	162,309	70,955	82,172
1995.....	230,688	247,351	145,009	153,515	67,790	75,947
1996.....	256,460	281,115	159,124	170,790	77,012	90,002
1997.....	265,863	289,014	164,444	175,179	78,535	90,951
1998.....	294,326	314,607	189,453	199,409	80,417	90,624
1999.....	321,667	348,826	212,695	222,280	(NA)	99,290

**ADDITIONAL DATA**

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

- Current Construction Reports, *Value of Construction Put in Place: June 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

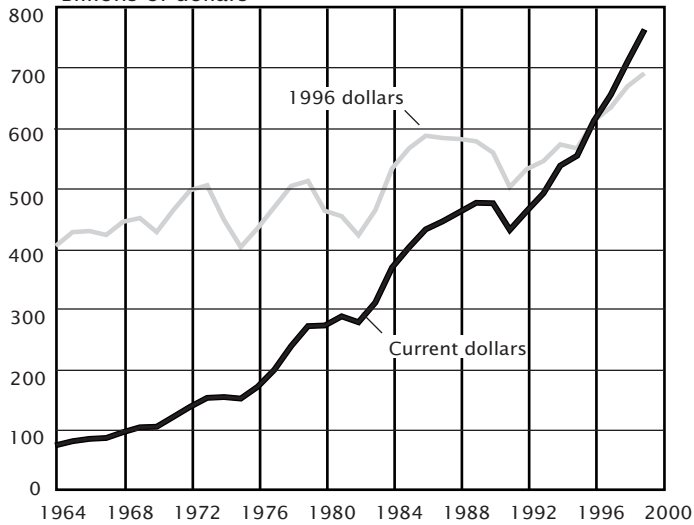
progress from start to completion for private nonresidential buildings and for state and local construction.

- 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.

## Annual Value of Construction Put in Place: 1964-1999

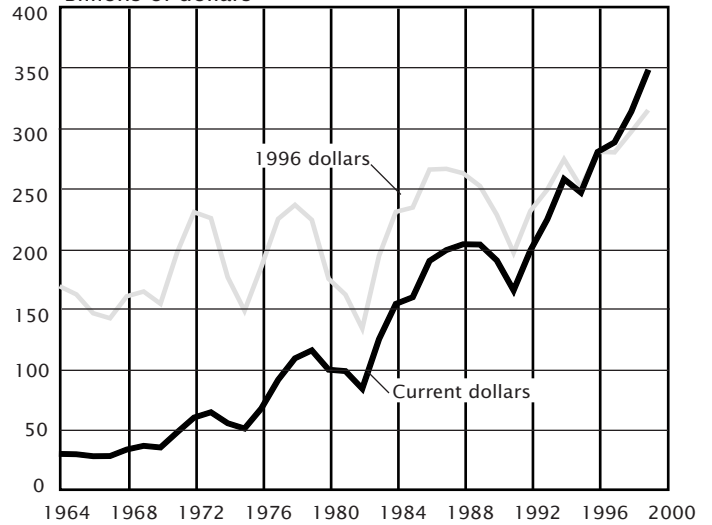
**Total Construction**

Billions of dollars



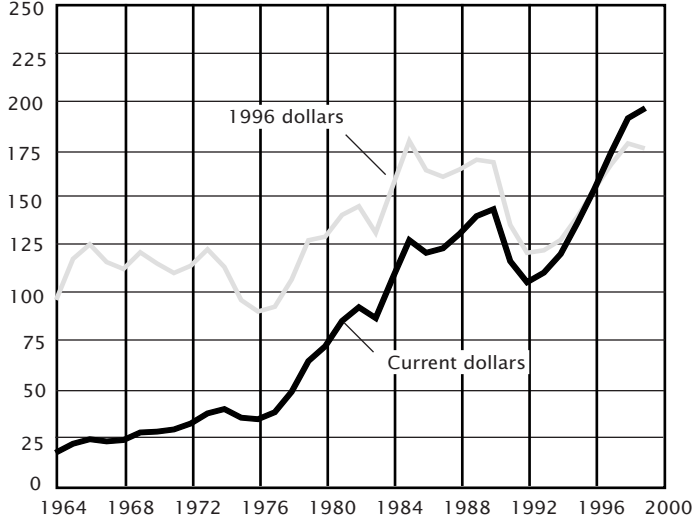
**Private Residential Construction**

Billions of dollars



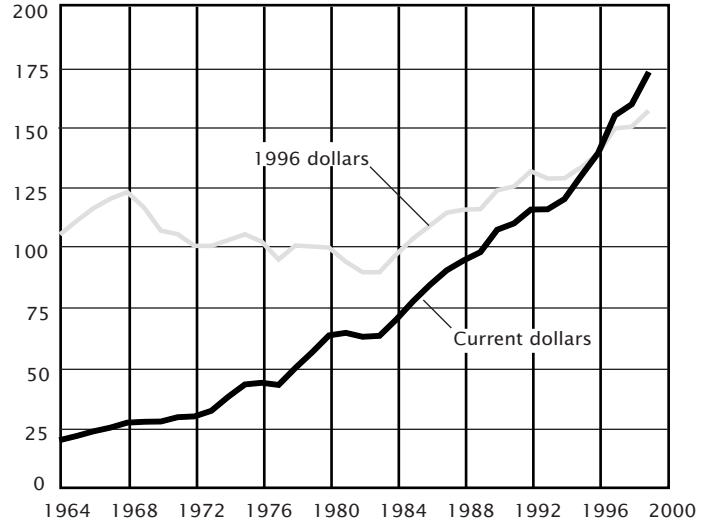
**Private Nonresidential Construction**

Billions of dollars



**Public Construction**

Billions of dollars



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

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

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
<b>Total construction</b> .....	<b>555,591</b>	<b>613,535</b>	<b>656,630</b>	<b>711,759</b>	<b>764,233</b>	<b>567,900</b>	<b>613,454</b>	<b>635,765</b>	<b>670,859</b>	<b>692,477</b>
<b>Private construction</b> .....	<b>425,658</b>	<b>474,273</b>	<b>501,749</b>	<b>552,236</b>	<b>591,561</b>	<b>434,450</b>	<b>474,307</b>	<b>486,273</b>	<b>520,613</b>	<b>535,625</b>
Residential buildings .....	247,351	281,115	289,014	314,607	348,826	251,937	281,229	280,748	297,886	315,757
New housing units .....	171,404	191,113	198,063	223,983	249,536	174,585	191,212	192,386	212,068	225,896
1 unit .....	153,515	170,790	175,179	199,409	222,280	156,363	170,865	170,154	188,785	201,210
2 units or more .....	17,889	20,324	22,883	24,574	27,256	18,222	20,347	22,232	23,283	24,686
Improvements .....	75,947	90,002	90,951	90,624	99,290	77,352	90,018	88,362	85,818	89,860
Nonresidential buildings .....	136,541	153,912	172,990	190,711	195,776	139,711	153,866	166,754	177,639	175,048
Industrial .....	34,024	36,220	36,739	40,484	34,894	34,814	36,215	35,411	37,715	31,214
Office .....	25,613	27,886	34,305	42,226	46,570	26,218	27,875	33,058	39,333	41,643
Hotels, motels .....	7,112	10,912	12,898	14,816	15,939	7,274	10,909	12,438	13,794	14,262
Other commercial .....	42,654	48,188	51,809	53,598	57,143	43,636	48,170	49,948	49,915	51,067
Religious .....	4,326	4,534	5,777	6,594	7,497	4,426	4,531	5,565	6,139	6,701
Educational .....	5,493	6,742	8,693	9,698	9,784	5,621	6,737	8,375	9,039	8,743
Hospital and institutional .....	11,248	11,780	13,546	13,793	13,624	11,512	11,778	13,066	12,853	12,183
Miscellaneous <sup>1</sup> .....	6,071	7,650	9,223	9,501	10,327	6,209	7,650	8,892	8,850	9,235
Farm nonresidential .....	3,014	3,658	3,815	4,284	4,451	3,084	3,657	3,675	3,989	3,977
Public utilities .....	35,859	33,156	33,638	40,028	39,607	36,740	33,124	32,884	38,616	38,166
Telecommunications .....	11,093	11,810	12,416	13,328	15,223	11,556	11,791	12,159	13,036	15,142
Other public utilities .....	24,766	21,346	21,222	26,700	24,384	25,184	21,333	20,725	25,581	23,024
Railroads .....	3,509	4,398	4,922	5,736	4,918	3,609	4,391	4,745	5,463	4,540
Electric light and power .....	14,049	11,211	11,325	12,381	14,057	14,310	11,209	11,122	11,885	13,393
Gas .....	6,279	4,722	4,006	7,318	3,920	6,329	4,720	3,911	7,020	3,690
Petroleum pipelines .....	929	1,015	969	1,265	1,489	936	1,013	947	1,213	1,401
All other private <sup>2</sup> .....	2,893	2,431	2,292	2,606	2,901	2,979	2,431	2,212	2,482	2,678
<b>Public construction</b> .....	<b>129,933</b>	<b>139,263</b>	<b>154,882</b>	<b>159,523</b>	<b>172,673</b>	<b>133,450</b>	<b>139,147</b>	<b>149,493</b>	<b>150,246</b>	<b>156,852</b>
Buildings .....	57,754	63,471	71,867	73,277	77,690	59,074	63,446	69,319	68,334	69,497
Housing and redevelopment ..	4,698	5,048	5,230	5,124	5,618	4,786	5,046	5,084	4,853	5,088
Industrial .....	1,508	1,389	999	1,010	925	1,544	1,390	965	941	828
Educational .....	25,783	28,590	34,385	36,234	39,725	26,374	28,577	33,136	33,743	35,497
Hospital .....	4,236	4,617	5,152	3,906	3,968	4,335	4,617	4,970	3,642	3,548
Other <sup>3</sup> .....	21,528	23,826	26,100	27,004	27,454	22,034	23,815	25,164	25,155	24,537
Highways and streets .....	37,616	39,464	44,105	48,515	53,532	38,952	39,412	42,535	45,877	48,827
Military facilities .....	3,011	2,591	2,556	2,529	2,111	3,102	2,593	2,466	2,377	1,909
Conservation and development ..	6,308	6,008	5,739	5,447	6,003	6,443	6,000	5,541	5,219	5,602
Sewer systems .....	8,420	9,798	10,392	10,168	11,181	8,600	9,778	10,034	9,743	10,438
Water supply facilities .....	4,709	5,618	6,419	6,830	7,602	4,809	5,609	6,275	6,552	7,142
Miscellaneous public <sup>4</sup> .....	12,116	12,313	13,803	12,755	14,555	12,468	12,310	13,323	12,145	13,436

<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: 1995-1999**

[Millions of dollars]

Type of construction	Current dollars					Constant (1996) dollars				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
<b>Total public construction . . . .</b>	<b>129,933</b>	<b>139,263</b>	<b>154,882</b>	<b>159,523</b>	<b>172,673</b>	<b>133,450</b>	<b>139,147</b>	<b>149,493</b>	<b>150,246</b>	<b>156,852</b>
<b>State and local construction . . . .</b>	<b>114,181</b>	<b>123,938</b>	<b>140,795</b>	<b>145,207</b>	<b>158,617</b>	<b>117,298</b>	<b>123,819</b>	<b>135,901</b>	<b>136,743</b>	<b>144,028</b>
Total buildings . . . . .	51,711	57,240	65,760	67,246	72,220	52,891	57,212	63,427	62,706	64,601
Housing and redevelopment . . . .	4,122	4,367	4,554	4,581	5,194	4,200	4,365	4,426	4,338	4,704
Educational . . . . .	25,757	28,578	34,366	36,219	39,709	26,347	28,565	33,118	33,729	35,483
Hospital . . . . .	3,195	3,457	3,901	2,897	3,118	3,269	3,457	3,764	2,701	2,785
Other <sup>1</sup> . . . . .	18,638	20,838	22,939	23,550	24,199	19,075	20,826	22,120	21,938	21,628
Highways and streets . . . . .	37,308	39,096	43,850	48,264	53,214	38,633	39,045	42,289	45,640	48,537
Conservation and development ..	2,140	2,163	2,371	1,911	1,993	2,187	2,159	2,289	1,832	1,860
Sewer systems . . . . .	8,420	9,798	10,392	10,168	11,181	8,600	9,778	10,034	9,743	10,438
Water supply facilities . . . . .	4,709	5,618	6,419	6,830	7,602	4,809	5,609	6,275	6,552	7,142
Miscellaneous nonbuilding <sup>2</sup> . . . .	9,893	10,022	12,002	10,787	12,407	10,177	10,017	11,587	10,271	11,450
<b>Federal construction . . . . .</b>	<b>15,751</b>	<b>15,325</b>	<b>14,087</b>	<b>14,317</b>	<b>14,056</b>	<b>16,151</b>	<b>15,328</b>	<b>13,592</b>	<b>13,503</b>	<b>12,824</b>
Total buildings . . . . .	6,043	6,230	6,107	6,031	5,470	6,183	6,234	5,892	5,628	4,896
Housing . . . . .	576	681	677	543	424	586	682	658	515	384
Industrial . . . . .	1,508	1,389	999	1,010	925	1,544	1,390	965	941	828
Educational . . . . .	27	12	19	15	15	27	12	19	14	14
Hospital . . . . .	1,041	1,159	1,251	1,009	850	1,066	1,161	1,206	941	762
Other <sup>3</sup> . . . . .	2,891	2,989	3,161	3,454	3,255	2,960	2,989	3,045	3,217	2,909
Highways and streets . . . . .	308	368	255	251	318	319	368	246	237	290
Military facilities . . . . .	3,011	2,591	2,556	2,529	2,111	3,102	2,593	2,466	2,377	1,909
Conservation and development ..	4,167	3,845	3,368	3,536	4,009	4,257	3,841	3,252	3,387	3,743
Miscellaneous public <sup>4</sup> . . . . .	2,223	2,291	1,800	1,969	2,148	2,290	2,293	1,735	1,873	1,986

NA Not available, but estimates are included in totals.

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

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

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

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

Table 3a. **Monthly Value of Construction Put in Place: May 1998-May 2000— 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>																		
May 1999	284,772	224,502	128,262	93,024	82,238	10,786	77,958	14,494	18,671	6,909	21,585	2,886	3,595	5,552	4,265	(NA)	5,752	1,066
May 2000	301,052	239,548	137,260	101,138	89,717	11,420	85,263	15,183	21,105	6,961	23,965	3,074	4,525	6,114	4,336	(NA)	(NA)	1,055
Percent change	6	7	7	9	9	6	9	5	13	1	11	7	26	10	2	(NA)	(NA)	-1
<b>MONTHLY DATA</b>																		
1998: May <sup>f</sup>	59,026	46,395	26,777	18,410	16,358	2,051	15,622	3,291	3,549	1,099	4,402	464	891	1,157	768	(NA)	1,101	206
June <sup>f</sup>	66,335	51,169	28,896	19,867	17,763	2,104	16,835	3,491	3,762	1,321	4,833	526	909	1,168	825	(NA)	1,178	267
July <sup>f</sup>	66,951	51,149	29,972	21,069	18,904	2,166	16,412	3,333	3,533	1,285	4,894	541	854	1,138	834	(NA)	1,135	222
August <sup>f</sup>	69,145	52,668	30,653	21,394	19,320	2,074	17,010	3,645	3,483	1,360	4,960	604	895	1,194	869	(NA)	1,124	250
September <sup>f</sup>	68,696	51,736	30,015	21,517	19,373	2,144	17,063	3,661	3,598	1,409	4,903	614	851	1,197	831	(NA)	1,158	236
October <sup>f</sup>	66,736	51,245	29,849	21,329	19,113	2,217	17,320	3,632	3,835	1,436	4,993	640	744	1,165	876	(NA)	1,272	232
November <sup>f</sup>	62,862	49,252	28,562	20,741	18,645	2,096	16,963	3,516	3,865	1,349	4,823	644	759	1,174	834	(NA)	1,119	248
December <sup>f</sup>	56,336	44,317	24,580	17,999	16,012	1,987	16,296	3,434	3,772	1,347	4,397	607	745	1,177	818	(NA)	1,162	214
1999: January <sup>f</sup>	50,794	40,399	22,529	16,732	14,782	1,950	14,603	2,885	3,541	1,308	3,857	568	612	1,054	779	(NA)	902	169
February <sup>f</sup>	50,817	40,039	21,367	16,022	14,005	2,017	15,021	2,825	3,675	1,412	3,992	552	646	1,108	811	(NA)	977	173
March <sup>f</sup>	57,544	45,757	25,746	19,114	16,896	2,219	15,868	2,997	3,757	1,434	4,368	571	722	1,138	881	(NA)	1,399	216
April <sup>f</sup>	60,957	47,711	27,997	19,980	17,710	2,269	16,050	2,892	3,786	1,389	4,538	598	823	1,125	900	(NA)	1,359	259
May <sup>f</sup>	64,660	50,596	30,623	21,176	18,845	2,331	16,416	2,896	3,913	1,367	4,830	597	792	1,128	894	(NA)	1,114	249
June <sup>f</sup>	69,001	53,214	32,642	22,372	19,954	2,418	16,698	2,954	3,942	1,300	4,991	634	947	1,090	840	(NA)	1,242	257
July <sup>f</sup>	70,701	54,337	33,076	23,070	20,693	2,378	16,806	3,033	3,832	1,368	5,054	637	956	1,078	847	(NA)	1,344	273
August <sup>f</sup>	72,608	55,012	33,477	23,372	20,910	2,462	17,057	2,977	4,090	1,288	5,090	683	941	1,143	846	(NA)	1,390	269
September <sup>f</sup>	71,204	53,597	32,284	23,160	20,762	2,398	17,123	2,915	4,230	1,233	5,190	655	840	1,173	887	(NA)	1,270	253
October <sup>f</sup>	69,170	52,843	32,059	22,754	20,409	2,345	16,929	2,822	4,108	1,218	5,152	702	830	1,219	878	(NA)	1,329	252
November <sup>f</sup>	66,722	51,557	30,652	22,248	19,973	2,275	16,970	2,795	3,957	1,312	5,291	675	847	1,212	881	(NA)	1,365	255
December <sup>f</sup>	60,055	46,498	26,374	19,536	17,342	2,194	16,236	2,905	3,740	1,309	4,791	625	827	1,157	882	(NA)	1,531	276
2000: January <sup>f</sup>	53,219	42,130	24,274	18,320	16,223	2,097	14,900	2,526	3,675	1,307	4,182	563	760	1,107	781	(NA)	1,239	173
February <sup>f</sup>	53,312	42,547	23,115	17,579	15,507	2,072	16,267	2,910	4,001	1,295	4,639	609	828	1,127	860	(NA)	1,173	202
March <sup>f</sup>	60,928	48,680	27,703	20,829	18,459	2,370	17,243	3,106	4,290	1,429	4,785	631	888	1,232	882	(NA)	1,529	236
April <sup>f</sup>	64,199	51,017	29,869	21,684	19,262	2,423	17,719	3,120	4,474	1,433	4,956	630	944	1,289	875	(NA)	1,360	218
May <sup>p</sup>	69,393	55,174	32,299	22,726	20,267	2,459	19,134	3,522	4,666	1,498	5,404	642	1,105	1,359	938	(NA)	(NA)	227
<b>PERCENT CHANGE</b>																		
April 2000-May 2000	8	8	8	5	5	1	8	13	4	5	9	2	17	5	7	(NA)	(NA)	4

See footnotes at end of table.

∞ Table 3a. **Monthly Value of Construction Put in Place: May 1998-May 2000— 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>													
May 1999	60,270	28,689	2,207	377	14,115	1,536	10,454	16,303	866	2,122	4,186	2,876	5,229
May 2000	61,503	28,263	2,191	461	12,154	1,723	11,734	16,764	896	2,296	4,329	2,957	5,999
Percent change	2	-1	-1	22	-14	12	12	3	3	8	3	3	15
<b>MONTHLY DATA</b>													
1998: May <sup>f</sup>	12,631	5,877	405	81	2,872	334	2,186	3,806	199	417	776	555	1,000
June <sup>f</sup>	15,166	6,756	465	78	3,521	334	2,358	5,007	225	494	892	545	1,248
July <sup>f</sup>	15,802	7,115	513	93	3,783	317	2,409	5,187	279	473	938	603	1,207
August <sup>f</sup>	16,477	7,084	434	88	3,814	305	2,443	5,816	241	493	960	612	1,272
September <sup>f</sup>	16,960	6,988	455	108	3,506	389	2,530	5,871	225	762	1,011	671	1,431
October <sup>f</sup>	15,491	6,395	447	58	3,128	335	2,427	5,712	157	369	1,031	731	1,097
November <sup>f</sup>	13,609	6,019	449	91	2,866	295	2,318	4,173	189	458	989	673	1,109
December <sup>f</sup>	12,019	5,823	435	79	2,830	291	2,189	3,073	198	421	866	621	1,018
1999: January <sup>f</sup>	10,395	5,284	388	64	2,630	291	1,912	2,394	147	385	776	502	907
February <sup>f</sup>	10,778	5,401	387	69	2,602	343	2,001	2,548	174	423	727	545	959
March <sup>f</sup>	11,787	5,726	445	85	2,727	305	2,164	3,000	187	459	852	586	978
April <sup>f</sup>	13,246	6,090	473	76	3,053	283	2,205	3,837	179	443	877	605	1,216
May <sup>f</sup>	14,063	6,187	515	83	3,103	314	2,173	4,524	179	413	954	638	1,168
June <sup>f</sup>	15,787	6,995	479	73	3,810	344	2,289	5,166	186	496	1,028	669	1,247
July <sup>f</sup>	16,364	7,136	479	89	3,881	346	2,341	5,514	195	491	1,003	724	1,300
August <sup>f</sup>	17,596	7,587	514	70	4,194	327	2,483	6,099	142	594	1,031	713	1,430
September <sup>f</sup>	17,607	7,398	539	112	3,828	379	2,540	6,139	207	776	1,019	697	1,371
October <sup>f</sup>	16,327	6,992	508	45	3,529	349	2,561	5,618	145	423	1,034	711	1,404
November <sup>f</sup>	15,165	6,603	451	72	3,266	344	2,469	4,849	166	554	975	648	1,369
December <sup>f</sup>	13,557	6,289	441	88	3,101	343	2,316	3,844	204	546	906	565	1,203
2000: January <sup>f</sup>	11,090	5,222	398	93	2,249	314	2,168	2,952	135	425	755	540	1,061
February <sup>f</sup>	10,765	5,309	375	96	2,267	310	2,261	2,343	205	479	757	577	1,094
March <sup>f</sup>	12,248	5,534	448	92	2,365	310	2,318	3,285	194	494	857	551	1,333
April <sup>f</sup>	13,183	5,936	484	91	2,532	382	2,447	3,804	171	457	984	625	1,205
May <sup>p</sup>	14,219	6,261	487	89	2,740	407	2,539	4,381	191	441	975	664	1,305
<b>PERCENT CHANGE</b>													
April 2000-May 2000	8	5	1	-2	8	7	4	15	12	-4	-1	6	8

NA Not available, but estimates are included in totals. <sup>f</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 3b. **Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Type of construction	1997												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>656,630</b>	<b>43,142</b>	<b>42,423</b>	<b>47,184</b>	<b>51,562</b>	<b>55,735</b>	<b>59,261</b>	<b>61,664</b>	<b>63,593</b>	<b>63,004</b>	<b>61,807</b>	<b>56,670</b>	<b>50,585</b>
<b>Private construction</b> . . . . .	<b>501,749</b>	<b>33,763</b>	<b>32,861</b>	<b>36,539</b>	<b>39,819</b>	<b>42,797</b>	<b>44,923</b>	<b>46,522</b>	<b>47,657</b>	<b>47,131</b>	<b>46,772</b>	<b>43,710</b>	<b>39,255</b>
Residential buildings . . . . .	289,014	18,617	17,900	21,072	23,220	25,447	26,802	27,323	27,767	27,021	26,952	25,344	21,549
New housing units . . . . .	198,063	13,042	12,725	14,852	15,701	16,847	17,565	18,221	18,668	18,752	18,638	17,764	15,288
1 unit . . . . .	175,179	11,553	11,012	13,090	13,865	14,747	15,556	16,332	16,646	16,754	16,466	15,796	13,362
2 units or more . . . . .	22,883	1,488	1,713	1,762	1,836	2,100	2,009	1,888	2,022	1,998	2,173	1,968	1,926
Improvements . . . . .	90,951	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	172,990	12,554	12,820	13,021	13,598	14,114	14,591	15,332	15,768	15,934	15,751	14,972	14,534
Industrial . . . . .	36,739	2,750	2,795	2,660	2,830	2,889	3,027	3,220	3,283	3,393	3,377	3,180	3,334
Office . . . . .	34,305	2,464	2,623	2,520	2,531	2,643	2,783	3,018	3,079	3,124	3,254	3,171	3,098
Hotels, motels . . . . .	12,898	939	972	1,026	1,051	1,151	1,163	1,163	1,121	1,086	1,115	1,050	1,062
Other commercial . . . . .	51,809	3,780	3,763	3,897	4,067	4,319	4,497	4,738	4,917	4,870	4,675	4,321	3,965
Religious . . . . .	5,777	367	376	434	456	484	443	469	493	562	583	574	537
Educational . . . . .	8,693	536	545	551	678	715	817	874	898	848	789	748	694
Hospital and institutional . . . . .	13,546	1,068	1,084	1,168	1,188	1,103	1,089	1,060	1,176	1,221	1,164	1,153	1,073
Miscellaneous <sup>1</sup> . . . . .	9,223	650	662	766	797	811	773	791	803	830	794	775	772
Farm nonresidential . . . . .	3,815	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	33,638	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	12,416	852	825	916	1,042	1,013	1,060	1,142	1,062	1,158	1,195	1,026	1,124
Railroads . . . . .	4,922	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	11,325	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	4,006	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	969	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,292	150	140	165	169	175	186	208	231	221	256	222	170
<b>Public construction</b> . . . . .	<b>154,882</b>	<b>9,378</b>	<b>9,562</b>	<b>10,645</b>	<b>11,743</b>	<b>12,938</b>	<b>14,337</b>	<b>15,142</b>	<b>15,936</b>	<b>15,873</b>	<b>15,036</b>	<b>12,961</b>	<b>11,330</b>
Buildings . . . . .	71,867	5,051	5,081	5,444	5,721	5,824	6,427	6,636	6,821	6,833	6,596	5,876	5,558
Housing and redevelopment . . . . .	5,230	411	416	415	444	471	430	438	411	464	525	428	376
Industrial . . . . .	999	89	79	88	112	74	95	92	80	98	56	66	71
Educational . . . . .	34,385	2,192	2,231	2,450	2,592	2,744	3,243	3,456	3,667	3,274	3,166	2,715	2,655
Hospital . . . . .	5,152	413	407	410	449	395	450	443	419	524	469	414	359
Other <sup>3</sup> . . . . .	26,100	1,945	1,947	2,081	2,124	2,140	2,209	2,207	2,244	2,473	2,380	2,253	2,098
Highways and streets . . . . .	44,105	1,780	1,839	2,177	3,015	3,754	4,501	4,946	5,346	5,041	4,883	3,951	2,873
Military facilities . . . . .	2,556	199	169	191	185	215	224	236	245	273	196	230	191
Conservation and development . . . . .	5,739	427	398	469	439	459	451	482	534	774	409	419	479
Other public construction . . . . .	30,614	1,923	2,076	2,364	2,383	2,686	2,734	2,843	2,990	2,952	2,952	2,485	2,228
Sewer systems . . . . .	10,392	724	728	823	862	952	975	938	932	984	942	825	709
Water supply facilities . . . . .	6,419	453	475	550	517	541	537	569	547	580	610	563	478
Miscellaneous public <sup>4</sup> . . . . .	13,803	746	873	991	1,004	1,192	1,222	1,336	1,511	1,389	1,401	1,097	1,042

See footnotes at end of table.

Table 3b. **Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1998												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>711,759</b>	<b>45,398</b>	<b>44,349</b>	<b>50,355</b>	<b>55,569</b>	<b>59,026</b>	<b>66,335</b>	<b>66,951</b>	<b>69,145</b>	<b>68,696</b>	<b>66,736</b>	<b>62,862</b>	<b>56,336</b>
<b>Private construction</b> . . . . .	<b>552,236</b>	<b>35,712</b>	<b>34,848</b>	<b>39,990</b>	<b>43,753</b>	<b>46,395</b>	<b>51,169</b>	<b>51,149</b>	<b>52,668</b>	<b>51,736</b>	<b>51,245</b>	<b>49,252</b>	<b>44,317</b>
Residential buildings . . . . .	314,607	19,603	18,685	22,358	24,658	26,777	28,896	29,972	30,653	30,015	29,849	28,562	24,580
New housing units . . . . .	223,983	14,230	13,693	16,295	17,440	18,410	19,867	21,069	21,394	21,517	21,329	20,741	17,999
1 unit . . . . .	199,409	12,383	11,835	14,322	15,383	16,358	17,763	18,904	19,320	19,373	19,113	18,645	16,012
2 units or more . . . . .	24,574	1,847	1,858	1,973	2,057	2,051	2,104	2,166	2,074	2,144	2,217	2,096	1,987
Improvements . . . . .	90,624	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	190,711	13,492	13,575	14,611	15,510	15,622	16,835	16,412	17,010	17,063	17,320	16,963	16,296
Industrial . . . . .	40,484	2,912	2,954	3,316	3,301	3,291	3,491	3,333	3,645	3,661	3,632	3,516	3,434
Office . . . . .	42,226	3,127	3,087	3,185	3,431	3,549	3,762	3,533	3,483	3,598	3,835	3,865	3,772
Hotels, motels . . . . .	14,816	999	989	1,065	1,158	1,099	1,321	1,285	1,360	1,409	1,436	1,349	1,347
Other commercial . . . . .	53,598	3,586	3,599	3,973	4,236	4,402	4,833	4,894	4,960	4,903	4,993	4,823	4,397
Religious . . . . .	6,594	483	489	486	495	464	526	541	604	614	640	644	607
Educational . . . . .	9,698	684	730	786	850	891	909	854	895	851	744	759	745
Hospital and institutional . . . . .	13,793	1,044	1,064	1,119	1,196	1,157	1,168	1,138	1,194	1,197	1,165	1,174	1,177
Miscellaneous <sup>1</sup> . . . . .	9,501	656	664	683	845	768	825	834	869	831	876	834	818
Farm nonresidential . . . . .	4,284	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	40,028	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	13,328	869	952	1,182	1,077	1,101	1,178	1,135	1,124	1,158	1,272	1,119	1,162
Railroads . . . . .	5,736	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	12,381	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	7,318	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	1,265	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,606	182	171	188	192	206	267	222	250	236	232	248	214
<b>Public construction</b> . . . . .	<b>159,523</b>	<b>9,686</b>	<b>9,500</b>	<b>10,365</b>	<b>11,816</b>	<b>12,631</b>	<b>15,166</b>	<b>15,802</b>	<b>16,477</b>	<b>16,960</b>	<b>15,491</b>	<b>13,609</b>	<b>12,019</b>
Buildings . . . . .	73,277	5,144	5,080	5,295	5,701	5,877	6,756	7,115	7,084	6,988	6,395	6,019	5,823
Housing and redevelopment . . . . .	5,124	357	355	388	420	405	465	513	434	455	447	449	435
Industrial . . . . .	1,010	76	79	95	84	81	78	93	88	108	58	91	79
Educational . . . . .	36,234	2,421	2,369	2,410	2,715	2,872	3,521	3,783	3,814	3,506	3,128	2,866	2,830
Hospital . . . . .	3,906	331	306	372	297	334	334	317	305	389	335	295	291
Other <sup>3</sup> . . . . .	27,004	1,960	1,971	2,029	2,184	2,186	2,358	2,409	2,443	2,530	2,427	2,318	2,189
Highways and streets . . . . .	48,515	2,065	2,029	2,466	3,311	3,806	5,007	5,187	5,816	5,871	5,712	4,173	3,073
Military facilities . . . . .	2,529	188	187	237	204	199	225	279	241	225	157	189	198
Conservation and development . . . . .	5,447	346	419	410	385	417	494	473	493	762	369	458	421
Other public construction . . . . .	29,754	1,943	1,785	1,957	2,216	2,331	2,685	2,748	2,843	3,113	2,858	2,771	2,505
Sewer systems . . . . .	10,168	644	614	701	748	776	892	938	960	1,011	1,031	989	866
Water supply facilities . . . . .	6,830	423	432	442	524	555	545	603	612	671	731	673	621
Miscellaneous public <sup>4</sup> . . . . .	12,755	876	739	815	945	1,000	1,248	1,207	1,272	1,431	1,097	1,109	1,018

See footnotes at end of table.



**Table 3b. Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>764,233</b>	<b>50,794</b>	<b>50,817</b>	<b>57,544</b>	<b>60,957</b>	<b>64,660</b>	<b>69,001</b>	<b>70,701</b>	<b>72,608</b>	<b>71,204</b>	<b>69,170</b>	<b>66,722</b>	<b>60,055</b>
<b>Private construction</b> . . . . .	<b>591,561</b>	<b>40,399</b>	<b>40,039</b>	<b>45,757</b>	<b>47,711</b>	<b>50,596</b>	<b>53,214</b>	<b>54,337</b>	<b>55,012</b>	<b>53,597</b>	<b>52,843</b>	<b>51,557</b>	<b>46,498</b>
Residential buildings . . . . .	348,826	22,529	21,367	25,746	27,997	30,623	32,642	33,076	33,477	32,284	32,059	30,652	26,374
New housing units . . . . .	249,536	16,732	16,022	19,114	19,980	21,176	22,372	23,070	23,372	23,160	22,754	22,248	19,536
1 unit . . . . .	222,280	14,782	14,005	16,896	17,710	18,845	19,954	20,693	20,910	20,762	20,409	19,973	17,342
2 units or more . . . . .	27,256	1,950	2,017	2,219	2,269	2,331	2,418	2,378	2,462	2,398	2,345	2,275	2,194
Improvements . . . . .	99,290	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	195,776	14,603	15,021	15,868	16,050	16,416	16,698	16,806	17,057	17,123	16,929	16,970	16,236
Industrial . . . . .	34,894	2,885	2,825	2,997	2,892	2,896	2,954	3,033	2,977	2,915	2,822	2,795	2,905
Office . . . . .	46,570	3,541	3,675	3,757	3,786	3,913	3,942	3,832	4,090	4,230	4,108	3,957	3,740
Hotels, motels . . . . .	15,939	1,308	1,412	1,434	1,389	1,367	1,300	1,368	1,288	1,233	1,218	1,312	1,309
Other commercial . . . . .	57,143	3,857	3,992	4,368	4,538	4,830	4,991	5,054	5,090	5,190	5,152	5,291	4,791
Religious . . . . .	7,497	568	552	571	598	597	634	637	683	655	702	675	625
Educational . . . . .	9,784	612	646	722	823	792	947	956	941	840	830	847	827
Hospital and institutional . . . . .	13,624	1,054	1,108	1,138	1,125	1,128	1,090	1,078	1,143	1,173	1,219	1,212	1,157
Miscellaneous <sup>1</sup> . . . . .	10,327	779	811	881	900	894	840	847	846	887	878	881	882
Farm nonresidential . . . . .	4,451	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	39,607	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	15,223	902	977	1,399	1,359	1,114	1,242	1,344	1,390	1,270	1,329	1,365	1,531
Railroads . . . . .	4,918	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	14,057	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	3,920	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	1,489	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,901	169	173	216	259	249	257	273	269	253	252	255	276
<b>Public construction</b> . . . . .	<b>172,673</b>	<b>10,395</b>	<b>10,778</b>	<b>11,787</b>	<b>13,246</b>	<b>14,063</b>	<b>15,787</b>	<b>16,364</b>	<b>17,596</b>	<b>17,607</b>	<b>16,327</b>	<b>15,165</b>	<b>13,557</b>
Buildings . . . . .	77,690	5,284	5,401	5,726	6,090	6,187	6,995	7,136	7,587	7,398	6,992	6,603	6,289
Housing and redevelopment . . . . .	5,618	388	387	445	473	515	479	479	514	539	508	451	441
Industrial . . . . .	925	64	69	85	76	83	73	89	70	112	45	72	88
Educational . . . . .	39,725	2,630	2,602	2,727	3,053	3,103	3,810	3,881	4,194	3,828	3,529	3,266	3,101
Hospital . . . . .	3,968	291	343	305	283	314	344	346	327	379	349	344	343
Other <sup>3</sup> . . . . .	27,454	1,912	2,001	2,164	2,205	2,173	2,289	2,341	2,483	2,540	2,561	2,469	2,316
Highways and streets . . . . .	53,532	2,394	2,548	3,000	3,837	4,524	5,166	5,514	6,099	6,139	5,618	4,849	3,844
Military facilities . . . . .	2,111	147	174	187	179	179	186	195	142	207	145	166	204
Conservation and development . . . . .	6,003	385	423	459	443	413	496	491	594	776	423	554	546
Other public construction . . . . .	33,338	2,185	2,231	2,415	2,698	2,760	2,944	3,028	3,174	3,087	3,149	2,993	2,674
Sewer systems . . . . .	11,181	776	727	852	877	954	1,028	1,003	1,031	1,019	1,034	975	906
Water supply facilities . . . . .	7,602	502	545	586	605	638	669	724	713	697	711	648	565
Miscellaneous public <sup>4</sup> . . . . .	14,555	907	959	978	1,216	1,168	1,247	1,300	1,430	1,371	1,404	1,369	1,203

NA Not available, but estimates are included in total.

<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 4a. **Monthly Value of Construction Put in Place: May 1998-May 2000—Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Period	Total construction	Private construction																	All other private <sup>5</sup>	
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings										Public utilities <sup>4</sup>		
			Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications			
				Total	1 unit	2 units or more														
1998: May <sup>f</sup> . . . . .	693,778	541,501	305,795	216,863	193,400	23,463	186,515	39,974	41,185	13,322	52,667	5,876	10,453	13,846	9,191	(NA)	13,781	2,534		
June <sup>f</sup> . . . . .	728,227	565,258	310,508	221,552	197,914	23,638	194,727	41,359	44,085	14,897	54,863	6,438	9,344	14,120	9,621	(NA)	13,132	3,132		
July <sup>f</sup> . . . . .	717,279	554,915	315,583	226,553	201,638	24,915	190,673	39,915	41,691	14,971	54,991	6,642	8,540	14,104	9,820	(NA)	12,870	2,431		
August <sup>f</sup> . . . . .	719,648	559,247	318,159	226,787	203,722	23,066	191,670	41,976	40,576	15,901	53,384	6,734	9,018	13,935	10,145	(NA)	13,090	2,562		
September <sup>f</sup> . . . . .	724,236	560,967	322,485	230,531	205,908	24,624	190,753	41,057	41,272	16,656	52,207	6,589	9,573	13,889	9,511	(NA)	13,344	2,546		
October <sup>f</sup> . . . . .	726,270	565,571	325,603	233,744	208,311	25,433	194,816	40,470	44,633	16,729	54,028	6,737	9,029	13,367	9,822	(NA)	13,928	2,380		
November <sup>f</sup> . . . . .	733,290	572,003	329,590	236,575	211,471	25,104	198,106	40,605	45,604	16,456	55,598	7,102	9,511	13,558	9,673	(NA)	13,080	2,907		
December <sup>f</sup> . . . . .	741,496	577,101	334,431	240,079	214,925	25,154	199,275	39,241	46,665	16,033	56,006	7,029	10,242	14,045	10,014	(NA)	12,867	2,647		
1999: January <sup>f</sup> . . . . .	760,164	591,253	340,130	242,974	216,323	26,650	198,508	38,556	46,386	17,596	55,097	7,889	8,897	13,537	10,549	(NA)	13,757	2,434		
February <sup>f</sup> . . . . .	776,268	597,184	341,742	245,291	217,980	27,312	201,435	37,493	47,470	18,161	56,562	7,619	9,188	14,093	10,848	(NA)	14,030	2,638		
March <sup>f</sup> . . . . .	777,990	602,473	346,811	248,801	221,097	27,704	201,045	38,019	46,238	17,246	58,044	7,374	9,539	13,763	10,822	(NA)	16,551	2,865		
April <sup>f</sup> . . . . .	766,495	591,532	347,724	248,952	221,611	27,341	196,287	35,699	45,251	16,351	57,261	7,598	10,285	13,352	10,490	(NA)	16,034	3,308		
May <sup>f</sup> . . . . .	758,942	590,028	349,638	249,494	222,799	26,694	195,742	35,311	45,498	16,334	57,726	7,372	9,284	13,513	10,707	(NA)	14,121	3,071		
June <sup>f</sup> . . . . .	755,587	587,457	350,485	249,468	222,329	27,140	193,312	34,953	46,062	14,946	56,821	7,803	9,771	13,129	9,827	(NA)	13,990	3,021		
July <sup>f</sup> . . . . .	759,825	590,438	348,729	248,669	221,310	27,358	195,279	36,326	45,574	15,889	56,791	7,763	9,628	13,339	9,969	(NA)	15,709	3,002		
August <sup>f</sup> . . . . .	755,253	584,016	348,084	248,363	220,876	27,487	191,317	34,279	47,235	14,851	54,731	7,526	9,470	13,364	9,860	(NA)	15,461	2,741		
September <sup>f</sup> . . . . .	753,081	582,464	347,616	248,800	221,259	27,540	191,179	32,696	48,522	14,355	55,408	6,957	9,437	13,614	10,190	(NA)	14,669	2,732		
October <sup>f</sup> . . . . .	756,854	584,860	349,968	249,644	222,844	26,800	191,463	31,354	48,089	14,678	55,846	7,670	10,033	13,959	9,834	(NA)	15,189	2,569		
November <sup>f</sup> . . . . .	776,476	596,942	353,854	253,806	226,538	27,268	197,362	32,244	46,373	15,717	60,932	7,253	10,626	13,981	10,235	(NA)	15,213	3,014		
December <sup>f</sup> . . . . .	791,698	605,802	358,223	259,835	232,004	27,831	199,689	33,262	46,224	15,848	60,963	7,498	11,332	13,806	10,756	(NA)	16,884	3,405		
2000: January <sup>f</sup> . . . . .	794,370	614,584	365,149	265,361	236,834	28,528	202,450	33,947	48,144	17,192	59,817	7,560	11,009	14,235	10,546	(NA)	19,155	2,497		
February <sup>f</sup> . . . . .	803,956	629,590	368,745	268,696	240,727	27,970	215,499	38,538	49,644	15,969	65,796	7,959	11,812	14,309	11,473	(NA)	15,936	3,116		
March <sup>f</sup> . . . . .	817,559	637,743	372,118	270,657	241,034	29,623	218,044	39,030	52,586	17,178	63,444	8,287	11,777	14,886	10,858	(NA)	17,748	3,138		
April <sup>f</sup> . . . . .	808,224	634,033	369,465	268,623	239,522	29,100	218,344	38,473	54,499	17,347	62,662	8,052	11,832	15,257	10,222	(NA)	17,478	2,791		
May <sup>p</sup> . . . . .	809,257	639,944	368,025	266,723	238,432	28,291	225,940	42,474	53,527	17,643	64,273	7,864	12,827	16,161	11,169	(NA)	(NA)	2,818		
<b>PERCENT CHANGE</b>																				
April 2000- May 2000 . . . . .	(Z)	1	(Z)	-1	(Z)	-3	3	10	-2	2	3	-2	8	6	9	(NA)	(NA)	1		

See footnotes at end of table.

Table 4a. **Monthly Value of Construction Put in Place: May 1998-May 2000—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>						
1998: May <sup>f</sup> . . . . .	152,277	71,278	4,850	989	35,905	4,112	25,423	45,631	2,362	5,109	9,386	6,490	12,020
June <sup>f</sup> . . . . .	162,969	74,562	5,373	905	37,426	3,798	27,060	50,068	2,588	5,733	9,856	6,230	13,934
July <sup>f</sup> . . . . .	162,363	76,346	6,029	1,060	37,609	3,678	27,969	47,439	3,240	5,393	10,445	6,603	12,897
August <sup>f</sup> . . . . .	160,401	73,854	5,237	1,103	35,988	3,764	27,764	48,908	2,792	5,262	10,257	6,696	12,631
September <sup>f</sup> . . . . .	163,269	74,165	4,838	977	36,708	3,996	27,647	49,723	2,105	5,957	10,352	7,330	13,638
October <sup>f</sup> . . . . .	160,699	72,757	4,944	786	35,777	3,944	27,305	50,544	2,289	5,114	10,697	7,386	11,912
November <sup>f</sup> . . . . .	161,287	73,123	5,227	1,119	36,085	3,568	27,124	48,757	2,204	5,464	11,215	7,444	13,078
December <sup>f</sup> . . . . .	164,395	75,097	5,288	938	37,899	3,489	27,483	48,705	2,268	5,368	11,308	7,969	13,680
1999: January <sup>f</sup> . . . . .	168,911	74,017	5,167	861	38,253	3,824	25,912	54,199	1,952	5,676	11,503	7,542	14,021
February <sup>f</sup> . . . . .	179,084	76,475	5,232	923	38,832	4,524	26,965	59,843	2,587	6,164	11,216	8,010	14,788
March <sup>f</sup> . . . . .	175,517	76,946	5,673	1,015	38,681	3,730	27,847	56,515	2,157	6,045	11,485	8,280	14,089
April <sup>f</sup> . . . . .	174,962	77,075	5,753	920	40,077	3,426	26,899	55,809	2,268	5,635	11,172	7,548	15,456
May <sup>f</sup> . . . . .	168,914	75,114	6,154	1,022	38,790	3,878	25,271	53,647	2,124	5,050	11,509	7,452	14,018
June <sup>f</sup> . . . . .	168,130	77,152	5,547	848	40,536	3,912	26,308	50,074	2,140	5,814	11,359	7,641	13,950
July <sup>f</sup> . . . . .	169,387	76,490	5,669	1,024	38,521	4,067	27,208	51,896	2,268	5,598	11,306	7,933	13,896
August <sup>f</sup> . . . . .	171,237	78,764	6,101	891	39,545	3,995	28,232	51,542	1,646	6,373	10,857	7,791	14,264
September <sup>f</sup> . . . . .	170,617	78,684	5,803	989	40,157	4,025	27,709	52,432	1,932	6,145	10,447	7,592	13,386
October <sup>f</sup> . . . . .	171,994	79,978	5,678	640	40,448	4,035	29,176	50,646	2,114	5,941	10,885	7,202	15,228
November <sup>f</sup> . . . . .	179,534	80,188	5,176	877	41,084	4,101	28,949	56,547	1,944	6,585	10,925	7,191	16,154
December <sup>f</sup> . . . . .	185,895	81,004	5,359	986	41,628	4,079	28,952	60,218	2,332	7,001	11,740	7,255	16,346
2000: January <sup>f</sup> . . . . .	179,787	72,930	5,307	1,253	32,758	4,165	29,448	63,368	1,782	6,223	11,199	7,955	16,329
February <sup>f</sup> . . . . .	174,366	74,451	5,036	1,267	33,629	4,105	30,413	53,145	3,011	6,975	11,518	8,475	16,792
March <sup>f</sup> . . . . .	179,816	73,892	5,685	1,077	33,582	3,825	29,722	59,007	2,249	6,494	11,507	7,748	18,919
April <sup>f</sup> . . . . .	174,191	75,124	5,997	1,164	33,282	4,842	29,840	55,260	2,182	5,826	12,737	7,780	15,282
May <sup>p</sup> . . . . .	169,314	75,270	5,743	1,078	34,142	4,859	29,448	51,538	2,259	5,378	11,463	7,715	15,691
<b>PERCENT CHANGE</b>													
April 2000- May 2000 . . . . .	-3	(Z)	-4	-7	3	(Z)	-1	-7	4	-8	-10	-1	3

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 4b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Type of construction	1997											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> .....	<b>641,522</b>	<b>648,083</b>	<b>645,825</b>	<b>649,113</b>	<b>651,358</b>	<b>650,205</b>	<b>661,042</b>	<b>661,872</b>	<b>664,801</b>	<b>669,976</b>	<b>662,784</b>	<b>666,423</b>
<b>Private construction</b> .....	<b>493,904</b>	<b>494,129</b>	<b>487,574</b>	<b>494,240</b>	<b>496,862</b>	<b>495,708</b>	<b>505,094</b>	<b>506,002</b>	<b>509,645</b>	<b>513,827</b>	<b>508,424</b>	<b>511,708</b>
Residential buildings .....	284,011	288,746	287,450	289,069	290,124	287,192	287,135	287,107	289,316	292,778	292,521	293,763
New housing units .....	190,314	195,642	195,188	196,432	198,472	196,038	196,115	197,314	199,921	203,300	202,373	204,320
1 unit .....	169,901	172,281	173,186	174,222	174,523	173,487	174,367	174,915	176,978	178,329	178,823	179,961
2 units or more .....	20,412	23,362	22,002	22,210	23,949	22,551	21,747	22,399	22,944	24,971	23,550	24,359
Improvements .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings .....	170,220	172,615	166,124	166,803	167,655	169,229	177,383	177,620	177,370	176,987	175,307	178,049
Industrial .....	36,744	37,184	33,746	34,941	34,951	35,860	38,565	37,805	38,092	37,661	36,800	37,997
Office .....	31,621	33,839	31,527	30,125	30,375	32,965	35,641	35,873	35,834	37,585	37,676	38,438
Hotels, motels .....	12,269	12,507	12,493	12,691	13,473	13,338	13,300	13,315	12,618	13,071	12,979	12,842
Other commercial .....	54,195	53,377	51,845	51,422	51,727	51,003	53,190	52,866	51,673	50,585	49,858	50,568
Religious .....	5,013	5,216	5,653	5,736	5,923	5,543	5,529	5,643	5,961	6,198	6,346	6,356
Educational .....	7,845	7,754	7,286	8,509	8,401	8,383	8,707	9,055	9,538	9,566	9,373	9,564
Hospital and institutional .....	13,633	13,799	14,190	14,129	13,129	13,137	13,117	13,682	14,192	13,412	13,328	12,794
Miscellaneous <sup>1</sup> .....	8,899	8,939	9,384	9,251	9,676	9,000	9,335	9,382	9,462	8,910	8,946	9,489
Farm nonresidential .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications .....	11,956	11,883	11,736	12,592	12,097	12,402	13,038	12,209	13,272	12,710	12,425	12,469
Railroads .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> .....	2,106	2,108	2,210	2,170	2,144	2,179	2,281	2,399	2,377	2,640	2,588	2,104
<b>Public construction</b> .....	<b>147,618</b>	<b>153,954</b>	<b>158,251</b>	<b>154,873</b>	<b>154,496</b>	<b>154,496</b>	<b>155,947</b>	<b>155,870</b>	<b>155,156</b>	<b>156,149</b>	<b>154,360</b>	<b>154,715</b>
Buildings .....	69,884	72,109	73,147	72,864	70,194	71,213	71,685	71,189	72,502	74,727	71,351	71,397
Housing and redevelopment .....	5,316	5,624	5,378	5,424	5,582	5,027	5,190	5,003	4,930	5,805	5,040	4,554
Industrial .....	1,122	1,057	1,081	1,411	871	1,121	1,106	999	891	745	820	803
Educational .....	31,925	33,296	34,622	34,518	34,195	34,537	34,363	34,490	34,245	36,181	34,118	35,633
Hospital .....	5,286	5,367	5,125	5,455	4,792	5,192	5,195	5,160	5,432	5,422	5,081	4,244
Other <sup>3</sup> .....	26,236	26,765	26,942	26,056	24,754	25,335	25,830	25,537	27,003	26,575	26,292	26,162
Highways and streets .....	39,989	41,786	43,105	44,071	44,040	44,822	45,138	45,303	43,897	42,187	46,760	45,535
Military facilities .....	2,643	2,516	2,201	2,354	2,551	2,578	2,743	2,842	2,554	2,866	2,692	2,190
Conservation and development .....	6,267	5,859	6,327	5,533	5,611	5,200	5,435	5,646	6,230	5,278	4,977	6,131
Other public construction .....	28,835	31,684	33,471	30,051	32,101	30,683	30,946	30,890	29,973	31,091	28,580	29,463
Sewer systems .....	10,346	11,192	11,335	10,990	11,440	10,920	10,465	9,952	10,070	9,642	9,478	9,325
Water supply facilities .....	6,737	6,985	7,746	6,456	6,351	6,149	6,214	5,998	6,338	6,158	6,221	6,143
Miscellaneous public <sup>4</sup> .....	11,752	13,507	14,390	12,605	14,310	13,614	14,267	14,940	13,565	15,291	12,881	13,995

See footnotes at end of table.

Table 4b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1998											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> .....	<b>675,806</b>	<b>677,374</b>	<b>685,103</b>	<b>698,744</b>	<b>693,777</b>	<b>728,227</b>	<b>717,279</b>	<b>719,648</b>	<b>724,236</b>	<b>726,270</b>	<b>733,290</b>	<b>741,496</b>
<b>Private construction</b> .....	<b>520,494</b>	<b>522,236</b>	<b>529,798</b>	<b>542,709</b>	<b>541,501</b>	<b>565,258</b>	<b>554,915</b>	<b>559,247</b>	<b>560,967</b>	<b>565,571</b>	<b>572,003</b>	<b>577,101</b>
Residential buildings .....	297,360	300,086	302,677	306,423	305,795	310,508	315,583	318,159	322,485	325,603	329,590	334,431
New housing units .....	207,184	210,140	212,855	217,494	216,863	221,552	226,553	226,787	230,531	233,744	236,575	240,079
1 unit .....	181,879	184,925	188,241	192,685	193,400	197,914	201,638	203,722	205,908	208,311	211,471	214,925
2 units or more .....	25,305	25,215	24,614	24,809	23,463	23,638	24,915	23,066	24,624	25,433	25,104	25,154
Improvements .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings .....	182,521	182,478	185,867	189,663	186,515	194,727	190,673	191,670	190,753	194,816	198,106	199,275
Industrial .....	38,912	39,249	42,103	40,708	39,974	41,359	39,915	41,976	41,057	40,470	40,605	39,241
Office .....	40,525	39,874	39,560	40,924	41,185	44,085	41,691	40,576	41,272	44,633	45,604	46,665
Hotels, motels .....	12,978	12,710	12,800	13,726	13,322	14,897	14,971	15,901	16,656	16,729	16,456	16,033
Other commercial .....	51,352	51,045	52,792	53,507	52,667	54,863	54,991	53,384	52,207	54,028	55,598	56,006
Religious .....	6,518	6,756	6,290	6,159	5,876	6,438	6,642	6,734	6,589	6,737	7,102	7,029
Educational .....	9,967	10,397	10,403	10,650	10,453	9,344	8,540	9,018	9,573	9,029	9,511	10,242
Hospital and institutional .....	13,361	13,524	13,534	14,176	13,846	14,120	14,104	13,935	13,889	13,367	13,558	14,045
Miscellaneous <sup>1</sup> .....	8,908	8,921	8,385	9,813	9,191	9,621	9,820	10,145	9,511	9,822	9,673	10,014
Farm nonresidential .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications .....	12,626	13,695	14,423	13,002	13,781	13,132	12,870	13,090	13,344	13,928	13,080	12,867
Railroads .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> .....	2,603	2,593	2,494	2,463	2,534	3,132	2,431	2,562	2,546	2,380	2,907	2,647
<b>Public construction</b> .....	<b>155,312</b>	<b>155,138</b>	<b>155,305</b>	<b>156,035</b>	<b>152,277</b>	<b>162,969</b>	<b>162,363</b>	<b>160,401</b>	<b>163,269</b>	<b>160,699</b>	<b>161,287</b>	<b>164,395</b>
Buildings .....	71,613	71,993	71,297	72,267	71,278	74,562	76,346	73,854	74,165	72,757	73,123	75,097
Housing and redevelopment .....	4,688	4,805	5,021	5,124	4,850	5,373	6,029	5,237	4,838	4,944	5,227	5,288
Industrial .....	974	1,051	1,210	1,038	989	905	1,060	1,103	977	786	1,119	938
Educational .....	35,210	35,354	34,103	35,806	35,905	37,426	37,609	35,988	36,708	35,777	36,085	37,899
Hospital .....	4,275	4,028	4,657	3,600	4,112	3,798	3,678	3,764	3,996	3,944	3,568	3,489
Other <sup>3</sup> .....	26,466	26,755	26,306	26,699	25,423	27,060	27,969	27,764	27,647	27,305	27,124	27,483
Highways and streets .....	46,759	47,004	48,197	48,328	45,631	50,068	47,439	48,908	49,723	50,544	48,757	48,705
Military facilities .....	2,506	2,782	2,731	2,592	2,362	2,588	3,240	2,792	2,105	2,289	2,204	2,268
Conservation and development .....	5,152	6,137	5,494	4,871	5,109	5,733	5,393	5,262	5,957	5,114	5,464	5,368
Other public construction .....	29,282	27,222	27,585	27,977	27,896	30,020	29,945	29,585	31,319	29,995	31,738	32,957
Sewer systems .....	9,367	9,457	9,541	9,522	9,386	9,856	10,445	10,257	10,352	10,697	11,215	11,308
Water supply facilities .....	6,347	6,347	6,246	6,527	6,490	6,230	6,603	6,696	7,330	7,386	7,444	7,969
Miscellaneous public <sup>4</sup> .....	13,567	11,418	11,798	11,927	12,020	13,934	12,897	12,631	13,638	11,912	13,078	13,680

See footnotes at end of table.

Table 4b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>760,164</b>	<b>776,268</b>	<b>777,989</b>	<b>766,495</b>	<b>758,942</b>	<b>755,587</b>	<b>759,824</b>	<b>755,253</b>	<b>753,081</b>	<b>756,854</b>	<b>776,476</b>	<b>791,698</b>
<b>Private construction</b> . . . . .	<b>591,253</b>	<b>597,184</b>	<b>602,473</b>	<b>591,532</b>	<b>590,028</b>	<b>587,457</b>	<b>590,438</b>	<b>584,016</b>	<b>582,464</b>	<b>584,860</b>	<b>596,942</b>	<b>605,802</b>
Residential buildings . . . . .	340,130	341,742	346,811	347,724	349,638	350,485	348,729	348,084	347,615	349,968	353,854	358,223
New housing units . . . . .	242,974	245,291	248,801	248,952	249,493	249,468	248,669	248,363	248,800	249,644	253,806	259,835
1 unit . . . . .	216,323	217,980	221,097	221,611	222,799	222,329	221,310	220,876	221,259	222,844	226,538	232,004
2 units or more . . . . .	26,650	27,312	27,704	27,341	26,694	27,140	27,358	27,487	27,540	26,800	27,268	27,831
Improvements . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	198,508	201,435	201,045	196,287	195,742	193,312	195,279	191,317	191,179	191,463	197,362	199,689
Industrial . . . . .	38,556	37,493	38,019	35,699	35,311	34,953	36,326	34,279	32,696	31,354	32,244	33,262
Office . . . . .	46,386	47,470	46,238	45,251	45,498	46,062	45,574	47,235	48,522	48,089	46,373	46,224
Hotels, motels . . . . .	17,596	18,161	17,246	16,351	16,334	14,946	15,889	14,851	14,355	14,678	15,717	15,848
Other commercial . . . . .	55,097	56,562	58,044	57,261	57,726	56,821	56,791	54,731	55,408	55,846	60,932	60,963
Religious . . . . .	7,889	7,619	7,374	7,598	7,372	7,803	7,763	7,526	6,957	7,670	7,253	7,498
Educational . . . . .	8,897	9,188	9,539	10,285	9,284	9,771	9,628	9,470	9,437	10,033	10,626	11,332
Hospital and institutional . . . . .	13,537	14,093	13,762	13,352	13,513	13,129	13,339	13,364	13,614	13,959	13,981	13,806
Miscellaneous <sup>1</sup> . . . . .	10,549	10,848	10,822	10,490	10,707	9,827	9,969	9,860	10,190	9,834	10,235	10,756
Farm nonresidential . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	13,757	14,030	16,551	16,034	14,121	13,990	15,709	15,461	14,669	15,189	15,213	16,884
Railroads . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,434	2,638	2,865	3,308	3,071	3,021	3,002	2,741	2,732	2,569	3,014	3,405
<b>Public construction</b> . . . . .	<b>168,911</b>	<b>179,084</b>	<b>175,517</b>	<b>174,962</b>	<b>168,914</b>	<b>168,130</b>	<b>169,387</b>	<b>171,237</b>	<b>170,617</b>	<b>171,994</b>	<b>179,534</b>	<b>185,895</b>
Buildings . . . . .	74,017	76,475	76,946	77,075	75,114	77,152	76,490	78,764	78,684	79,978	80,188	81,004
Housing and redevelopment . . . . .	5,167	5,232	5,673	5,753	6,154	5,547	5,669	6,101	5,803	5,678	5,176	5,359
Industrial . . . . .	861	923	1,015	920	1,022	848	1,024	891	989	640	877	986
Educational . . . . .	38,253	38,832	38,681	40,077	38,790	40,536	38,521	39,545	40,157	40,448	41,084	41,628
Hospital . . . . .	3,824	4,524	3,730	3,426	3,878	3,912	4,067	3,995	4,025	4,035	4,101	4,079
Other <sup>3</sup> . . . . .	25,912	26,965	27,847	26,899	25,271	26,308	27,208	28,232	27,709	29,176	28,949	28,952
Highways and streets . . . . .	54,199	59,843	56,515	55,809	53,647	50,074	51,896	51,542	52,432	50,646	56,547	60,218
Military facilities . . . . .	1,952	2,587	2,157	2,268	2,124	2,140	2,268	1,646	1,932	2,114	1,944	2,332
Conservation and development . . . . .	5,676	6,164	6,045	5,635	5,050	5,814	5,598	6,373	6,145	5,941	6,585	7,001
Other public construction . . . . .	33,067	34,015	33,854	34,176	32,980	32,950	33,135	32,912	31,425	33,315	34,270	35,340
Sewer systems . . . . .	11,503	11,216	11,485	11,172	11,509	11,359	11,306	10,857	10,447	10,885	10,925	11,740
Water supply facilities . . . . .	7,542	8,010	8,280	7,548	7,452	7,641	7,933	7,791	7,592	7,202	7,191	7,255
Miscellaneous public <sup>4</sup> . . . . .	14,021	14,788	14,089	15,456	14,018	13,950	13,896	14,264	13,386	15,228	16,154	16,346

NA Not available, but estimates are included in total.

<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 5a. Monthly Value of Construction Put in Place: May 1998-May 2000—Seasonally Adjusted Annual Rate in 1996 Dollars**

[Millions of dollars]

Period	Total construction	Private construction																All other private <sup>5</sup>	
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings									Public utilities <sup>4</sup>		
			Total <sup>2</sup>	New housing units			Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>	Total	Telecommunications		
				Total	1 unit	2 units or more													
1998: May <sup>f</sup> . . . . .	659,146	514,646	292,347	207,326	184,895	22,432	174,803	37,464	38,599	12,486	49,360	5,507	9,796	12,977	8,614	(NA)	13,510	2,430	
June <sup>f</sup> . . . . .	687,901	533,914	294,600	210,202	187,774	22,427	181,479	38,545	41,086	13,884	51,130	6,000	8,708	13,159	8,966	(NA)	12,912	2,991	
July <sup>f</sup> . . . . .	675,642	522,617	298,283	214,133	190,585	23,549	177,371	37,130	38,782	13,926	51,154	6,178	7,944	13,120	9,135	(NA)	12,717	2,317	
August <sup>f</sup> . . . . .	675,971	525,559	300,434	214,152	192,372	21,781	177,636	38,903	37,605	14,736	49,476	6,241	8,357	12,915	9,402	(NA)	12,910	2,426	
September <sup>f</sup> . . . . .	679,101	526,452	304,231	217,482	194,253	23,230	176,460	37,980	38,179	15,408	48,295	6,095	8,856	12,849	8,798	(NA)	13,134	2,401	
October <sup>f</sup> . . . . .	678,737	528,731	305,731	219,477	195,597	23,881	179,719	37,334	41,174	15,433	49,841	6,215	8,329	12,332	9,061	(NA)	13,682	2,250	
November <sup>f</sup> . . . . .	682,952	532,445	307,741	220,892	197,452	23,440	182,250	37,355	41,954	15,139	51,148	6,533	8,750	12,473	8,899	(NA)	12,861	2,756	
December <sup>f</sup> . . . . .	687,453	534,403	310,232	222,708	199,374	23,334	182,653	35,968	42,773	14,696	51,335	6,442	9,388	12,873	9,179	(NA)	12,627	2,507	
1999: January <sup>f</sup> . . . . .	701,368	544,635	313,484	223,939	199,376	24,562	180,791	35,115	42,246	16,026	50,180	7,185	8,103	12,328	9,608	(NA)	13,513	2,301	
February <sup>f</sup> . . . . .	715,528	549,511	314,680	225,867	200,718	25,149	183,122	34,085	43,155	16,510	51,420	6,927	8,352	12,812	9,862	(NA)	13,795	2,491	
March <sup>f</sup> . . . . .	714,481	552,543	318,467	228,467	203,028	25,440	181,941	34,407	41,844	15,607	52,528	6,674	8,633	12,455	9,794	(NA)	16,211	2,693	
April <sup>f</sup> . . . . .	701,320	540,570	317,846	227,561	202,569	24,992	177,154	32,219	40,840	14,758	51,679	6,857	9,282	12,050	9,468	(NA)	15,907	3,092	
May <sup>f</sup> . . . . .	691,411	537,192	318,432	227,225	202,914	24,312	176,027	31,754	40,915	14,689	51,911	6,629	8,349	12,152	9,628	(NA)	14,065	2,843	
June <sup>f</sup> . . . . .	684,295	531,889	317,468	225,968	201,385	24,583	172,754	31,236	41,163	13,357	50,779	6,973	8,732	11,733	8,782	(NA)	13,948	2,774	
July <sup>f</sup> . . . . .	686,711	533,081	314,453	224,228	199,558	24,669	174,201	32,405	40,655	14,174	50,661	6,925	8,589	11,899	8,893	(NA)	15,709	2,764	
August <sup>f</sup> . . . . .	681,219	526,376	313,589	223,751	198,987	24,763	170,211	30,498	42,024	13,212	48,693	6,696	8,425	11,889	8,772	(NA)	15,430	2,515	
September <sup>f</sup> . . . . .	678,934	524,618	312,885	223,942	199,153	24,789	170,088	29,089	43,169	12,771	49,296	6,189	8,396	12,112	9,066	(NA)	14,640	2,509	
October <sup>f</sup> . . . . .	679,390	524,712	313,872	223,896	199,860	24,036	169,437	27,747	42,557	12,990	49,421	6,787	8,878	12,353	8,703	(NA)	15,204	2,348	
November <sup>f</sup> . . . . .	693,806	533,077	315,941	226,612	202,266	24,346	173,734	28,384	40,822	13,836	53,637	6,384	9,354	12,307	9,010	(NA)	15,229	2,742	
December <sup>f</sup> . . . . .	705,174	539,263	318,704	231,170	206,409	24,761	175,166	29,177	40,547	13,902	53,477	6,577	9,940	12,110	9,435	(NA)	16,901	3,090	
2000: January <sup>f</sup> . . . . .	705,152	545,064	323,714	235,250	209,959	25,291	176,812	29,648	42,047	15,015	52,242	6,603	9,615	12,433	9,211	(NA)	19,079	2,260	
February <sup>f</sup> . . . . .	711,613	556,969	326,612	237,995	213,221	24,774	187,881	33,599	43,282	13,922	57,363	6,939	10,298	12,475	10,002	(NA)	15,762	2,805	
March <sup>f</sup> . . . . .	721,468	562,076	327,857	238,464	212,365	26,099	189,604	33,939	45,727	14,937	55,168	7,206	10,241	12,944	9,442	(NA)	17,555	2,825	
April <sup>f</sup> . . . . .	711,480	557,829	325,520	236,672	211,033	25,639	189,206	33,339	47,227	15,032	54,300	6,978	10,253	13,221	8,858	(NA)	17,203	2,498	
May <sup>p</sup> . . . . .	711,003	561,851	323,396	234,379	209,518	24,861	195,619	36,774	46,344	15,275	55,648	6,809	11,106	13,993	9,670	(NA)	(NA)	2,520	
<b>PERCENT CHANGE</b>																			
April 2000- May 2000 . . . . .	(Z)	1	-1	-1	-1	-3	3	10	-2	2	2	-2	8	6	9	(NA)	(NA)	1	

See footnotes at end of table.

Table 5a. **Monthly Value of Construction Put in Place: May 1998-May 2000—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.**

[Millions of dollars]

Period	Public construction												
	Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
1998: May <sup>f</sup> . . . . .	144,500	66,894	4,637	927	33,650	3,853	23,827	43,624	2,237	4,913	9,025	6,283	11,525
June <sup>f</sup> . . . . .	153,986	69,579	5,098	843	34,880	3,540	25,219	47,729	2,439	5,486	9,432	6,013	13,308
July <sup>f</sup> . . . . .	153,024	71,110	5,698	986	34,985	3,422	26,018	45,052	3,045	5,161	9,995	6,368	12,294
August <sup>f</sup> . . . . .	150,412	68,539	4,945	1,022	33,353	3,488	25,731	46,096	2,609	5,011	9,769	6,426	11,961
September <sup>f</sup> . . . . .	152,649	68,697	4,564	903	33,957	3,697	25,575	46,644	1,961	5,652	9,821	7,008	12,866
October <sup>f</sup> . . . . .	150,006	67,200	4,642	725	33,005	3,638	25,189	47,326	2,127	4,875	10,198	7,021	11,259
November <sup>f</sup> . . . . .	150,507	67,343	4,881	1,029	33,197	3,282	24,953	45,696	2,046	5,234	10,742	7,050	12,397
December <sup>f</sup> . . . . .	153,050	68,892	4,905	860	34,737	3,198	25,191	45,604	2,100	5,146	10,842	7,511	12,955
1999: January <sup>f</sup> . . . . .	156,733	67,467	4,762	784	34,839	3,483	23,599	50,701	1,802	5,421	10,987	7,102	13,253
February <sup>f</sup> . . . . .	166,017	69,584	4,818	839	35,302	4,113	24,514	55,980	2,384	5,876	10,693	7,536	13,964
March <sup>f</sup> . . . . .	161,938	69,710	5,209	919	35,005	3,376	25,201	52,621	1,981	5,735	10,897	7,753	13,242
April <sup>f</sup> . . . . .	160,750	69,628	5,258	830	36,170	3,092	24,277	51,628	2,073	5,316	10,540	7,121	14,445
May <sup>f</sup> . . . . .	154,219	67,619	5,605	919	34,883	3,487	22,725	49,172	1,927	4,724	10,766	7,031	12,980
June <sup>f</sup> . . . . .	152,406	69,014	5,025	758	36,225	3,496	23,510	45,522	1,928	5,393	10,537	7,202	12,810
July <sup>f</sup> . . . . .	153,630	68,288	5,111	914	34,363	3,628	24,271	47,308	2,045	5,202	10,507	7,484	12,796
August <sup>f</sup> . . . . .	154,842	70,143	5,496	792	35,182	3,555	25,117	46,856	1,481	5,901	10,053	7,323	13,086
September <sup>f</sup> . . . . .	154,315	70,064	5,223	880	35,726	3,581	24,653	47,709	1,739	5,695	9,682	7,135	12,292
October <sup>f</sup> . . . . .	154,678	70,845	5,093	567	35,795	3,571	25,820	45,710	1,889	5,496	10,070	6,750	13,919
November <sup>f</sup> . . . . .	160,729	70,653	4,621	772	36,166	3,610	25,484	50,760	1,728	6,080	10,088	6,721	14,699
December <sup>f</sup> . . . . .	165,911	71,123	4,768	865	36,516	3,578	25,396	53,862	2,066	6,452	10,820	6,755	14,833
2000: January <sup>f</sup> . . . . .	160,088	63,764	4,705	1,094	28,610	3,638	25,718	56,629	1,574	5,709	10,274	7,359	14,778
February <sup>f</sup> . . . . .	154,643	64,979	4,461	1,105	29,319	3,579	26,515	47,282	2,651	6,353	10,490	7,775	15,114
March <sup>f</sup> . . . . .	159,392	64,319	5,009	936	29,202	3,326	25,845	52,591	1,980	5,904	10,461	7,108	17,029
April <sup>f</sup> . . . . .	153,651	65,186	5,283	1,009	28,841	4,196	25,857	48,989	1,913	5,267	11,516	7,099	13,682
May <sup>p</sup> . . . . .	149,151	65,243	5,047	933	29,560	4,207	25,496	45,649	1,979	4,858	10,355	7,033	14,035
<b>PERCENT CHANGE</b>													
April 2000- May 2000 . . . . .	-3	(Z)	-4	-8	2	(Z)	-1	-7	3	-8	-10	-1	3

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 5b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996**  
**Dollars**

[Millions of dollars]

Type of construction	1997											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> .....	<b>630,158</b>	<b>636,368</b>	<b>631,544</b>	<b>633,410</b>	<b>634,192</b>	<b>631,791</b>	<b>639,889</b>	<b>639,024</b>	<b>639,561</b>	<b>642,661</b>	<b>632,827</b>	<b>636,139</b>
<b>Private construction</b> .....	<b>485,194</b>	<b>485,424</b>	<b>477,623</b>	<b>483,154</b>	<b>484,691</b>	<b>482,305</b>	<b>489,368</b>	<b>488,802</b>	<b>490,248</b>	<b>493,010</b>	<b>485,984</b>	<b>489,058</b>
Residential buildings .....	278,989	283,640	282,368	283,401	284,156	280,188	279,042	278,204	278,724	281,247	280,462	281,652
New housing units .....	186,949	192,183	191,737	192,580	194,390	191,256	190,588	191,196	192,602	195,293	194,030	195,897
1 unit .....	166,897	169,234	170,124	170,806	170,933	169,256	169,453	169,492	170,499	171,305	171,450	172,542
2 units or more .....	20,051	22,949	21,613	21,774	23,456	22,001	21,135	21,704	22,104	23,988	22,579	23,355
Improvements .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings .....	167,046	169,396	161,914	162,259	162,456	163,823	170,725	170,297	169,570	168,881	166,325	168,927
Industrial .....	36,059	36,491	32,891	33,989	33,867	34,715	37,118	36,246	36,417	35,936	34,914	36,050
Office .....	31,031	33,208	30,728	29,304	29,433	31,912	34,303	34,394	34,258	35,863	35,746	36,469
Hotels, motels .....	12,041	12,274	12,177	12,345	13,055	12,912	12,800	12,766	12,063	12,472	12,314	12,184
Other commercial .....	53,184	52,382	50,531	50,021	50,123	49,374	51,193	50,686	49,401	48,268	47,303	47,978
Religious .....	4,919	5,119	5,510	5,580	5,739	5,366	5,322	5,410	5,699	5,914	6,021	6,031
Educational .....	7,699	7,609	7,101	8,277	8,141	8,115	8,380	8,682	9,119	9,128	8,893	9,074
Hospital and institutional .....	13,379	13,542	13,830	13,744	12,721	12,718	12,625	13,118	13,568	12,798	12,645	12,139
Miscellaneous <sup>1</sup> .....	8,733	8,772	9,146	8,999	9,376	8,712	8,984	8,995	9,046	8,502	8,488	9,003
Farm nonresidential .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications .....	11,815	11,777	11,551	12,333	11,813	12,112	12,770	11,970	13,012	12,436	12,075	12,094
Railroads .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> .....	2,066	2,061	2,138	2,096	2,069	2,105	2,204	2,318	2,297	2,539	2,469	2,004
<b>Public construction</b> .....	<b>144,964</b>	<b>150,944</b>	<b>153,921</b>	<b>150,256</b>	<b>149,501</b>	<b>149,486</b>	<b>150,521</b>	<b>150,222</b>	<b>149,313</b>	<b>149,651</b>	<b>146,843</b>	<b>147,081</b>
Buildings .....	68,586	70,770	71,335	70,921	68,076	68,976	69,043	68,305	69,350	71,342	67,746	67,784
Housing and redevelopment .....	5,222	5,524	5,283	5,318	5,467	4,905	5,044	4,848	4,750	5,576	4,832	4,366
Industrial .....	1,101	1,037	1,054	1,372	844	1,085	1,065	958	852	710	778	762
Educational .....	31,329	32,675	33,744	33,578	33,135	33,434	33,073	33,068	32,739	34,524	32,370	33,808
Hospital .....	5,187	5,267	4,995	5,306	4,643	5,026	5,000	4,947	5,194	5,173	4,820	4,027
Other <sup>3</sup> .....	25,747	26,266	26,259	25,346	23,987	24,526	24,861	24,484	25,815	25,358	24,945	24,822
Highways and streets .....	39,398	41,048	41,972	42,663	42,510	43,265	43,612	43,814	42,453	40,448	44,322	43,079
Military facilities .....	2,599	2,471	2,143	2,283	2,467	2,494	2,645	2,738	2,456	2,740	2,554	2,074
Conservation and development .....	6,120	5,694	6,084	5,330	5,416	5,034	5,251	5,449	6,014	5,090	4,776	5,883
Other public construction .....	28,261	30,962	32,388	29,058	31,033	29,718	29,970	29,916	29,040	30,032	27,445	28,259
Sewer systems .....	10,103	10,877	10,899	10,588	11,043	10,571	10,111	9,606	9,720	9,298	9,096	8,949
Water supply facilities .....	6,624	6,882	7,572	6,292	6,178	5,993	6,074	5,874	6,213	6,031	6,058	5,981
Miscellaneous public <sup>4</sup> .....	11,533	13,203	13,917	12,179	13,812	13,154	13,784	14,435	13,107	14,703	12,291	13,329

See footnotes at end of table.

Table 5b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996**  
**Dollars—Con.**

[Millions of dollars]

Type of construction	1998											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>643,921</b>	<b>646,280</b>	<b>653,445</b>	<b>665,328</b>	<b>659,146</b>	<b>687,901</b>	<b>675,642</b>	<b>675,971</b>	<b>679,101</b>	<b>678,737</b>	<b>682,952</b>	<b>687,453</b>
<b>Private construction</b> . . . . .	<b>496,342</b>	<b>498,551</b>	<b>505,550</b>	<b>516,869</b>	<b>514,646</b>	<b>533,914</b>	<b>522,617</b>	<b>525,559</b>	<b>526,452</b>	<b>528,731</b>	<b>532,445</b>	<b>534,403</b>
Residential buildings . . . . .	284,828	287,990	290,477	293,508	292,347	294,600	298,283	300,434	304,231	305,731	307,741	310,232
New housing units . . . . .	198,452	201,670	204,275	208,328	207,326	210,202	214,133	214,152	217,482	219,477	220,892	222,708
1 unit . . . . .	174,213	177,471	180,654	184,564	184,895	187,774	190,585	192,372	194,253	195,597	197,452	199,374
2 units or more . . . . .	24,239	24,199	23,622	23,764	22,432	22,427	23,549	21,781	23,230	23,881	23,440	23,334
Improvements . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	172,515	172,474	175,512	178,422	174,803	181,479	177,371	177,636	176,460	179,719	182,250	182,653
Industrial . . . . .	36,779	37,098	39,757	38,295	37,464	38,545	37,130	38,903	37,980	37,334	37,355	35,968
Office . . . . .	38,304	37,688	37,356	38,499	38,599	41,086	38,782	37,605	38,179	41,174	41,954	42,773
Hotels, motels . . . . .	12,266	12,014	12,086	12,913	12,486	13,884	13,926	14,736	15,408	15,433	15,139	14,696
Other commercial . . . . .	48,537	48,247	49,851	50,336	49,360	51,130	51,154	49,476	48,295	49,841	51,148	51,335
Religious . . . . .	6,160	6,386	5,940	5,794	5,507	6,000	6,178	6,241	6,095	6,215	6,533	6,442
Educational . . . . .	9,421	9,827	9,824	10,019	9,796	8,708	7,944	8,357	8,856	8,329	8,750	9,388
Hospital and institutional . . . . .	12,629	12,783	12,780	13,336	12,977	13,159	13,120	12,915	12,849	12,332	12,473	12,873
Miscellaneous <sup>1</sup> . . . . .	8,419	8,432	7,918	9,231	8,614	8,966	9,135	9,402	8,798	9,061	8,899	9,179
Farm nonresidential . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	12,176	13,194	13,868	12,648	13,510	12,912	12,717	12,910	13,134	13,682	12,861	12,627
Railroads . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,488	2,489	2,396	2,368	2,430	2,991	2,317	2,426	2,401	2,250	2,756	2,507
<b>Public construction</b> . . . . .	<b>147,578</b>	<b>147,729</b>	<b>147,895</b>	<b>148,459</b>	<b>144,500</b>	<b>153,986</b>	<b>153,024</b>	<b>150,412</b>	<b>152,649</b>	<b>150,006</b>	<b>150,507</b>	<b>153,050</b>
Buildings . . . . .	67,747	68,116	67,402	68,072	66,894	69,579	71,110	68,539	68,697	67,200	67,343	68,892
Housing and redevelopment . . . . .	4,490	4,612	4,818	4,908	4,637	5,098	5,698	4,945	4,564	4,642	4,881	4,905
Industrial . . . . .	921	993	1,143	977	927	843	986	1,022	903	725	1,029	860
Educational . . . . .	33,280	33,416	32,203	33,684	33,650	34,880	34,985	33,353	33,957	33,005	33,197	34,737
Hospital . . . . .	4,041	3,808	4,398	3,386	3,853	3,540	3,422	3,488	3,697	3,638	3,282	3,198
Other <sup>3</sup> . . . . .	25,015	25,289	24,840	25,117	23,827	25,219	26,018	25,731	25,575	25,189	24,953	25,191
Highways and streets . . . . .	44,364	44,808	45,990	46,247	43,624	47,729	45,052	46,096	46,644	47,326	45,696	45,604
Military facilities . . . . .	2,374	2,642	2,593	2,459	2,237	2,439	3,045	2,609	1,961	2,127	2,046	2,100
Conservation and development . . . . .	4,958	5,929	5,314	4,702	4,913	5,486	5,161	5,011	5,652	4,875	5,234	5,146
Other public construction . . . . .	28,137	26,233	26,596	26,978	26,833	28,753	28,657	28,156	29,695	28,477	30,189	31,307
Sewer systems . . . . .	9,016	9,137	9,228	9,191	9,025	9,432	9,995	9,769	9,821	10,198	10,742	10,842
Water supply facilities . . . . .	6,150	6,138	6,035	6,319	6,283	6,013	6,368	6,426	7,008	7,021	7,050	7,511
Miscellaneous public <sup>4</sup> . . . . .	12,971	10,958	11,333	11,468	11,525	13,308	12,294	11,961	12,866	11,259	12,397	12,955

See footnotes at end of table.

Table 5b. **Monthly Value of Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996**  
**Dollars—Con.**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>701,368</b>	<b>715,528</b>	<b>714,481</b>	<b>701,320</b>	<b>691,411</b>	<b>684,295</b>	<b>686,711</b>	<b>681,219</b>	<b>678,934</b>	<b>679,390</b>	<b>693,806</b>	<b>705,174</b>
<b>Private construction</b> . . . . .	<b>544,635</b>	<b>549,511</b>	<b>552,543</b>	<b>540,570</b>	<b>537,192</b>	<b>531,889</b>	<b>533,081</b>	<b>526,376</b>	<b>524,618</b>	<b>524,712</b>	<b>533,077</b>	<b>539,263</b>
Residential buildings . . . . .	313,484	314,680	318,467	317,846	318,432	317,468	314,453	313,589	312,885	313,872	315,941	318,704
New housing units . . . . .	223,939	225,867	228,467	227,561	227,225	225,968	224,228	223,751	223,942	223,896	226,612	231,170
1 unit . . . . .	199,376	200,718	203,028	202,569	202,914	201,385	199,558	198,987	199,153	199,860	202,266	206,409
2 units or more . . . . .	24,562	25,149	25,440	24,992	24,312	24,583	24,669	24,763	24,789	24,036	24,346	24,761
Improvements . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	180,791	183,122	181,941	177,154	176,027	172,754	174,201	170,211	170,088	169,437	173,734	175,166
Industrial . . . . .	35,115	34,085	34,407	32,219	31,754	31,236	32,405	30,498	29,089	27,747	28,384	29,177
Office . . . . .	42,246	43,155	41,844	40,840	40,915	41,163	40,655	42,024	43,169	42,557	40,822	40,547
Hotels, motels . . . . .	16,026	16,510	15,607	14,758	14,689	13,357	14,174	13,212	12,771	12,990	13,836	13,902
Other commercial . . . . .	50,180	51,420	52,528	51,679	51,911	50,779	50,661	48,693	49,296	49,421	53,637	53,477
Religious . . . . .	7,185	6,927	6,674	6,857	6,629	6,973	6,925	6,696	6,189	6,787	6,384	6,577
Educational . . . . .	8,103	8,352	8,633	9,282	8,349	8,732	8,589	8,425	8,396	8,878	9,354	9,940
Hospital and institutional . . . . .	12,328	12,812	12,455	12,050	12,152	11,733	11,899	11,889	12,112	12,353	12,307	12,110
Miscellaneous <sup>1</sup> . . . . .	9,608	9,862	9,794	9,468	9,628	8,782	8,893	8,772	9,066	8,703	9,010	9,435
Farm nonresidential . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	13,513	13,795	16,211	15,907	14,065	13,948	15,709	15,430	14,640	15,204	15,229	16,901
Railroads . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,301	2,491	2,693	3,092	2,843	2,774	2,764	2,515	2,509	2,348	2,742	3,090
<b>Public construction</b> . . . . .	<b>156,733</b>	<b>166,017</b>	<b>161,938</b>	<b>160,750</b>	<b>154,219</b>	<b>152,406</b>	<b>153,630</b>	<b>154,842</b>	<b>154,315</b>	<b>154,678</b>	<b>160,729</b>	<b>165,911</b>
Buildings . . . . .	67,467	69,584	69,710	69,628	67,619	69,014	68,288	70,143	70,064	70,845	70,653	71,123
Housing and redevelopment . . . . .	4,762	4,818	5,209	5,258	5,605	5,025	5,111	5,496	5,223	5,093	4,621	4,768
Industrial . . . . .	784	839	919	830	919	758	914	792	880	567	772	865
Educational . . . . .	34,839	35,302	35,005	36,170	34,883	36,225	34,363	35,182	35,726	35,795	36,166	36,516
Hospital . . . . .	3,483	4,113	3,376	3,092	3,487	3,496	3,628	3,555	3,581	3,571	3,610	3,578
Other <sup>3</sup> . . . . .	23,599	24,514	25,201	24,277	22,725	23,510	24,271	25,117	24,653	25,820	25,484	25,396
Highways and streets . . . . .	50,701	55,980	52,621	51,628	49,172	45,522	47,308	46,856	47,709	45,710	50,760	53,862
Military facilities . . . . .	1,802	2,384	1,981	2,073	1,927	1,928	2,045	1,481	1,739	1,889	1,728	2,066
Conservation and development . . . . .	5,421	5,876	5,735	5,316	4,724	5,393	5,202	5,901	5,695	5,496	6,080	6,452
Other public construction . . . . .	31,341	32,192	31,891	32,105	30,777	30,549	30,787	30,462	29,109	30,739	31,508	32,408
Sewer systems . . . . .	10,987	10,693	10,897	10,540	10,766	10,537	10,507	10,053	9,682	10,070	10,088	10,820
Water supply facilities . . . . .	7,102	7,536	7,753	7,121	7,031	7,202	7,484	7,323	7,135	6,750	6,721	6,755
Miscellaneous public <sup>4</sup> . . . . .	13,253	13,964	13,242	14,445	12,980	12,810	12,796	13,086	12,292	13,919	14,699	14,833

NA Not available, but estimates are included in total.

<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 6a. **Monthly Value of Construction Put in Place: May 1998-May 2000—Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Period	Total construction	Private construction															All other private <sup>5</sup>		
		Total <sup>1</sup>	Residential buildings					Nonresidential buildings								Public utilities <sup>4</sup>			
			Total <sup>2</sup>	New housing units				Total	Industrial	Office	Hotels, motels	Other commercial	Religious	Educational	Hospital and institutional	Miscellaneous <sup>3</sup>		Total	Telecommunications
				Total	1 unit	2 units or more													
<b>YEAR TO DATE</b>																			
May 1999	261,106	205,630	117,562	85,275	75,387	9,888	70,563	13,122	16,902	6,255	19,534	2,612	3,252	5,027	3,860	(NA)	5,675	999	
May 2000	265,594	211,188	121,099	89,238	79,161	10,077	74,109	13,196	18,346	6,050	20,831	2,672	3,932	5,314	3,768	(NA)	(NA)	947	
Percent change	2	3	3	5	5	2	5	1	9	-3	7	2	21	6	-2	(NA)	(NA)	-5	
<b>MONTHLY DATA</b>																			
1998: May <sup>f</sup>	56,085	44,099	25,599	17,600	15,639	1,961	14,641	3,085	3,326	1,030	4,126	435	835	1,085	720	(NA)	1,080	197	
June <sup>f</sup>	62,678	48,346	27,415	18,849	16,853	1,996	15,690	3,254	3,506	1,231	4,504	490	847	1,089	769	(NA)	1,158	255	
July <sup>f</sup>	63,090	48,194	28,329	19,914	17,867	2,047	15,267	3,100	3,287	1,195	4,553	504	794	1,058	776	(NA)	1,121	211	
August <sup>f</sup>	64,970	49,515	28,945	20,202	18,243	1,958	15,764	3,378	3,228	1,260	4,597	560	829	1,106	805	(NA)	1,108	236	
September <sup>f</sup>	64,427	48,563	28,316	20,299	18,276	2,023	15,785	3,387	3,328	1,303	4,536	568	787	1,107	768	(NA)	1,139	223	
October <sup>f</sup>	62,378	47,911	28,028	20,028	17,946	2,082	15,978	3,351	3,538	1,325	4,606	590	686	1,075	808	(NA)	1,250	219	
November <sup>f</sup>	58,549	45,845	26,668	19,366	17,409	1,957	15,605	3,234	3,556	1,241	4,437	592	698	1,080	767	(NA)	1,101	235	
December <sup>f</sup>	52,219	41,034	22,802	16,697	14,853	1,843	14,937	3,147	3,457	1,234	4,030	556	683	1,079	750	(NA)	1,141	203	
1999: January <sup>f</sup>	46,821	37,191	20,764	15,421	13,624	1,797	13,300	2,628	3,225	1,191	3,513	517	557	960	709	(NA)	886	160	
February <sup>f</sup>	46,802	36,828	19,675	14,753	12,896	1,857	13,655	2,568	3,341	1,284	3,629	502	587	1,007	737	(NA)	961	163	
March <sup>f</sup>	52,826	41,962	23,642	17,552	15,515	2,037	14,360	2,712	3,400	1,298	3,953	517	653	1,030	797	(NA)	1,370	203	
April <sup>f</sup>	55,761	43,594	25,591	18,263	16,189	2,074	14,485	2,610	3,417	1,253	4,096	539	743	1,015	813	(NA)	1,348	242	
May <sup>f</sup>	58,896	46,055	27,890	19,286	17,163	2,123	14,763	2,604	3,519	1,229	4,343	537	712	1,015	804	(NA)	1,110	231	
June <sup>f</sup>	62,497	48,187	29,567	20,264	18,074	2,190	14,922	2,639	3,523	1,162	4,460	567	846	974	751	(NA)	1,238	236	
July <sup>f</sup>	63,916	49,074	29,825	20,803	18,659	2,144	14,992	2,706	3,418	1,220	4,509	568	853	962	756	(NA)	1,344	252	
August <sup>f</sup>	65,516	49,602	30,159	21,056	18,837	2,218	15,175	2,648	3,639	1,146	4,528	608	837	1,017	752	(NA)	1,387	247	
September <sup>f</sup>	64,220	48,283	29,058	20,846	18,687	2,159	15,234	2,594	3,763	1,097	4,617	582	747	1,044	790	(NA)	1,268	233	
October <sup>f</sup>	62,094	47,403	28,752	20,407	18,304	2,103	14,981	2,497	3,635	1,078	4,559	622	735	1,079	777	(NA)	1,329	230	
November <sup>f</sup>	59,627	46,044	27,368	19,864	17,833	2,031	14,939	2,460	3,483	1,155	4,657	594	746	1,067	776	(NA)	1,367	232	
December <sup>f</sup>	53,499	41,402	23,465	17,381	15,429	1,952	14,242	2,548	3,281	1,148	4,202	548	726	1,015	774	(NA)	1,532	251	
2000: January <sup>f</sup>	47,201	37,335	21,519	16,241	14,382	1,859	13,013	2,206	3,210	1,141	3,653	491	663	967	682	(NA)	1,234	156	
February <sup>f</sup>	47,168	37,629	20,474	15,570	13,735	1,835	14,182	2,537	3,488	1,129	4,044	531	722	982	749	(NA)	1,160	181	
March <sup>f</sup>	53,765	42,916	24,408	18,352	16,264	2,088	14,994	2,701	3,731	1,242	4,161	549	772	1,071	767	(NA)	1,513	212	
April <sup>f</sup>	56,495	44,870	26,316	19,105	16,971	2,134	15,354	2,703	3,877	1,241	4,294	546	818	1,117	758	(NA)	1,339	195	
May <sup>p</sup>	60,965	48,438	28,382	19,970	17,809	2,161	16,566	3,049	4,040	1,297	4,679	555	957	1,177	812	(NA)	(NA)	203	
<b>PERCENT CHANGE</b>																			
April 2000- May 2000	8	8	8	5	5	1	8	13	4	5	9	2	17	5	7	(NA)	(NA)	4	

See footnotes at end of table.

Table 6a. **Monthly Value of Construction Put in Place: May 1998-May 2000—Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Period	Public construction												
	Total	Buildings						Highways and streets	Military facilities	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous public <sup>7</sup>
		Total	Housing and redevelopment	Industrial	Educational	Hospital	Other public buildings <sup>6</sup>						
<b>YEAR TO DATE</b>													
May 1999	55,476	25,992	2,023	341	12,774	1,391	9,462	15,112	794	2,009	3,962	2,707	4,901
May 2000	54,405	24,596	1,934	401	10,564	1,497	10,200	14,902	788	2,087	3,933	2,710	5,391
Percent change	-2	-5	-4	18	-17	8	8	-1	-1	4	-1	(Z)	10
<b>MONTHLY DATA</b>													
1998: May <sup>f</sup>	11,987	5,516	387	76	2,692	313	2,048	3,639	189	401	746	537	959
June <sup>f</sup>	14,333	6,304	441	73	3,281	311	2,197	4,773	212	473	854	526	1,192
July <sup>f</sup>	14,897	6,626	485	87	3,519	295	2,241	4,926	262	453	898	582	1,150
August <sup>f</sup>	15,455	6,573	410	82	3,535	283	2,264	5,482	225	470	914	587	1,204
September <sup>f</sup>	15,864	6,473	430	100	3,243	360	2,340	5,508	210	723	959	642	1,350
October <sup>f</sup>	14,467	5,907	420	53	2,885	309	2,239	5,348	146	352	982	694	1,037
November <sup>f</sup>	12,704	5,544	419	84	2,636	272	2,133	3,911	175	439	947	637	1,051
December <sup>f</sup>	11,185	5,342	403	73	2,594	266	2,006	2,877	183	403	830	585	964
1999: January <sup>f</sup>	9,630	4,817	357	58	2,395	265	1,741	2,239	135	367	741	473	858
February <sup>f</sup>	9,974	4,915	356	63	2,365	312	1,819	2,384	161	403	693	512	906
March <sup>f</sup>	10,864	5,188	409	77	2,468	276	1,958	2,793	172	435	808	549	919
April <sup>f</sup>	12,167	5,502	432	68	2,755	256	1,990	3,549	163	418	827	571	1,137
May <sup>f</sup>	12,841	5,570	469	75	2,791	282	1,954	4,147	163	386	893	602	1,081
June <sup>f</sup>	14,310	6,257	434	65	3,405	307	2,046	4,696	168	460	954	630	1,145
July <sup>f</sup>	14,842	6,371	432	80	3,462	308	2,089	5,026	176	457	933	683	1,197
August <sup>f</sup>	15,915	6,756	463	62	3,731	291	2,209	5,545	128	550	954	670	1,312
September <sup>f</sup>	15,937	6,587	485	99	3,406	337	2,260	5,586	186	719	944	655	1,259
October <sup>f</sup>	14,691	6,194	455	40	3,123	309	2,267	5,070	129	391	957	666	1,284
November <sup>f</sup>	13,583	5,818	403	63	2,875	303	2,174	4,353	148	512	900	606	1,246
December <sup>f</sup>	12,097	5,522	393	77	2,721	301	2,031	3,438	180	504	835	526	1,092
2000: January <sup>f</sup>	9,865	4,566	353	81	1,965	274	1,894	2,638	119	389	693	500	960
February <sup>f</sup>	9,539	4,634	332	84	1,977	270	1,971	2,084	180	437	690	529	985
March <sup>f</sup>	10,849	4,817	395	80	2,056	270	2,016	2,928	171	449	779	506	1,200
April <sup>f</sup>	11,625	5,151	426	79	2,194	331	2,121	3,372	150	414	890	570	1,079
May <sup>p</sup>	12,527	5,428	428	77	2,372	352	2,198	3,880	168	398	881	605	1,167
<b>PERCENT CHANGE</b>													
April 2000- May 2000	8	5	(Z)	-3	8	6	4	15	12	-4	-1	6	8

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

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

Table 6b. **Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996**  
**Dollars**

[Millions of dollars]

Type of construction	1997												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>635,765</b>	<b>42,373</b>	<b>41,655</b>	<b>46,143</b>	<b>50,319</b>	<b>54,272</b>	<b>57,585</b>	<b>59,700</b>	<b>61,411</b>	<b>60,624</b>	<b>59,291</b>	<b>54,110</b>	<b>48,283</b>
<b>Private construction</b> . . . . .	<b>486,273</b>	<b>33,166</b>	<b>32,281</b>	<b>35,790</b>	<b>38,925</b>	<b>41,753</b>	<b>43,715</b>	<b>45,084</b>	<b>46,050</b>	<b>45,344</b>	<b>44,878</b>	<b>41,779</b>	<b>37,509</b>
Residential buildings . . . . .	280,748	18,288	17,583	20,699	22,765	24,923	26,148	26,553	26,906	26,032	25,891	24,300	20,661
New housing units . . . . .	192,386	12,811	12,500	14,589	15,393	16,500	17,136	17,707	18,089	18,065	17,904	17,032	14,658
1 unit . . . . .	170,154	11,349	10,817	12,859	13,593	14,444	15,177	15,872	16,130	16,141	15,817	15,145	12,811
2 units or more . . . . .	22,232	1,462	1,683	1,731	1,800	2,056	1,960	1,835	1,959	1,925	2,087	1,887	1,847
Improvements . . . . .	88,362	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	166,754	12,320	12,581	12,691	13,227	13,677	14,125	14,757	15,118	15,233	15,029	14,205	13,790
Industrial . . . . .	35,411	2,698	2,743	2,593	2,753	2,800	2,930	3,099	3,147	3,244	3,222	3,017	3,163
Office . . . . .	33,058	2,418	2,574	2,456	2,462	2,561	2,694	2,904	2,952	2,986	3,105	3,009	2,939
Hotels, motels . . . . .	12,438	921	954	1,000	1,023	1,115	1,125	1,119	1,074	1,038	1,064	996	1,007
Other commercial . . . . .	49,948	3,710	3,693	3,798	3,956	4,185	4,353	4,560	4,714	4,656	4,461	4,100	3,762
Religious . . . . .	5,565	360	369	423	444	469	429	451	472	538	556	544	510
Educational . . . . .	8,375	526	535	537	659	693	791	841	861	811	753	710	659
Hospital and institutional . . . . .	13,066	1,048	1,064	1,139	1,156	1,069	1,055	1,021	1,127	1,167	1,110	1,094	1,018
Miscellaneous <sup>1</sup> . . . . .	8,892	638	650	746	775	786	748	761	770	793	757	735	732
Farm nonresidential . . . . .	3,675	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	32,884	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	12,159	842	818	902	1,021	989	1,036	1,118	1,041	1,135	1,169	997	1,090
Railroads . . . . .	4,745	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	11,122	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	3,911	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	947	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,212	147	136	160	163	169	180	201	223	213	246	212	162
<b>Public construction</b> . . . . .	<b>149,493</b>	<b>9,207</b>	<b>9,374</b>	<b>10,353</b>	<b>11,394</b>	<b>12,520</b>	<b>13,871</b>	<b>14,616</b>	<b>15,361</b>	<b>15,280</b>	<b>14,412</b>	<b>12,331</b>	<b>10,774</b>
Buildings . . . . .	69,319	4,957	4,986	5,310	5,569	5,648	6,225	6,391	6,544	6,536	6,297	5,579	5,277
Housing and redevelopment . . . . .	5,084	404	409	407	435	462	420	426	399	447	504	410	361
Industrial . . . . .	965	87	78	86	109	72	92	88	76	94	53	62	67
Educational . . . . .	33,136	2,151	2,189	2,388	2,521	2,659	3,140	3,326	3,516	3,130	3,021	2,576	2,519
Hospital . . . . .	4,970	406	399	400	437	382	435	426	401	501	448	393	340
Other <sup>3</sup> . . . . .	25,164	1,909	1,911	2,028	2,066	2,073	2,138	2,124	2,152	2,364	2,271	2,138	1,990
Highways and streets . . . . .	42,535	1,753	1,806	2,120	2,919	3,624	4,344	4,779	5,170	4,875	4,682	3,745	2,718
Military facilities . . . . .	2,466	195	166	186	180	208	217	228	236	263	188	219	181
Conservation and development . . . . .	5,541	417	387	451	423	443	436	465	516	747	394	402	460
Other public construction . . . . .	29,632	1,885	2,028	2,287	2,304	2,596	2,648	2,753	2,895	2,860	2,852	2,386	2,138
Sewer systems . . . . .	10,034	707	707	791	830	919	943	906	900	949	908	792	680
Water supply facilities . . . . .	6,275	445	468	538	504	527	523	556	536	569	597	548	466
Miscellaneous public <sup>4</sup> . . . . .	13,323	732	853	958	970	1,150	1,181	1,291	1,460	1,342	1,347	1,046	992

See footnotes at end of table.

**Table 6b. Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996  
Dollars—Con.**

[Millions of dollars]

Type of construction	1998												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>670,859</b>	<b>43,246</b>	<b>42,291</b>	<b>48,019</b>	<b>52,906</b>	<b>56,085</b>	<b>62,678</b>	<b>63,090</b>	<b>64,970</b>	<b>64,427</b>	<b>62,378</b>	<b>58,549</b>	<b>52,219</b>
<b>Private construction</b> . . . . .	<b>520,613</b>	<b>34,042</b>	<b>33,248</b>	<b>38,151</b>	<b>41,666</b>	<b>44,099</b>	<b>48,346</b>	<b>48,194</b>	<b>49,515</b>	<b>48,563</b>	<b>47,911</b>	<b>45,845</b>	<b>41,034</b>
Residential buildings . . . . .	297,886	18,777	17,932	21,457	23,619	25,599	27,415	28,329	28,945	28,316	28,028	26,668	22,802
New housing units . . . . .	212,068	13,630	13,141	15,638	16,705	17,600	18,849	19,914	20,202	20,299	20,028	19,366	16,697
1 unit . . . . .	188,785	11,861	11,358	13,745	14,734	15,639	16,853	17,867	18,243	18,276	17,946	17,409	14,853
2 units or more . . . . .	23,283	1,769	1,783	1,894	1,970	1,961	1,996	2,047	1,958	2,023	2,082	1,957	1,843
Improvements . . . . .	85,818	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	177,639	12,752	12,831	13,797	14,591	14,641	15,690	15,267	15,764	15,785	15,978	15,605	14,937
Industrial . . . . .	37,715	2,752	2,792	3,131	3,105	3,085	3,254	3,100	3,378	3,387	3,351	3,234	3,147
Office . . . . .	39,333	2,956	2,918	3,007	3,227	3,326	3,506	3,287	3,228	3,328	3,538	3,556	3,457
Hotels, motels . . . . .	13,794	945	935	1,005	1,089	1,030	1,231	1,195	1,260	1,303	1,325	1,241	1,234
Other commercial . . . . .	49,915	3,390	3,401	3,751	3,985	4,126	4,504	4,553	4,597	4,536	4,606	4,437	4,030
Religious . . . . .	6,139	457	462	459	465	435	490	504	560	568	590	592	556
Educational . . . . .	9,039	646	690	742	800	835	847	794	829	787	686	698	683
Hospital and institutional . . . . .	12,853	987	1,006	1,056	1,125	1,085	1,089	1,058	1,106	1,107	1,075	1,080	1,079
Miscellaneous <sup>1</sup> . . . . .	8,850	620	628	645	795	720	769	776	805	768	808	767	750
Farm nonresidential . . . . .	3,989	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	38,616	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	13,036	838	917	1,136	1,048	1,080	1,158	1,121	1,108	1,139	1,250	1,101	1,141
Railroads . . . . .	5,463	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	11,885	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	7,020	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	1,213	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,482	174	164	180	185	197	255	211	236	223	219	235	203
<b>Public construction</b> . . . . .	<b>150,246</b>	<b>9,204</b>	<b>9,044</b>	<b>9,868</b>	<b>11,240</b>	<b>11,987</b>	<b>14,333</b>	<b>14,897</b>	<b>15,455</b>	<b>15,864</b>	<b>14,467</b>	<b>12,704</b>	<b>11,185</b>
Buildings . . . . .	68,334	4,866	4,807	5,006	5,370	5,516	6,304	6,626	6,573	6,473	5,907	5,544	5,342
Housing and redevelopment . . . . .	4,853	342	341	373	402	387	441	485	410	430	420	419	403
Industrial . . . . .	941	71	74	90	79	76	73	87	82	100	53	84	73
Educational . . . . .	33,743	2,288	2,239	2,276	2,554	2,692	3,281	3,519	3,535	3,243	2,885	2,636	2,594
Hospital . . . . .	3,642	312	289	351	280	313	311	295	283	360	309	272	266
Other <sup>3</sup> . . . . .	25,155	1,852	1,863	1,916	2,055	2,048	2,197	2,241	2,264	2,340	2,239	2,133	2,006
Highways and streets . . . . .	45,877	1,959	1,934	2,353	3,168	3,639	4,773	4,926	5,482	5,508	5,348	3,911	2,877
Military facilities . . . . .	2,377	178	178	225	194	189	212	262	225	210	146	175	183
Conservation and development . . . . .	5,219	333	405	397	371	401	473	453	470	723	352	439	403
Other public construction . . . . .	28,439	1,867	1,720	1,887	2,137	2,242	2,571	2,630	2,706	2,951	2,714	2,636	2,379
Sewer systems . . . . .	9,743	620	593	677	722	746	854	898	914	959	982	947	830
Water supply facilities . . . . .	6,552	409	417	427	507	537	526	582	587	642	694	637	585
Miscellaneous public <sup>4</sup> . . . . .	12,145	838	709	783	908	959	1,192	1,150	1,204	1,350	1,037	1,051	964

See footnotes at end of table.

Table 6b. **Annual and Monthly Value of Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996**  
**Dollars—Con.**

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Total construction</b> . . . . .	<b>692,477</b>	<b>46,821</b>	<b>46,802</b>	<b>52,826</b>	<b>55,761</b>	<b>58,896</b>	<b>62,497</b>	<b>63,916</b>	<b>65,516</b>	<b>64,220</b>	<b>62,095</b>	<b>59,627</b>	<b>53,499</b>
<b>Private construction</b> . . . . .	<b>535,625</b>	<b>37,191</b>	<b>36,828</b>	<b>41,962</b>	<b>43,594</b>	<b>46,055</b>	<b>48,187</b>	<b>49,074</b>	<b>49,602</b>	<b>48,283</b>	<b>47,404</b>	<b>46,044</b>	<b>41,402</b>
Residential buildings . . . . .	315,757	20,764	19,675	23,642	25,591	27,890	29,567	29,825	30,159	29,058	28,752	27,368	23,465
New housing units . . . . .	225,896	15,421	14,753	17,552	18,263	19,286	20,264	20,803	21,056	20,846	20,407	19,864	17,381
1 unit . . . . .	201,210	13,624	12,896	15,515	16,189	17,163	18,074	18,659	18,837	18,687	18,304	17,833	15,429
2 units or more . . . . .	24,686	1,797	1,857	2,037	2,074	2,123	2,190	2,144	2,218	2,159	2,103	2,031	1,952
Improvements . . . . .	89,860	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nonresidential buildings . . . . .	175,048	13,300	13,655	14,360	14,485	14,763	14,922	14,992	15,175	15,234	14,981	14,939	14,242
Industrial . . . . .	31,214	2,628	2,568	2,712	2,610	2,604	2,639	2,706	2,648	2,594	2,497	2,460	2,548
Office . . . . .	41,643	3,225	3,341	3,400	3,417	3,519	3,523	3,418	3,639	3,763	3,635	3,483	3,281
Hotels, motels . . . . .	14,262	1,191	1,284	1,298	1,253	1,229	1,162	1,220	1,146	1,097	1,078	1,155	1,148
Other commercial . . . . .	51,067	3,513	3,629	3,953	4,096	4,343	4,460	4,509	4,528	4,617	4,559	4,657	4,202
Religious . . . . .	6,701	517	502	517	539	537	567	568	608	582	622	594	548
Educational . . . . .	8,743	557	587	653	743	712	846	853	837	747	735	746	726
Hospital and institutional . . . . .	12,183	960	1,007	1,030	1,015	1,015	974	962	1,017	1,044	1,079	1,067	1,015
Miscellaneous <sup>1</sup> . . . . .	9,235	709	737	797	813	804	751	756	752	790	777	776	774
Farm nonresidential . . . . .	3,977	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities . . . . .	38,166	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Telecommunications . . . . .	15,142	886	961	1,370	1,348	1,110	1,238	1,344	1,387	1,268	1,330	1,367	1,532
Railroads . . . . .	4,540	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electric light and power . . . . .	13,393	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gas . . . . .	3,690	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Petroleum pipelines . . . . .	1,401	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
All other private <sup>2</sup> . . . . .	2,678	160	163	203	242	231	236	252	247	233	230	232	251
<b>Public construction</b> . . . . .	<b>156,852</b>	<b>9,630</b>	<b>9,974</b>	<b>10,864</b>	<b>12,167</b>	<b>12,841</b>	<b>14,310</b>	<b>14,842</b>	<b>15,915</b>	<b>15,937</b>	<b>14,691</b>	<b>13,583</b>	<b>12,097</b>
Buildings . . . . .	69,497	4,817	4,915	5,188	5,502	5,570	6,257	6,371	6,756	6,587	6,194	5,818	5,522
Housing and redevelopment . . . . .	5,088	357	356	409	432	469	434	432	463	485	455	403	393
Industrial . . . . .	828	58	63	77	68	75	65	80	62	99	40	63	77
Educational . . . . .	35,497	2,395	2,365	2,468	2,755	2,791	3,405	3,462	3,731	3,406	3,123	2,875	2,721
Hospital . . . . .	3,548	265	312	276	256	282	307	308	291	337	309	303	301
Other <sup>3</sup> . . . . .	24,537	1,741	1,819	1,958	1,990	1,954	2,046	2,089	2,209	2,260	2,267	2,174	2,031
Highways and streets . . . . .	48,827	2,239	2,384	2,793	3,549	4,147	4,696	5,026	5,545	5,586	5,070	4,353	3,438
Military facilities . . . . .	1,909	135	161	172	163	163	168	176	128	186	129	148	180
Conservation and development . . . . .	5,602	367	403	435	418	386	460	457	550	719	391	512	504
Other public construction . . . . .	31,017	2,071	2,112	2,276	2,535	2,576	2,729	2,813	2,936	2,859	2,906	2,752	2,453
Sewer systems . . . . .	10,438	741	693	808	827	893	954	933	954	944	957	900	835
Water supply facilities . . . . .	7,142	473	512	549	571	602	630	683	670	655	666	606	526
Miscellaneous public <sup>4</sup> . . . . .	13,436	858	906	919	1,137	1,081	1,145	1,197	1,312	1,259	1,284	1,246	1,092

NA Not available, but estimates are included in total.

<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 7a. Monthly Value of Public Construction Put in Place: May 1998-May 2000—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>					
1998:	May <sup>f</sup> . . . . .	11,550	5,394	362	2,871	244	1,917	3,785	163	776	555	877
	June <sup>f</sup> . . . . .	13,970	6,262	421	3,519	252	2,069	4,982	199	892	545	1,090
	July <sup>f</sup> . . . . .	14,456	6,535	452	3,781	222	2,080	5,160	161	938	603	1,059
	August <sup>f</sup> . . . . .	15,247	6,578	377	3,811	219	2,172	5,787	177	960	612	1,133
	September <sup>f</sup> . . . . .	15,138	6,298	399	3,503	242	2,155	5,842	170	1,011	671	1,145
	October <sup>f</sup> . . . . .	14,570	5,960	414	3,127	245	2,174	5,683	176	1,031	731	991
	November <sup>f</sup> . . . . .	12,366	5,542	401	2,865	232	2,044	4,150	145	989	673	868
	December <sup>f</sup> . . . . .	10,782	5,327	394	2,829	241	1,864	3,055	129	866	621	785
1999:	January <sup>f</sup> . . . . .	9,405	4,884	361	2,627	209	1,687	2,381	142	776	502	721
	February <sup>f</sup> . . . . .	9,649	4,935	360	2,601	220	1,753	2,535	129	727	545	778
	March <sup>f</sup> . . . . .	10,643	5,261	408	2,726	223	1,904	2,984	127	852	586	833
	April <sup>f</sup> . . . . .	12,094	5,662	431	3,052	223	1,957	3,816	151	877	605	983
	May <sup>f</sup> . . . . .	13,026	5,768	483	3,103	247	1,936	4,497	142	954	638	1,027
	June <sup>f</sup> . . . . .	14,596	6,541	440	3,809	274	2,019	5,133	158	1,028	669	1,068
	July <sup>f</sup> . . . . .	15,152	6,657	441	3,878	260	2,079	5,480	159	1,003	724	1,129
	August <sup>f</sup> . . . . .	16,422	7,171	480	4,190	281	2,220	6,062	197	1,031	713	1,249
	September <sup>f</sup> . . . . .	16,017	6,806	493	3,828	306	2,180	6,101	196	1,019	697	1,198
	October <sup>f</sup> . . . . .	15,349	6,572	476	3,529	300	2,267	5,581	187	1,034	711	1,265
	November <sup>f</sup> . . . . .	13,930	6,150	413	3,266	302	2,169	4,821	216	975	648	1,120
	December <sup>f</sup> . . . . .	12,335	5,813	408	3,101	275	2,029	3,823	193	906	565	1,036
2000:	January <sup>f</sup> . . . . .	10,137	4,832	373	2,249	255	1,954	2,938	146	755	540	926
	February <sup>f</sup> . . . . .	9,710	4,917	347	2,267	254	2,048	2,329	174	757	577	957
	March <sup>f</sup> . . . . .	11,028	5,111	416	2,365	270	2,060	3,268	147	857	551	1,094
	April <sup>f</sup> . . . . .	12,119	5,518	451	2,525	313	2,229	3,783	142	984	625	1,068
	May <sup>p</sup> . . . . .	13,128	5,861	454	2,739	365	2,304	4,353	150	975	664	1,125
		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>
1998:	May <sup>f</sup> . . . . .	1,081	483	42	81	1	90	269	(NA)	199	254	123
	June <sup>f</sup> . . . . .	1,196	494	44	78	2	82	289	(NA)	225	294	158
	July <sup>f</sup> . . . . .	1,346	580	61	93	2	95	329	(NA)	279	312	148
	August <sup>f</sup> . . . . .	1,231	506	57	88	3	87	271	(NA)	241	316	139
	September <sup>f</sup> . . . . .	1,821	690	57	108	3	148	375	(NA)	225	592	285
	October <sup>f</sup> . . . . .	921	435	34	58	-	90	253	(NA)	157	193	107
	November <sup>f</sup> . . . . .	1,243	478	48	91	1	64	275	(NA)	189	313	241
	December <sup>f</sup> . . . . .	1,237	496	41	79	1	50	325	(NA)	198	292	233
1999:	January <sup>f</sup> . . . . .	989	400	27	64	3	82	225	(NA)	147	243	187
	February <sup>f</sup> . . . . .	1,129	466	26	69	1	123	247	(NA)	174	294	181
	March <sup>f</sup> . . . . .	1,144	465	37	85	1	82	260	(NA)	187	332	144
	April <sup>f</sup> . . . . .	1,153	428	42	76	1	60	248	(NA)	179	292	233
	May <sup>f</sup> . . . . .	1,038	420	32	83	1	67	237	(NA)	179	271	140
	June <sup>f</sup> . . . . .	1,190	453	39	73	1	71	270	(NA)	186	338	180
	July <sup>f</sup> . . . . .	1,213	479	39	89	3	86	263	(NA)	195	333	172
	August <sup>f</sup> . . . . .	1,174	416	34	70	4	46	263	(NA)	142	397	182
	September <sup>f</sup> . . . . .	1,590	592	46	112	1	73	360	(NA)	207	580	173
	October <sup>f</sup> . . . . .	978	421	32	45	-	49	295	(NA)	145	236	139
	November <sup>f</sup> . . . . .	1,236	453	38	72	-	43	301	(NA)	166	338	250
	December <sup>f</sup> . . . . .	1,222	476	33	88	1	68	287	(NA)	204	354	168
2000:	January <sup>f</sup> . . . . .	952	390	25	93	-	59	214	(NA)	135	279	135
	February <sup>f</sup> . . . . .	1,055	393	27	96	-	56	213	(NA)	205	306	137
	March <sup>f</sup> . . . . .	1,220	423	32	92	-	40	259	(NA)	194	347	240
	April <sup>f</sup> . . . . .	1,063	418	33	91	7	69	218	(NA)	171	315	138
	May <sup>p</sup> . . . . .	1,091	400	33	89	1	43	235	(NA)	191	291	180

- Less than \$0.5 million. NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>f</sup>Revised.

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

**Table 7b. Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars**

[Millions of dollars]

Type of construction	1997												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>140,795</b>	<b>8,334</b>	<b>8,558</b>	<b>9,548</b>	<b>10,680</b>	<b>11,802</b>	<b>13,189</b>	<b>13,980</b>	<b>14,755</b>	<b>14,132</b>	<b>14,057</b>	<b>11,716</b>	<b>10,045</b>
Total buildings . . . . .	65,760	4,566	4,599	4,987	5,249	5,370	5,915	6,160	6,343	6,124	6,133	5,309	5,005
Housing and redevelopment . . . . .	4,554	340	358	362	394	423	372	384	353	409	454	368	337
Educational . . . . .	34,366	2,192	2,229	2,446	2,591	2,743	3,242	3,455	3,665	3,271	3,166	2,715	2,652
Hospital . . . . .	3,901	300	287	327	376	311	341	372	339	350	354	285	258
Other <sup>1</sup> . . . . .	22,939	1,734	1,725	1,851	1,888	1,893	1,961	1,949	1,986	2,094	2,160	1,941	1,758
Highways and streets . . . . .	43,850	1,769	1,828	2,164	2,997	3,732	4,475	4,918	5,315	5,012	4,854	3,930	2,857
Conservation and development . . . . .	2,371	155	149	193	213	169	193	209	238	227	253	205	167
Other State and local construction . . . . .	28,814	1,844	1,982	2,204	2,221	2,531	2,606	2,692	2,859	2,770	2,816	2,272	2,017
Sewer systems . . . . .	10,392	724	728	823	862	952	975	938	932	984	942	825	709
Water supply facilities . . . . .	6,419	453	475	550	517	541	537	569	547	580	610	563	478
Miscellaneous nonbuilding <sup>2</sup> . . . . .	12,002	668	780	832	842	1,037	1,094	1,185	1,380	1,206	1,265	884	830
<b>Federal construction . . . . .</b>	<b>14,087</b>	<b>1,045</b>	<b>1,004</b>	<b>1,097</b>	<b>1,063</b>	<b>1,136</b>	<b>1,148</b>	<b>1,163</b>	<b>1,181</b>	<b>1,741</b>	<b>979</b>	<b>1,245</b>	<b>1,284</b>
Total buildings . . . . .	6,107	484	482	457	473	454	512	476	478	709	462	567	554
Housing . . . . .	677	71	58	52	50	49	59	55	58	55	71	60	39
Industrial . . . . .	999	89	79	88	112	74	95	92	80	98	56	66	71
Educational . . . . .	19	-	2	4	1	1	2	1	2	3	-	1	3
Hospital . . . . .	1,251	113	120	83	73	84	109	70	80	174	116	129	101
Other federal buildings <sup>3</sup> . . . . .	3,161	211	223	230	236	247	248	257	258	379	220	312	340
Highways and streets . . . . .	255	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,556	199	169	191	185	215	224	236	245	273	196	230	191
Conservation and development . . . . .	3,368	272	249	276	226	290	258	272	297	547	155	214	312
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,800	79	93	159	162	155	128	151	131	182	136	213	212

See footnotes at end of table.

**Table 7b. Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1998												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>145,207</b>	<b>8,680</b>	<b>8,466</b>	<b>9,233</b>	<b>10,748</b>	<b>11,550</b>	<b>13,970</b>	<b>14,456</b>	<b>15,247</b>	<b>15,138</b>	<b>14,570</b>	<b>12,366</b>	<b>10,782</b>
Total buildings . . . . .	67,246	4,714	4,633	4,790	5,213	5,394	6,262	6,535	6,578	6,298	5,960	5,542	5,327
Housing and redevelopment . . . . .	4,581	318	306	356	382	362	421	452	377	399	414	401	394
Educational . . . . .	36,219	2,421	2,368	2,410	2,714	2,871	3,519	3,781	3,811	3,503	3,127	2,865	2,829
Hospital . . . . .	2,897	259	241	268	235	244	252	222	219	242	245	232	241
Other <sup>1</sup> . . . . .	23,550	1,717	1,719	1,757	1,883	1,917	2,069	2,080	2,172	2,155	2,174	2,044	1,864
Highways and streets . . . . .	48,264	2,054	2,019	2,454	3,294	3,785	4,982	5,160	5,787	5,842	5,683	4,150	3,055
Conservation and development . . . . .	1,911	157	140	153	141	163	199	161	177	170	176	145	129
Other State and local construction . . . . .	27,786	1,755	1,674	1,835	2,101	2,208	2,527	2,600	2,705	2,828	2,752	2,530	2,272
Sewer systems . . . . .	10,168	644	614	701	748	776	892	938	960	1,011	1,031	989	866
Water supply facilities . . . . .	6,830	423	432	442	524	555	545	603	612	671	731	673	621
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,787	688	628	693	830	877	1,090	1,059	1,133	1,145	991	868	785
<b>Federal construction . . . . .</b>	<b>14,317</b>	<b>1,006</b>	<b>1,034</b>	<b>1,133</b>	<b>1,068</b>	<b>1,081</b>	<b>1,196</b>	<b>1,346</b>	<b>1,231</b>	<b>1,821</b>	<b>921</b>	<b>1,243</b>	<b>1,237</b>
Total buildings . . . . .	6,031	429	447	504	488	483	494	580	506	690	435	478	496
Housing . . . . .	543	40	50	32	39	42	44	61	57	57	34	48	41
Industrial . . . . .	1,010	76	79	95	84	81	78	93	88	108	58	91	79
Educational . . . . .	15	-	1	-	1	1	2	2	3	3	-	1	1
Hospital . . . . .	1,009	71	66	105	63	90	82	95	87	148	90	64	50
Other federal buildings <sup>3</sup> . . . . .	3,454	243	253	272	301	269	289	329	271	375	253	275	325
Highways and streets . . . . .	251	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,529	188	187	237	204	199	225	279	241	225	157	189	198
Conservation and development . . . . .	3,536	190	279	258	244	254	294	312	316	592	193	313	292
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,969	188	111	122	115	123	158	148	139	285	107	241	233

See footnotes at end of table.

Table 7b. **Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>158,617</b>	<b>9,405</b>	<b>9,649</b>	<b>10,643</b>	<b>12,094</b>	<b>13,026</b>	<b>14,596</b>	<b>15,152</b>	<b>16,422</b>	<b>16,017</b>	<b>15,349</b>	<b>13,930</b>	<b>12,335</b>
Total buildings . . . . .	72,220	4,884	4,935	5,261	5,662	5,768	6,541	6,657	7,171	6,806	6,572	6,150	5,813
Housing and redevelopment . . . . .	5,194	361	360	408	431	483	440	441	480	493	476	413	408
Educational . . . . .	39,709	2,627	2,601	2,726	3,052	3,103	3,809	3,878	4,190	3,828	3,529	3,266	3,101
Hospital . . . . .	3,118	209	220	223	223	247	274	260	281	306	300	302	275
Other <sup>1</sup> . . . . .	24,199	1,687	1,753	1,904	1,957	1,936	2,019	2,079	2,220	2,180	2,267	2,169	2,029
Highways and streets . . . . .	53,214	2,381	2,535	2,984	3,816	4,497	5,133	5,480	6,062	6,101	5,581	4,821	3,823
Conservation and development . . . . .	1,993	142	129	127	151	142	158	159	197	196	187	216	193
Other State and local construction . . . . .	31,190	1,998	2,050	2,271	2,465	2,620	2,765	2,856	2,992	2,914	3,010	2,743	2,507
Sewer systems . . . . .	11,181	776	727	852	877	954	1,028	1,003	1,031	1,019	1,034	975	906
Water supply facilities . . . . .	7,602	502	545	586	605	638	669	724	713	697	711	648	565
Miscellaneous nonbuilding <sup>2</sup> . . . . .	12,407	721	778	833	983	1,027	1,068	1,129	1,249	1,198	1,265	1,120	1,036
<b>Federal construction . . . . .</b>	<b>14,056</b>	<b>989</b>	<b>1,129</b>	<b>1,144</b>	<b>1,153</b>	<b>1,038</b>	<b>1,190</b>	<b>1,213</b>	<b>1,174</b>	<b>1,590</b>	<b>978</b>	<b>1,236</b>	<b>1,222</b>
Total buildings . . . . .	5,470	400	466	465	428	420	453	479	416	592	421	453	476
Housing . . . . .	424	27	26	37	42	32	39	39	34	46	32	38	33
Industrial . . . . .	925	64	69	85	76	83	73	89	70	112	45	72	88
Educational . . . . .	15	3	1	1	1	1	1	3	4	1	-	-	1
Hospital . . . . .	850	82	123	82	60	67	71	86	46	73	49	43	68
Other federal buildings <sup>3</sup> . . . . .	3,255	225	247	260	248	237	270	263	263	360	295	301	287
Highways and streets . . . . .	318	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,111	147	174	187	179	179	186	195	142	207	145	166	204
Conservation and development . . . . .	4,009	243	294	332	292	271	338	333	397	580	236	338	354
Miscellaneous nonbuilding <sup>4</sup> . . . . .	2,148	187	181	144	233	140	180	172	182	173	139	250	168

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

<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 8a. Monthly Value of Public Construction Put in Place: May 1998-May 2000—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>					
1998:	May <sup>f</sup>	139,073	65,373	4,333	35,888	3,015	22,137	45,379	1,951	9,386	6,490	10,493
	June <sup>f</sup>	148,991	68,842	4,867	37,405	2,853	23,717	49,818	2,203	9,856	6,230	12,042
	July <sup>f</sup>	146,839	69,756	5,336	37,591	2,594	24,235	47,192	1,694	10,445	6,603	11,148
	August <sup>f</sup>	145,969	67,538	4,524	35,957	2,681	24,377	48,664	1,731	10,257	6,696	11,082
	September <sup>f</sup>	148,406	67,923	4,326	36,682	2,662	24,253	49,477	1,726	10,352	7,330	11,599
	October <sup>f</sup>	147,052	66,815	4,482	35,775	2,710	23,849	50,288	1,791	10,697	7,386	10,075
	November <sup>f</sup>	146,266	67,239	4,638	36,078	2,782	23,741	48,488	1,699	11,215	7,444	10,181
	December <sup>f</sup>	149,522	69,234	4,806	37,884	2,898	23,646	48,420	1,779	11,308	7,969	10,812
1999:	January <sup>f</sup>	155,221	68,655	4,812	38,214	2,729	22,900	53,905	2,237	11,503	7,542	11,378
	February <sup>f</sup>	163,282	70,259	4,881	38,822	2,888	23,668	59,537	2,023	11,216	8,010	12,236
	March <sup>f</sup>	161,485	71,367	5,225	38,671	2,745	24,726	56,213	1,868	11,485	8,280	12,271
	April <sup>f</sup>	160,507	71,883	5,239	40,063	2,695	23,885	55,504	1,914	11,172	7,548	12,486
	May <sup>f</sup>	156,206	69,946	5,755	38,781	3,049	22,360	53,326	1,692	11,509	7,452	12,280
	June <sup>f</sup>	154,153	71,868	5,091	40,523	3,090	23,164	49,754	1,741	11,359	7,641	11,789
	July <sup>f</sup>	155,344	70,992	5,227	38,491	3,081	24,193	51,576	1,667	11,306	7,933	11,870
	August <sup>f</sup>	157,479	73,445	5,672	39,496	3,407	24,869	51,229	1,926	10,857	7,791	12,231
	September <sup>f</sup>	157,713	73,440	5,400	40,149	3,375	24,516	52,107	1,982	10,447	7,592	12,145
	October <sup>f</sup>	157,155	74,016	5,232	40,447	3,335	25,003	50,313	1,897	10,885	7,202	12,842
	November <sup>f</sup>	164,718	74,669	4,713	41,083	3,581	25,292	56,220	2,540	10,925	7,191	13,172
	December <sup>f</sup>	171,493	75,666	4,991	41,621	3,314	25,740	59,889	2,655	11,740	7,255	14,288
2000:	January <sup>f</sup>	166,574	67,665	4,975	32,757	3,373	26,560	63,068	2,271	11,199	7,955	14,417
	February <sup>f</sup>	159,683	69,292	4,679	33,625	3,372	27,616	52,827	2,697	11,518	8,475	14,874
	March <sup>f</sup>	164,937	68,937	5,309	33,580	3,358	26,690	58,701	2,137	11,507	7,748	15,907
	April <sup>f</sup>	160,574	69,772	5,576	33,189	3,962	27,045	54,954	1,804	12,737	7,780	13,527
	May <sup>p</sup>	156,082	70,430	5,349	34,130	4,345	26,607	51,208	1,792	11,463	7,715	13,474
		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>
1998:	May <sup>f</sup>	13,204	5,905	517	989	17	1,096	3,286	(NA)	2,362	3,158	1,528
	June <sup>f</sup>	13,978	5,720	506	905	21	945	3,343	(NA)	2,588	3,529	1,892
	July <sup>f</sup>	15,525	6,590	693	1,060	18	1,084	3,734	(NA)	3,240	3,700	1,748
	August <sup>f</sup>	14,432	6,316	713	1,103	31	1,083	3,386	(NA)	2,792	3,531	1,549
	September <sup>f</sup>	14,863	6,242	512	977	26	1,334	3,394	(NA)	2,105	4,231	2,039
	October <sup>f</sup>	13,647	5,941	461	786	3	1,234	3,457	(NA)	2,289	3,323	1,837
	November <sup>f</sup>	15,020	5,884	589	1,119	7	786	3,383	(NA)	2,204	3,766	2,898
	December <sup>f</sup>	14,873	5,863	482	938	14	592	3,837	(NA)	2,268	3,589	2,868
1999:	January <sup>f</sup>	13,690	5,362	355	861	39	1,095	3,011	(NA)	1,952	3,439	2,643
	February <sup>f</sup>	15,802	6,216	351	923	9	1,636	3,297	(NA)	2,587	4,142	2,552
	March <sup>f</sup>	14,032	5,579	448	1,015	10	985	3,121	(NA)	2,157	4,177	1,818
	April <sup>f</sup>	14,456	5,192	513	920	13	732	3,014	(NA)	2,268	3,721	2,969
	May <sup>f</sup>	12,708	5,168	399	1,022	9	828	2,911	(NA)	2,124	3,357	1,739
	June <sup>f</sup>	13,977	5,283	457	848	13	821	3,144	(NA)	2,140	4,073	2,160
	July <sup>f</sup>	14,043	5,498	442	1,024	30	987	3,015	(NA)	2,268	3,931	2,027
	August <sup>f</sup>	13,758	5,319	429	891	49	588	3,362	(NA)	1,646	4,447	2,033
	September <sup>f</sup>	12,904	5,244	403	989	8	651	3,193	(NA)	1,932	4,162	1,241
	October <sup>f</sup>	14,839	5,962	446	640	1	700	4,174	(NA)	2,114	4,043	2,386
	November <sup>f</sup>	14,816	5,518	462	877	1	520	3,657	(NA)	1,944	4,045	2,982
	December <sup>f</sup>	14,402	5,338	369	986	7	765	3,211	(NA)	2,332	4,346	2,057
2000:	January <sup>f</sup>	13,212	5,266	332	1,253	1	792	2,887	(NA)	1,782	3,952	1,912
	February <sup>f</sup>	14,683	5,159	358	1,267	4	733	2,797	(NA)	3,011	4,278	1,917
	March <sup>f</sup>	14,879	4,955	376	1,077	2	468	3,032	(NA)	2,449	4,358	3,012
	April <sup>f</sup>	13,617	5,353	421	1,164	93	880	2,794	(NA)	2,182	4,021	1,755
	May <sup>p</sup>	13,232	4,840	394	1,078	12	514	2,842	(NA)	2,259	3,586	2,217

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 8b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars**

[Millions of dollars]

Type of construction	1997											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>133,698</b>	<b>139,897</b>	<b>144,734</b>	<b>141,421</b>	<b>140,822</b>	<b>141,022</b>	<b>142,202</b>	<b>141,978</b>	<b>140,691</b>	<b>141,835</b>	<b>139,185</b>	<b>139,549</b>
Total buildings . . . . .	63,755	65,669	67,536	66,933	64,838	65,169	65,960	65,195	66,072	68,571	64,272	65,105
Housing and redevelopment . . . . .	4,415	4,843	4,736	4,794	5,006	4,332	4,531	4,275	4,432	4,863	4,297	4,111
Educational . . . . .	31,921	33,273	34,572	34,508	34,186	34,515	34,348	34,467	34,217	36,178	34,111	35,601
Hospital . . . . .	3,854	3,765	4,105	4,538	3,803	3,911	4,349	4,157	3,855	3,883	3,467	3,099
Other <sup>1</sup> . . . . .	23,565	23,788	24,122	23,092	21,843	22,411	22,732	22,296	23,568	23,646	22,396	22,294
Highways and streets . . . . .	39,742	41,536	42,848	43,808	43,782	44,563	44,883	45,041	43,644	41,937	46,511	45,281
Conservation and development . . . . .	2,467	2,328	2,873	2,673	2,020	2,128	2,203	2,319	2,310	2,591	2,393	2,298
Other State and local construction . . . . .	27,734	30,364	31,478	28,006	30,182	29,162	29,156	29,424	28,665	28,736	26,009	26,865
Sewer systems . . . . .	10,346	11,192	11,335	10,990	11,440	10,920	10,465	9,952	10,070	9,642	9,478	9,325
Water supply facilities . . . . .	6,737	6,985	7,746	6,456	6,351	6,149	6,214	5,998	6,338	6,158	6,221	6,143
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,652	12,186	12,397	10,561	12,391	12,093	12,477	13,473	12,257	12,936	10,309	11,397
<b>Federal construction . . . . .</b>	<b>13,920</b>	<b>14,057</b>	<b>13,517</b>	<b>13,452</b>	<b>13,675</b>	<b>13,474</b>	<b>13,746</b>	<b>13,891</b>	<b>14,465</b>	<b>14,314</b>	<b>15,175</b>	<b>15,166</b>
Total buildings . . . . .	6,129	6,440	5,611	5,931	5,356	6,044	5,726	5,994	6,430	6,156	7,079	6,292
Housing . . . . .	901	780	642	630	576	695	660	728	498	942	743	443
Industrial . . . . .	1,122	1,057	1,081	1,411	871	1,121	1,106	999	891	745	820	803
Educational . . . . .	4	23	49	10	9	22	16	23	28	3	6	32
Hospital . . . . .	1,432	1,602	1,020	916	989	1,281	846	1,003	1,577	1,538	1,613	1,145
Other federal buildings <sup>3</sup> . . . . .	2,671	2,977	2,820	2,964	2,911	2,924	3,098	3,241	3,435	2,929	3,896	3,868
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,643	2,516	2,201	2,354	2,551	2,578	2,743	2,842	2,554	2,866	2,692	2,190
Conservation and development . . . . .	3,800	3,530	3,455	2,859	3,591	3,072	3,232	3,327	3,921	2,687	2,584	3,832
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,101	1,321	1,993	2,044	1,919	1,521	1,790	1,467	1,308	2,355	2,572	2,598

See footnotes at end of table.

Table 8b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1998											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>141,707</b>	<b>140,652</b>	<b>141,159</b>	<b>142,621</b>	<b>139,073</b>	<b>148,991</b>	<b>146,839</b>	<b>145,969</b>	<b>148,406</b>	<b>147,052</b>	<b>146,266</b>	<b>149,522</b>
Total buildings . . . . .	66,071	66,023	64,881	66,249	65,373	68,842	69,756	67,538	67,923	66,815	67,239	69,234
Housing and redevelopment . . . . .	4,176	4,143	4,610	4,648	4,333	4,867	5,336	4,524	4,326	4,482	4,638	4,806
Educational . . . . .	35,207	35,343	34,100	35,789	35,888	37,405	37,591	35,957	36,682	35,775	36,078	37,884
Hospital . . . . .	3,354	3,154	3,326	2,827	3,015	2,853	2,594	2,681	2,662	2,710	2,782	2,898
Other <sup>1</sup> . . . . .	23,334	23,382	22,846	22,986	22,137	23,717	24,235	24,377	24,253	23,849	23,741	23,646
Highways and streets . . . . .	46,510	46,772	47,963	48,080	45,379	49,818	47,192	48,664	49,477	50,288	48,488	48,420
Conservation and development . . . . .	2,486	2,202	2,262	1,773	1,951	2,203	1,694	1,731	1,726	1,791	1,699	1,779
Other State and local construction . . . . .	26,640	25,655	26,053	26,519	26,368	28,128	28,197	28,035	29,280	28,158	28,840	30,089
Sewer systems . . . . .	9,367	9,457	9,541	9,522	9,386	9,856	10,445	10,257	10,352	10,697	11,215	11,308
Water supply facilities . . . . .	6,347	6,347	6,246	6,527	6,490	6,230	6,603	6,696	7,330	7,386	7,444	7,969
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,925	9,851	10,265	10,469	10,493	12,042	11,148	11,082	11,599	10,075	10,181	10,812
<b>Federal construction . . . . .</b>	<b>13,605</b>	<b>14,486</b>	<b>14,146</b>	<b>13,415</b>	<b>13,204</b>	<b>13,978</b>	<b>15,525</b>	<b>14,432</b>	<b>14,863</b>	<b>13,647</b>	<b>15,020</b>	<b>14,873</b>
Total buildings . . . . .	5,542	5,971	6,416	6,018	5,905	5,720	6,590	6,316	6,242	5,941	5,884	5,863
Housing . . . . .	512	662	411	476	517	506	693	713	512	461	589	482
Industrial . . . . .	974	1,051	1,210	1,038	989	905	1,060	1,103	977	786	1,119	938
Educational . . . . .	3	11	4	17	17	21	18	31	26	3	7	14
Hospital . . . . .	921	874	1,331	773	1,096	945	1,084	1,083	1,334	1,234	786	592
Other federal buildings <sup>3</sup> . . . . .	3,132	3,373	3,460	3,713	3,286	3,343	3,734	3,386	3,394	3,457	3,383	3,837
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,506	2,782	2,731	2,592	2,362	2,588	3,240	2,792	2,105	2,289	2,204	2,268
Conservation and development . . . . .	2,666	3,935	3,232	3,098	3,158	3,529	3,700	3,531	4,231	3,323	3,766	3,589
Miscellaneous nonbuilding <sup>4</sup> . . . . .	2,642	1,567	1,533	1,458	1,528	1,892	1,748	1,549	2,039	1,837	2,898	2,868

See footnotes at end of table.

Table 8b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in Current Dollars—Con.**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>155,221</b>	<b>163,282</b>	<b>161,485</b>	<b>160,507</b>	<b>156,206</b>	<b>154,153</b>	<b>155,344</b>	<b>157,479</b>	<b>157,713</b>	<b>157,155</b>	<b>164,718</b>	<b>171,493</b>
Total buildings . . . . .	68,655	70,259	71,367	71,883	69,946	71,868	70,992	73,445	73,440	74,016	74,669	75,666
Housing and redevelopment . . . . .	4,812	4,881	5,225	5,239	5,755	5,091	5,227	5,672	5,400	5,232	4,713	4,991
Educational . . . . .	38,214	38,822	38,671	40,063	38,781	40,523	38,491	39,496	40,149	40,447	41,083	41,621
Hospital . . . . .	2,729	2,888	2,745	2,695	3,049	3,090	3,081	3,407	3,375	3,335	3,581	3,314
Other <sup>1</sup> . . . . .	22,900	23,668	24,726	23,885	22,360	23,164	24,193	24,869	24,516	25,003	25,292	25,740
Highways and streets . . . . .	53,905	59,537	56,213	55,504	53,326	49,754	51,576	51,229	52,107	50,313	56,220	59,889
Conservation and development . . . . .	2,237	2,023	1,868	1,914	1,692	1,741	1,667	1,926	1,982	1,897	2,540	2,655
Other State and local construction . . . . .	30,423	31,463	32,036	31,206	31,241	30,789	31,109	30,879	30,184	30,929	31,288	33,283
Sewer systems . . . . .	11,503	11,216	11,485	11,172	11,509	11,359	11,306	10,857	10,447	10,885	10,925	11,740
Water supply facilities . . . . .	7,542	8,010	8,280	7,548	7,452	7,641	7,933	7,791	7,592	7,202	7,191	7,255
Miscellaneous nonbuilding <sup>2</sup> . . . . .	11,378	12,236	12,271	12,486	12,280	11,789	11,870	12,231	12,145	12,842	13,172	14,288
<b>Federal construction . . . . .</b>	<b>13,690</b>	<b>15,802</b>	<b>14,032</b>	<b>14,456</b>	<b>12,708</b>	<b>13,977</b>	<b>14,043</b>	<b>13,758</b>	<b>12,904</b>	<b>14,839</b>	<b>14,816</b>	<b>14,402</b>
Total buildings . . . . .	5,362	6,216	5,579	5,192	5,168	5,283	5,498	5,319	5,244	5,962	5,518	5,338
Housing . . . . .	355	351	448	513	399	457	442	429	403	446	462	369
Industrial . . . . .	861	923	1,015	920	1,022	848	1,024	891	989	640	877	986
Educational . . . . .	39	9	10	13	9	13	30	49	8	1	1	7
Hospital . . . . .	1,095	1,636	985	732	828	821	987	588	651	700	520	765
Other federal buildings <sup>3</sup> . . . . .	3,011	3,297	3,121	3,014	2,911	3,144	3,015	3,362	3,193	4,174	3,657	3,211
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	1,952	2,587	2,157	2,268	2,124	2,140	2,268	1,646	1,932	2,114	1,944	2,332
Conservation and development . . . . .	3,439	4,142	4,177	3,721	3,357	4,073	3,931	4,447	4,162	4,043	4,045	4,346
Miscellaneous nonbuilding <sup>4</sup> . . . . .	2,643	2,552	1,818	2,969	1,739	2,160	2,027	2,033	1,241	2,386	2,982	2,057

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

<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 9a. Monthly Value of Public Construction Put in Place: May 1998-May 2000—Seasonally Adjusted Annual Rate in 1996 Dollars**

[Millions of dollars]

Period		State and locally owned public construction										
		Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
			Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1998:	May <sup>f</sup> . . . . .	131,978	61,350	4,143	33,634	2,826	20,747	43,384	1,876	9,025	6,283	10,060
	June <sup>f</sup> . . . . .	140,786	64,240	4,618	34,860	2,659	22,103	47,491	2,108	9,432	6,013	11,501
	July <sup>f</sup> . . . . .	138,397	64,969	5,043	34,968	2,413	22,545	44,817	1,621	9,995	6,368	10,628
	August <sup>f</sup> . . . . .	136,877	62,673	4,272	33,324	2,485	22,592	45,866	1,649	9,769	6,426	10,494
	September <sup>f</sup> . . . . .	138,735	62,913	4,081	33,933	2,463	22,436	46,414	1,637	9,821	7,008	10,942
	October <sup>f</sup> . . . . .	137,246	61,712	4,209	33,002	2,500	22,001	47,086	1,707	10,198	7,021	9,523
	November <sup>f</sup> . . . . .	136,434	61,921	4,331	33,190	2,559	21,841	45,444	1,627	10,742	7,050	9,650
	December <sup>f</sup> . . . . .	139,146	63,512	4,458	34,724	2,656	21,674	45,337	1,705	10,842	7,511	10,239
1999:	January <sup>f</sup> . . . . .	143,986	62,580	4,435	34,803	2,485	20,857	50,426	2,137	10,987	7,102	10,754
	February <sup>f</sup> . . . . .	151,334	63,929	4,495	35,293	2,625	21,516	55,694	1,928	10,693	7,536	11,554
	March <sup>f</sup> . . . . .	148,950	64,655	4,798	34,996	2,484	22,376	52,340	1,773	10,897	7,753	11,533
	April <sup>f</sup> . . . . .	147,417	64,937	4,789	36,158	2,432	21,557	51,345	1,805	10,540	7,121	11,669
	May <sup>f</sup> . . . . .	142,596	62,967	5,242	34,875	2,742	20,108	48,879	1,583	10,766	7,031	11,370
	June <sup>f</sup> . . . . .	139,698	64,287	4,611	36,214	2,762	20,700	45,231	1,615	10,537	7,202	10,826
	July <sup>f</sup> . . . . .	140,866	63,380	4,713	34,337	2,748	21,582	47,016	1,549	10,507	7,484	10,930
	August <sup>f</sup> . . . . .	142,358	65,406	5,110	35,139	3,032	22,126	46,572	1,783	10,053	7,323	11,221
	September <sup>f</sup> . . . . .	142,615	65,394	4,860	35,719	3,002	21,812	47,413	1,837	9,682	7,135	11,152
	October <sup>f</sup> . . . . .	141,285	65,564	4,692	35,794	2,951	22,126	45,408	1,755	10,070	6,750	11,738
	November <sup>f</sup> . . . . .	147,396	65,789	4,208	36,165	3,152	22,264	50,467	2,345	10,088	6,721	11,985
	December <sup>f</sup> . . . . .	152,992	66,436	4,440	36,510	2,907	22,579	53,568	2,447	10,820	6,755	12,966
2000:	January <sup>f</sup> . . . . .	148,286	59,161	4,410	28,609	2,946	23,197	56,361	2,083	10,274	7,359	13,047
	February <sup>f</sup> . . . . .	141,585	60,477	4,144	29,316	2,940	24,077	46,999	2,456	10,490	7,775	13,388
	March <sup>f</sup> . . . . .	146,154	60,006	4,677	29,200	2,920	23,209	52,318	1,942	10,461	7,108	14,318
	April <sup>f</sup> . . . . .	141,616	60,542	4,912	28,760	3,433	23,436	48,719	1,631	11,516	7,099	12,110
	May <sup>p</sup> . . . . .	137,463	61,047	4,700	29,549	3,762	23,036	45,357	1,618	10,355	7,033	12,052
		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>
1998:	May <sup>f</sup> . . . . .	12,522	5,544	494	927	16	1,027	3,080	(NA)	2,237	3,036	1,465
	June <sup>f</sup> . . . . .	13,200	5,339	480	843	19	881	3,115	(NA)	2,439	3,377	1,807
	July <sup>f</sup> . . . . .	14,627	6,140	655	986	17	1,008	3,474	(NA)	3,045	3,540	1,667
	August <sup>f</sup> . . . . .	13,535	5,866	673	1,022	29	1,003	3,139	(NA)	2,609	3,363	1,467
	September <sup>f</sup> . . . . .	13,914	5,784	483	903	24	1,234	3,140	(NA)	1,961	4,015	1,923
	October <sup>f</sup> . . . . .	12,760	5,488	433	725	3	1,138	3,189	(NA)	2,127	3,168	1,736
	November <sup>f</sup> . . . . .	14,073	5,421	550	1,029	7	723	3,112	(NA)	2,046	3,607	2,747
	December <sup>f</sup> . . . . .	13,903	5,379	447	860	13	542	3,517	(NA)	2,100	3,441	2,716
1999:	January <sup>f</sup> . . . . .	12,747	4,887	327	784	35	998	2,743	(NA)	1,802	3,284	2,498
	February <sup>f</sup> . . . . .	14,683	5,655	323	839	8	1,487	2,998	(NA)	2,384	3,948	2,410
	March <sup>f</sup> . . . . .	12,987	5,055	411	919	9	892	2,825	(NA)	1,981	3,963	1,709
	April <sup>f</sup> . . . . .	13,333	4,692	469	830	12	660	2,720	(NA)	2,073	3,510	2,775
	May <sup>f</sup> . . . . .	11,623	4,652	363	919	8	745	2,618	(NA)	1,927	3,141	1,610
	June <sup>f</sup> . . . . .	12,708	4,727	414	758	11	734	2,810	(NA)	1,928	3,778	1,984
	July <sup>f</sup> . . . . .	12,764	4,908	398	914	27	880	2,689	(NA)	2,045	3,653	1,866
	August <sup>f</sup> . . . . .	12,485	4,737	387	792	43	523	2,991	(NA)	1,481	4,118	1,865
	September <sup>f</sup> . . . . .	11,701	4,670	363	880	7	579	2,841	(NA)	1,739	3,858	1,139
	October <sup>f</sup> . . . . .	13,393	5,281	400	567	1	619	3,694	(NA)	1,889	3,740	2,181
	November <sup>f</sup> . . . . .	13,333	4,863	413	772	1	457	3,219	(NA)	1,728	3,735	2,713
	December <sup>f</sup> . . . . .	12,919	4,687	328	865	6	671	2,817	(NA)	2,066	4,005	1,867
2000:	January <sup>f</sup> . . . . .	11,802	4,603	294	1,094	1	692	2,522	(NA)	1,574	3,625	1,730
	February <sup>f</sup> . . . . .	13,058	4,503	317	1,105	3	639	2,438	(NA)	2,651	3,896	1,726
	March <sup>f</sup> . . . . .	13,237	4,313	331	936	2	407	2,636	(NA)	1,980	3,962	2,711
	April <sup>f</sup> . . . . .	12,035	4,644	371	1,009	81	763	2,421	(NA)	1,913	3,636	1,571
	May <sup>p</sup> . . . . .	11,688	4,196	347	933	10	445	2,460	(NA)	1,979	3,240	1,983

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 9b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996 Dollars**

[Millions of dollars]

Type of construction	1997											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>131,314</b>	<b>137,185</b>	<b>140,804</b>	<b>137,214</b>	<b>136,271</b>	<b>136,443</b>	<b>137,260</b>	<b>136,848</b>	<b>135,414</b>	<b>135,936</b>	<b>132,396</b>	<b>132,640</b>
Total buildings . . . . .	62,570	64,450	65,861	65,146	62,880	63,120	63,526	62,551	63,199	65,462	61,022	61,810
Housing and redevelopment . . . . .	4,337	4,758	4,652	4,700	4,903	4,227	4,403	4,142	4,270	4,672	4,120	3,941
Educational . . . . .	31,326	32,653	33,696	33,568	33,126	33,412	33,058	33,046	32,712	34,521	32,364	33,777
Hospital . . . . .	3,782	3,695	4,001	4,415	3,685	3,786	4,186	3,986	3,686	3,705	3,290	2,940
Other <sup>1</sup> . . . . .	23,126	23,344	23,511	22,463	21,166	21,695	21,879	21,377	22,531	22,563	21,249	21,152
Highways and streets . . . . .	39,154	40,802	41,721	42,409	42,260	43,015	43,365	43,560	42,209	40,208	44,086	42,840
Conservation and development . . . . .	2,409	2,263	2,762	2,575	1,950	2,060	2,129	2,238	2,229	2,499	2,297	2,206
Other State and local construction . . . . .	27,181	29,671	30,460	27,083	29,181	28,248	28,240	28,499	27,776	27,767	24,991	25,785
Sewer systems . . . . .	10,103	10,877	10,899	10,588	11,043	10,571	10,111	9,606	9,720	9,298	9,096	8,949
Water supply facilities . . . . .	6,624	6,882	7,572	6,292	6,178	5,993	6,074	5,874	6,213	6,031	6,058	5,981
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,453	11,912	11,989	10,203	11,960	11,684	12,055	13,018	11,843	12,439	9,837	10,855
<b>Federal construction . . . . .</b>	<b>13,650</b>	<b>13,759</b>	<b>13,117</b>	<b>13,042</b>	<b>13,230</b>	<b>13,043</b>	<b>13,261</b>	<b>13,374</b>	<b>13,899</b>	<b>13,715</b>	<b>14,447</b>	<b>14,440</b>
Total buildings . . . . .	6,016	6,320	5,474	5,774	5,196	5,856	5,517	5,754	6,151	5,880	6,724	5,974
Housing . . . . .	885	767	630	618	564	678	641	705	480	905	712	425
Industrial . . . . .	1,101	1,037	1,054	1,372	844	1,085	1,065	958	852	710	778	762
Educational . . . . .	4	22	48	10	9	22	15	22	27	3	6	30
Hospital . . . . .	1,405	1,572	994	891	958	1,240	814	962	1,508	1,468	1,531	1,087
Other federal buildings <sup>3</sup> . . . . .	2,621	2,922	2,748	2,883	2,821	2,830	2,982	3,107	3,284	2,795	3,696	3,670
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,599	2,471	2,143	2,283	2,467	2,494	2,645	2,738	2,456	2,740	2,554	2,074
Conservation and development . . . . .	3,711	3,431	3,322	2,755	3,467	2,974	3,123	3,211	3,784	2,591	2,480	3,678
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,080	1,291	1,928	1,975	1,852	1,470	1,729	1,417	1,264	2,264	2,454	2,474

See footnotes at end of table.

Table 9b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996**  
**Dollars—Con.**

[Millions of dollars]

Type of construction	1998											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>134,632</b>	<b>133,908</b>	<b>134,415</b>	<b>135,700</b>	<b>131,978</b>	<b>140,786</b>	<b>138,397</b>	<b>136,877</b>	<b>138,735</b>	<b>137,246</b>	<b>136,434</b>	<b>139,146</b>
Total buildings . . . . .	62,502	62,464	61,337	62,402	61,350	64,240	64,969	62,673	62,913	61,712	61,921	63,512
Housing and redevelopment . . . . .	4,000	3,976	4,424	4,452	4,143	4,618	5,043	4,272	4,081	4,209	4,331	4,458
Educational . . . . .	33,277	33,406	32,200	33,668	33,634	34,860	34,968	33,324	33,933	33,002	33,190	34,724
Hospital . . . . .	3,170	2,981	3,141	2,659	2,826	2,659	2,413	2,485	2,463	2,500	2,559	2,656
Other <sup>1</sup> . . . . .	22,055	22,100	21,573	21,623	20,747	22,103	22,545	22,592	22,436	22,001	21,841	21,674
Highways and streets . . . . .	44,127	44,587	45,766	46,010	43,384	47,491	44,817	45,866	46,414	47,086	45,444	45,337
Conservation and development . . . . .	2,392	2,128	2,188	1,711	1,876	2,108	1,621	1,649	1,637	1,707	1,627	1,705
Other State and local construction . . . . .	25,611	24,729	25,123	25,577	25,368	26,947	26,990	26,689	27,771	26,741	27,442	28,591
Sewer systems . . . . .	9,016	9,137	9,228	9,191	9,025	9,432	9,995	9,769	9,821	10,198	10,742	10,842
Water supply facilities . . . . .	6,150	6,138	6,035	6,319	6,283	6,013	6,368	6,426	7,008	7,021	7,050	7,511
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,445	9,454	9,861	10,067	10,060	11,501	10,628	10,494	10,942	9,523	9,650	10,239
<b>Federal construction . . . . .</b>	<b>12,946</b>	<b>13,821</b>	<b>13,480</b>	<b>12,759</b>	<b>12,522</b>	<b>13,200</b>	<b>14,627</b>	<b>13,535</b>	<b>13,914</b>	<b>12,760</b>	<b>14,073</b>	<b>13,903</b>
Total buildings . . . . .	5,245	5,653	6,065	5,670	5,544	5,339	6,140	5,866	5,784	5,488	5,421	5,379
Housing . . . . .	491	635	394	456	494	480	655	673	483	433	550	447
Industrial . . . . .	921	993	1,143	977	927	843	986	1,022	903	725	1,029	860
Educational . . . . .	2	10	4	16	16	19	17	29	24	3	7	13
Hospital . . . . .	871	826	1,257	727	1,027	881	1,008	1,003	1,234	1,138	723	542
Other federal buildings <sup>3</sup> . . . . .	2,960	3,188	3,267	3,493	3,080	3,115	3,474	3,139	3,140	3,189	3,112	3,517
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,374	2,642	2,593	2,459	2,237	2,439	3,045	2,609	1,961	2,127	2,046	2,100
Conservation and development . . . . .	2,566	3,802	3,126	2,991	3,036	3,377	3,540	3,363	4,015	3,168	3,607	3,441
Miscellaneous nonbuilding <sup>4</sup> . . . . .	2,526	1,504	1,472	1,402	1,465	1,807	1,667	1,467	1,923	1,736	2,747	2,716

See footnotes at end of table.

Table 9b. **Monthly Value of Public Construction Put in Place: 1997-1999 —Seasonally Adjusted Annual Rate in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	1999											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . . .</b>	<b>143,986</b>	<b>151,334</b>	<b>148,950</b>	<b>147,417</b>	<b>142,596</b>	<b>139,698</b>	<b>140,866</b>	<b>142,358</b>	<b>142,615</b>	<b>141,285</b>	<b>147,396</b>	<b>152,992</b>
Total buildings . . . . .	62,580	63,929	64,655	64,937	62,967	64,287	63,380	65,406	65,394	65,564	65,789	66,436
Housing and redevelopment . . . . .	4,435	4,495	4,798	4,789	5,242	4,611	4,713	5,110	4,860	4,692	4,208	4,440
Educational . . . . .	34,803	35,293	34,996	36,158	34,875	36,214	34,337	35,139	35,719	35,794	36,165	36,510
Hospital . . . . .	2,485	2,625	2,484	2,432	2,742	2,762	2,748	3,032	3,002	2,951	3,152	2,907
Other <sup>1</sup> . . . . .	20,857	21,516	22,376	21,557	20,108	20,700	21,582	22,126	21,812	22,126	22,264	22,579
Highways and streets . . . . .	50,426	55,694	52,340	51,345	48,879	45,231	47,016	46,572	47,413	45,408	50,467	53,568
Conservation and development . . . . .	2,137	1,928	1,773	1,805	1,583	1,615	1,549	1,783	1,837	1,755	2,345	2,447
Other State and local construction . . . . .	28,843	29,782	30,182	29,330	29,167	28,565	28,921	28,597	27,970	28,558	28,794	30,541
Sewer systems . . . . .	10,987	10,693	10,897	10,540	10,766	10,537	10,507	10,053	9,682	10,070	10,088	10,820
Water supply facilities . . . . .	7,102	7,536	7,753	7,121	7,031	7,202	7,484	7,323	7,135	6,750	6,721	6,755
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,754	11,554	11,533	11,669	11,370	10,826	10,930	11,221	11,152	11,738	11,985	12,966
<b>Federal construction . . . . .</b>	<b>12,747</b>	<b>14,683</b>	<b>12,987</b>	<b>13,333</b>	<b>11,623</b>	<b>12,708</b>	<b>12,764</b>	<b>12,485</b>	<b>11,701</b>	<b>13,393</b>	<b>13,333</b>	<b>12,919</b>
Total buildings . . . . .	4,887	5,655	5,055	4,692	4,652	4,727	4,908	4,737	4,670	5,281	4,863	4,687
Housing . . . . .	327	323	411	469	363	414	398	387	363	400	413	328
Industrial . . . . .	784	839	919	830	919	758	914	792	880	567	772	865
Educational . . . . .	35	8	9	12	8	11	27	43	7	1	1	6
Hospital . . . . .	998	1,487	892	660	745	734	880	523	579	619	457	671
Other federal buildings <sup>3</sup> . . . . .	2,743	2,998	2,825	2,720	2,618	2,810	2,689	2,991	2,841	3,694	3,219	2,817
Highways and streets . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	1,802	2,384	1,981	2,073	1,927	1,928	2,045	1,481	1,739	1,889	1,728	2,066
Conservation and development . . . . .	3,284	3,948	3,963	3,510	3,141	3,778	3,653	4,118	3,858	3,740	3,735	4,005
Miscellaneous nonbuilding <sup>4</sup> . . . . .	2,498	2,410	1,709	2,775	1,610	1,984	1,866	1,865	1,139	2,181	2,713	1,867

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

<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 10a. Monthly Value of Public Construction Put in Place: May 1998-May 2000—Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Period		State and locally owned public construction										
		Total state and local	Buildings					Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscellaneous construction <sup>2</sup>
			Total	Housing and redevelopment	Educational	Hospital	Other buildings <sup>1</sup>					
1998:	May <sup>f</sup> . . . . .	10,962	5,062	346	2,691	229	1,796	3,619	157	746	537	841
	June <sup>f</sup> . . . . .	13,203	5,843	400	3,280	235	1,929	4,749	191	854	526	1,041
	July <sup>f</sup> . . . . .	13,629	6,086	427	3,517	206	1,935	4,900	154	898	582	1,010
	August <sup>f</sup> . . . . .	14,300	6,103	356	3,532	203	2,013	5,454	169	914	587	1,073
	September <sup>f</sup> . . . . .	14,157	5,833	376	3,241	223	1,993	5,481	162	959	642	1,081
	October <sup>f</sup> . . . . .	13,607	5,505	388	2,885	226	2,006	5,321	168	982	694	936
	November <sup>f</sup> . . . . .	11,539	5,104	375	2,636	213	1,880	3,889	139	947	637	823
	December <sup>f</sup> . . . . .	10,030	4,887	365	2,593	220	1,709	2,860	124	830	585	743
1999:	January <sup>f</sup> . . . . .	8,710	4,452	333	2,393	190	1,536	2,227	135	741	473	681
	February <sup>f</sup> . . . . .	8,925	4,491	332	2,365	200	1,594	2,372	123	693	512	735
	March <sup>f</sup> . . . . .	9,805	4,767	375	2,467	202	1,723	2,778	120	808	549	783
	April <sup>f</sup> . . . . .	11,104	5,115	394	2,754	201	1,766	3,530	142	827	571	919
	May <sup>f</sup> . . . . .	11,892	5,192	439	2,790	222	1,741	4,122	132	893	602	951
	June <sup>f</sup> . . . . .	13,228	5,851	398	3,404	244	1,804	4,666	146	954	630	981
	July <sup>f</sup> . . . . .	13,740	5,943	397	3,459	232	1,854	4,995	147	933	683	1,039
	August <sup>f</sup> . . . . .	14,848	6,385	433	3,728	250	1,975	5,511	182	954	670	1,146
	September <sup>f</sup> . . . . .	14,493	6,061	444	3,405	272	1,939	5,551	181	944	655	1,100
	October <sup>f</sup> . . . . .	13,810	5,821	427	3,123	265	2,006	5,037	173	957	666	1,156
	November <sup>f</sup> . . . . .	12,471	5,419	369	2,875	266	1,909	4,328	199	900	606	1,019
	December <sup>f</sup> . . . . .	11,002	5,104	363	2,720	241	1,780	3,419	177	835	526	940
2000:	January <sup>f</sup> . . . . .	9,015	4,225	331	1,964	223	1,707	2,625	134	693	500	838
	February <sup>f</sup> . . . . .	8,602	4,291	308	1,976	222	1,786	2,072	158	690	529	861
	March <sup>f</sup> . . . . .	9,764	4,449	367	2,056	235	1,791	2,912	134	779	506	984
	April <sup>f</sup> . . . . .	10,686	4,788	397	2,188	271	1,932	3,353	129	890	570	956
	May <sup>p</sup> . . . . .	11,563	5,081	399	2,371	316	1,995	3,855	135	881	605	1,006
		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>
1998:	May <sup>f</sup> . . . . .	1,025	454	40	76	1	84	252	(NA)	189	244	118
	June <sup>f</sup> . . . . .	1,129	461	41	73	2	76	269	(NA)	212	282	151
	July <sup>f</sup> . . . . .	1,268	540	58	87	1	89	306	(NA)	262	299	141
	August <sup>f</sup> . . . . .	1,155	470	54	82	2	80	251	(NA)	225	301	131
	September <sup>f</sup> . . . . .	1,707	640	53	100	3	136	347	(NA)	210	561	269
	October <sup>f</sup> . . . . .	860	402	32	53	-	83	234	(NA)	146	184	101
	November <sup>f</sup> . . . . .	1,165	440	45	84	1	59	253	(NA)	175	300	228
	December <sup>f</sup> . . . . .	1,156	455	38	73	1	46	298	(NA)	183	280	221
1999:	January <sup>f</sup> . . . . .	921	364	24	58	3	74	205	(NA)	135	232	177
	February <sup>f</sup> . . . . .	1,049	424	24	63	1	112	225	(NA)	161	281	171
	March <sup>f</sup> . . . . .	1,058	421	34	77	1	74	235	(NA)	172	315	136
	April <sup>f</sup> . . . . .	1,063	387	39	68	1	54	224	(NA)	163	276	218
	May <sup>f</sup> . . . . .	949	378	30	75	1	61	213	(NA)	163	254	130
	June <sup>f</sup> . . . . .	1,082	406	36	65	1	63	241	(NA)	168	314	165
	July <sup>f</sup> . . . . .	1,102	428	35	80	2	77	234	(NA)	176	309	158
	August <sup>f</sup> . . . . .	1,066	371	30	62	3	41	234	(NA)	128	368	167
	September <sup>f</sup> . . . . .	1,444	527	41	99	1	65	321	(NA)	186	538	159
	October <sup>f</sup> . . . . .	881	373	28	40	-	44	261	(NA)	129	219	127
	November <sup>f</sup> . . . . .	1,112	400	34	63	-	38	265	(NA)	148	312	227
	December <sup>f</sup> . . . . .	1,096	418	29	77	1	60	251	(NA)	180	326	152
2000:	January <sup>f</sup> . . . . .	850	341	22	81	-	51	187	(NA)	119	256	122
	February <sup>f</sup> . . . . .	937	343	24	84	-	49	186	(NA)	180	279	123
	March <sup>f</sup> . . . . .	1,085	368	28	80	-	35	225	(NA)	171	315	216
	April <sup>f</sup> . . . . .	940	363	29	79	6	60	189	(NA)	150	285	123
	May <sup>p</sup> . . . . .	963	347	29	77	1	37	203	(NA)	168	263	161

- Less than \$0.5 million. NA Not available, but estimates are included in totals. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996 Dollars**

[Millions of dollars]

Type of construction	1997												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>135,901</b>	<b>8,182</b>	<b>8,391</b>	<b>9,289</b>	<b>10,363</b>	<b>11,420</b>	<b>12,759</b>	<b>13,494</b>	<b>14,223</b>	<b>13,607</b>	<b>13,475</b>	<b>11,146</b>	<b>9,551</b>
Total buildings . . . . .	63,427	4,482	4,513	4,863	5,109	5,208	5,729	5,932	6,085	5,857	5,855	5,041	4,752
Housing and redevelopment . . . . .	4,426	334	351	356	386	414	362	373	342	394	436	353	323
Educational . . . . .	33,118	2,151	2,188	2,384	2,520	2,658	3,138	3,325	3,514	3,127	3,021	2,576	2,516
Hospital . . . . .	3,764	295	282	319	366	301	330	358	325	335	338	271	244
Other <sup>1</sup> . . . . .	22,120	1,702	1,692	1,804	1,836	1,834	1,898	1,876	1,904	2,002	2,061	1,842	1,667
Highways and streets . . . . .	42,289	1,742	1,795	2,107	2,901	3,603	4,319	4,752	5,140	4,847	4,654	3,725	2,702
Conservation and development . . . . .	2,289	151	145	185	205	163	186	202	229	219	244	197	161
Other State and local construction . . . . .	27,896	1,807	1,937	2,133	2,148	2,447	2,524	2,607	2,769	2,683	2,721	2,183	1,936
Sewer systems . . . . .	10,034	707	707	791	830	919	943	906	900	949	908	792	680
Water supply facilities . . . . .	6,275	445	468	538	504	527	523	556	536	569	597	548	466
Miscellaneous nonbuilding <sup>2</sup> . . . . .	11,587	655	762	804	814	1,001	1,057	1,145	1,333	1,166	1,216	844	791
<b>Federal construction . . . . .</b>	<b>13,592</b>	<b>1,024</b>	<b>983</b>	<b>1,064</b>	<b>1,031</b>	<b>1,100</b>	<b>1,112</b>	<b>1,122</b>	<b>1,138</b>	<b>1,673</b>	<b>938</b>	<b>1,185</b>	<b>1,223</b>
Total buildings . . . . .	5,892	475	473	446	460	440	496	458	458	679	441	538	526
Housing . . . . .	658	70	57	51	49	48	57	53	56	53	68	57	37
Industrial . . . . .	965	87	78	86	109	72	92	88	76	94	53	62	67
Educational . . . . .	19	-	2	4	1	1	2	1	2	3	-	-	3
Hospital . . . . .	1,206	111	118	81	71	81	105	68	77	166	110	123	96
Other federal buildings <sup>3</sup> . . . . .	3,045	207	219	224	230	239	240	248	248	362	210	296	323
Highways and streets . . . . .	246	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,466	195	166	186	180	208	217	228	236	263	188	219	181
Conservation and development . . . . .	3,252	266	242	265	218	280	250	263	287	528	150	205	299
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,735	77	91	154	156	150	124	146	126	176	131	203	201

See footnotes at end of table.

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996**  
**Dollars—Con.**

[Millions of dollars]

Type of construction	1998												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>136,743</b>	<b>8,247</b>	<b>8,057</b>	<b>8,789</b>	<b>10,224</b>	<b>10,962</b>	<b>13,203</b>	<b>13,629</b>	<b>14,300</b>	<b>14,157</b>	<b>13,607</b>	<b>11,539</b>	<b>10,030</b>
Total buildings . . . . .	62,706	4,460	4,383	4,529	4,911	5,062	5,843	6,086	6,103	5,833	5,505	5,104	4,887
Housing and redevelopment . . . . .	4,338	304	294	342	365	346	400	427	356	376	388	375	365
Educational . . . . .	33,729	2,288	2,238	2,275	2,553	2,691	3,280	3,517	3,532	3,241	2,885	2,636	2,593
Hospital . . . . .	2,701	245	227	253	221	229	235	206	203	223	226	213	220
Other <sup>1</sup> . . . . .	21,938	1,623	1,624	1,659	1,771	1,796	1,929	1,935	2,013	1,993	2,006	1,880	1,709
Highways and streets . . . . .	45,640	1,949	1,925	2,342	3,152	3,619	4,749	4,900	5,454	5,481	5,321	3,889	2,860
Conservation and development . . . . .	1,832	151	136	148	136	157	191	154	169	162	168	139	124
Other State and local construction . . . . .	26,566	1,687	1,613	1,770	2,026	2,124	2,421	2,489	2,574	2,682	2,613	2,407	2,159
Sewer systems . . . . .	9,743	620	593	677	722	746	854	898	914	959	982	947	830
Water supply facilities . . . . .	6,552	409	417	427	507	537	526	582	587	642	694	637	585
Miscellaneous nonbuilding <sup>2</sup> . . . . .	10,271	658	603	666	798	841	1,041	1,010	1,073	1,081	936	823	743
<b>Federal construction . . . . .</b>	<b>13,503</b>	<b>957</b>	<b>987</b>	<b>1,079</b>	<b>1,016</b>	<b>1,025</b>	<b>1,129</b>	<b>1,268</b>	<b>1,155</b>	<b>1,707</b>	<b>860</b>	<b>1,165</b>	<b>1,156</b>
Total buildings . . . . .	5,628	406	423	477	460	454	461	540	470	640	402	440	455
Housing . . . . .	515	38	48	31	37	40	41	58	54	53	32	45	38
Industrial . . . . .	941	71	74	90	79	76	73	87	82	100	53	84	73
Educational . . . . .	14	-	1	-	1	1	2	1	2	3	-	1	1
Hospital . . . . .	941	67	62	99	59	84	76	89	80	136	83	59	46
Other federal buildings <sup>3</sup> . . . . .	3,217	229	239	257	283	252	269	306	251	347	234	253	298
Highways and streets . . . . .	237	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	2,377	178	178	225	194	189	212	262	225	210	146	175	183
Conservation and development . . . . .	3,387	182	269	249	236	244	282	299	301	561	184	300	280
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,873	180	107	117	110	118	151	141	131	269	101	228	221

See footnotes at end of table.

Table 10b. **Annual and Monthly Value of Public Construction Put in Place: 1997-1999 —Not Seasonally Adjusted in 1996 Dollars—Con.**

[Millions of dollars]

Type of construction	1999												
	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>State and local construction . . .</b>	<b>144,028</b>	<b>8,710</b>	<b>8,925</b>	<b>9,805</b>	<b>11,104</b>	<b>11,892</b>	<b>13,228</b>	<b>13,740</b>	<b>14,848</b>	<b>14,493</b>	<b>13,810</b>	<b>12,471</b>	<b>11,002</b>
Total buildings . . . . .	64,601	4,452	4,491	4,767	5,115	5,192	5,851	5,943	6,385	6,061	5,821	5,419	5,104
Housing and redevelopment . . . . .	4,704	333	332	375	394	439	398	397	433	444	427	369	363
Educational . . . . .	35,483	2,393	2,365	2,467	2,754	2,790	3,404	3,459	3,728	3,405	3,123	2,875	2,720
Hospital . . . . .	2,785	190	200	202	201	222	244	232	250	272	265	266	241
Other <sup>1</sup> . . . . .	21,628	1,536	1,594	1,723	1,766	1,741	1,804	1,854	1,975	1,939	2,006	1,909	1,780
Highways and streets . . . . .	48,537	2,227	2,372	2,778	3,530	4,122	4,666	4,995	5,511	5,551	5,037	4,328	3,419
Conservation and development . . . . .	1,860	135	123	120	142	132	146	147	182	181	173	199	177
Other State and local construction . . . . .	29,031	1,895	1,940	2,140	2,317	2,446	2,564	2,655	2,770	2,700	2,779	2,525	2,301
Sewer systems . . . . .	10,438	741	693	808	827	893	954	933	954	944	957	900	835
Water supply facilities . . . . .	7,142	473	512	549	571	602	630	683	670	655	666	606	526
Miscellaneous nonbuilding <sup>2</sup> . . . . .	11,450	681	735	783	919	951	981	1,039	1,146	1,100	1,156	1,019	940
<b>Federal construction . . . . .</b>	<b>12,824</b>	<b>921</b>	<b>1,049</b>	<b>1,058</b>	<b>1,063</b>	<b>949</b>	<b>1,082</b>	<b>1,102</b>	<b>1,066</b>	<b>1,444</b>	<b>881</b>	<b>1,112</b>	<b>1,096</b>
Total buildings . . . . .	4,896	364	424	421	387	378	406	428	371	527	373	400	418
Housing . . . . .	384	24	24	34	39	30	36	35	30	41	28	34	29
Industrial . . . . .	828	58	63	77	68	75	65	80	62	99	40	63	77
Educational . . . . .	14	3	1	1	1	1	1	2	3	1	-	-	1
Hospital . . . . .	762	74	112	74	54	61	63	77	41	65	44	38	60
Other federal buildings <sup>3</sup> . . . . .	2,909	205	225	235	224	213	241	234	234	321	261	265	251
Highways and streets . . . . .	290	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Military facilities . . . . .	1,909	135	161	172	163	163	168	176	128	186	129	148	180
Conservation and development . . . . .	3,743	232	281	315	276	254	314	309	368	538	219	312	326
Miscellaneous nonbuilding <sup>4</sup> . . . . .	1,986	177	171	136	218	130	165	158	167	159	127	227	152

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

<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.



# Appendix A.

## Definitions

---

### CONSTRUCTION

In this publication, construction includes the following:

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

The following are excluded from construction:

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

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

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

### VALUE OF CONSTRUCTION PUT IN PLACE

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

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

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

### CLASSIFICATION OF CONSTRUCTION

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

---

## Categories of Private Construction

### Residential Buildings

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

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

### Nonresidential Buildings

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

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

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

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

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

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

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

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

### Farm Nonresidential

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

### Public Utilities

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

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

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

---

## All Other Private

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

## Categories of Public Construction

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

### State and local Construction

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

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

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

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

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

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

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

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

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

### Federal Construction

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

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

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

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

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

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

---

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

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

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

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

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

# Appendix B.

## Data Sources, Assumptions, and Methods

---

### INTRODUCTION

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

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

### PRIVATE RESIDENTIAL BUILDINGS

#### New One-Unit Housing

Construction cost of new one-unit houses started each month is estimated using data from the U.S. Census Bureau's Housing Starts Survey and Housing Sales Survey. The estimated cost of all single units started is then distributed into monthly value put in place by applying fixed patterns of monthly construction progress. The patterns are shown in Table B-1.

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

#### New Two-or-More-Unit Buildings

A subsample of new residential building projects with two units or more is selected from the Census Bureau's Survey of Construction (SOC). A description of this survey is provided in Current Construction Reports, C20/00-1 *Housing Starts*, issued March 2000.

Once a project is selected, monthly construction progress reports are requested from the owner until the project is completed. About 2,700 projects are in the

survey each month. This number includes newly selected projects as well as projects carried over from the previous months. Estimates of value put in place are obtained by multiplying the final weight of each project by the reported value and summing all projects. The final weight can be expressed as follows:

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

- a. **Basic weight.** The basic weight is the reciprocal of the probability of selection. Since the projects in the Two Plus Survey are a subsample of the SOC sample, the basic weight includes the reciprocal of the sampling rate used in SOC.
- b. **Unit adjustment factor.** The unit adjustment factor is the ratio of the unbiased estimate obtained from the Census Bureau's Building Permits Survey of the number of 2+ units authorized in a month to the unbiased estimate from the Two Plus Survey of the number of 2+ units authorized in a month.
- c. **Adjustment for architectural, engineering, and miscellaneous costs.** The value put in place for the construction of a project includes the total construction cost and fees for architectural and engineering services and miscellaneous costs. However, monthly reports from sample projects do not include architectural, engineering, and miscellaneous costs. Each month's reported value is inflated to account for these costs so that the sum of the values put in place each month is the total cost of the project. This adjustment factor is defined as the ratio of the total estimated value of the project reported by the owner (construction cost and architectural, engineering, and miscellaneous costs) to the estimated construction cost of the project reported by the owner.

#### Improvements

Data for this series are obtained by the Census Bureau from household interviews in a representative sample of owner-occupied units and a mail survey of owners of a sample of rental or vacant properties. Prior to 1985, these data were collected as part of the Census Bureau's Quarterly Household Survey of Residential Alterations and Repairs. Beginning with January 1984 statistics, estimates of expenditures on owner-occupied

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

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

Data from the mail survey of owners of a sample of rental or vacant properties are collected after the end of each quarter. The expenditures are not reported for each month of the quarter but only for the entire quarter. For this report, monthly estimates need to be made by apportioning the quarterly expenditures to the months in the quarter. The quarterly estimate is available 4 months after the end of the quarter and accounts for about 24 percent of the estimate.

The estimates of total residential improvements are usually forecasted data at least 1 or 2 months in advance. The revised estimates are still based on incomplete data and in many cases are still forecasts. Estimates based on complete data are first used in the May publication for revisions to the previous year. The total improvements estimates are subject to substantial revisions from the preliminary estimates based on forecasts to the final estimates based on complete data. The final estimates have relative standard errors approximating 15 percent. For estimates beginning in 1982, time series techniques have been used to remove the sampling variation.

### PRIVATE NONRESIDENTIAL BUILDINGS

The Census Bureau conducts a monthly Construction Progress Reporting Survey for estimating the value of private nonresidential building construction in the United States. This survey uses three sources of information for identifying nonresidential building projects:

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

Projects from sources 1 and 2 are stratified by type of construction and construction value. Sixty-six strata are created and each stratum is assigned a specific sampling rate. Of the 66 strata, 22 are certainty strata and have a sampling rate of 1-in-1. Within each of the remaining 44 non-certainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Projects from source 3 (nonpermit areas) are selected with virtual certainty. Once a project is selected, monthly construction progress reports are requested from the owner until the project is completed. About 7,000 projects are in the survey at any one time.

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

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

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

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

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

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

Imputations are made for projects which have not reported at the time of the monthly tabulation, based on estimated total construction value and month of start of the project. Weighted data are summed over all

---

sample projects by type of construction. The results are increased by 28 percent to account for undercoverage of construction projects not reported by F.W. Dodge. The adjustment for undercoverage results from comparison studies of Dodge reports with building permits for a sample of projects for which permits were issued.

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

### **FARM NONRESIDENTIAL CONSTRUCTION**

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

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

### **PUBLIC UTILITIES**

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

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

### **ALL OTHER PRIVATE CONSTRUCTION**

Beginning with data for May 1995, estimates for this series are based upon a monthly sample survey of projects. The information for creating the sampling frame is obtained from the same F.W. Dodge data used for private nonresidential buildings (see above). Once a

project is selected it remains in the survey until completion of the project, and monthly progress reports are requested from the owner. Tabulation of data is the same as for private nonresidential buildings. The results are also increased by 28 percent to account for projects not reported by F.W. Dodge.

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

### **PUBLIC CONSTRUCTION**

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

#### **State and Local**

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

The projects are stratified by type of construction and value according to the information from Dodge. Seventy-two strata are created and a sampling rate is assigned to each stratum. Of the 72 strata, 16 are certainty strata. Within each of the remaining 56 non-certainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Once a project is selected it remains in the survey until completion of the project, and monthly construction progress reports are requested from the appropriate agency in charge of the project or its designated agent, such as the builder or architect responsible for the project. The average number of projects in the survey at any one time is about 8,000. These include newly selected projects as well as projects carried over from previous months.

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

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

#### **Federal**

Monthly value-in-place estimates for federally owned construction are based on monthly data which, with few exceptions, are supplied to the Census Bureau by each federal agency involved in construction activities. Information is obtained from federal budget documents for a small number of agencies where information cannot be directly supplied. These budget totals are prorated over the fiscal year to derive monthly estimates.

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

[Percent of the value of units started monthly]

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

<sup>1</sup>Month of start is first month of activity.



# Appendix C.

## Reliability of the Estimates

---

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

On an annual basis, the estimates for series directly measured monthly, quarterly, or annually accounted for about 71 percent of total construction in 1999 (private multi-family residential, private residential improvements, private nonresidential buildings, farm nonresidential construction, public utility construction, all other private construction, and virtually all of public construction). On a monthly basis, directly measured data are available for about 54 percent of the value-in-place estimates.

Some of the directly measured monthly construction value-in-place estimates are based on samples. Estimates from these samples may differ from statistics which would have been obtained from a complete census using the same schedules and procedures. An estimate based on a sample survey is subject to both sampling error and nonsampling error. The accuracy of a survey result is determined by the joint effects of these errors.

### MEASURE OF SAMPLING ERRORS

Sampling error reflects the fact that only a particular sample was surveyed rather than the entire population. Each sample selected for the monthly value-in-place survey is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Estimates derived from the different samples would differ from one another. The standard error, or sampling error, of a survey estimate is a measure of the variation among the estimates from all possible samples and, thus, is a measure of the precision with which an estimate from a particular sample approximates the average from all possible samples.

Estimates of the standard errors for the monthly, year-to-date and annual estimates were computed from the sample data for selected statistics in this report.

They are presented in the form of relative standard errors in Table C-1. The relative standard error equals the standard error divided by the estimated value to which it refers.

The sample estimate and an estimate of its standard error allow us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples with the same size and design. A 90-percent confidence interval is defined to be from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate. If all possible samples were selected and surveyed under essentially the same conditions and all the respective 90-percent confidence intervals were generated, then approximately nine-tenths of the intervals would include the average value of all sample estimates and approximately one-tenth would not include this estimate. For example, suppose Table 3 of this report showed that the monthly VIP estimate for "total private nonresidential buildings" was \$10.0 billion in a particular month. According to Table C-1, the relative standard error of this estimate is 2 percent. Multiplying \$10.0 billion by .02, we obtain \$200 million as the standard error. To obtain a 90-percent confidence interval, multiply \$200 million by 1.6 and add and subtract the result from \$10.0 billion, yielding limits of \$9.68 billion and \$10.32 billion. The average value of the monthly VIP estimate for "total private nonresidential buildings" may or may not be contained in this computed interval, but one can say that the average is included in the constructed interval with a specified confidence of 90 percent.

Table C-1 also presents coefficients necessary to compute standard errors for the month-to-month and year-to-date changes. To derive a specific standard error of a change, look up an appropriate coefficient (k1 or k2) for the change and apply the following formula:

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

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

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

### NONSAMPLING ERRORS

As calculated for this report, the coefficient of variation estimates sampling variation but does not measure all nonsampling error in the data. Nonsampling error

---

consists of both a variance component and a bias component. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. Nonsampling errors are usually attributed to many possible sources: (1) coverage error—failure to accurately represent all population units in the sample, (2) inability to obtain information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of coverage, collection and nonresponse, response, processing, or imputing for missing or inconsistent data. These nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For preliminary value-in-place estimates, the average imputation rates for major components are as follows: private nonresidential construction, 45 percent; state and locally owned public construction, 32 percent; private residential construction of 2 units or more, 43 percent; and private residential improvements, 13 percent. Each of these imputation rates is not an explicit indication of the potential error in statistics, but the degree of uncertainty regarding the accuracy of the statistics increases as the percentage of imputation increases.

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

For state and locally owned construction, construction outlays from the Survey of Government Finances are available only through Fiscal Year 1997. (Outlays

are included if a government agency's fiscal year ending date falls within July 1996 to June 1997 inclusive, and for three state agencies with fiscal years ending in August or September 1997.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1997 through April 2001. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12 month period but result from capital outlays made over a 26 month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

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

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

### **MONTHLY REVISIONS TO ESTIMATES**

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

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -0.7 percent to 1.0 percent with a median of 0.2 percent (see Table C-2). The range of the difference between first revision and second revision was from -0.2 to 1.1 percent, with a median of 0.2 percent.

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

Type of construction	Relative standard error (percent)			Coefficient for changes	
	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
<b>Total construction</b> .....	<b>2</b>	<b>2</b>	<b>1</b>	<b>.03</b>	<b>.02</b>
Private construction .....	3	2	1	.04	.03
Residential buildings .....	5	3	2	.06	.05
New housing units .....	2	2	1	.01	.02
1 unit .....	2	2	2	.01	.02
2 units or more .....	4	4	3	.03	.04
Nonresidential buildings .....	2	1	1	.02	.01
Industrial .....	3	2	2	.04	.03
Office .....	4	3	2	.05	.04
Hotels, motels .....	7	6	5	.09	.08
Other commercial .....	5	3	2	.06	.04
Religious .....	9	8	5	.12	.11
Educational .....	7	5	5	.10	.07
Hospital and institutional .....	6	5	5	.07	.07
Miscellaneous buildings .....	7	5	4	.09	.07
Public construction .....	2	1	1	.03	.01
Housing and redevelopment .....	8	5	4	.11	.07
Industrial .....	(NA)	(NA)	(NA)	(NA)	(NA)
Educational .....	3	2	2	.04	.03
Hospital .....	6	5	4	.08	.07
Other public buildings .....	3	2	2	.04	.03
Highways and streets .....	4	3	2	.05	.04
Military facilities .....	(NA)	(NA)	(NA)	(NA)	(NA)
Conservation and development .....	4	3	2	.06	.04
Sewer systems .....	6	4	3	.08	.06
Water supply facilities .....	8	5	3	.11	.07
Miscellaneous public .....	8	5	4	.11	.07
State and local construction .....	2	1	1	.03	.01
Housing and redevelopment .....	8	5	5	.11	.07
Educational .....	3	2	2	.04	.03
Hospital .....	8	7	5	.11	.10
Other public buildings .....	4	3	2	.05	.04
Highways and streets .....	4	3	2	.05	.04
Conservation and development .....	16	10	9	.23	.14
Sewer systems .....	6	4	3	.08	.06
Water supply facilities .....	8	5	3	.11	.07
Miscellaneous public .....	9	6	4	.12	.09
Federal construction .....	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Note: All statistics are based upon 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.

# Appendix D.

## Adjustments for Seasonal Variations and Cost Changes

### ADJUSTMENT FOR SEASONAL VARIATIONS

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

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

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

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

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

[www.census.gov/const/www/faq2.html](http://www.census.gov/const/www/faq2.html)

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

As the unadjusted data are revised, so are the seasonal factors. Thus, changes in seasonally adjusted estimates will not only reflect changes in the unadjusted data, but also changes to the seasonal factors. In addition, the seasonally adjusted data are revised back for 4 years each year with the release of May data.

### ADJUSTMENT FOR COST CHANGES

The monthly value-in-place estimates in current dollars are converted to a constant 1996 dollar series using cost indexes derived for each category of construction. The deflators for the various categories are related indexes or combinations of related indexes from private companies and federal agencies. The selection of the indexes and procedures used for developing the deflators for each category resulted primarily from recommendations made jointly by the Bureau of Economic Analysis and the Census Bureau.<sup>1</sup>

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

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

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

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

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

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

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

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

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

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

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

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

Both the construction index and the building index have four components—three materials items plus labor. The materials items for both indexes are as follows: 1) the base price of structural steel, which is a

20-city average of wholesale prices; 2) consumers' net price of cement, which is a 20-city average of f.o.b. bulk prices; 3) lumber, which is 2" x 4" S4S pine and fir in carload lots (ENR 20-city average). The labor component of the construction cost index, which is designed to show the movement of construction cost in general, is the common labor rate (ENR 20-city average), while the labor component of the building cost index is the skilled labor rate (ENR 20-city average).

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

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

Annual indexes are averages of the monthly indexes.

More information about the indexes can be found on the ENR Internet site at [www.enr.com](http://www.enr.com).

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

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

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

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

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

This price index is designed to measure changes over time in the price of new single-family houses under construction each month and year. It is calculated using the "hedonic" or regression methodology whereby physical characteristics of new houses are regressed against house values to obtain "prices" of

---

those characteristics. These prices can then be used in an index calculation such that “quality” of new houses is kept constant and inflation measured.

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

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

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

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

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

Fisher ideal chain-type annual-weighted indexes are computed by multiplying annual components together, called index relatives. The index relative is the geometric mean of a Laspeyres index and a Paasche index. The Laspeyres index compares the current year construction value of the houses built in the previous year to the actual value of the previous year’s construction value of these same houses.

For years following the base year, the index is computed by multiplying the relatives. For years prior to the base year, the index is found by dividing the relatives.

Monthly Fisher ideal indexes are derived by distributing the annual indexes into monthly indexes based on a month-to-month change in the Single-Family Houses Under Construction Paasche Index.

Because the chain-type Fisher ideal index addresses the substitution effects which can bias the more traditional index measures, this index is the preferred index for use as a price deflator.

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

The index is compiled quarterly with 1977 as the base period. The Bureau of Reclamation composite index for dams and reclamation projects reflects the

Bureau of Reclamation’s cost of constructing these projects in 17 Western States. The index is a weighted average of costs of labor, materials, and equipment furnished by contractors and the government. When possible, labor and materials costs are based on unit bid prices from contracts let by the Bureau of Reclamation. These data are supplemented by components of the Federal Highway Administration index, Bureau of Labor Statistics wholesale indexes, quotations of wage rates published in *Engineering News-Record* and judgment of Bureau of Reclamation analysts.

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

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

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

This index is available on the Internet at [www.usbr.gov/tsc/costtrend.html](http://www.usbr.gov/tsc/costtrend.html).

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

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

The annual index is an average of the quarterly indexes.

This index is available on the Internet at [www.turnerconstruction.com](http://www.turnerconstruction.com).

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

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

---

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

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

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

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

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

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

AUS Consultants developed an independent telephone plant index in 1977. This index had been published since then through affiliation with Whitman, Requardt and Associates as the Handy-Whitman Index of Public Utility Construction Cost for the telephone industry. As of January 1, 1990, Handy-Whitman no longer publishes the index which is now available only through C.A. Turner, the publications division of AUS Consultants.

The telephone plant index numbers cover each major FCC plant account and are published with 1973 as the base period at January 1 and July 1 price levels each year. Data from many operating companies and suppliers related to construction methods, plant investment, and component costs are analyzed and summarized as a basis for preparing the index.

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

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

Type of construction	Average percentage change				$\bar{I}/\bar{C}$	MCD
	$\bar{O}$	$\bar{C}$	$\bar{I}$	$\bar{C}$		
<b>Total construction</b> .....	<b>6.00</b>	<b>1.17</b>	<b>0.98</b>	<b>0.61</b>	<b>1.61</b>	<b>2</b>
Private construction.....	4.98	1.28	0.99	0.68	1.45	2
Residential buildings.....	6.55	1.25	0.68	0.94	0.73	1
Nonresidential buildings.....	4.15	2.17	1.89	0.90	2.10	3
Public construction.....	9.23	2.20	2.04	0.66	3.09	4
Buildings.....	5.43	2.53	2.36	0.82	2.86	3
Military facilities.....	17.92	11.24	10.87	2.28	4.76	6
Highways.....	18.84	4.04	3.76	1.11	3.37	4
Conservation and development.....	15.96	8.43	8.33	1.60	5.22	8
All other public.....	8.03	4.43	4.23	1.09	3.89	5

### DEFINITIONS OF SUMMARY MEASURES

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

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

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



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

[Percent]

Type of construction	May 2000 <sup>P</sup>	Apr. 2000 <sup>r</sup>	Mar. 2000 <sup>r</sup>	Feb. 2000 <sup>r</sup>	Jan. 2000 <sup>r</sup>	Dec. 1999 <sup>r</sup>	Nov. 1999 <sup>r</sup>	Oct. 1999 <sup>r</sup>	Sep. 1999 <sup>r</sup>	Aug. 1999 <sup>r</sup>	July 1999 <sup>r</sup>	May 1999 <sup>r</sup>
<b>PRIVATE CONSTRUCTION</b>												
Residential buildings:												
New housing units:												
1 unit .....	102.0	96.5	91.9	77.3	82.2	89.7	105.8	109.9	112.6	113.6	112.2	101.5
2 units or more .....	104.3	99.9	96.0	88.9	88.2	94.6	100.1	105.0	104.5	107.5	104.3	104.8
Nonresidential buildings:												
Industrial .....	99.5	97.3	95.5	90.6	89.3	104.8	104.0	108.0	107.0	104.2	100.2	98.4
Office .....	104.6	98.5	97.9	96.7	91.6	97.1	102.4	102.5	104.6	103.9	100.9	103.2
Hotels, motels .....	101.9	99.1	99.8	97.3	91.2	99.1	100.2	99.6	103.1	104.1	103.3	100.4
Other commercial .....	100.9	94.9	90.5	84.6	83.9	94.3	104.2	110.7	112.4	111.6	106.8	100.4
Religious .....	97.9	93.9	91.4	91.8	89.3	100.0	111.7	109.9	112.9	108.9	98.4	97.2
Educational .....	103.4	95.7	90.5	84.1	82.8	87.6	95.7	99.3	106.8	119.2	119.2	102.4
Hospital and institutional .....	100.9	101.4	99.3	94.5	93.3	100.6	104.0	104.8	103.4	102.6	97.0	100.2
Miscellaneous nonresidential .....	100.8	102.7	97.5	89.9	88.9	98.4	103.3	107.1	104.5	102.9	102.0	100.2
Telecommunications .....	102.9	93.4	103.4	88.3	77.6	108.8	107.7	105.0	103.9	107.9	102.7	94.7
All other private .....	96.8	93.7	90.2	77.6	82.9	97.4	101.5	117.5	111.2	117.8	109.3	97.3
<b>PUBLIC CONSTRUCTION</b>												
<b>State and Local</b>												
Buildings:												
Housing and redevelopment .....	101.9	97.0	94.1	89.1	90.0	98.2	105.2	109.2	109.6	101.6	101.2	100.6
Educational .....	96.3	91.3	84.5	80.9	82.4	89.4	95.4	104.7	114.4	127.3	120.9	96.0
Hospital .....	100.7	94.8	96.6	90.5	90.8	99.4	101.1	107.8	108.7	99.1	101.2	97.0
Other buildings .....	103.9	98.9	92.6	89.0	88.3	94.6	102.9	108.8	106.7	107.1	103.1	103.9
Highways and streets .....	102.0	82.6	66.8	52.9	55.9	76.6	102.9	133.1	140.5	142.0	127.5	101.2
Conservation and development .....	100.2	94.7	82.5	77.2	77.1	87.0	102.0	118.2	118.4	122.5	114.1	100.4
Sewer systems .....	102.1	92.7	89.4	78.9	80.9	92.6	107.1	114.0	117.0	113.9	106.5	99.5
Water supply facilities .....	103.2	96.4	85.4	81.7	81.5	93.4	108.2	118.4	110.2	109.8	109.5	102.7
Miscellaneous construction .....	100.2	94.7	82.5	77.2	77.1	87.0	102.0	118.2	118.4	122.5	114.1	100.4
<b>Federal</b>												
Buildings:												
Housing and redevelopment .....	99.2	93.8	102.4	91.3	88.9	107.1	98.6	84.7	135.4	93.9	104.6	97.5
Industrial .....	99.2	93.8	102.4	91.3	88.9	107.1	98.6	84.7	135.4	93.9	104.6	97.5
Educational .....	99.2	93.8	102.4	91.3	88.9	107.1	98.6	84.7	135.4	93.9	104.6	97.5
Hospital .....	99.2	93.8	102.4	91.3	88.9	107.1	98.6	84.7	135.4	93.9	104.6	97.5
Other buildings .....	99.2	93.8	102.4	91.3	88.9	107.1	98.6	84.7	135.4	93.9	104.6	97.5
Military .....	101.6	94.2	103.5	81.7	90.7	104.8	102.7	82.2	128.4	103.5	103.3	101.2
Conservation and development .....	97.5	94.0	95.5	85.8	84.6	97.7	100.4	70.1	167.3	107.2	101.6	96.9
Miscellaneous construction .....	97.5	94.0	95.5	85.8	84.6	97.7	100.4	70.1	167.3	107.2	101.6	96.9

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

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

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

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

Table D-4. **Indexes Used in Deriving Estimates of the Value of Construction Put in Place in Constant Dollars**

[1996 = 100]

Period	U.S. Census Bureau		Engineering News-Record		U.S. Census Bureau Houses Under Construction		Federal Highway Administration composite	Bureau of Reclamation	Turner Construction Company	Handy-Whitman public utility				C.A. Turner telephone plant
	Composite fixed-weighted	Implicit price deflator	Buildings	Construction	Fixed-weighted	Price deflator				Buildings	Electric	Gas	Water	
	Annual indexes													
1995.....	97.7	97.8	97.1	97.3	98.1	98.1	99.8	98	97	97	98	99	98	96
1996.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	100	100	100	100	100	100
1997.....	103.2	103.3	105.0	103.6	102.9	102.9	107.5	103	104	103	102	102	102	102
1998.....	106.0	106.1	105.8	105.3	105.6	105.6	105.2	105	109	104	104	104	104	102
1999.....	110.3	110.4	107.9	107.8	110.4	110.4	112.7	107	113	107	105	107	107	101
	Monthly indexes						Quarterly indexes			Semiannual indexes				
1998: January .....	104.9	105.0	105.0	104.1	104.3	104.4								
February .....	104.7	104.9	105.3	104.5	104.1	104.2	98.0	105	107					
March.....	104.8	104.9	105.1	104.5	104.1	104.2				103	103	104	103	103
April.....	105.0	105.0	105.4	104.6	104.5	104.4								
May.....	105.3	105.2	105.3	104.6	104.6	104.6	103.0	104	108					
June.....	105.9	105.8	105.5	104.9	105.5	105.4								
July.....	106.2	106.1	105.6	105.3	105.9	105.8								
August.....	106.5	106.4	105.9	105.5	106.0	105.9	112.1	105	110					
September .....	106.6	106.6	106.6	106.1	106.0	106.0				104	104	104	104	102
October.....	106.9	107.0	106.9	106.5	106.4	106.5								
November.....	107.3	107.4	106.9	106.6	107.1	107.1	107.7	106	111					
December.....	107.9	107.9	106.7	106.6	107.8	107.8								
1999: January .....	108.4	108.5	106.9	106.7	108.5	108.5								
February.....	108.6	108.6	106.7	106.6	108.7	108.6	107.1	105	111					
March.....	109.0	108.9	106.5	106.5	109.0	108.9				105	105	105	106	102
April.....	109.3	109.3	106.8	106.9	109.5	109.4								
May.....	109.7	109.8	106.8	106.8	109.8	109.8	117.5	106	112					
June.....	110.4	110.4	107.2	107.4	110.4	110.4								
July.....	110.6	110.6	108.0	108.1	110.8	110.9								
August.....	110.8	110.8	108.5	108.3	110.9	111.0	108.0	108	114					
September.....	110.9	110.9	109.4	109.0	111.0	111.1				106	105	106	106	100
October.....	111.4	111.4	109.4	109.1	111.5	111.5								
November.....	112.0	111.9	109.2	109.0	112.1	112.0	118.1	109	115					
December.....	112.3	112.3	109.2	109.0	112.3	112.4								
2000: January.....	<sup>r</sup> 112.6	<sup>r</sup> 112.8	109.4	109.0	<sup>r</sup> 112.6	<sup>r</sup> 112.8								
February.....	<sup>r</sup> 112.9	<sup>r</sup> 113.0	110.0	109.6	<sup>r</sup> 112.8	<sup>r</sup> 112.9	113.2	109	116					
March.....	<sup>r</sup> 113.3	<sup>r</sup> 113.3	110.4	110.3	<sup>r</sup> 113.3	<sup>r</sup> 113.5				109	106	110	108	100
April.....	<sup>r</sup> 113.6	<sup>r</sup> 113.6	110.3	110.3	<sup>r</sup> 113.5	<sup>r</sup> 113.5								
May.....	<sup>p</sup> 113.8	<sup>p</sup> 113.8	111.1	110.9	<sup>p</sup> 113.8	<sup>p</sup> 113.8	(NA)	111	117					
June.....			110.9	111.0										

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

**Table D-5. Monthly U.S. Census Bureau Composite Fixed-Weighted Price Index: 1964 to 2000**  
 [1996=100]

Year	Month												Annual composite index
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	
1964	18.7	18.3	18.0	18.3	18.5	18.6	18.5	18.4	18.4	18.7	18.8	18.9	18.5
1965	18.9	18.8	18.8	18.8	19.0	19.1	19.0	19.0	19.0	19.4	19.6	19.7	19.1
1966	19.5	19.3	19.3	19.8	20.2	20.2	20.1	20.0	19.9	20.2	20.3	20.5	19.9
1967	20.3	20.2	20.3	20.3	20.4	20.4	20.5	20.6	20.7	20.8	20.9	21.1	20.5
1968	21.2	21.3	21.4	21.5	21.6	21.6	21.5	21.6	21.7	22.0	22.4	22.8	21.7
1969	22.6	22.7	22.9	23.0	23.3	23.1	23.3	23.2	23.2	23.5	23.7	23.8	23.2
1970	23.7	23.8	24.0	24.5	24.8	25.2	24.7	24.4	24.4	24.6	24.7	25.1	24.5
1971	25.0	25.6	25.8	25.9	25.9	26.1	26.2	26.7	26.6	26.8	27.0	27.2	26.2
1972	27.3	27.3	27.5	27.5	27.5	27.6	27.8	28.1	28.3	28.6	28.8	29.2	28.0
1973	29.2	29.2	29.5	29.8	30.0	30.1	30.5	30.9	31.1	31.4	31.6	31.7	30.4
1974	32.3	32.5	33.3	33.1	33.5	34.5	34.9	34.9	35.1	35.4	35.8	36.0	34.3
1975	36.4	36.3	36.4	36.7	37.1	37.4	37.4	37.1	37.5	37.6	37.8	38.1	37.2
1976	38.0	38.0	38.1	38.5	39.1	39.4	39.5	39.4	39.5	39.8	40.0	40.2	39.1
1977	40.8	41.0	41.2	41.4	41.9	42.5	42.6	42.9	43.3	43.5	43.9	44.4	42.5
1978	44.8	45.1	45.4	45.9	46.2	46.7	47.1	47.6	48.1	48.7	49.3	49.7	47.1
1979	50.2	50.7	50.9	51.3	52.2	53.0	53.4	54.1	54.4	54.9	55.5	55.9	53.0
1980	56.7	57.2	57.5	57.8	58.5	59.3	59.9	60.2	60.4	60.9	61.4	61.7	59.3
1981	62.1	62.4	63.1	63.4	63.6	63.9	64.2	64.4	64.4	65.0	65.2	65.3	63.9
1982	65.4	65.3	65.4	65.4	65.6	65.9	65.6	65.7	65.8	65.7	66.1	66.2	65.7
1983	66.6	66.5	66.4	66.2	66.8	67.2	67.3	67.4	67.4	67.9	68.1	68.3	67.2
1984	68.5	68.8	69.0	69.0	69.3	69.5	69.7	70.2	70.5	70.9	71.0	71.0	69.8
1985	71.3	71.2	71.3	71.2	71.4	71.6	71.7	71.8	72.1	72.4	72.6	73.0	71.8
1986	73.4	73.5	73.7	73.9	74.3	74.7	75.0	75.1	75.4	75.8	76.1	76.5	74.8
1987	76.7	76.9	77.0	77.2	77.3	77.6	77.8	77.9	78.0	78.1	78.7	79.0	77.7
1988	79.5	79.7	79.7	79.7	80.0	80.1	80.3	80.5	80.8	81.1	81.4	81.5	80.4
1989	81.7	82.2	82.3	82.7	83.0	83.1	83.4	83.7	83.9	84.0	84.1	84.2	83.2
1990	84.5	84.6	84.8	84.9	85.1	85.4	85.8	86.0	86.0	86.0	86.3	86.3	85.5
1991	86.3	86.2	85.9	85.8	86.0	86.4	86.5	86.5	86.4	86.2	86.1	86.0	86.2
1992	86.0	86.2	86.2	86.4	86.3	86.4	86.5	86.7	86.9	87.4	87.7	88.2	86.7
1993	88.4	88.8	89.4	89.8	89.5	89.4	89.9	90.4	90.7	91.0	91.5	91.9	90.1
1994	92.2	92.4	92.5	92.6	93.0	93.4	93.8	94.2	94.7	95.2	95.9	96.6	93.9
1995	97.1	97.1	97.1	97.1	97.4	97.8	97.8	97.9	98.2	98.5	98.4	98.4	97.7
1996	98.8	99.0	99.1	99.0	99.2	99.6	100.2	100.4	100.7	100.9	100.9	101.3	100.0
1997	101.7	101.8	102.2	102.5	102.7	102.9	103.3	103.5	103.9	104.2	104.7	104.8	103.2
1998	104.9	104.7	104.8	105.0	105.3	105.9	106.2	106.5	106.6	106.9	107.3	107.9	106.0
1999	108.4	108.6	109.0	109.3	109.7	110.4	110.6	110.8	110.9	111.4	112.0	112.3	110.3
2000	<sup>r</sup> 112.6	<sup>r</sup> 112.9	<sup>r</sup> 113.3	<sup>r</sup> 113.6	<sup>r</sup> 113.8								

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

**Table D-6. Monthly U.S. Census Bureau Implicit Price Deflator: 1964 to 2000**

[1996=100]

Year	Month												Annual deflator
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	
1964	18.6	18.2	17.9	18.3	18.5	18.6	18.6	18.5	18.5	18.6	18.8	18.8	18.5
1965	18.9	18.8	18.8	18.8	19.0	19.1	19.1	19.0	19.0	19.3	19.6	19.6	19.1
1966	19.4	19.2	19.3	19.7	20.2	20.2	20.0	19.9	19.9	20.2	20.3	20.4	19.9
1967	20.3	20.2	20.3	20.3	20.4	20.4	20.6	20.6	20.7	20.8	20.9	21.1	20.6
1968	21.1	21.3	21.4	21.4	21.6	21.6	21.5	21.6	21.7	22.0	22.4	22.7	21.7
1969	22.6	22.6	22.8	22.9	23.2	23.1	23.3	23.2	23.2	23.6	23.8	24.0	23.2
1970	23.8	23.8	24.1	24.6	24.9	25.3	24.9	24.7	24.7	24.9	24.9	25.2	24.7
1971	25.0	25.7	25.8	25.9	25.9	26.1	26.2	26.7	26.7	26.8	27.0	27.2	26.3
1972	27.2	27.3	27.5	27.5	27.5	27.5	27.7	28.1	28.1	28.5	28.7	29.1	27.9
1973	29.0	29.1	29.3	29.8	29.9	30.0	30.4	30.8	31.0	31.3	31.6	31.7	30.4
1974	32.2	32.7	33.4	33.2	33.7	34.7	35.0	35.1	35.3	35.8	36.2	36.5	34.5
1975	36.9	36.9	36.9	37.2	37.6	38.0	38.0	37.8	38.1	38.2	38.4	38.6	37.8
1976	38.3	38.3	38.4	38.9	39.5	39.8	39.9	39.9	40.0	40.1	40.2	40.4	39.5
1977	40.7	41.0	41.1	41.2	41.8	42.6	42.7	43.2	43.5	43.7	44.0	44.3	42.6
1978	44.7	45.1	45.6	46.2	46.4	47.3	47.6	48.2	48.3	48.9	49.2	49.5	47.5
1979	49.7	50.1	50.4	50.9	52.2	53.1	53.5	54.4	54.4	55.2	55.4	55.6	53.1
1980	56.1	56.7	57.0	57.4	58.2	59.1	59.7	59.7	60.1	60.8	61.0	61.1	59.0
1981	61.5	61.8	62.6	62.7	63.0	63.5	63.9	64.1	64.2	64.7	64.6	64.6	63.5
1982	64.8	64.8	65.2	65.1	65.7	66.2	66.1	66.5	66.6	66.3	66.4	66.4	65.9
1983	66.8	66.7	66.6	66.4	66.7	67.0	67.1	67.1	67.1	67.6	67.6	67.7	67.1
1984	68.1	68.5	68.6	68.6	68.7	68.8	69.2	69.7	69.8	70.0	70.0	70.1	69.3
1985	70.5	70.6	70.8	70.6	70.7	70.8	70.9	71.1	71.3	71.6	71.7	71.8	71.1
1986	72.3	72.4	72.6	72.8	73.1	73.4	73.7	73.9	74.2	74.5	74.7	75.0	73.6
1987	75.3	75.4	75.4	75.7	75.8	76.2	76.5	76.6	76.7	76.9	77.3	77.5	76.3
1988	78.1	78.4	78.5	78.6	78.8	78.9	79.1	79.3	79.6	79.9	80.1	80.3	79.2
1989	80.7	81.1	81.3	81.8	82.3	82.4	82.6	82.8	83.0	83.1	83.2	83.5	82.4
1990	84.0	84.1	84.2	84.4	84.6	84.9	85.3	85.6	85.5	85.7	85.7	85.7	85.0
1991	85.6	85.6	85.2	85.4	85.6	86.0	86.2	86.3	86.3	86.2	85.9	85.9	85.9
1992	86.0	86.3	86.3	86.4	86.4	86.6	86.8	86.9	87.2	87.6	88.0	88.4	86.9
1993	88.7	89.0	89.6	89.9	89.6	89.5	90.0	90.5	90.8	91.0	91.5	91.8	90.2
1994	92.2	92.4	92.5	92.7	92.9	93.3	93.6	94.1	94.6	95.2	95.8	96.4	93.9
1995	96.9	97.0	97.0	97.2	97.4	97.8	97.9	98.0	98.4	98.5	98.6	98.7	97.8
1996	98.8	99.0	99.1	99.0	99.2	99.6	100.2	100.4	100.7	100.9	101.0	101.3	100.0
1997	101.8	101.8	102.3	102.5	102.7	102.9	103.3	103.6	103.9	104.2	104.7	104.8	103.3
1998	105.0	104.9	104.9	105.0	105.2	105.8	106.1	106.4	106.6	107.0	107.4	107.9	106.1
1999	108.5	108.6	108.9	109.3	109.8	110.4	110.6	110.8	110.9	111.4	111.9	112.3	110.4
2000	<sup>r</sup> 112.8	<sup>r</sup> 113.0	<sup>r</sup> 113.3	<sup>r</sup> 113.6	<sup>r</sup> 113.8								

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