# Value of Construction Put in Place

*Мау*2001

Issued August 2001

# C30/01-5 **Current Construction Reports**

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May

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# **Current Construction Reports**





U.S. Department of Commerce Donald L. Evans, Secretary

**Economics** and Statistics Administration Kathleen B. Cooper, Under Secretary for Economic Affairs

U.S. CENSUS BUREAU William G. Barron, Jr., Acting Director

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# Introduction

# ANNUAL DATA BACK TO 1991 AND MONTHLY DATA BACK TO 1998 ARE SHOWN IN THIS REPORT

Construction put in place during May 2001 was estimated at a seasonally adjusted annual rate of \$881.6 billion, nearly the same (±5 percent) as the revised April estimate of \$879.2 billion. The May figure represents an 8 percent increase over May 2000.

In constant (1996) dollars, the May annual rate was \$741.5 billion, nearly the same (±5 percent) as the revised estimate of \$741.0 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 1998-December 2000 were computed using data through April 2001. The revised factors for January-May 2001 were computed using data through May 2001. 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. Estimates for monthly residential improvements have been revised back to 1993 to reflect new benchmark procedures.
- 2. Estimates for private industrial buildings, electric light and power, and all other private have been revised back to 1993 to incorporate our new classification scheme.

For comparison, the table on page 3 shows the previously published and revised data for selected series back to 1993.

Annual statistics reflecting all revisions back to 1993 are shown in Tables 1 and 2. Monthly estimates for January 1998 through May 2001 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.

# 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:

# **Private Structures**

Estimates of residential structures are the value-inplace estimates.

Estimates of all components of nonresidential buildings, except industrial buildings, are prepared by BEA as an extrapolation of a 1992 benchmark Input-Output account estimates using the corresponding value-in-place estimates. Input-Output account estimates are

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

prepared by BEA every 5 years. For structures, most Input-Output estimates are based on the value-in-place estimates adjusted for coverage differences. The estimate of industrial buildings is the value-in-place estimate.

Estimates of public utility structures are the value-inplace 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 non-residential 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 valuein-place series.

# **Timing of Revisions**

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

### ADDITIONAL DATA

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

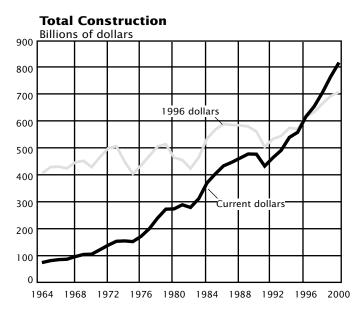
- Current Construction Reports, Value of Construction Put in Place: June 2000, C30/00-6, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 2000; contains annual value of construction put in place for private nonresidential buildings by geographic area and detailed types of construction for 1994 to 1999.
- Current Construction Reports, Value of New Construction Put in Place: October 1992, C30/92-10, U.S.
   Department of Commerce, U.S. Census Bureau, Washington, DC, 1992; contains total time and monthly progress from start to completion for private nonresidential buildings and for state and local construction.
- Current Construction Reports, Value of New Construction Put in Place in the United States, 1964 to 1980, C30-80 supplement, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1981; contains annual data for 1915 to 1963.
- Current Construction Reports Special Study, Expenditures for Nonresidential Improvements and Repairs: 1992, U.S. Department of Commerce, U.S. Census Bureau, Washington, DC, 1994.

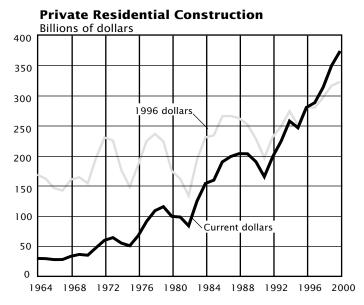
Table A. Comparison of Previously Published Data with Revised Data for Selected Construction Categories, 1993-2000

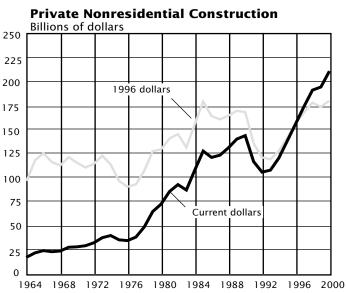
Year	Total construction		Total private construction		Total nonresidential buildings		Indu	strial	To: public		Electric light and power		Tota other p	al all orivate
real	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised	Previous published	Revised
1993	493.260	491,033	377.300	375.073	110.635	107.715	26.482	23.562	34.925	35.618	15.567	16.260	3.281	3,281
1994	539,232	539,193	419,038	418,999	120,289	120,284	28,952	28,947	34,071	34,038	14,918	14,884	2,890	2,890
1995	555,591	557,818	425,658	427,885	136,541	138,015	34,024	35,498	35,859	36,084	14,049	14,274	2,893	3,420
1996	613,535	615,900	474,273	476,638	153,912	155,858	36,220	38,166	33,156	33,202	11,211	11,256	2,431	2,805
1997	656,630	653,429	501,749	502,734	172,990	173,875	36,739	37,624	33,638	33,638	11,325	11,325	2,292	2,392
1998	711,759	704,724	552,236	551,383	190,711	190,710	40,484	40,484	40,028	39,212	12,381	12,381	2,606	2,570
1999	764,233	763,786	591,561	596,280	195,776	193,935	34,894	32,639	39,607	44,066	14,057	14,585	2,901	2,709
2000	807,582	815,414	623,930	640,554	217,004	210,140	40,462	32,073	(NA)	48,084	(NA)	21,111	3,171	2,899

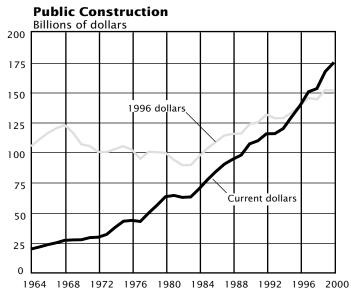
NA Not available, but estimates are included in totals.

# Annual Value of Construction Put in Place: 1964-2000









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

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Table 1. Annual Value of Construction Put in Place: 1991-2000

Time of construction		Cı	urrent dolla	rs			Const	ant (1996)	dollars	
Type of construction	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
Total construction	432,592	463,661	491,033	539,193	557,818	503,711	533,322	544,285	574,256	570,188
Private construction	322,483	347,814	375,073	418,999	427,885	378,245	401,567	415,565	445,414	436,738
Residential buildings  New housing units  1 unit.  2 units or more  Improvements	166,251 114,575 99,427 15,148 51,676	199,393 135,070 121,976 13,094 64,323	225,067 150,911 140,123 10,788 74,156	258,561 176,389 162,309 14,081 82,172	247,351 171,404 153,515 17,889 75,947	197,526 136,121 118,110 18,011 61,405	232,134 157,254 141,990 15,264 74,879	249,763 167,467 155,488 11,979 82,296	274,966 187,561 172,609 14,952 87,404	251,953 174,585 156,363 18,222 77,368
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous <sup>1</sup>	116,570 31,424 25,951 6,939 29,355 3,521 4,193 10,567 4,619	105,646 29,029 20,271 3,691 29,197 3,485 4,474 11,487 4,012	107,715 23,562 20,920 4,565 32,453 3,887 4,649 12,492 5,188	120,284 28,947 22,178 4,648 37,551 3,869 4,822 12,268 6,002	138,015 35,498 25,613 7,112 42,654 4,326 5,493 11,248 6,071	135,389 36,496 30,143 8,064 34,092 4,088 4,869 12,273 5,363	120,921 33,233 23,209 4,225 33,401 3,988 5,124 13,149 4,593	118,988 26,030 23,129 5,044 35,834 4,292 5,134 13,799 5,726	127,576 30,679 23,537 4,934 39,801 4,104 5,120 13,029 6,373	141,218 36,322 26,218 7,274 43,636 4,426 5,621 11,512 6,209
Farm nonresidential	2,753	2,398	3,392	3,226	3,014	3,197	2,744	3,746	3,424	3,084
Public utilities Telecommunications Other public utilities Railroads Electric light and power Gas Petroleum pipelines	33,966 8,962 25,004 2,406 16,293 5,555 750	36,807 8,993 27,814 2,928 17,136 6,901 849	35,618 9,619 25,999 3,108 16,260 5,645 986	34,038 10,121 23,916 3,340 14,884 4,694 998	36,084 11,093 24,991 3,509 14,274 6,279 929	38,830 10,275 28,555 2,698 18,662 6,340 856	41,745 10,330 31,415 3,299 19,422 7,742 953	39,427 10,857 28,570 3,445 17,825 6,216 1,084	36,334 11,225 25,109 3,592 15,650 4,837 1,031	36,965 11,556 25,409 3,609 14,535 6,329 936
All other private <sup>2</sup>	2,943	3,570	3,281	2,890	3,420	3,303	4,024	3,641	3,114	3,518
Public construction	110,109	115,847	115,960	120,193	129,933	125,467	131,755	128,720	128,842	133,450
Buildings  Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup> .	47,406 3,587 1,824 19,203 2,829 19,965	49,986 4,138 1,876 20,647 3,383 19,943	48,559 4,011 1,718 19,129 3,710 19,991	49,446 3,835 1,465 20,361 3,951 19,834	57,754 4,698 1,508 25,783 4,236 21,528	55,144 4,264 2,117 22,294 3,285 23,184	57,316 4,818 2,146 23,638 3,873 22,840	53,684 4,465 1,898 21,145 4,098 22,078	52,436 4,073 1,555 21,573 4,195 21,040	59,074 4,786 1,544 26,374 4,335 22,034
Highways and streets	32,042 1,837 5,011 10,039 4,981 8,793	33,106 2,502 5,952 9,663 5,162 9,477	34,299 2,453 5,937 8,863 5,085 10,765	37,419 2,318 6,363 8,700 4,647 11,301	37,616 3,011 6,308 8,420 4,709 12,116	35,376 2,081 5,714 11,448 5,840 9,864	37,405 2,844 6,695 10,874 5,939 10,683	38,573 2,735 6,496 9,705 5,594 11,932	40,886 2,497 6,751 9,231 4,868 12,173	38,952 3,102 6,443 8,600 4,809 12,468

Table 1. Annual Value of Construction Put in Place: 1991-2000—Con.

Two of construction		Cı	urrent dolla	rs			Const	ant (1996)	dollars	
Type of construction	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
Total construction	615,900	653,429	704,724	763,786	815,414	615,797	632,680	664,244	692,281	706,899
Private construction	476,638	502,734	551,383	596,280	640,554	476,650	487,197	519,859	540,159	555,089
Residential buildings New housing units 1 unit	281,115 191,113 170,790 20,324 90,002	289,014 198,063 175,179 22,883 90,951	314,607 223,983 199,409 24,574 90,624	350,562 251,272 223,837 27,434 99,290	374,274 264,864 236,788 28,076 109,410	281,207 191,212 170,865 20,347 89,996	280,720 192,386 170,154 22,232 88,334	297,960 212,068 188,785 23,283 85,892	317,232 227,461 202,615 24,847 89,771	323,708 229,103 204,812 24,292 94,605
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous <sup>1</sup>	155,858 38,166 27,886 10,912 48,188 4,534 6,742 11,780 7,650	173,875 37,624 34,305 12,898 51,809 5,777 8,693 13,546 9,223	190,710 40,484 42,226 14,816 53,598 6,594 9,698 13,793 9,501	193,935 32,639 47,582 15,951 56,915 7,371 9,645 13,530 10,301	210,140 32,073 55,686 16,396 61,453 8,068 11,356 14,575 10,533	155,813 38,161 27,875 10,909 48,170 4,531 6,737 11,778 7,650	167,610 36,267 33,058 12,438 49,948 5,565 8,375 13,066 8,892	177,644 37,720 39,333 13,794 49,915 6,139 9,039 12,853 8,850	173,418 29,204 42,549 14,273 50,867 6,590 8,621 12,101 9,214	179,654 27,419 47,594 14,027 52,539 6,898 9,707 12,459 9,010
Farm nonresidential	3,658	3,815	4,284	5,008	5,158	3,657	3,675	3,989	4,474	4,407
Public utilities Telecommunications Other public utilities Railroads Electric light and power Gas Petroleum pipelines	33,202 11,810 21,391 4,398 11,256 4,722 1,015	33,638 12,416 21,222 4,922 11,325 4,006 969	39,212 12,458 26,754 5,736 12,381 7,372 1,265	44,066 18,404 25,662 4,670 14,585 4,918 1,489	48,084 17,994 30,089 4,226 21,111 3,750 1,003	33,167 11,791 21,376 4,391 11,253 4,720 1,013	32,883 12,159 20,725 4,745 11,122 3,911 947	37,818 12,188 25,631 5,463 11,883 7,072 1,213	42,534 18,305 24,229 4,311 13,892 4,625 1,401	44,749 17,497 27,253 3,750 19,251 3,354 897
All other private <sup>2</sup>	2,805	2,392	2,570	2,709	2,899	2,806	2,309	2,447	2,501	2,570
Public construction	139,263	150,695	153,341	167,507	174,860	139,147	145,483	144,385	152,121	151,810
Buildings  Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	63,471 5,048 1,389 28,590 4,617 23,826	69,860 5,299 999 33,552 4,977 25,033	71,776 4,922 1,010 34,828 3,906 27,110	76,542 5,138 925 38,966 3,932 27,582	82,275 5,228 1,159 43,560 4,007 28,321	63,446 5,046 1,390 28,577 4,617 23,815	67,400 5,150 965 32,340 4,802 24,144	66,920 4,663 941 32,431 3,641 25,245	68,474 4,653 827 34,821 3,516 24,657	70,390 4,521 991 37,237 3,427 24,214
Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	39,464 2,591 6,008 9,798 5,618 12,313	42,602 2,556 5,625 10,515 6,493 13,045	45,565 2,530 5,452 9,367 6,290 12,361	51,374 2,130 5,993 10,343 6,844 14,280	52,088 2,337 6,014 10,287 6,928 14,930	39,412 2,593 6,000 9,778 5,609 12,310	41,093 2,466 5,431 10,152 6,347 12,594	43,085 2,377 5,223 8,976 6,035 11,767	46,858 1,926 5,594 9,653 6,431 13,185	45,230 2,016 5,449 9,324 6,160 13,241

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

<sup>&</sup>lt;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>&</sup>lt;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: 1991-2000

Time of construction		Cı	urrent dolla	rs			Const	ant (1996)	dollars	
Type of construction	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
Total public construction	110,109	115,847	115,960	120,193	129,933	125,467	131,755	128,720	128,842	133,450
State and local construction	97,264	101,471	101,535	105,753	114,181	110,736	115,424	112,788	113,435	117,298
Total buildings	41,520 3,374 19,183 2,125 16,838 31,806	44,022 3,977 20,617 2,626 16,801 32,886	42,865 3,775 19,108 2,804 17,177 33,961	44,303 3,389 20,335 3,099 17,480 36,991	51,711 4,122 25,757 3,195 18,638 37,308	48,303 4,011 22,271 2,468 19,553 35,115	50,481 4,631 23,604 3,007 19,240 37,156	47,393 4,203 21,122 3,096 18,972 38,193	46,982 3,599 21,545 3,292 18,546 40,418	52,891 4,200 26,347 3,269 19,075 38.633
Conservation and development Sewer systems	1,408 10,039 4,981 7,510	1,419 9,663 5,162 8,320	1,719 8,863 5,085 9,043	1,988 8,700 4,647 9,125	2,140 8,420 4,709 9,893	1,605 11,448 5,840 8,425	1,595 10,874 5,939 9,378	1,880 9,705 5,594 10,023	2,108 9,231 4,868 9,828	2,187 8,600 4,809 10,177
Federal construction	12,845	14,376	14,424	14,440	15,751	14,731	16,331	15,932	15,406	16,151
Total buildings Housing Industrial Educational Hospital Other <sup>3</sup>	5,886 213 1,824 20 703 3,127	5,964 161 1,876 30 757 3,141	5,695 236 1,718 21 906 2,814	5,142 446 1,465 26 851 2,354	6,043 576 1,508 27 1,041 2,891	6,841 253 2,117 23 817 3,630	6,834 187 2,146 34 866 3,600	6,292 262 1,898 23 1,002 3,106	5,454 473 1,555 28 904 2,494	6,183 586 1,544 27 1,066 2,960
Highways and streets	236 1,837 3,603 1,283	220 2,502 4,533 1,157	338 2,453 4,217 1,722	428 2,318 4,376 2,176	308 3,011 4,167 2,223	261 2,081 4,109 1,439	249 2,844 5,099 1,305	380 2,735 4,617 1,909	468 2,497 4,643 2,344	319 3,102 4,257 2,290

Table 2. Annual Value of Public Construction Put in Place: 1991-2000—Con.

Time of construction		Cı	urrent dolla	rs			Const	ant (1996)	dollars	
Type of construction	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
Total public construction	139,263	150,695	153,341	167,507	174,860	139,147	145,483	144,385	152,121	151,810
State and local construction	123,938	136,608	139,023	153,505	161,053	123,819	131,891	130,880	139,348	139,704
Total buildings Housing and redevelopment Educational Hospital Other¹  Highways and streets Conservation and development Sewer systems Water supply facilities Miscellaneous nonbuilding²	57,240 4,367 28,578 3,457 20,838 39,096 2,163 9,798 5,618 10,022	63,752 4,622 33,533 3,725 21,872 42,347 2,256 10,515 6,493 11,245	65,750 4,384 34,813 2,897 23,656 45,308 1,915 9,367 6,290 10,393	71,073 4,714 38,950 3,081 24,327 51,123 1,988 10,343 6,844 12,135	77,203 4,846 43,531 3,372 25,454 51,790 1,985 10,287 6,928 12,859	57,212 4,365 28,565 3,457 20,826 39,045 2,159 9,778 5,609 10,017	61,508 4,492 32,322 3,596 21,099 40,847 2,178 10,152 6,347 10,859	61,297 4,153 32,417 2,700 22,027 42,842 1,836 8,976 6,035 9,894	63,578 4,269 34,807 2,754 21,749 46,629 1,855 9,653 6,431 11,202	66,049 4,190 37,212 2,884 21,763 44,971 1,798 9,324 6,160 11,402
Federal construction	15,325	14,087	14,318	14,002	13,807	15,328	13,592	13,505	12,774	12,106
Total buildings Housing Industrial Educational Hospital Other <sup>3</sup>	6,230 681 1,389 12 1,159 2,989	6,107 677 999 19 1,251 3,161	6,026 538 1,010 15 1,009 3,454	5,470 424 925 15 850 3,255	5,072 382 1,159 29 634 2,867	6,234 682 1,390 12 1,161 2,989	5,892 658 965 19 1,206 3,045	5,624 510 941 14 941 3,217	4,896 384 827 14 762 2,909	4,341 331 991 25 543 2,452
Highways and streets	368 2,591 3,845 2,291	255 2,556 3,368 1,800	257 2,530 3,536 1,969	251 2,130 4,005 2,145	298 2,337 4,029 2,071	368 2,593 3,841 2,293	246 2,466 3,252 1,735	243 2,377 3,387 1,873	229 1,926 3,739 1,983	258 2,016 3,651 1,839

<sup>&</sup>lt;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 1999-May 2001— Not Seasonally Adjusted in Current Dollars [Millions of dollars]

				Private construction  Residential buildings Nonresidential buildings Public utilities <sup>4</sup>															
				F	Residentia	ıl building	ıs				Nonres	idential b	uildings				Public i	utilities4	
	Period				New	housing	units								Hospi-			Tele- com-	
		Total con- struction	Total <sup>1</sup>	Total <sup>2</sup>	Total	1 unit	2 units or more	Total	Indus- trial	Office	Hotels, motels	Other com- mercial	Reli- gious	Educa- tional	tal and institu- tional	Mis- cella- neous <sup>3</sup>	Total	muni- ca- tions	All other private <sup>5</sup>
YEAR 1	TO DATE																		
May 20	00 01 t change	307,130 328,359 7		142,489 146,511 3	102,936 103,704 1	91,328 91,810 1	11,608 11,894 2	80,637 86,454 7	12,253 13,216 8	20,894 23,960 15	6,874 6,231 –9	23,360 24,671 6	3,088 3,134 1	4,219 4,691 11	5,595 6,424 15	4,355 4,129 –5	(NA) (NA) (NA)	6,418 (NA) (NA)	1,004 971 -3
MONTH	ILY DATA																		
1999:	May <sup>r</sup> June <sup>r</sup>	63,740 68,919	50,051 53,605	30,021 32,110	21,288 22,478	18,948 20,069	2,340 2,409	16,329 16,705	2,672 2,851	4,015 4,050	1,354 1,296	4,841 4,979	599 628	798 946	1,149 1,109	901 847	(NA) (NA)	1,294 1,472	239 243
	Julyr	70,736 72,375 72,504 70,676 68,448 60,716	54,862 55,360 55,426 55,001 53,786 47,681	32,882 33,754 33,907 33,756 32,343 27,107	23,208 23,545 23,362 22,959 22,476 19,804	20,820 21,068 20,938 20,582 20,186 17,553	2,388 2,477 2,424 2,376 2,290 2,251	16,708 16,916 17,027 16,689 16,589 15,651	2,816 2,767 2,739 2,597 2,547 2,594	3,964 4,169 4,325 4,184 4,015 3,792	1,346 1,277 1,266 1,251 1,326 1,308	5,071 5,127 5,199 5,143 5,225 4,624	628 669 638 680 641 587	955 930 828 800 803 776	1,083 1,137 1,164 1,180 1,163 1,100	846 840 867 856 869 871	(NA) (NA) (NA) (NA) (NA) (NA)	1,638 1,747 1,694 1,818 1,934 1,994	251 239 232 226 237 254
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	55,427 54,410 62,364 64,670 70,259 72,991	43,986 43,316 49,697 51,088 55,626 57,340	26,065 24,013 28,947 30,172 33,292 34,596	18,625 17,865 21,164 22,036 23,247 24,097	16,492 15,758 18,750 19,585 20,743 21,552	2,133 2,107 2,415 2,451 2,504 2,545	14,443 15,500 16,269 16,610 17,815 18,130	2,141 2,316 2,460 2,530 2,807 2,902	3,614 3,909 4,220 4,366 4,784 4,653	1,323 1,314 1,426 1,404 1,407 1,426	4,223 4,647 4,641 4,784 5,066 5,345	577 620 628 626 637 691	736 783 843 851 1,007 1,016	1,034 1,061 1,135 1,173 1,193 1,200	796 851 916 877 914 899	(NA) (NA) (NA) (NA) (NA) (NA)	1,166 1,112 1,484 1,213 1,443 1,597	173 197 216 204 215 233
	Julyr	72,395 76,948 77,025 75,332 70,999 62,594	56,740 58,851 58,994 58,846 56,251 49,819	34,229 34,650 34,302 34,271 32,628 27,109	24,187 24,270 23,788 23,320 22,632 19,634	21,882 21,903 21,491 20,961 20,286 17,385	2,305 2,367 2,297 2,359 2,346 2,249	18,095 19,123 19,054 19,158 18,452 17,491	2,793 2,857 2,796 2,910 2,850 2,713	4,650 5,009 5,156 5,103 5,177 5,044	1,394 1,394 1,362 1,364 1,327 1,255	5,370 5,736 5,799 5,780 5,208 4,856	719 741 722 778 705 625	1,070 1,182 1,022 1,006 961 880	1,223 1,276 1,295 1,323 1,342 1,322	877 929 903 894 882 796	(NA) (NA) (NA) (NA) (NA) (NA)	1,332 1,447 1,818 1,631 1,753 1,999	241 304 302 300 277 238
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup>	59,522 57,587 65,381 69,720 76,149	47,316 45,548 52,066 53,876 57,959	26,285 24,588 29,450 31,152 35,036	18,600 18,015 21,047 22,168 23,875	16,417 15,800 18,676 19,713 21,204	2,183 2,215 2,371 2,455 2,671	16,695 16,420 17,842 17,643 17,855	2,715 2,476 2,739 2,643 2,642	4,721 4,571 5,004 4,893 4,771	1,237 1,241 1,273 1,235 1,246	4,540 4,661 5,072 5,129 5,269	618 602 624 637 653	864 848 934 986 1,059	1,255 1,231 1,313 1,280 1,345	746 789 884 841 869	(NA) (NA) (NA) (NA) (NA)	1,675 1,604 1,780 1,795 (NA)	193 196 191 189 202
April 20	NT CHANGE 001- 001	9	8	12	8	8	9	1	(Z)	-2	1	3	3	7	5	3	(NA)	(NA)	7

# Table 3a. Monthly Value of Construction Put in Place: May 1999-May 2001— Not Seasonally Adjusted in Current Dollars—Con.

[Millions of dollars]

							Pu	blic construc	tion					
	Period				Build	lings					Conserva-			
	Tollou	Total	Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>	Highways and streets	Military facilities	tion and develop- ment	Sewer systems	Water supply facilities	Miscel- laneous public <sup>7</sup>
YEAR 1	TO DATE													
May 20	00	63,417 71,593 13	31,023 35,382 14	1,979 2,517 27	461 578 25	15,904 18,201 14	1,624 1,611 -1	11,055 12,476 13	17,009 18,823 11	941 908 -4	2,303 2,712 18	4,059 4,452 10	2,682 3,417 27	5,399 5,898 9
MONTH	ILY DATA													
1999:	May <sup>r</sup> June <sup>r</sup>	13,689 15,314	6,124 6,850	467 433	83 73	3,056 3,707	319 345	2,200 2,292	4,353 4,993	179 186	414 496	875 953	581 606	1,162 1,231
	July <sup>r</sup>	15,874 17,015 17,078 15,674 14,662 13,035	7,023 7,441 7,254 6,777 6,464 6,091	435 463 492 460 420 424	89 70 112 45 72 88	3,835 4,146 3,783 3,464 3,206 2,938	340 319 367 335 331 325	2,323 2,444 2,501 2,473 2,435 2,317	5,299 5,818 5,917 5,359 4,651 3,708	195 142 207 151 172 210	487 587 769 411 554 548	937 967 960 971 913 850	664 656 632 627 584 499	1,269 1,406 1,338 1,378 1,324 1,130
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	11,441 11,095 12,667 13,582 14,633 15,651	5,822 5,881 6,145 6,426 6,749 7,318	361 342 409 431 436 450	93 96 92 91 89 98	2,992 3,016 3,151 3,237 3,509 4,008	306 300 308 344 367 360	2,071 2,127 2,185 2,323 2,348 2,403	2,924 2,349 3,318 3,928 4,490 4,855	139 212 212 180 198 196	425 478 499 462 440 501	720 713 794 930 903 981	500 512 498 564 607 565	911 950 1,200 1,092 1,247 1,235
	July'	15,655 18,097 18,031 16,485 14,748 12,775	7,334 7,958 7,708 7,398 6,930 6,605	427 457 480 497 488 451	98 109 125 76 93 99	4,180 4,547 4,157 3,797 3,522 3,444	334 342 374 336 341 295	2,295 2,502 2,573 2,693 2,486 2,315	5,095 6,474 6,179 5,271 4,181 3,024	188 206 269 129 225 183	427 518 797 502 479 488	873 927 918 927 867 737	542 652 654 679 619 535	1,197 1,363 1,506 1,580 1,446 1,203
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	12,206 12,039 13,315 15,844 18,190	6,369 6,192 6,606 7,664 8,550	485 435 458 542 597	124 103 114 130 108	3,258 3,143 3,336 3,888 4,575	309 295 307 326 374	2,194 2,216 2,391 2,778 2,896	2,738 2,719 3,396 4,467 5,503	171 161 184 200 192	509 536 568 518 582	782 753 825 987 1,106	543 576 640 836 822	1,094 1,102 1,096 1,172 1,434
PERCE	NT CHANGE													
April 20 May 2	01- 001	15	12	10	-17	18	15	4	23	-4	12	12	-2	22

NA Not available, but estimates are included in totals.

<sup>&</sup>lt;sup>p</sup>Preliminary.

rRevised.

Z Less than 0.5 percent.

<sup>&</sup>lt;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, 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: 1998-2000—Not Seasonally Adjusted in Current Dollars [Millions of dollars]

To a set a section of the set							1998						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	704,724	46,015	44,147	50,605	55,163	59,194	65,616	66,250	67,907	67,963	65,607	61,644	54,614
Private construction	551,383	36,829	35,114	40,732	43,903	47,123	51,097	51,059	52,033	51,568	50,629	48,412	42,884
Residential buildings	314,607 223,983 199,409 24,574 90,624	20,688 14,230 12,383 1,847 (NA)	18,914 13,693 11,835 1,858 (NA)	23,063 16,295 14,322 1,973 (NA)	24,792 17,440 15,383 2,057 (NA)	27,499 18,410 16,358 2,051 (NA)	29,291 19,867 17,763 2,104 (NA)	29,924 21,069 18,904 2,166 (NA)	30,076 21,394 19,320 2,074 (NA)	29,938 21,517 19,373 2,144 (NA)	29,351 21,329 19,113 2,217 (NA)	27,868 20,741 18,645 2,096 (NA)	23,205 17,999 16,012 1,987 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	190,710 40,484 42,226 14,816 53,598 6,594 9,698 13,793 9,501	13,540 2,960 3,127 999 3,586 483 684 1,044 656	13,622 3,000 3,087 989 3,599 489 730 1,064 664	14,659 3,363 3,185 1,065 3,973 486 786 1,119 683	15,559 3,349 3,431 1,158 4,236 495 850 1,196 845	15,676 3,345 3,549 1,099 4,402 464 891 1,157 768	16,850 3,506 3,762 1,321 4,833 526 909 1,168 825	16,419 3,340 3,533 1,285 4,894 541 854 1,138 834	17,005 3,640 3,483 1,360 4,960 604 895 1,194 869	17,016 3,614 3,598 1,409 4,903 614 851 1,197 831	17,271 3,583 3,835 1,436 4,993 640 744 1,165 876	16,864 3,417 3,865 1,349 4,823 644 759 1,174 834	16,230 3,367 3,772 1,347 4,397 607 745 1,177 818
Farm nonresidential	4,284	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	39,212 12,458 5,736 12,381 7,372 1,265	(NA) 809 (NA) (NA) (NA) (NA)	(NA) 892 (NA) (NA) (NA) (NA)	(NA) 1,110 (NA) (NA) (NA) (NA)	(NA) 1,005 (NA) (NA) (NA) (NA)	(NA) 1,032 (NA) (NA) (NA) (NA)	(NA) 1,100 (NA) (NA) (NA) (NA)	(NA) 1,058 (NA) (NA) (NA) (NA)	(NA) 1,049 (NA) (NA) (NA) (NA)	(NA) 1,082 (NA) (NA) (NA) (NA)	(NA) 1,192 (NA) (NA) (NA) (NA)	(NA) 1,046 (NA) (NA) (NA) (NA)	(NA) 1,084 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,570	187	173	187	185	204	259	217	247	236	234	239	204
Public construction	153,341	9,186	9,032	9,873	11,259	12,071	14,519	15,191	15,874	16,395	14,978	13,232	11,730
Buildings  Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	71,776 4,922 1,010 34,828 3,906 27,110	4,882 361 76 2,299 312 1,836	4,841 356 79 2,249 291 1,866	5,077 386 95 2,292 359 1,944	5,497 414 84 2,588 290 2,122	5,712 393 81 2,747 331 2,161	6,596 449 78 3,373 334 2,362	6,986 492 93 3,632 321 2,447	6,996 411 88 3,675 312 2,510	6,942 429 108 3,390 399 2,616	6,389 418 58 3,034 347 2,532	6,029 418 91 2,787 307 2,426	5,828 397 79 2,762 303 2,287
Highways and streets	45,565 2,530 5,452	1,923 188 335	1,889 187 411	2,297 237 403	3,084 204 380	3,553 199 415	4,683 225 494	4,861 279 476	5,466 241 499	5,533 225 769	5,389 157 378	3,959 189 466	2,930 198 428
Other public construction Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	28,018 9,367 6,290 12,361	1,858 637 418 804	1,704 599 421 683	1,860 675 426 758	2,094 712 499 883	2,192 727 520 946	2,521 824 504 1,194	2,589 856 550 1,183	2,672 867 553 1,252	2,927 906 602 1,420	2,665 918 651 1,096	2,590 878 598 1,114	2,346 767 550 1,029

Table 3b. Annual and Monthly Value of Construction Put in Place: 1998-2000—Not Seasonally Adjusted in Current Dollars—Con.

Turns of association							1999						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	763,786	49,995	49,553	56,615	59,510	63,740	68,919	70,736	72,375	72,504	70,676	68,448	60,716
Private construction	596,280	39,830	39,026	45,074	46,578	50,051	53,605	54,862	55,360	55,426	55,001	53,786	47,681
Residential buildings New housing units 1 unit 2 units or more. Improvements	350,562 251,272 223,837 27,434 99,290	22,135 16,763 14,806 1,956 (NA)	20,573 16,084 14,063 2,022 (NA)	25,218 19,215 16,989 2,226 (NA)	26,756 20,090 17,815 2,274 (NA)	30,021 21,288 18,948 2,340 (NA)	32,110 22,478 20,069 2,409 (NA)	32,882 23,208 20,820 2,388 (NA)	33,754 23,545 21,068 2,477 (NA)	33,907 23,362 20,938 2,424 (NA)	33,756 22,959 20,582 2,376 (NA)	32,343 22,476 20,186 2,290 (NA)	27,107 19,804 17,553 2,251 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	193,935 32,639 47,582 15,951 56,915 7,371 9,645 13,530 10,301	14,557 2,802 3,596 1,304 3,829 571 614 1,056 786	14,994 2,716 3,754 1,410 3,986 555 647 1,108 819	15,781 2,828 3,844 1,432 4,357 574 723 1,137 886	15,990 2,711 3,875 1,383 4,536 600 827 1,145 914	16,329 2,672 4,015 1,354 4,841 599 798 1,149 901	16,705 2,851 4,050 1,296 4,979 628 946 1,109 847	16,708 2,816 3,964 1,346 5,071 628 955 1,083 846	16,916 2,767 4,169 1,277 5,127 669 930 1,137 840	17,027 2,739 4,325 1,266 5,199 638 828 1,164 867	16,689 2,597 4,184 1,251 5,143 680 800 1,180 856	16,589 2,547 4,015 1,326 5,225 641 803 1,163 869	15,651 2,594 3,792 1,308 4,624 587 776 1,100 871
Farm nonresidential	5,008	(NA)											
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	44,066 18,404 4,670 14,585 4,918 1,489	(NA) 880 (NA) (NA) (NA) (NA)	(NA) 994 (NA) (NA) (NA) (NA)	(NA) 1,461 (NA) (NA) (NA) (NA)	(NA) 1,479 (NA) (NA) (NA) (NA)	(NA) 1,294 (NA) (NA) (NA) (NA)	(NA) 1,472 (NA) (NA) (NA) (NA)	(NA) 1,638 (NA) (NA) (NA) (NA)	(NA) 1,747 (NA) (NA) (NA) (NA)	(NA) 1,694 (NA) (NA) (NA) (NA)	(NA) 1,818 (NA) (NA) (NA) (NA)	(NA) 1,934 (NA) (NA) (NA) (NA)	(NA) 1,994 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,709	168	167	209	245	239	243	251	239	232	226	237	254
Public construction	167,507	10,165	10,528	11,541	12,932	13,689	15,314	15,874	17,015	17,078	15,674	14,662	13,035
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	76,542 5,138 925 38,966 3,932 27,582	5,294 356 64 2,582 301 1,992	5,407 349 69 2,556 353 2,080	5,743 407 85 2,688 312 2,250	6,074 432 76 3,005 287 2,275	6,124 467 83 3,056 319 2,200	6,850 433 73 3,707 345 2,292	7,023 435 89 3,835 340 2,323	7,441 463 70 4,146 319 2,444	7,254 492 112 3,783 367 2,501	6,777 460 45 3,464 335 2,473	6,464 420 72 3,206 331 2,435	6,091 424 88 2,938 325 2,317
Highways and streets	51,374 2,130 5,993	2,288 147 392	2,432 175 428	2,883 188 463	3,674 179 446	4,353 179 414	4,993 186 496	5,299 195 487	5,818 142 587	5,917 207 769	5,359 151 411	4,651 172 554	3,708 210 548
Other public construction Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	31,467 10,343 6,844 14,280	2,044 692 449 903	2,086 652 482 952	2,265 773 518 974	2,560 799 546 1,215	2,618 875 581 1,162	2,789 953 606 1,231	2,870 937 664 1,269	3,028 967 656 1,406	2,931 960 632 1,338	2,976 971 627 1,378	2,821 913 584 1,324	2,479 850 499 1,130

Table 3b. Annual and Monthly Value of Construction Put in Place: 1998-2000—Not Seasonally Adjusted in Current Dollars—Con.

Tune of construction							2000						_
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	815,414	55,427	54,410	62,364	64,670	70,259	72,991	72,395	76,948	77,025	75,332	70,999	62,594
Private construction	640,554	43,986	43,316	49,697	51,088	55,626	57,340	56,740	58,851	58,994	58,846	56,251	49,819
Residential buildings	374,274 264,864 236,788 28,076 109,410	26,065 18,625 16,492 2,133 (NA)	24,013 17,865 15,758 2,107 (NA)	28,947 21,164 18,750 2,415 (NA)	30,172 22,036 19,585 2,451 (NA)	33,292 23,247 20,743 2,504 (NA)	34,596 24,097 21,552 2,545 (NA)	34,229 24,187 21,882 2,305 (NA)	34,650 24,270 21,903 2,367 (NA)	34,302 23,788 21,491 2,297 (NA)	34,271 23,320 20,961 2,359 (NA)	32,628 22,632 20,286 2,346 (NA)	27,109 19,634 17,385 2,249 (NA)
Nonresidential buildings Industrial Office. Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	210,140 32,073 55,686 16,396 61,453 8,068 11,356 14,575 10,533	14,443 2,141 3,614 1,323 4,223 577 736 1,034 796	15,500 2,316 3,909 1,314 4,647 620 783 1,061 851	16,269 2,460 4,220 1,426 4,641 628 843 1,135 916	16,610 2,530 4,366 1,404 4,784 626 851 1,173 877	17,815 2,807 4,784 1,407 5,066 637 1,007 1,193 914	18,130 2,902 4,653 1,426 5,345 691 1,016 1,200 899	18,095 2,793 4,650 1,394 5,370 719 1,070 1,223 877	19,123 2,857 5,009 1,394 5,736 741 1,182 1,276 929	19,054 2,796 5,156 1,362 5,799 722 1,022 1,295 903	19,158 2,910 5,103 1,364 5,780 778 1,006 1,323 894	18,452 2,850 5,177 1,327 5,208 705 961 1,342 882	17,491 2,713 5,044 1,255 4,856 625 880 1,322 796
Farm nonresidential	5,158	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	48,084 17,994 4,226 21,111 3,750 1,003	(NA) 1,166 (NA) (NA) (NA) (NA)	(NA) 1,112 (NA) (NA) (NA) (NA)	(NA) 1,484 (NA) (NA) (NA) (NA)	(NA) 1,213 (NA) (NA) (NA) (NA)	(NA) 1,443 (NA) (NA) (NA) (NA)	(NA) 1,597 (NA) (NA) (NA) (NA)	(NA) 1,332 (NA) (NA) (NA) (NA)	(NA) 1,447 (NA) (NA) (NA) (NA)	(NA) 1,818 (NA) (NA) (NA) (NA)	(NA) 1,631 (NA) (NA) (NA) (NA)	(NA) 1,753 (NA) (NA) (NA) (NA)	(NA) 1,999 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,899	173	197	216	204	215	233	241	304	302	300	277	238
Public construction	174,860	11,441	11,095	12,667	13,582	14,633	15,651	15,655	18,097	18,031	16,485	14,748	12,775
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	82,275 5,228 1,159 43,560 4,007 28,321	5,822 361 93 2,992 306 2,071	5,881 342 96 3,016 300 2,127	6,145 409 92 3,151 308 2,185	6,426 431 91 3,237 344 2,323	6,749 436 89 3,509 367 2,348	7,318 450 98 4,008 360 2,403	7,334 427 98 4,180 334 2,295	7,958 457 109 4,547 342 2,502	7,708 480 125 4,157 374 2,573	7,398 497 76 3,797 336 2,693	6,930 488 93 3,522 341 2,486	6,605 451 99 3,444 295 2,315
Highways and streets	52,088 2,337 6,014	2,924 139 425	2,349 212 478	3,318 212 499	3,928 180 462	4,490 198 440	4,855 196 501	5,095 188 427	6,474 206 518	6,179 269 797	5,271 129 502	4,181 225 479	3,024 183 488
Other public construction Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	32,145 10,287 6,928 14,930	2,131 720 500 911	2,175 713 512 950	2,492 794 498 1,200	2,586 930 564 1,092	2,757 903 607 1,247	2,781 981 565 1,235	2,612 873 542 1,197	2,941 927 652 1,363	3,078 918 654 1,506	3,186 927 679 1,580	2,932 867 619 1,446	2,475 737 535 1,203

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Seasonally Adjusted Annual Rate in Current Dollars

[Millions of dollars]

										Priva	te constr	uction							
				F	Residentia	al building	js				Nonres	idential bu	uildings				Public ι	utilities <sup>4</sup>	
	Period				New	housing	units								Hospi-			Tele- com-	
		Total con- struction	Total <sup>1</sup>	Total <sup>2</sup>	Total	1 unit	2 units or more	Total	Indus- trial	Office	Hotels, motels	Other com- mercial	Reli- gious	Educa- tional	tal and institu- tional	Mis- cella- neous <sup>3</sup>	Total	muni- ca- tions	All other private <sup>5</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	744,806 755,904	580,340 592,023	340,628 344,999	248,295 249,159	221,394 222,165	26,901 26,994	194,282 192,571	32,652 32,675	46,687 47,599	16,130 14,978	57,798 56,682	7,398 7,675	9,308 9,793	13,639 13,271	10,670 9,898	(NA) (NA)	16,701 16,553	2,961 2,874
	July' August' September' October' November' December'	768,541 758,803 763,567 771,515 797,610 811,436	598,206 604,152 622,396	349,951 355,037 359,693 364,647 371,890 378,359	249,965 251,481 252,451 253,337 258,593 264,983	222,278 223,334 224,534 225,973 231,141 236,667	27,687 28,148 27,917 27,364 27,453 28,316	190,165 189,056 193,167	33,831 31,771 30,863 28,988 29,280 29,872	47,143 48,242 49,380 48,886 46,917 46,768	15,609 14,875 14,723 15,073 15,893 15,823	57,025 55,129 55,502 55,746 60,351 59,282	7,600 7,367 6,828 7,423 7,011 7,160	9,633 9,314 9,307 9,663 10,102 10,635	13,311 13,290 13,545 13,583 13,452 13,321	9,965 9,790 10,017 9,694 10,161 10,815	(NA) (NA) (NA) (NA) (NA) (NA)	19,266 19,649 19,486 20,486 21,390 21,342	2,823 2,509 2,512 2,349 2,707 3,032
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	820,048 820,264 832,999 817,654 814,016 802,668	645,309	381,142 376,813	269,740 272,076 274,281 272,536 270,515 266,468	244,629 244,561	28,982 27,446 29,719 29,499 28,611 28,543	196,617 204,136 205,510 205,237 209,758 209,399	29,293 29,625 31,101 31,854 33,319 33,837	47,454 48,713 51,837 53,352 54,880 54,529	17,327 16,274 17,061 16,970 16,598 16,232	60,324 65,598 61,263 60,299 60,434 60,911	7,699 8,048 8,222 7,955 7,823 8,466	10,567 11,128 11,183 10,722 11,692 10,560	13,223 13,487 13,726 13,923 14,205 14,356	10,730 11,263 11,115 10,162 10,807 10,510	(NA) (NA) (NA) (NA) (NA) (NA)	18,343 15,157 17,203 16,121 17,012 17,789	2,396 2,925 2,882 2,654 2,670 2,762
2001:	Julyr	792,253 803,968 815,410 820,805 826,746 838,731 867,056 876,171 876,111	638,851 644,836	364,039 364,372 370,256 374,281 379,593 386,088	260,266 258,652 257,355 257,459 259,935 263,547 269,061 275,425 273,876	231,979 230,675 230,345 232,061 234,931 239,661 245,596	26,859 26,673 26,680 27,114 27,874 28,615 29,399 29,829 29,484	213,266 214,027 215,534 215,342 217,998 223,788 220,158	33,986 32,623 31,384 32,125 33,265 31,398 35,878 33,386 34,823	55,805 57,461 59,380 58,992 60,552 63,114 60,849 58,922 61,840	16,432 15,961 16,273 16,004 15,862 15,659 15,940 15,939 15,121	60,388 61,678 61,969 62,768 60,035 62,120 64,553 65,646 66,952	8,723 7,998 8,064 8,166 7,662 7,793 8,081 8,143 8,092	10,852 11,834 11,469 12,119 12,103 12,051 12,396 12,077 12,394	15,038 14,922 15,053 15,220 15,528 16,003 16,049 15,685 15,900	10,332 10,790 10,434 10,140 10,335 9,860 10,041 10,359 10,731	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	16,698 15,648 21,072 17,955 19,699 23,043 24,272 22,920 21,657	2,720 3,165 3,280 3,121 3,166 2,829 2,681 2,914 2,549
PERCE	April <sup>r</sup>	879,231 881,647	674,043 667,529	395,145 396,244	275,089 277,924	245,393 247,519	29,696 30,405	217,351	33,316 31,329	59,126 54,947	14,735 14,544	64,581 62,913	8,100 7,944	12,452 12,294	15,250 16,012	9,791 10,272	(NA) (NA)	22,935 (NA)	2,495 2,522
April 20 May 2	01- 001	(Z)	-1	(Z)	1	1	2	-3	-6	-7	-1	-3	-2	-1	5	5	(NA)	(NA)	1

Table 4a. Monthly Value of Construction Put in Place: May 1999-May 2001—Seasonally Adjusted Annual Rate in Current Dollars—Con.

							Pu	blic construc	tion					
	Period				Build	lings					Conserva-			
	Penod	Total	Total	Housing and redevelopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>	Highways and streets	Military facilities	tion and develop- ment	Sewer systems	Water supply facilities	Miscel- laneous public <sup>7</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	164,466 163,881	74,333 75,188	5,621 5,029	1,028 832	37,956 39,335	3,920 3,792	25,808 26,200	52,030 49,517	2,109 2,147	5,000 5,742	10,450 10,506	6,716 6,969	13,828 13,812
2000:	July'	165,671 164,809 165,361 167,364 175,213 180,375 187,278 174,955 184,274 178,351 173,394 168,162	75,787 77,086 77,310 78,004 78,911 78,619 81,349 82,618 82,160 81,160 81,473 80,489	5,181 5,496 5,290 5,149 4,827 5,126 4,810 4,496 5,168 5,353 5,139 5,210	1,016 853 1,009 643 910 1,011 1,240 1,287 1,064 1,163 1,059 1,078	38,420 39,312 39,788 40,043 40,845 39,696 42,947 44,238 44,122 42,083 43,538 42,641	4,057 3,794 3,960 3,904 3,929 3,923 4,055 3,797 3,814 4,313 4,255 4,131	27,114 27,630 27,263 28,265 28,400 28,862 28,297 28,801 27,992 28,248 27,483 27,428	50,586 48,181 49,999 50,010 55,147 59,322 65,712 49,535 58,301 56,185 51,903 48,431	2,280 1,643 1,932 2,213 2,010 2,410 1,849 3,100 2,467 2,289 2,329 2,262	5,514 6,287 6,201 5,656 6,682 7,128 6,182 7,022 6,589 5,845 5,314 5,814	10,568 10,256 9,952 10,298 10,358 11,235 10,532 10,495 10,643 12,013 10,515 10,809	7,296 7,191 6,910 6,442 6,585 6,497 7,410 7,468 6,914 6,920 6,979 6,491	13,640 14,165 13,056 14,742 15,520 15,164 14,244 14,716 17,199 13,939 14,881 13,868
	Julyr	164,520 173,311 176,559 175,680 177,883 193,340 194,345 194,935 205,188 214,118	79,082 81,979 82,233 85,163 84,673 86,184 88,960 88,513 89,165 97,188 103,082	5,132 5,342 5,275 5,517 5,575 5,578 6,365 5,943 5,843 6,628 6,945	1,161 1,308 1,099 1,116 1,177 1,201 1,587 1,392 1,351 1,603 1,323	41,911 43,038 43,751 44,020 44,776 46,745 47,153 47,089 47,202 51,325 56,481	3,998 4,055 4,042 3,805 4,151 3,643 3,871 3,916 3,948 4,039 4,419	26,881 28,236 28,067 30,705 28,994 29,016 29,984 30,173 30,822 33,593 33,913	49,628 52,777 53,923 48,764 48,858 50,189 58,458 58,794 60,289 61,117 62,420	2,196 2,386 2,509 1,883 2,629 2,107 2,270 2,342 2,131 2,534 2,273	4,818 5,568 6,425 6,815 5,789 6,339 7,364 7,826 7,557 6,564 7,004	9,945 9,719 9,617 9,703 9,831 10,009 11,333 11,521 11,237 12,545 12,808	5,961 7,137 7,156 7,000 6,989 6,950 8,060 8,416 8,832 10,287 9,411	12,890 13,747 14,695 16,640 16,911 16,105 16,895 16,934 15,724 14,953 17,119
April 20 May 2	001- 001	4	6	5	-17	10	9	1	2	-10	7	2	-9	14

NA Not available, but estimates are included in totals.

<sup>r</sup>Revised.

Z Less than 0.5 percent.

Preliminary.

<sup>&</sup>lt;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: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars [Millions of dollars]

Two of construction						19	98					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	674,990	677,642	683,767	695,517	690,830	718,693	715,607	712,890	713,175	712,960	721,124	725,200
Private construction	527,611	532,072	538,190	548,885	545,689	563,327	558,745	558,228	554,375	555,212	562,805	563,908
Residential buildings  New housing units  1 unit 2 units or more. Improvements	305,301 207,206 182,101 25,105 (NA)	308,310 210,111 184,925 25,186 (NA)	311,604 212,804 188,241 24,563 (NA)	313,449 215,752 191,287 24,465 (NA)	311,540 215,441 191,887 23,553 (NA)	314,658 220,887 197,182 23,705 (NA)	317,999 226,553 201,638 24,915 (NA)	315,387 227,537 204,080 23,457 (NA)	317,042 231,406 206,640 24,766 (NA)	316,958 234,337 208,880 25,457 (NA)	320,291 238,059 212,880 25,180 (NA)	321,626 240,913 215,891 25,022 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	183,431 39,954 40,569 12,894 51,414 6,481 9,871 13,390 8,858	183,486 40,542 39,917 12,724 50,865 6,672 10,385 13,510 8,872	185,537 42,259 39,479 12,800 52,501 6,250 10,426 13,548 8,275	191,031 41,995 41,087 13,659 53,451 6,134 10,717 14,232 9,756	186,482 40,218 41,146 13,322 52,667 5,895 10,402 13,723 9,109	194,132 40,573 44,345 15,010 54,863 6,373 9,368 13,979 9,621	190,483 39,795 41,691 14,956 55,043 6,601 8,569 13,988 9,840	192,613 42,953 40,576 15,947 53,384 6,722 8,972 13,922 10,135	189,418 39,747 41,075 16,672 52,207 6,648 9,582 13,930 9,556	194,548 40,109 44,546 16,745 54,028 6,743 9,019 13,432 9,924	197,805 40,121 45,469 16,423 55,758 7,188 9,541 13,584 9,720	199,246 38,299 46,617 16,065 56,426 7,139 10,242 14,257 10,201
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 11,820 (NA) (NA) (NA) (NA)	(NA) 12,875 (NA) (NA) (NA) (NA)	(NA) 13,578 (NA) (NA) (NA) (NA)	(NA) 12,395 (NA) (NA) (NA) (NA)	(NA) 13,010 (NA) (NA) (NA) (NA)	(NA) 12,350 (NA) (NA) (NA) (NA)	(NA) 12,022 (NA) (NA) (NA) (NA)	(NA) 12,362 (NA) (NA) (NA) (NA)	(NA) 12,271 (NA) (NA) (NA) (NA)	(NA) 12,960 (NA) (NA) (NA) (NA)	(NA) 12,198 (NA) (NA) (NA) (NA)	(NA) 11,741 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,565	2,566	2,498	2,412	2,516	3,051	2,436	2,615	2,550	2,441	2,713	2,448
Public construction	147,378	145,571	145,577	146,633	145,141	155,366	156,862	154,662	158,801	157,748	158,319	161,292
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	68,067 4,712 964 33,271 4,153 24,967	68,475 4,851 1,067 33,323 3,879 25,354	67,912 4,962 1,194 32,175 4,429 25,152	69,369 5,029 1,022 34,009 3,559 25,751	69,285 4,745 986 34,190 4,044 25,320	72,498 5,192 884 35,754 3,723 26,945	75,367 5,792 1,039 36,357 3,715 28,465	72,914 4,954 1,067 34,787 3,818 28,289	73,703 4,555 987 35,586 4,013 28,563	73,229 4,618 796 34,943 4,190 28,682	73,533 4,889 1,172 35,396 3,786 28,291	75,408 4,814 967 37,279 3,657 28,691
Highways and streets Military facilities Conservation and development	43,859 2,501 4,956	42,452 2,741 6,006	43,402 2,755 5,403	43,589 2,594 4,794	42,502 2,346 5,008	46,325 2,595 5,696	44,561 3,256 5,383	45,710 2,792 5,312	47,287 2,100 6,169	49,181 2,298 5,066	47,081 2,203 5,642	47,062 2,281 5,547
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	27,995 9,342 6,131 12,523	25,898 9,186 6,137 10,575	26,105 9,107 5,953 11,046	26,286 8,980 6,133 11,174	25,999 8,712 6,026 11,262	28,253 9,072 5,798 13,383	28,295 9,542 6,033 12,720	27,934 9,316 6,071 12,546	29,542 9,371 6,592 13,578	27,975 9,596 6,665 11,714	29,859 10,062 6,708 13,089	30,994 10,128 7,143 13,723

Table 4b. Monthly Value of Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars—Con.

Time of construction						19	99					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	735,705	754,200	757,474	747,409	744,806	755,904	768,541	758,803	763,567	771,515	797,609	811,436
Private construction	570,944	583,748	588,791	579,483	580,340	592,023	602,870	593,994	598,205	604,151	622,396	631,061
Residential buildings  New housing units  1 unit  2 units or more  Improvements	325,335 243,619 216,942 26,677 (NA)	330,620 246,195 218,875 27,320 (NA)	336,769 249,564 222,081 27,483 (NA)	336,794 248,009 220,852 27,157 (NA)	340,628 248,295 221,394 26,901 (NA)	344,999 249,159 222,165 26,994 (NA)	349,951 249,965 222,278 27,687 (NA)	355,037 251,481 223,334 28,148 (NA)	359,693 252,451 224,534 27,917 (NA)	364,646 253,337 225,973 27,364 (NA)	371,889 258,593 231,141 27,453 (NA)	378,359 264,983 236,667 28,316 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	197,827 37,688 47,155 17,411 54,761 7,876 8,827 13,507 10,600	201,360 36,705 48,537 18,129 56,274 7,554 9,198 14,085 10,878	198,951 35,455 47,267 17,128 57,584 7,406 9,585 13,770 10,755	195,912 33,747 46,542 16,315 57,115 7,589 10,419 13,621 10,563	194,282 32,652 46,687 16,130 57,798 7,398 9,308 13,639 10,670	192,571 32,675 47,599 14,978 56,682 7,675 9,793 13,271 9,898	194,116 33,831 47,143 15,609 57,025 7,600 9,633 13,311 9,965	189,778 31,771 48,242 14,875 55,129 7,367 9,314 13,290 9,790	190,165 30,863 49,380 14,723 55,502 6,828 9,307 13,545 10,017	189,056 28,988 48,886 15,073 55,746 7,423 9,663 13,583 9,694	193,167 29,280 46,917 15,893 60,351 7,011 10,102 13,452 10,161	193,676 29,872 46,768 15,823 59,282 7,160 10,635 13,321 10,815
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 13,415 (NA) (NA) (NA) (NA)	(NA) 14,305 (NA) (NA) (NA) (NA)	(NA) 17,176 (NA) (NA) (NA) (NA)	(NA) 17,762 (NA) (NA) (NA) (NA)	(NA) 16,701 (NA) (NA) (NA) (NA)	(NA) 16,553 (NA) (NA) (NA) (NA)	(NA) 19,266 (NA) (NA) (NA) (NA)	(NA) 19,649 (NA) (NA) (NA) (NA)	(NA) 19,486 (NA) (NA) (NA) (NA)	(NA) 20,486 (NA) (NA) (NA) (NA)	(NA) 21,390 (NA) (NA) (NA) (NA)	(NA) 21,342 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,312	2,480	2,788	3,202	2,961	2,874	2,823	2,509	2,512	2,349	2,707	3,032
Public construction	164,761	170,453	168,682	167,925	164,466	163,881	165,671	164,809	165,361	167,364	175,213	180,375
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	73,918 4,722 845 37,191 3,967 27,194	76,269 4,760 938 37,626 4,713 28,232	76,544 5,156 1,006 37,688 3,725 28,969	76,419 5,238 898 39,232 3,547 27,504	74,333 5,621 1,028 37,956 3,920 25,808	75,188 5,029 832 39,335 3,792 26,200	75,787 5,181 1,016 38,420 4,057 27,114	77,086 5,496 853 39,312 3,794 27,630	77,310 5,290 1,009 39,788 3,960 27,263	78,004 5,149 643 40,043 3,904 28,265	78,911 4,827 910 40,845 3,929 28,400	78,619 5,126 1,011 39,696 3,923 28,862
Highways and streets	52,286 1,951 5,731	53,647 2,555 6,261	52,172 2,180 6,107	51,387 2,273 5,634	52,030 2,109 5,000	49,517 2,147 5,742	50,586 2,280 5,514	48,181 1,643 6,287	49,999 1,932 6,201	50,010 2,213 5,656	55,147 2,010 6,682	59,322 2,410 7,128
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	30,875 10,193 6,632 14,049	31,721 9,994 7,022 14,705	31,680 10,326 7,218 14,136	32,212 10,062 6,698 15,452	30,994 10,450 6,716 13,828	31,286 10,506 6,969 13,812	31,504 10,568 7,296 13,640	31,612 10,256 7,191 14,165	29,919 9,952 6,910 13,056	31,481 10,298 6,442 14,742	32,463 10,358 6,585 15,520	32,896 11,235 6,497 15,164

# Table 4b. Monthly Value of Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars—Con.

[Millions of dollars]

Town of a material in						20	000					
Type of construction	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	820,048	820,264	832,999	817,654	814,016	802,668	792,253	803,968	815,410	820,805	826,746	838,731
Private construction	632,770	645,309	648,725	639,303	640,622	634,506	627,733	630,656	638,850	644,836	651,066	660,849
Residential buildings	382,902 269,740 240,758 28,982 (NA)	387,725 272,075 244,629 27,446 (NA)	386,936 274,281 244,561 29,719 (NA)	381,142 272,536 243,037 29,499 (NA)	376,813 270,515 241,903 28,611 (NA)	371,020 266,468 237,925 28,543 (NA)	364,140 260,266 233,407 26,859 (NA)	364,039 258,652 231,979 26,673 (NA)	364,372 257,355 230,675 26,680 (NA)	370,256 257,459 230,345 27,114 (NA)	374,281 259,935 232,061 27,874 (NA)	379,593 263,547 234,931 28,615 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	196,617 29,293 47,454 17,327 60,324 7,699 10,567 13,223 10,730	204,136 29,625 48,713 16,274 65,598 8,048 11,128 13,487 11,263	205,510 31,101 51,837 17,061 61,263 8,222 11,183 13,726 11,115	205,237 31,854 53,352 16,970 60,299 7,955 10,722 13,923 10,162	209,758 33,319 54,880 16,598 60,434 7,823 11,692 14,205 10,807	209,399 33,837 54,529 16,232 60,911 8,466 10,560 14,356 10,510	211,555 33,986 55,805 16,432 60,388 8,723 10,852 15,038 10,332	213,266 32,623 57,461 15,961 61,678 7,998 11,834 14,922 10,790	214,027 31,384 59,380 16,273 61,969 8,064 11,469 15,053 10,434	215,534 32,125 58,992 16,004 62,768 8,166 12,119 15,220 10,140	215,342 33,265 60,552 15,862 60,035 7,662 12,103 15,528 10,335	217,998 31,398 63,114 15,659 62,120 7,793 12,051 16,003 9,860
Farm nonresidential	(NA)	(NA)										
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 18,343 (NA) (NA) (NA) (NA)	(NA) 15,157 (NA) (NA) (NA) (NA)	(NA) 17,203 (NA) (NA) (NA) (NA)	(NA) 16,121 (NA) (NA) (NA) (NA)	(NA) 17,012 (NA) (NA) (NA) (NA)	(NA) 17,789 (NA) (NA) (NA) (NA)	(NA) 16,698 (NA) (NA) (NA) (NA)	(NA) 15,648 (NA) (NA) (NA) (NA)	(NA) 21,072 (NA) (NA) (NA) (NA)	(NA) 17,955 (NA) (NA) (NA) (NA)	(NA) 19,699 (NA) (NA) (NA) (NA)	(NA) 23,043 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,396	2,925	2,882	2,654	2,670	2,762	2,720	3,165	3,280	3,121	3,166	2,829
Public construction	187,278	174,955	184,274	178,351	173,394	168,162	164,520	173,311	176,559	175,969	175,680	177,883
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	81,349 4,810 1,240 42,947 4,055 28,297	82,618 4,496 1,287 44,238 3,797 28,801	82,160 5,168 1,064 44,122 3,814 27,992	81,160 5,353 1,163 42,083 4,313 28,248	81,473 5,139 1,059 43,538 4,255 27,483	80,489 5,210 1,078 42,641 4,131 27,428	79,082 5,132 1,161 41,911 3,998 26,881	81,979 5,342 1,308 43,038 4,055 28,236	82,233 5,275 1,099 43,751 4,042 28,067	85,163 5,517 1,116 44,020 3,805 30,705	84,673 5,575 1,177 44,776 4,151 28,994	86,184 5,578 1,201 46,745 3,643 29,016
Highways and streets	65,712 1,849 6,182	49,535 3,100 7,022	58,301 2,467 6,589	56,185 2,289 5,845	51,903 2,329 5,314	48,431 2,262 5,814	49,628 2,196 4,818	52,777 2,386 5,568	53,923 2,509 6,425	48,764 1,883 6,815	48,858 2,629 5,789	50,189 2,107 6,339
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	32,186 10,532 7,410 14,244	32,679 10,495 7,468 14,716	34,756 10,643 6,914 17,199	32,872 12,013 6,920 13,939	32,375 10,515 6,979 14,881	31,167 10,809 6,491 13,868	28,797 9,945 5,961 12,890	30,602 9,719 7,137 13,747	31,468 9,617 7,156 14,695	33,343 9,703 7,000 16,640	33,731 9,831 6,989 16,911	33,064 10,009 6,950 16,105

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Seasonally Adjusted Annual Rate in 1996 Dollars

										Priva	te constr	uction							-
				В	esidentia	ıl building	ıs				Nonres	dential bu	uildings				Public ι	utilities <sup>4</sup>	
	Period				New	housing	units								Hospi-			Tele- com-	
		Total con- struction	Total <sup>1</sup>	Total <sup>2</sup>	Total	1 unit	2 units or more	Total	Indus- trial	Office	Hotels, motels	Other com- mercial	Reli- gious	Educa- tional	tal and institu- tional	Mis- cella- neous <sup>3</sup>	Total	muni- ca- tions	All other private <sup>5</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	678,581 685,141	528,474 536,614	310,226 312,499	226,134 225,687	201,633 201,236	24,500 24,451	174,714 172,092	29,363 29,200	41,985 42,537	14,506 13,385	51,977 50,654	6,652 6,859	8,371 8,751	12,265 11,859	9,595 8,845	(NA) (NA)	16,618 16,503	2,742 2,639
	July' August' September' October' November' December'	695,279 684,774 688,784 693,122 713,575 723,543	545,065 535,781 539,258 542,648 556,749 562,585	315,556 319,853 323,756 327,037 332,044 336,618	225,396 226,560 227,228 227,208 230,887 235,750	200,431 201,201 202,101 202,667 206,376 210,558	24,966 25,358 25,128 24,542 24,511 25,192	173,164 168,841 169,186 167,306 170,042 169,891	30,179 28,266 27,458 25,653 25,775 26,204	42,054 42,920 43,933 43,262 41,300 41,025	13,924 13,234 13,099 13,339 13,990 13,879	50,870 49,047 49,379 49,333 53,126 52,002	6,779 6,555 6,075 6,569 6,171 6,280	8,593 8,286 8,280 8,551 8,893 9,329	11,874 11,824 12,050 12,021 11,842 11,685	8,889 8,710 8,912 8,579 8,945 9,487	(NA) (NA) (NA) (NA) (NA) (NA)	19,285 19,610 19,467 20,486 21,390 21,321	2,599 2,302 2,306 2,147 2,463 2,752
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	720,341 719,031 731,241 714,807 709,169 697,476	554,433 564,728 568,450 558,658 558,056 551,061	333,829 338,329 337,935 332,875 327,949 321,508	235,170 237,413 239,546 238,023 235,435 230,908	209,902 213,464 213,591 212,259 210,534 206,174	25,268 23,950 25,956 25,764 24,901 24,734	170,379 176,588 177,930 176,776 180,204 179,588	25,384 25,627 26,928 27,436 28,624 29,019	41,121 42,139 44,881 45,954 47,148 46,765	15,014 14,078 14,771 14,617 14,260 13,921	52,274 56,745 53,042 51,937 51,919 52,239	6,672 6,962 7,119 6,852 6,721 7,261	9,157 9,627 9,682 9,235 10,045 9,056	11,458 11,667 11,884 11,992 12,203 12,312	9,298 9,743 9,624 8,753 9,284 9,014	(NA) (NA) (NA) (NA) (NA) (NA)	18,215 14,948 16,966 15,758 16,581 17,339	2,166 2,630 2,594 2,370 2,376 2,461
	Julyr	685,157 694,146 703,256 705,695 708,897 717,155	551,028 554,513 558,316 564,809	318,089 320,446 323,333	224,755 223,168 221,476 221,185 222,547 224,486	201,560 200,155 198,515 197,891 198,682 200,112	23,194 23,014 22,960 23,294 23,865 24,374	180,508 181,503 181,841 182,656 182,030 183,809	28,998 27,764 26,664 27,225 28,119 26,474	47,615 48,903 50,451 49,993 51,185 53,216	14,021 13,584 13,826 13,562 13,408 13,203	51,526 52,492 52,650 53,193 50,748 52,378	7,443 6,807 6,851 6,920 6,477 6,571	9,259 10,071 9,744 10,271 10,231 10,161	12,831 12,699 12,790 12,899 13,126 13,493	8,816 9,183 8,865 8,593 8,736 8,314	(NA) (NA) (NA) (NA) (NA) (NA)	16,228 15,221 20,479 17,281 18,869 22,051	2,407 2,793 2,890 2,738 2,775 2,482
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	739,304 744,360 738,995 741,033 741,518	578,166 574,277 567,904	336,310	227,824 232,230 229,761 230,586 232,962	202,931 207,079 205,027 205,694 207,476	24,894 25,151 24,735 24,892 25,486	188,374 184,696 188,211 180,825 174,340	30,201 28,008 29,019 27,717 25,978	51,220 49,432 51,533 49,190 45,561	13,418 13,372 12,601 12,259 12,059	54,337 55,073 55,793 53,728 52,167	6,802 6,831 6,743 6,739 6,587	10,434 10,132 10,329 10,360 10,194	13,509 13,159 13,250 12,687 13,277	8,452 8,690 8,942 8,145 8,517	(NA) (NA) (NA) (NA) (NA)	23,227 21,891 20,646 21,864 (NA)	2,355 2,559 2,207 2,160 2,173
PERCE	NT CHANGE																		
April 20 May 2	01- 001	(Z)	-1	(Z)	1	1	2	-4	-6	-7	-2	-3	-2	-2	5	5	(NA)	(NA)	1

Table 5a. Monthly Value of Construction Put in Place: May 1999-May 2001—Seasonally Adjusted Annual Rate in 1996
Dollars—Con.

							Pu	blic construc	tion					
	Period				Build	lings					Conserva-			_
	Period	Total	Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>	Highways and streets	Military facilities	tion and develop- ment	Sewer systems	Water supply facilities	Miscel- laneous public <sup>7</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	150,107 148,527	66,911 67,253	5,119 4,556	924 744	34,134 35,152	3,525 3,388	23,209 23,414	47,690 45,016	1,914 1,935	4,677 5,327	9,776 9,745	6,335 6,568	12,804 12,683
	July <sup>r</sup>	150,214 148,993 149,525 150,475 156,825 160,957	67,657 68,643 68,836 69,091 69,525 69,028	4,671 4,951 4,762 4,618 4,310 4,560	906 759 898 569 801 887	34,273 34,975 35,399 35,436 35,955 34,821	3,619 3,376 3,523 3,455 3,459 3,442	24,188 24,582 24,255 25,013 25,000 25,317	46,113 43,801 45,495 45,135 49,503 53,060	2,056 1,477 1,739 1,977 1,787 2,135	5,124 5,821 5,747 5,232 6,170 6,569	9,821 9,496 9,224 9,526 9,564 10,355	6,883 6,759 6,495 6,037 6,154 6,050	12,560 12,995 11,989 13,475 14,122 13,761
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	165,908 154,303 162,791 156,149 151,113 146,415	70,518 71,503 71,173 69,969 70,052 69,076	4,194 3,923 4,514 4,675 4,472 4,515	1,075 1,113 922 1,002 909 924	37,216 38,268 38,201 36,247 37,404 36,571	3,514 3,284 3,302 3,715 3,656 3,543	24,521 24,915 24,235 24,330 23,610 23,523	58,724 44,071 51,962 49,285 45,172 42,077	1,626 2,719 2,166 1,989 2,013 1,953	5,661 6,384 5,990 5,309 4,839 5,314	9,645 9,541 9,676 10,911 9,576 9,880	6,855 6,852 6,343 6,240 6,220 5,754	12,879 13,234 15,480 12,445 13,240 12,360
2001:	Julyr	142,347 149,662 152,228 151,182 150,580 152,347 165,673 166,194 164,718 173,130	67,529 69,832 69,925 72,237 71,636 72,715 74,914 74,281 74,337 80,897	4,431 4,609 4,539 4,740 4,773 4,751 5,390 5,011 4,902 5,556	990 1,113 934 946 995 1,013 1,336 1,168 1,126 1,334	35,760 36,628 37,171 37,305 37,849 39,414 39,691 39,504 39,335 42,700	3,411 3,451 3,435 3,224 3,509 3,072 3,258 3,285 3,290 3,360	22,936 24,030 23,846 26,021 24,509 24,465 25,239 25,313 25,685 27,948	42,893 45,576 46,486 41,786 41,759 42,933 50,093 50,294 50,409 51,058	1,885 2,046 2,146 1,606 2,235 1,788 1,927 1,985 1,779 2,114	4,368 5,029 5,789 6,129 5,206 5,711 6,640 7,050 6,790 5,892	9,017 8,779 8,664 8,725 8,841 9,017 10,219 10,379 10,096 11,262	5,248 6,266 6,272 6,103 6,083 6,054 7,033 7,337 7,693 8,961	11,407 12,133 12,947 14,597 14,821 14,127 14,846 14,868 13,613 12,946
April 20	May <sup>P</sup>	179,925	85,537 6	5,822 5	1,097	46,834	3,664	28,120	51,887	1,888 -11	6,260	11,446	8,162 -9	14,745

NA Not available, but estimates are included in totals.

rRevised.

Z Less than 0.5 percent.

Preliminary.

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

Table 5b. Monthly Value of Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in 1996 Dollars [Millions of dollars]

Time of construction						19	98					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	643,190	646,600	652,237	662,234	656,327	678,778	674,055	669,572	668,677	666,157	671,526	672,226
Private construction	503,141	507,975	513,607	522,741	518,626	532,008	526,256	524,579	520,241	518,957	523,839	522,120
Residential buildings  New housing units  1 unit  2 units or more Improvements	292,434 198,474 174,427 24,047 (NA)	295,883 201,642 177,471 24,171 (NA)	299,044 204,226 180,654 23,573 (NA)	300,239 206,659 183,226 23,434 (NA)	297,839 205,966 183,449 22,517 (NA)	298,537 209,570 187,080 22,490 (NA)	300,566 214,133 190,585 23,549 (NA)	297,816 214,861 192,710 22,150 (NA)	299,096 218,307 194,943 23,364 (NA)	297,613 220,035 196,131 23,903 (NA)	299,058 222,277 198,767 23,510 (NA)	298,355 223,482 200,270 23,212 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	173,375 37,763 38,345 12,187 48,595 6,126 9,330 12,656 8,372	173,427 38,319 37,729 12,027 48,077 6,306 9,816 12,769 8,385	175,200 39,904 37,279 12,086 49,576 5,901 9,845 12,793 7,814	179,710 39,506 38,652 12,849 50,283 5,770 10,082 13,389 9,178	174,772 37,693 38,562 12,486 49,360 5,524 9,749 12,861 8,537	180,924 37,813 41,328 13,989 51,130 5,939 8,731 13,028 8,966	177,193 37,019 38,782 13,913 51,202 6,141 7,971 13,012 9,153	178,510 39,809 37,605 14,780 49,476 6,230 8,316 12,903 9,393	175,225 36,769 37,997 15,423 48,295 6,150 8,864 12,886 8,840	179,472 37,001 41,094 15,448 49,841 6,221 8,320 12,391 9,155	181,973 36,910 41,830 15,108 51,296 6,612 8,777 12,497 8,942	182,627 35,104 42,729 14,725 51,719 6,543 9,388 13,068 9,350
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 11,398 (NA) (NA) (NA) (NA)	(NA) 12,404 (NA) (NA) (NA) (NA)	(NA) 13,056 (NA) (NA) (NA) (NA)	(NA) 12,057 (NA) (NA) (NA) (NA)	(NA) 12,755 (NA) (NA) (NA) (NA)	(NA) 12,156 (NA) (NA) (NA) (NA)	(NA) 11,891 (NA) (NA) (NA) (NA)	(NA) 12,203 (NA) (NA) (NA) (NA)	(NA) 12,090 (NA) (NA) (NA) (NA)	(NA) 12,731 (NA) (NA) (NA) (NA)	(NA) 11,983 (NA) (NA) (NA) (NA)	(NA) 11,511 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,452	2,462	2,399	2,319	2,412	2,914	2,322	2,477	2,406	2,307	2,571	2,318
Public construction	140,049	138,625	138,630	139,493	137,701	146,770	147,799	144,993	148,436	147,199	147,687	150,106
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	64,395 4,513 911 31,447 3,925 23,599	64,791 4,656 1,009 31,497 3,666 23,964	64,205 4,762 1,127 30,382 4,183 23,751	65,344 4,817 961 31,993 3,348 24,225	65,024 4,537 924 32,043 3,790 23,730	67,653 4,926 824 33,322 3,469 25,112	70,196 5,475 966 33,821 3,455 26,479	67,662 4,678 989 32,240 3,538 26,217	68,264 4,297 913 32,919 3,713 26,422	67,630 4,336 735 32,235 3,866 26,459	67,715 4,565 1,078 32,563 3,483 26,027	69,171 4,466 887 34,170 3,352 26,297
Highways and streets Military facilities Conservation and development	41,612 2,368 4,770	40,469 2,603 5,802	41,414 2,616 5,225	41,712 2,462 4,628	40,633 2,221 4,815	44,161 2,446 5,451	42,318 3,060 5,151	43,082 2,609 5,059	44,359 1,957 5,853	46,049 2,135 4,829	44,124 2,045 5,404	44,065 2,112 5,319
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	26,904 8,991 5,940 11,972	24,959 8,876 5,935 10,148	25,169 8,807 5,751 10,611	25,348 8,668 5,937 10,744	25,008 8,377 5,833 10,798	27,060 8,681 5,597 12,782	27,074 9,131 5,818 12,126	26,580 8,873 5,827 11,881	28,003 8,891 6,302 12,810	26,555 9,148 6,335 11,072	28,397 9,638 6,353 12,407	29,438 9,711 6,732 12,995

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

[Millions of dollars]

Two of construction						19	99					
Type of construction	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	678,538	694,944	695,464	683,733	678,581	685,141	695,279	684,774	688,784	693,122	713,575	723,543
Private construction	525,720	537,026	539,911	529,521	528,474	536,614	545,065	535,781	539,258	542,648	556,749	562,585
Residential buildings New housing units 1 unit 2 units or more. Improvements	299,847 224,534 199,947 24,587 (NA)	304,438 226,699 201,542 25,157 (NA)	309,246 229,168 203,931 25,237 (NA)	307,856 226,699 201,876 24,824 (NA)	310,226 226,134 201,633 24,500 (NA)	312,499 225,687 201,236 24,451 (NA)	315,556 225,396 200,431 24,966 (NA)	319,853 226,560 201,201 25,358 (NA)	323,756 227,228 202,101 25,128 (NA)	327,037 227,208 202,667 24,542 (NA)	332,044 230,887 206,376 24,511 (NA)	336,618 235,750 210,558 25,192 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous <sup>1</sup>	180,170 34,325 42,947 15,857 49,873 7,173 8,039 12,301 9,654	183,054 33,369 44,124 16,481 51,159 6,867 8,361 12,804 9,889	180,046 32,086 42,776 15,500 52,112 6,703 8,675 12,462 9,733	176,816 30,457 42,005 14,725 51,548 6,850 9,404 12,293 9,533	174,714 29,363 41,985 14,506 51,977 6,652 8,371 12,265 9,595	172,092 29,200 42,537 13,385 50,654 6,859 8,751 11,859 8,845	173,164 30,179 42,054 13,924 50,870 6,779 8,593 11,874 8,889	168,841 28,266 42,920 13,234 49,047 6,555 8,286 11,824 8,710	169,186 27,458 43,933 13,099 49,379 6,075 8,280 12,050 8,912	167,306 25,653 43,262 13,339 49,333 6,569 8,551 12,021 8,579	170,042 25,775 41,300 13,990 53,126 6,171 8,893 11,842 8,945	169,891 26,204 41,025 13,879 52,002 6,280 9,329 11,685 9,487
Farm nonresidential	(NA)											
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 13,152 (NA) (NA) (NA) (NA)	(NA) 14,038 (NA) (NA) (NA) (NA)	(NA) 16,790 (NA) (NA) (NA) (NA)	(NA) 17,586 (NA) (NA) (NA) (NA)	(NA) 16,618 (NA) (NA) (NA) (NA)	(NA) 16,503 (NA) (NA) (NA) (NA)	(NA) 19,285 (NA) (NA) (NA) (NA)	(NA) 19,610 (NA) (NA) (NA) (NA)	(NA) 19,467 (NA) (NA) (NA) (NA)	(NA) 20,486 (NA) (NA) (NA) (NA)	(NA) 21,390 (NA) (NA) (NA) (NA)	(NA) 21,321 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,185	2,342	2,620	2,992	2,742	2,639	2,599	2,302	2,306	2,147	2,463	2,752
Public construction	152,818	157,918	155,553	154,213	150,107	148,527	150,214	148,993	149,525	150,475	156,825	160,957
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	67,372 4,352 769 33,871 3,613 24,767	69,391 4,383 853 34,206 4,284 25,665	69,339 4,734 911 34,106 3,371 26,217	69,030 4,788 810 35,408 3,202 24,823	66,911 5,119 924 34,134 3,525 23,209	67,253 4,556 744 35,152 3,388 23,414	67,657 4,671 906 34,273 3,619 24,188	68,643 4,951 759 34,975 3,376 24,582	68,836 4,762 898 35,399 3,523 24,255	69,091 4,618 569 35,436 3,455 25,013	69,525 4,310 801 35,955 3,459 25,000	69,028 4,560 887 34,821 3,442 25,317
Highways and streets	48,911 1,802 5,474	50,184 2,355 5,969	48,577 2,002 5,794	47,537 2,078 5,315	47,690 1,914 4,677	45,016 1,935 5,327	46,113 2,056 5,124	43,801 1,477 5,821	45,495 1,739 5,747	45,135 1,977 5,232	49,503 1,787 6,170	53,060 2,135 6,569
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	29,260 9,736 6,245 13,279	30,019 9,527 6,606 13,885	29,841 9,797 6,759 13,286	30,252 9,493 6,319 14,441	28,915 9,776 6,335 12,804	28,997 9,745 6,568 12,683	29,264 9,821 6,883 12,560	29,250 9,496 6,759 12,995	27,708 9,224 6,495 11,989	29,038 9,526 6,037 13,475	29,840 9,564 6,154 14,122	30,165 10,355 6,050 13,761

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

Turns of construction						20	000					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	720,341	719,031	731,241	714,807	709,169	697,476	685,157	694,146	703,256	705,695	708,897	717,155
Private construction	554,433	564,728	568,450	558,658	558,056	551,061	542,810	544,485	551,028	554,513	558,316	564,809
Residential buildings New housing units  1 unit 2 units or more. Improvements	333,829 235,170 209,902 25,268 (NA)	338,329 237,413 213,464 23,950 (NA)	337,935 239,546 213,591 25,956 (NA)	332,875 238,023 212,259 25,764 (NA)	327,949 235,435 210,534 24,901 (NA)	321,508 230,908 206,174 24,734 (NA)	314,456 224,755 201,560 23,194 (NA)	314,097 223,168 200,155 23,014 (NA)	313,573 221,476 198,515 22,960 (NA)	318,089 221,185 197,891 23,294 (NA)	320,446 222,547 198,682 23,865 (NA)	323,333 224,486 200,112 24,374 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	170,379 25,384 41,121 15,014 52,274 6,672 9,157 11,458 9,298	176,588 25,627 42,139 14,078 56,745 6,962 9,627 11,667 9,743	177,930 26,928 44,881 14,771 53,042 7,119 9,682 11,884 9,624	176,776 27,436 45,954 14,617 51,937 6,852 9,235 11,992 8,753	180,204 28,624 47,148 14,260 51,919 6,721 10,045 12,203 9,284	179,588 29,019 46,765 13,921 52,239 7,261 9,056 12,312 9,014	180,508 28,998 47,615 14,021 51,526 7,443 9,259 12,831 8,816	181,503 27,764 48,903 13,584 52,492 6,807 10,071 12,699 9,183	181,841 26,664 50,451 13,826 52,650 6,851 9,744 12,790 8,865	182,656 27,225 49,993 13,562 53,193 6,920 10,271 12,899 8,593	182,030 28,119 51,185 13,408 50,748 6,477 10,231 13,126 8,736	183,809 26,474 53,216 13,203 52,378 6,571 10,161 13,493 8,314
Farm nonresidential	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications. Railroads Electric light and power Gas Petroleum pipelines	(NA) 18,215 (NA) (NA) (NA) (NA)	(NA) 14,948 (NA) (NA) (NA) (NA)	(NA) 16,966 (NA) (NA) (NA) (NA)	(NA) 15,758 (NA) (NA) (NA) (NA)	(NA) 16,581 (NA) (NA) (NA) (NA)	(NA) 17,339 (NA) (NA) (NA) (NA)	(NA) 16,228 (NA) (NA) (NA) (NA)	(NA) 15,221 (NA) (NA) (NA) (NA)	(NA) 20,479 (NA) (NA) (NA) (NA)	(NA) 17,281 (NA) (NA) (NA) (NA)	(NA) 18,869 (NA) (NA) (NA) (NA)	(NA) 22,051 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,166	2,630	2,594	2,370	2,376	2,461	2,407	2,793	2,890	2,738	2,775	2,482
Public construction  Buildings  Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	70,518 4,194 1,075 37,216 3,514 24,521	154,303 71,503 3,923 1,113 38,268 3,284 24,915	71,173 4,514 922 38,201 3,302 24,235	156,149 69,969 4,675 1,002 36,247 3,715 24,330	70,052 4,472 909 37,404 3,656 23,610	146,415 69,076 4,515 924 36,571 3,543 23,523	142,347 67,529 4,431 990 35,760 3,411 22,936	149,662 69,832 4,609 1,113 36,628 3,451 24,030	152,228 69,925 4,539 934 37,171 3,435 23,846	72,237 4,740 946 37,305 3,224 26,021	150,580 71,636 4,773 995 37,849 3,509 24,509	152,347 72,715 4,751 1,013 39,414 3,072 24,465
Highways and streets Military facilities Conservation and development	58,724 1,626 5,661	44,071 2,719 6,384	51,962 2,166 5,990	49,285 1,989 5,309	45,172 2,013 4,839	42,077 1,953 5,314	42,893 1,885 4,368	45,576 2,046 5,029	46,486 2,146 5,789	41,786 1,606 6,129	41,759 2,235 5,206	42,933 1,788 5,711
Other public construction.  Sewer systems  Water supply facilities  Miscellaneous public <sup>4</sup>	29,379 9,645 6,855 12,879	29,626 9,541 6,852 13,234	31,499 9,676 6,343 15,480	29,596 10,911 6,240 12,445	29,036 9,576 6,220 13,240	27,994 9,880 5,754 12,360	25,672 9,017 5,248 11,407	27,178 8,779 6,266 12,133	27,883 8,664 6,272 12,947	29,425 8,725 6,103 14,597	29,745 8,841 6,083 14,821	29,198 9,017 6,054 14,127

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Not Seasonally Adjusted in 1996 Dollars [Millions of dollars]

			Private construction  Residential buildings  Nonresidential buildings																
				F	Residentia	ıl building	js				Nonres	idential b	uildings				Public i	utilities <sup>4</sup>	
	Period				New	housing	units								Hospi-			Tele- com-	
		Total con- struction	Total <sup>1</sup>	Total <sup>2</sup>	Total	1 unit	2 units or more	Total	Indus- trial	Office	Hotels, motels	Other com- mercial	Reli- gious	Educa- tional	tal and institu- tional	Mis- cella- neous <sup>3</sup>	Total	muni- ca- tions	All other private <sup>5</sup>
YEAR	TO DATE																		
May 20	00 01 t change	268,802 277,635 3	213,090 216,975 2	124,285 123,175 –1	89,788 87,190 -3	79,662 77,188 -3	10,126 10,001 -1	69,622 72,180 4	10,579 11,035 4	18,039 20,005 11	5,937 5,204 –12	20,169 20,594 2	2,666 2,617 –2	3,643 3,915 7	4,831 5,363 11	3,760 3,446 -8	(NA) (NA) (NA)	6,310 (NA) (NA)	901 846 -6
MONTH	HLY DATA																		
1999:	May <sup>r</sup> June <sup>r</sup>	58,064 62,469	45,569 48,590	27,342 29,085	19,388 20,361	17,256 18,178	2,132 2,182	14,684 14,929	2,403 2,548	3,611 3,619	1,217 1,158	4,353 4,449	539 561	718 845	1,033 991	810 757	(NA) (NA)	1,288 1,467	221 223
	Julyr	63,996 65,329 65,420 63,501 61,241 54,164	49,602 49,943 49,965 49,401 48,113 42,535	29,650 30,409 30,520 30,274 28,877 24,117	20,927 21,212 21,028 20,591 20,068 17,619	18,774 18,980 18,846 18,460 18,023 15,616	2,153 2,232 2,182 2,131 2,045 2,003	14,905 15,050 15,148 14,769 14,603 13,729	2,512 2,461 2,437 2,298 2,242 2,275	3,536 3,709 3,848 3,702 3,535 3,326	1,201 1,136 1,127 1,107 1,167 1,147	4,523 4,561 4,625 4,551 4,600 4,056	560 595 568 602 564 514	851 827 737 708 707 680	966 1,012 1,035 1,044 1,023 965	755 748 772 757 765 764	(NA) (NA) (NA) (NA) (NA) (NA)	1,639 1,744 1,692 1,818 1,934 1,992	231 220 213 206 216 230
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	48,634 47,684 54,746 56,530 61,208 63,419	38,517 37,912 43,567 44,640 48,454 49,795	22,724 20,954 25,281 26,351 28,975 29,979	16,238 15,589 18,484 19,245 20,232 20,881	14,378 13,751 16,375 17,105 18,053 18,676	1,859 1,838 2,109 2,141 2,179 2,205	12,516 13,408 14,086 14,307 15,305 15,549	1,855 2,003 2,130 2,179 2,412 2,488	3,132 3,382 3,654 3,761 4,110 3,991	1,146 1,137 1,235 1,210 1,209 1,223	3,659 4,019 4,018 4,120 4,353 4,584	500 536 544 539 547 592	638 677 730 733 865 871	896 918 982 1,010 1,025 1,029	690 736 793 756 785 771	(NA) (NA) (NA) (NA) (NA) (NA)	1,158 1,096 1,463 1,186 1,407 1,556	157 177 194 182 191 208
	Julyr	62,592 66,447 66,442 64,772 60,882 53,543	49,051 50,821 50,886 50,608 48,236 42,602	29,558 29,897 29,520 29,442 27,935 23,091	20,887 20,940 20,472 20,035 19,377 16,724	18,896 18,898 18,495 18,008 17,368 14,808	1,991 2,042 1,977 2,027 2,009 1,915	15,439 16,275 16,189 16,235 15,598 14,748	2,383 2,432 2,375 2,466 2,409 2,288	3,968 4,263 4,381 4,324 4,376 4,253	1,189 1,186 1,157 1,156 1,122 1,058	4,581 4,882 4,927 4,898 4,402 4,094	613 630 614 659 596 527	913 1,006 868 852 813 742	1,044 1,086 1,100 1,121 1,134 1,114	748 790 767 758 745 671	(NA) (NA) (NA) (NA) (NA) (NA)	1,294 1,408 1,766 1,570 1,679 1,913	213 268 266 263 243 209
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	50,727 48,929 55,170 58,771 64,038	40,273 38,639 43,912 45,399 48,752	22,256 20,732 24,706 26,113 29,368	15,749 15,190 17,657 18,582 20,012	13,901 13,322 15,667 16,524 17,774	1,848 1,867 1,989 2,058 2,239	14,053 13,775 14,869 14,678 14,805	2,285 2,077 2,283 2,199 2,191	3,974 3,835 4,170 4,070 3,956	1,041 1,041 1,061 1,028 1,033	3,822 3,910 4,226 4,267 4,369	520 505 520 530 542	727 712 778 820 878	1,056 1,033 1,094 1,065 1,115	628 662 736 700 720	(NA) (NA) (NA) (NA) (NA)	1,603 1,532 1,696 1,711 (NA)	170 172 166 164 174
April 20	OO1-	9	7	12	8	8	9	1	(Z)	-3	(Z)	2	2	7	5	3	(NA)	(NA)	6

Table 6a. Monthly Value of Construction Put in Place: May 1999-May 2001—Not Seasonally Adjusted in 1996 Dollars—Con. [Millions of dollars]

							Pu	blic construc	tion					
	Period				Build	lings					Conserva-			
	Toriou	Total	Total	Housing and rede- velopment	Industrial	Educa- tional	Hospital	Other public buildings <sup>6</sup>	Highways and streets	Military facilities	tion and develop- ment	Sewer systems	Water supply facilities	Miscel- laneous public <sup>7</sup>
YEAR 1	TO DATE													
May 20	00 01 change	55,713 60,660 9	26,804 29,544 10	1,726 2,116 23	398 482 21	13,732 15,188 11	1,402 1,344 -4	9,545 10,410 9	15,013 15,818 5	822 761 -7	2,096 2,437 16	3,696 3,998 8	2,440 2,975 22	4,842 5,128 6
MONTH	ILY DATA													
1999:	May <sup>r</sup> June <sup>r</sup>	12,495 13,879	5,512 6,127	425 392	75 65	2,748 3,313	287 308	1,979 2,049	3,990 4,539	163 168	387 460	819 884	548 571	1,076 1,130
	July <sup>r</sup>	14,393 15,386 15,455 14,101 13,128 11,628	6,269 6,625 6,459 6,002 5,695 5,348	393 417 442 413 375 377	80 62 99 40 63 77	3,421 3,689 3,366 3,065 2,822 2,577	303 283 327 296 291 285	2,073 2,174 2,225 2,188 2,143 2,033	4,830 5,289 5,384 4,837 4,175 3,316	176 127 186 135 153 186	452 543 713 380 511 505	871 895 890 899 843 784	626 616 594 588 546 465	1,168 1,290 1,229 1,260 1,205 1,025
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup>	10,117 9,772 11,180 11,890 12,754 13,623	5,047 5,090 5,324 5,540 5,803 6,280	314 299 357 376 380 390	80 83 80 78 77 84	2,593 2,609 2,728 2,788 3,014 3,438	265 259 267 296 315 308	1,795 1,840 1,892 2,001 2,017 2,060	2,613 2,090 2,957 3,446 3,907 4,218	123 186 186 156 171 169	389 435 453 419 400 458	659 648 722 845 822 897	463 470 457 509 541 501	824 854 1,080 975 1,109 1,101
	July'	13,541 15,626 15,556 14,164 12,645 10,940	6,262 6,778 6,555 6,275 5,863 5,573	368 394 413 427 417 385	83 93 106 64 79 84	3,567 3,870 3,532 3,218 2,978 2,904	285 291 318 285 288 249	1,958 2,130 2,186 2,282 2,102 1,952	4,404 5,591 5,326 4,516 3,574 2,587	161 177 230 110 192 155	387 468 718 451 431 440	791 837 827 833 779 664	477 573 573 592 539 466	1,060 1,203 1,327 1,386 1,268 1,056
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	10,454 10,289 11,259 13,372 15,286	5,364 5,197 5,508 6,380 7,095	410 367 384 454 501	104 86 95 108 89	2,742 2,637 2,780 3,235 3,794	260 247 256 271 310	1,847 1,859 1,992 2,311 2,401	2,346 2,326 2,840 3,731 4,575	145 136 153 167 160	459 483 510 465 520	705 678 741 886 988	474 502 558 728 713	961 968 949 1,015 1,235
PERCE	NT CHANGE													
April 20 May 2	01- 001	14	11	10	-18	17	14	4	23	-4	12	12	-2	22

NA Not available, but estimates are included in totals.

PPreliminary.

rRevised.

Z Less than 0.5 percent.

<sup>&</sup>lt;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, 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: 1998-2000—Not Seasonally Adjusted in 1996 Dollars [Millions of dollars]

Turns of accepturation							1998						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	664,244	43,840	42,101	48,261	52,518	56,246	61,988	62,423	63,799	63,736	61,313	57,405	50,614
Private construction	519,859	35,111	33,502	38,862	41,808	44,792	48,270	48,106	48,914	48,403	47,330	45,058	39,703
Residential buildings	297,960 212,068 188,785 23,283 85,892	19,816 13,630 11,861 1,769 (NA)	18,151 13,141 11,358 1,783 (NA)	22,133 15,638 13,745 1,894 (NA)	23,747 16,705 14,734 1,970 (NA)	26,290 17,600 15,639 1,961 (NA)	27,790 18,849 16,853 1,996 (NA)	28,284 19,914 17,867 2,047 (NA)	28,400 20,202 18,243 1,958 (NA)	28,243 20,299 18,276 2,023 (NA)	27,559 20,028 17,946 2,082 (NA)	26,020 19,366 17,409 1,957 (NA)	21,526 16,697 14,853 1,843 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	177,644 37,720 39,333 13,794 49,915 6,139 9,039 12,853 8,850	12,798 2,798 2,956 945 3,390 457 646 987 620	12,875 2,836 2,918 935 3,401 462 690 1,006 628	13,842 3,176 3,007 1,005 3,751 459 742 1,056 645	14,637 3,151 3,227 1,089 3,985 465 800 1,125 795	14,691 3,135 3,326 1,030 4,126 435 835 1,085 720	15,704 3,268 3,506 1,231 4,504 490 847 1,089 769	15,273 3,107 3,287 1,195 4,553 504 794 1,058 776	15,760 3,374 3,228 1,260 4,597 560 829 1,106 805	15,741 3,343 3,328 1,303 4,536 568 787 1,107 768	15,933 3,305 3,538 1,325 4,606 590 686 1,075 808	15,514 3,144 3,556 1,241 4,437 592 698 1,080 767	14,876 3,086 3,457 1,234 4,030 556 683 1,079 750
Farm nonresidential	3,989	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	37,818 12,188 5,463 11,883 7,072 1,213	(NA) 780 (NA) (NA) (NA) (NA)	(NA) 859 (NA) (NA) (NA) (NA)	(NA) 1,067 (NA) (NA) (NA) (NA)	(NA) 978 (NA) (NA) (NA) (NA)	(NA) 1,012 (NA) (NA) (NA) (NA)	(NA) 1,083 (NA) (NA) (NA) (NA)	(NA) 1,046 (NA) (NA) (NA) (NA)	(NA) 1,035 (NA) (NA) (NA) (NA)	(NA) 1,066 (NA) (NA) (NA) (NA)	(NA) 1,171 (NA) (NA) (NA) (NA)	(NA) 1,028 (NA) (NA) (NA) (NA)	(NA) 1,063 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,447	179	166	179	177	195	247	207	234	222	221	226	193
Public construction	144,385	8,730	8,599	9,399	10,710	11,454	13,718	14,317	14,885	15,333	13,983	12,347	10,911
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	66,920 4,663 941 32,431 3,641 25,245	4,619 345 71 2,172 295 1,735	4,581 341 74 2,126 275 1,764	4,800 371 90 2,165 339 1,836	5,179 396 79 2,434 272 1,997	5,361 376 76 2,574 310 2,025	6,155 426 73 3,143 311 2,202	6,506 465 87 3,379 299 2,277	6,491 388 82 3,406 289 2,326	6,429 404 100 3,136 369 2,420	5,901 392 53 2,799 320 2,336	5,552 390 84 2,564 283 2,231	5,346 368 73 2,532 278 2,096
Highways and streets	43,085 2,377 5,223	1,824 178 322	1,801 178 397	2,192 225 390	2,951 194 367	3,396 189 399	4,464 212 473	4,616 262 456	5,152 225 475	5,190 210 730	5,046 146 360	3,710 175 446	2,743 184 410
Other public construction Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	26,779 8,976 6,035 11,767	1,786 613 405 768	1,642 579 408 656	1,793 653 412 728	2,020 688 483 849	2,108 699 503 907	2,415 789 486 1,140	2,477 819 530 1,128	2,542 826 530 1,186	2,774 859 575 1,339	2,530 875 619 1,036	2,463 841 566 1,056	2,228 736 518 975

Table 6b. Annual and Monthly Value of Construction Put in Place: 1998-2000—Not Seasonally Adjusted in 1996 Dollars—Con.

Tune of construction							1999						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	692,281	46,072	45,623	51,962	54,439	58,064	62,469	63,996	65,329	65,420	63,501	61,241	54,164
Private construction	540,159	36,659	35,886	41,331	42,565	45,569	48,590	49,602	49,943	49,965	49,401	48,113	42,535
Residential buildings	317,232 227,461 202,615 24,847 89,771	20,401 15,449 13,646 1,803 (NA)	18,944 14,811 12,949 1,862 (NA)	23,157 17,645 15,601 2,044 (NA)	24,457 18,364 16,285 2,079 (NA)	27,342 19,388 17,256 2,132 (NA)	29,085 20,361 18,178 2,182 (NA)	29,650 20,927 18,774 2,153 (NA)	30,409 21,212 18,980 2,232 (NA)	30,520 21,028 18,846 2,182 (NA)	30,274 20,591 18,460 2,131 (NA)	28,877 20,068 18,023 2,045 (NA)	24,117 17,619 15,616 2,003 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous¹	173,418 29,204 42,549 14,273 50,867 6,590 8,621 12,101 9,214	13,257 2,551 3,275 1,188 3,487 520 559 962 716	13,631 2,469 3,412 1,281 3,624 505 588 1,007 744	14,282 2,559 3,479 1,296 3,943 519 654 1,029 802	14,431 2,447 3,497 1,248 4,094 542 746 1,034 825	14,684 2,403 3,611 1,217 4,353 539 718 1,033 810	14,929 2,548 3,619 1,158 4,449 561 845 991 757	14,905 2,512 3,536 1,201 4,523 560 851 966 755	15,050 2,461 3,709 1,136 4,561 595 827 1,012 748	15,148 2,437 3,848 1,127 4,625 568 737 1,035 772	14,769 2,298 3,702 1,107 4,551 602 708 1,044 757	14,603 2,242 3,535 1,167 4,600 564 707 1,023 765	13,729 2,275 3,326 1,147 4,056 514 680 965 764
Farm nonresidential	4,474	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	42,534 18,305 4,311 13,892 4,625 1,401	(NA) 863 (NA) (NA) (NA) (NA)	(NA) 976 (NA) (NA) (NA) (NA)	(NA) 1,429 (NA) (NA) (NA) (NA)	(NA) 1,464 (NA) (NA) (NA) (NA)	(NA) 1,288 (NA) (NA) (NA) (NA)	(NA) 1,467 (NA) (NA) (NA) (NA)	(NA) 1,639 (NA) (NA) (NA) (NA)	(NA) 1,744 (NA) (NA) (NA) (NA)	(NA) 1,692 (NA) (NA) (NA) (NA)	(NA) 1,818 (NA) (NA) (NA) (NA)	(NA) 1,934 (NA) (NA) (NA) (NA)	(NA) 1,992 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,501	159	158	196	229	221	223	231	220	213	206	216	230
Public construction	152,121	9,413	9,737	10,632	11,874	12,495	13,879	14,393	15,386	15,455	14,101	13,128	11,628
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	68,474 4,653 827 34,821 3,516 24,657	4,826 328 58 2,351 274 1,814	4,919 322 63 2,323 321 1,891	5,203 374 77 2,433 283 2,037	5,487 395 68 2,712 259 2,053	5,512 425 75 2,748 287 1,979	6,127 392 65 3,313 308 2,049	6,269 393 80 3,421 303 2,073	6,625 417 62 3,689 283 2,174	6,459 442 99 3,366 327 2,225	6,002 413 40 3,065 296 2,188	5,695 375 63 2,822 291 2,143	5,348 377 77 2,577 285 2,033
Highways and streets	46,858 1,926 5,594	2,140 136 374	2,275 161 408	2,684 172 439	3,399 163 420	3,990 163 387	4,539 168 460	4,830 176 452	5,289 127 543	5,384 186 713	4,837 135 380	4,175 153 511	3,316 186 505
Other public construction	29,269 9,653 6,431 13,185	1,938 661 423 853	1,974 622 454 899	2,134 733 485 916	2,404 754 515 1,135	2,443 819 548 1,076	2,585 884 571 1,130	2,665 871 626 1,168	2,801 895 616 1,290	2,713 890 594 1,229	2,746 899 588 1,260	2,594 843 546 1,205	2,273 784 465 1,025

Table 6b. Annual and Monthly Value of Construction Put in Place: 1998-2000—Not Seasonally Adjusted in 1996 Dollars—Con.

Turn of construction							2000						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total construction	706,899	48,634	47,684	54,746	56,530	61,208	63,419	62,592	66,447	66,442	64,772	60,882	53,543
Private construction	555,089	38,517	37,912	43,567	44,640	48,454	49,795	49,051	50,821	50,886	50,608	48,236	42,602
Residential buildings  New housing units  1 unit 2 units or more. Improvements	323,708 229,103 204,812 24,292 94,605	22,724 16,238 14,378 1,859 (NA)	20,954 15,589 13,751 1,838 (NA)	25,281 18,484 16,375 2,109 (NA)	26,351 19,245 17,105 2,141 (NA)	28,975 20,232 18,053 2,179 (NA)	29,979 20,881 18,676 2,205 (NA)	29,558 20,887 18,896 1,991 (NA)	29,897 20,940 18,898 2,042 (NA)	29,520 20,472 18,495 1,977 (NA)	29,442 20,035 18,008 2,027 (NA)	27,935 19,377 17,368 2,009 (NA)	23,091 16,724 14,808 1,915 (NA)
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous <sup>1</sup>	179,654 27,419 47,594 14,027 52,539 6,898 9,707 12,459 9,010	12,516 1,855 3,132 1,146 3,659 500 638 896 690	13,408 2,003 3,382 1,137 4,019 536 677 918 736	14,086 2,130 3,654 1,235 4,018 544 730 982 793	14,307 2,179 3,761 1,210 4,120 539 733 1,010 756	15,305 2,412 4,110 1,209 4,353 547 865 1,025 785	15,549 2,488 3,991 1,223 4,584 592 871 1,029 771	15,439 2,383 3,968 1,189 4,581 613 913 1,044 748	16,275 2,432 4,263 1,186 4,882 630 1,006 1,086 790	16,189 2,375 4,381 1,157 4,927 614 868 1,100 767	16,235 2,466 4,324 1,156 4,898 659 852 1,121 758	15,598 2,409 4,376 1,122 4,402 596 813 1,134 745	14,748 2,288 4,253 1,058 4,094 527 742 1,114 671
Farm nonresidential	4,407	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Public utilities Telecommunications Railroads Electric light and power Gas Petroleum pipelines	44,749 17,497 3,750 19,251 3,354 897	(NA) 1,158 (NA) (NA) (NA) (NA)	(NA) 1,096 (NA) (NA) (NA) (NA)	(NA) 1,463 (NA) (NA) (NA) (NA)	(NA) 1,186 (NA) (NA) (NA) (NA)	(NA) 1,407 (NA) (NA) (NA) (NA)	(NA) 1,556 (NA) (NA) (NA) (NA)	(NA) 1,294 (NA) (NA) (NA) (NA)	(NA) 1,408 (NA) (NA) (NA) (NA)	(NA) 1,766 (NA) (NA) (NA) (NA)	(NA) 1,570 (NA) (NA) (NA) (NA)	(NA) 1,679 (NA) (NA) (NA) (NA)	(NA) 1,913 (NA) (NA) (NA) (NA)
All other private <sup>2</sup>	2,570	157	177	194	182	191	208	213	268	266	263	243	209
Public construction	151,810	10,117	9,772	11,180	11,890	12,754	13,623	13,541	15,626	15,556	14,164	12,645	10,940
Buildings Housing and redevelopment Industrial Educational Hospital Other <sup>3</sup>	70,390 4,521 991 37,237 3,427 24,214	5,047 314 80 2,593 265 1,795	5,090 299 83 2,609 259 1,840	5,324 357 80 2,728 267 1,892	5,540 376 78 2,788 296 2,001	5,803 380 77 3,014 315 2,017	6,280 390 84 3,438 308 2,060	6,262 368 83 3,567 285 1,958	6,778 394 93 3,870 291 2,130	6,555 413 106 3,532 318 2,186	6,275 427 64 3,218 285 2,282	5,863 417 79 2,978 288 2,102	5,573 385 84 2,904 249 1,952
Highways and streets	45,230 2,016 5,449	2,613 123 389	2,090 186 435	2,957 186 453	3,446 156 419	3,907 171 400	4,218 169 458	4,404 161 387	5,591 177 468	5,326 230 718	4,516 110 451	3,574 192 431	2,587 155 440
Other public construction Sewer systems Water supply facilities Miscellaneous public <sup>4</sup>	28,725 9,324 6,160 13,241	1,945 659 463 824	1,972 648 470 854	2,259 722 457 1,080	2,328 845 509 975	2,472 822 541 1,109	2,498 897 501 1,101	2,328 791 477 1,060	2,612 837 573 1,203	2,727 827 573 1,327	2,812 833 592 1,386	2,586 779 539 1,268	2,185 664 466 1,056

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Not Seasonally Adjusted in Current Dollars

					Sta	te and local	ly owned pu	ıblic constru	ction			
					Buildings							
	Period	Total state and local	Total	Housing and rede- velop- ment	Educa- tional	Hospital	Other buildings <sup>1</sup>	Highways and streets	Conser- vation and develop- ment	Sewer systems	Water supply facilities	Miscella- neous construc- tion <sup>2</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	12,657 14,132	5,704 6,397	434 394	3,055 3,706	251 274	1,964 2,023	4,332 4,968	143 157	875 953	581 606	1,022 1,052
	July <sup>r</sup> August <sup>r</sup> . September <sup>r</sup> October <sup>r</sup> November <sup>r</sup> December <sup>r</sup>	14,669 15,849 15,497 14,705 13,428 11,811	6,544 7,025 6,663 6,356 6,011 5,615	397 429 446 429 382 391	3,833 4,143 3,782 3,464 3,206 2,937	254 273 294 285 288 256	2,061 2,181 2,140 2,178 2,134 2,031	5,273 5,788 5,888 5,332 4,629 3,691	154 190 189 179 216 193	937 967 960 971 913 850	664 656 632 627 584 499	1,097 1,224 1,165 1,239 1,076 963
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> Mayr <sup>r</sup> June <sup>r</sup>	10,486 10,035 11,426 12,516 13,543 14,430	5,432 5,490 5,719 6,011 6,351 6,875	336 315 377 402 406 418	2,992 3,015 3,151 3,230 3,508 4,006	247 245 265 275 325 298	1,857 1,915 1,927 2,104 2,113 2,154	2,911 2,336 3,302 3,908 4,465 4,825	146 172 151 148 149 146	720 713 794 930 903 981	500 512 498 564 607 565	777 813 962 955 1,068 1,038
	July <sup>r</sup> August <sup>r</sup> . September <sup>r</sup> . October <sup>r</sup> . November <sup>r</sup> . December <sup>r</sup> .	14,610 16,832 16,371 15,518 13,623 11,663	6,952 7,504 7,159 6,982 6,534 6,193	395 426 446 466 453 406	4,179 4,545 4,152 3,797 3,517 3,440	290 288 303 296 289 253	2,088 2,246 2,257 2,424 2,275 2,095	5,064 6,436 6,144 5,238 4,155 3,006	150 150 195 232 180 167	873 927 918 927 867 737	542 652 654 679 619 535	1,030 1,163 1,302 1,460 1,268 1,025
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	11,111 10,976 12,150 14,760 17,049	5,966 5,827 6,180 7,277 8,173	448 403 422 516 561	3,256 3,141 3,332 3,885 4,573	267 258 258 291 327	1,995 2,026 2,169 2,586 2,712	2,723 2,705 3,379 4,446 5,477	173 186 197 212 206	782 753 825 987 1,106	543 576 640 836 822	924 930 928 1,003 1,265
						Federally o	wned public	constructio	n			
			Buildings								Conser- vation	Miscella-
		Total federal	Total	Housing	Industrial	Educa- tional	Hospital	Other buildings <sup>3</sup>	Highways and streets	Military facilities	and develop- ment	neous construc- tion <sup>4</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	1,032 1,183	420 453	32 39	83 73	1 1	67 71	237 270	(NA) (NA)	179 186	271 339	140 180
	July <sup>r</sup>	1,205 1,167 1,581 969 1,234 1,224	479 416 592 421 453 476	39 34 46 32 38 33	89 70 112 45 72 88	3 4 1 - - 1	86 46 73 49 43 68	263 263 360 295 301 287	(NA) (NA) (NA) (NA) (NA) (NA)	195 142 207 151 172 210	333 397 580 232 338 355	172 182 173 139 248 167
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> June <sup>r</sup>	955 1,060 1,241 1,065 1,090 1,221	390 392 426 414 397 442	25 27 32 29 30 32	93 96 92 91 89 98	- - 7 1 3	59 55 44 69 43 62	214 213 259 218 235 249	(NA) (NA) (NA) (NA) (NA) (NA)	139 212 212 180 198 196	279 307 348 314 291 355	134 137 238 137 179 197
	July <sup>r</sup>	1,045 1,265 1,661 968 1,125 1,112	382 454 550 416 396 412	32 31 34 31 35 46	98 109 125 76 93 99	1 2 5 - 5 4	45 55 71 40 52 43	207 256 316 269 211 220	(NA) (NA) (NA) (NA) (NA) (NA)	188 206 269 129 225 183	277 368 602 270 299 321	167 200 205 120 179 178
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	1,095 1,063 1,165 1,084 1,141	403 365 426 387 378	36 33 36 26 36	124 103 114 130 108	2 2 5 4 2	42 37 49 36 47	200 190 222 193 184	(NA) (NA) (NA) (NA) (NA)	171 161 184 200 192	336 350 371 306 376	169 173 168 170 169

<sup>-</sup> Less than \$0.5 million.

NA Not available, but estimates are included in totals.

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<sup>&</sup>lt;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: 1998-2000—Not Seasonally Adjusted in Current Dollars

Time of construction							1998						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	139,023	8,180	7,997	8,739	10,191	10,991	13,322	13,844	14,641	14,572	14,057	11,989	10,500
Total buildings. Housing and redevelopment. Educational. Hospital. Other¹	65,750	4,453	4,394	4,573	5,009	5,229	6,102	6,406	6,490	6,251	5,954	5,551	5,337
	4,384	321	306	354	375	351	405	431	354	372	384	370	361
	34,813	2,298	2,249	2,292	2,586	2,745	3,371	3,631	3,673	3,387	3,034	2,787	2,761
	2,897	240	226	255	227	241	253	226	225	251	257	244	253
	23,656	1,593	1,614	1,672	1,821	1,892	2,074	2,119	2,239	2,241	2,279	2,151	1,962
Highways and streets	45,308	1,912	1,878	2,284	3,066	3,532	4,657	4,833	5,435	5,502	5,360	3,937	2,914
	1,915	145	132	145	136	161	200	164	183	177	185	152	136
Other state and local construction Sewer systems	26,050	1,670	1,593	1,737	1,979	2,069	2,363	2,441	2,533	2,642	2,559	2,349	2,113
	9,367	637	599	675	712	727	824	856	867	906	918	878	767
	6,290	418	421	426	499	520	504	550	553	602	651	598	550
	10,393	616	572	636	768	823	1,036	1,036	1,114	1,135	990	873	796
Federal construction	14,318	1,006	1,035	1,134	1,069	1,081	1,197	1,347	1,233	1,823	921	1,243	1,230
Total buildings. Housing. Industrial Educational Hospital Other federal buildings <sup>3</sup>	6,026	429	447	504	488	483	494	580	506	690	435	478	491
	538	40	50	32	39	42	44	61	57	57	34	48	36
	1,010	76	79	95	84	81	78	93	88	108	58	91	79
	15	-	1	-	1	1	2	2	3	3	-	1	1
	1,009	71	66	105	63	90	82	95	87	148	90	64	50
	3,454	243	253	272	301	269	289	329	271	375	253	275	325
Highways and streets Military facilities Conservation and development Miscellaneous nonbuilding <sup>4</sup>	257	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	2,530	188	187	237	204	199	225	279	241	225	157	189	198
	3,536	190	279	258	244	254	294	312	316	592	193	313	292
	1,969	188	111	122	115	123	158	148	139	285	107	241	233

Table 7b. Annual and Monthly Value of Public Construction Put in Place: 1998-2000—Not Seasonally Adjusted in Current Dollars—Con.

Time of construction							1999						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	153,505	9,177	9,400	10,398	11,783	12,657	14,132	14,669	15,849	15,497	14,705	13,428	11,811
Total buildings.  Housing and redevelopment  Educational  Hospital  Other <sup>1</sup>	71,073	4,894	4,941	5,278	5,646	5,704	6,397	6,544	7,025	6,663	6,356	6,011	5,615
	4,714	329	323	370	390	434	394	397	429	446	429	382	391
	38,950	2,579	2,555	2,688	3,004	3,055	3,706	3,833	4,143	3,782	3,464	3,206	2,937
	3,081	219	230	230	226	251	274	254	273	294	285	288	256
	24,327	1,767	1,833	1,990	2,026	1,964	2,023	2,061	2,181	2,140	2,178	2,134	2,031
Highways and streets  Conservation and development	51,123	2,277	2,421	2,869	3,656	4,332	4,968	5,273	5,788	5,888	5,332	4,629	3,691
	1,988	149	134	131	154	143	157	154	190	189	179	216	193
Other state and local construction  Sewer systems	29,322	1,858	1,905	2,121	2,327	2,478	2,610	2,698	2,846	2,758	2,838	2,573	2,312
	10,343	692	652	773	799	875	953	937	967	960	971	913	850
	6,844	449	482	518	546	581	606	664	656	632	627	584	499
	12,135	716	770	830	982	1,022	1,052	1,097	1,224	1,165	1,239	1,076	963
Federal construction	14,002	988	1,127	1,142	1,150	1,032	1,183	1,205	1,167	1,581	969	1,234	1,224
Total buildings.  Housing.  Industrial  Educational  Hospital.  Other federal buildings <sup>3</sup>	5,470	400	466	465	428	420	453	479	416	592	421	453	476
	424	27	26	37	42	32	39	39	34	46	32	38	33
	925	64	69	85	76	83	73	89	70	112	45	72	88
	15	3	1	1	1	1	1	3	4	1	-	-	1
	850	82	123	82	60	67	71	86	46	73	49	43	68
	3,255	225	247	260	248	237	270	263	263	360	295	301	287
Highways and streets	251	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	2,130	147	175	188	179	179	186	195	142	207	151	172	210
	4,005	243	294	332	292	271	339	333	397	580	232	338	355
	2,145	187	181	144	233	140	180	172	182	173	139	248	167

See footnotes at end of table.

Table 7b. Annual and Monthly Value of Public Construction Put in Place: 1998-2000—Not Seasonally Adjusted in Current Dollars—Con.

Turns of sometry of an							2000						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	161,053	10,486	10,035	11,426	12,516	13,543	14,430	14,610	16,832	16,371	15,518	13,623	11,663
Total buildings.  Housing and redevelopment.  Educational.  Hospital.  Other <sup>1</sup> .	77,203	5,432	5,490	5,719	6,011	6,351	6,875	6,952	7,504	7,159	6,982	6,534	6,193
	4,846	336	315	377	402	406	418	395	426	446	466	453	406
	43,531	2,992	3,015	3,151	3,230	3,508	4,006	4,179	4,545	4,152	3,797	3,517	3,440
	3,372	247	245	265	275	325	298	290	288	303	296	289	253
	25,454	1,857	1,915	1,927	2,104	2,113	2,154	2,088	2,246	2,257	2,424	2,275	2,095
Highways and streets	51,790	2,911	2,336	3,302	3,908	4,465	4,825	5,064	6,436	6,144	5,238	4,155	3,006
	1,985	146	172	151	148	149	146	150	150	195	232	180	167
Other state and local construction Sewer systems	30,074	1,997	2,038	2,254	2,449	2,578	2,583	2,444	2,742	2,873	3,066	2,754	2,297
	10,287	720	713	794	930	903	981	873	927	918	927	867	737
	6,928	500	512	498	564	607	565	542	652	654	679	619	535
	12,859	777	813	962	955	1,068	1,038	1,030	1,163	1,302	1,460	1,268	1,025
Federal construction	13,807	955	1,060	1,241	1,065	1,090	1,221	1,045	1,265	1,661	968	1,125	1,112
Total buildings.  Housing. Industrial Educational Hospital. Other federal buildings <sup>3</sup>	5,072	390	392	426	414	397	442	382	454	550	416	396	412
	382	25	27	32	29	30	32	32	31	34	31	35	46
	1,159	93	96	92	91	89	98	98	109	125	76	93	99
	29	-	-	-	7	1	3	1	2	5	-	5	4
	634	59	55	44	69	43	62	45	55	71	40	52	43
	2,867	214	213	259	218	235	249	207	256	316	269	211	220
Highways and streets	298	(NA)											
	2,337	139	212	212	180	198	196	188	206	269	129	225	183
	4,029	279	307	348	314	291	355	277	368	602	270	299	321
	2,071	134	137	238	137	179	197	167	200	205	120	179	178

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

<sup>&</sup>lt;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 1999-May 2001—Seasonally Adjusted Annual Rate in Current Dollars

					Sta	te and local	ly owned pu	ıblic constru	ction			
	Period				Buildings		I		Conser-			
		Total state and local	Total	Housing and rede- velop- ment	Educa- tional	Hospital	Other buildings <sup>1</sup>	Highways and streets	vation and develop- ment	Sewer systems	Water supply facilities	Miscella- neous construc- tion <sup>2</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	151,891 150,191	69,133 70,005	5,220 4,581	37,948 39,322	3,087 2,986	22,879 23,115	51,779 49,269	1,696 1,748	10,450 10,506	6,716 6,969	12,117 11,694
	Julyr	151,810 151,402 152,260 152,739 159,949 165,580	70,337 71,990 71,959 72,008 73,179 73,143	4,743 5,084 4,879 4,700 4,346 4,748	38,390 39,265 39,780 40,042 40,843 39,689	3,079 3,231 3,296 3,200 3,389 3,138	24,125 24,409 24,004 24,066 24,601 25,568	50,338 47,933 49,754 49,758 54,886 59,050	1,633 1,882 1,908 1,800 2,494 2,611	10,568 10,256 9,952 10,298 10,358 11,235	7,296 7,191 6,910 6,442 6,585 6,497	11,639 12,151 11,777 12,433 12,448 13,044
2000:	January <sup>r</sup> . February <sup>r</sup> . March <sup>r</sup> . April <sup>r</sup> . May <sup>r</sup> . June <sup>r</sup> .	174,229 160,106 169,233 164,802 160,332 154,205	76,136 77,390 77,221 75,862 76,751 75,610	4,481 4,132 4,796 4,982 4,780 4,863	42,946 44,234 44,120 41,990 43,526 42,614	3,270 3,063 3,310 3,434 3,750 3,452	25,438 25,961 24,995 25,456 24,694 24,682	65,420 49,261 58,020 55,899 51,614 48,132	2,336 2,700 2,226 1,891 1,774 1,625	10,532 10,495 10,643 12,013 10,515 10,809	7,410 7,468 6,914 6,920 6,979 6,491	12,394 12,791 14,209 12,216 12,699 11,538
	Julyr	152,295 158,889 162,936 161,188 161,829 164,146	74,536 76,544 77,393 79,062 79,674 81,197	4,755 4,967 4,976 5,070 5,136 5,025	41,897 43,011 43,708 44,017 44,711 46,693	3,464 3,399 3,422 3,220 3,499 3,128	24,420 25,168 25,286 26,755 26,327 26,351	49,326 52,467 53,618 48,459 48,554 49,890	1,589 1,490 1,972 2,328 2,081 2,260	9,945 9,719 9,617 9,703 9,831 10,009	5,961 7,137 7,156 7,000 6,989 6,950	10,938 11,533 13,181 14,637 14,700 13,840
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>f</sup> April <sup>r</sup> May <sup>p</sup>	178,584 179,397 180,699 191,588 200,325	83,775 83,567 84,131 92,404 98,452	5,899 5,503 5,423 6,308 6,502	47,126 47,058 47,144 51,282 56,452	3,335 3,411 3,365 3,600 3,846	27,416 27,596 28,199 31,214 31,653	58,138 58,491 59,988 60,829 62,126	2,723 2,898 2,894 2,708 2,455	11,333 11,521 11,237 12,545 12,808	8,060 8,416 8,832 10,287 9,411	14,554 14,505 13,617 12,814 15,073
						Federally o	wned public	construction	n			
					Build	lings			Highways		Conser- vation and	Miscella- neous
		Total federal	Total	Housing	Industrial	Educa- tional	Hospital	Other buildings <sup>3</sup>	and streets	Military facilities	develop- ment	construc- tion <sup>4</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	12,575 13,690	5,200 5,183	401 448	1,028 832	9 13	833 806	2,929 3,085	(NA) (NA)	2,109 2,147	3,304 3,994	1,710 2,118
	Julyr	13,861 13,407 13,101 14,625 15,264 14,794	5,451 5,096 5,351 5,996 5,732 5,476	438 411 411 449 481 378	1,016 853 1,009 643 910 1,011	30 47 8 1 1 7	978 563 664 704 540 785	2,989 3,222 3,258 4,199 3,800 3,294	(NA) (NA) (NA) (NA) (NA) (NA)	2,280 1,643 1,932 2,213 2,010 2,410	3,881 4,405 4,293 3,856 4,188 4,516	2,001 2,014 1,280 2,308 3,072 2,120
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> June <sup>r</sup>	13,049 14,849 15,041 13,549 13,062 13,957	5,213 5,228 4,939 5,297 4,723 4,878	329 363 372 371 359 347	1,240 1,287 1,064 1,163 1,059 1,078	1 4 2 93 12 28	784 734 504 879 505 679	2,858 2,840 2,997 2,791 2,789 2,746	(NA) (NA) (NA) (NA) (NA) (NA)	1,849 3,100 2,467 2,289 2,329 2,262	3,846 4,322 4,364 3,954 3,539 4,189	1,850 1,925 2,989 1,723 2,182 2,329
	July <sup>r</sup>	12,225 14,422 13,623 14,781 13,850 13,737	4,546 5,435 4,840 6,101 5,000 4,986	376 375 298 447 440 553	1,161 1,308 1,099 1,116 1,177 1,201	14 28 42 3 64 52	535 656 621 585 652 515	2,461 3,068 2,780 3,949 2,667 2,665	(NA) (NA) (NA) (NA) (NA) (NA)	2,196 2,386 2,509 1,883 2,629 2,107	3,229 4,078 4,454 4,487 3,708 4,080	1,952 2,214 1,514 2,004 2,211 2,265
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	14,756 14,949 14,236 13,601 13,793	5,184 4,946 5,034 4,784 4,630	466 440 420 320 444	1,587 1,392 1,351 1,603 1,323	27 31 58 43 29	536 505 583 439 574	2,568 2,577 2,622 2,379 2,260	(NA) (NA) (NA) (NA) (NA)	2,270 2,342 2,131 2,534 2,273	4,641 4,928 4,663 3,856 4,550	2,341 2,430 2,107 2,139 2,046

NA Not available, but estimates are included in totals.

<sup>&</sup>lt;sup>p</sup>Preliminary.

rRevised.

<sup>&</sup>lt;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: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars

[Millions of dollars]

Turn of construction						19	98					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	133,939	131,022	131,488	133,345	132,061	141,588	141,531	140,451	143,640	144,181	142,828	146,092
Total buildings. Housing and redevelopment Educational Hospital Other¹	62,584	62,410	61,583	63,448	63,398	66,908	68,912	66,802	67,394	67,212	67,371	69,421
	4,205	4,179	4,557	4,560	4,230	4,697	5,113	4,264	4,037	4,150	4,272	4,378
	33,269	33,313	32,171	33,992	34,173	35,734	36,339	34,756	35,559	34,940	35,388	37,265
	3,241	2,991	3,116	2,798	2,952	2,799	2,653	2,770	2,665	2,940	2,963	3,046
	21,869	21,928	21,739	22,097	22,044	23,678	24,807	25,011	25,133	25,181	24,748	24,732
Highways and streets	43,608	42,204	43,157	43,334	42,251	46,068	44,305	45,451	47,022	48,916	46,819	46,805
	2,342	2,076	2,174	1,722	1,911	2,222	1,741	1,804	1,791	1,854	1,764	1,836
Other state and local construction Sewer systems Water supply facilities Miscellaneous nonbuilding <sup>2</sup>	25,405	24,333	24,574	24,840	24,501	26,391	26,573	26,394	27,432	26,199	26,875	28,029
	9,342	9,186	9,107	8,980	8,712	9,072	9,542	9,316	9,371	9,596	10,062	10,128
	6,131	6,137	5,953	6,133	6,026	5,798	6,033	6,071	6,592	6,665	6,708	7,143
	9,932	9,009	9,515	9,728	9,764	11,521	10,999	11,007	11,469	9,938	10,105	10,758
Federal construction	13,439	14,548	14,089	13,288	13,079	13,778	15,331	14,211	15,160	13,567	15,490	15,201
Total buildings.  Housing Industrial Educational Hospital. Other federal buildings <sup>3</sup> .	5,483	6,065	6,329	5,921	5,887	5,590	6,455	6,112	6,309	6,017	6,163	5,987
	507	673	405	468	515	495	679	690	517	467	617	436
	964	1,067	1,194	1,022	986	884	1,039	1,067	987	796	1,172	967
	3	11	4	17	17	20	18	30	27	3	8	15
	911	888	1,313	761	1,093	924	1,062	1,048	1,348	1,250	823	610
	3,098	3,426	3,413	3,653	3,276	3,267	3,658	3,277	3,430	3,500	3,543	3,958
Highways and streets Military facilities Conservation and development Miscellaneous nonbuilding <sup>4</sup>	(NA)											
	2,501	2,741	2,755	2,594	2,346	2,595	3,256	2,792	2,100	2,298	2,203	2,281
	2,614	3,930	3,229	3,072	3,097	3,474	3,642	3,508	4,378	3,212	3,879	3,711
	2,590	1,565	1,531	1,446	1,498	1,862	1,721	1,539	2,109	1,776	2,985	2,965

See footnotes at end of table.

Table 8b. Monthly Value of Public Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars—Con.

Turn of construction						19	99					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	151,369	154,626	154,752	153,721	151,891	150,191	151,810	151,402	152,260	152,739	159,949	165,580
Total buildings. Housing and redevelopment. Educational. Hospital. Other¹	68,656	69,947	71,015	71,350	69,133	70,005	70,337	71,990	71,959	72,008	73,179	73,143
	4,373	4,403	4,712	4,737	5,220	4,581	4,743	5,084	4,879	4,700	4,346	4,748
	37,152	37,617	37,678	39,219	37,948	39,322	38,390	39,265	39,780	40,042	40,843	39,689
	2,892	3,049	2,749	2,833	3,087	2,986	3,079	3,231	3,296	3,200	3,389	3,138
	24,239	24,878	25,876	24,561	22,879	23,115	24,125	24,409	24,004	24,066	24,601	25,568
Highways and streets	52,034	53,404	51,919	51,136	51,779	49,269	50,338	47,933	49,754	49,758	54,886	59,050
	2,381	2,111	1,950	1,959	1,696	1,748	1,633	1,882	1,908	1,800	2,494	2,611
Other state and local construction Sewer systems Water supply facilities Miscellaneous nonbuilding <sup>2</sup>	28,298	29,163	29,869	29,277	29,283	29,168	29,503	29,598	28,639	29,173	29,390	30,776
	10,193	9,994	10,326	10,062	10,450	10,506	10,568	10,256	9,952	10,298	10,358	11,235
	6,632	7,022	7,218	6,698	6,716	6,969	7,296	7,191	6,910	6,442	6,585	6,497
	11,473	12,147	12,325	12,516	12,117	11,694	11,639	12,151	11,777	12,433	12,448	13,044
Federal construction	13,391	15,827	13,930	14,204	12,575	13,690	13,861	13,407	13,101	14,625	15,264	14,794
Total buildings.  Housing. Industrial Educational Hospital. Other federal buildings <sup>3</sup> .	5,262	6,321	5,529	5,069	5,200	5,183	5,451	5,096	5,351	5,996	5,732	5,476
	349	357	444	501	401	448	438	411	411	449	481	378
	845	938	1,006	898	1,028	832	1,016	853	1,009	643	910	1,011
	38	9	10	13	9	13	30	47	8	1	1	7
	1,075	1,664	976	714	833	806	978	563	664	704	540	785
	2,955	3,353	3,093	2,943	2,929	3,085	2,989	3,222	3,258	4,199	3,800	3,294
Highways and streets Military facilities Conservation and development Miscellaneous nonbuilding <sup>4</sup>	(NA)											
	1,951	2,555	2,180	2,273	2,109	2,147	2,280	1,643	1,932	2,213	2,010	2,410
	3,350	4,150	4,157	3,676	3,304	3,994	3,881	4,405	4,293	3,856	4,188	4,516
	2,577	2,558	1,811	2,935	1,710	2,118	2,001	2,014	1,280	2,308	3,072	2,120

See footnotes at end of table.

## Table 8b. Monthly Value of Public Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in Current Dollars—Con.

[Millions of dollars]

Two of construction						20	00					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	174,229	160,106	169,233	164,802	160,332	154,205	152,295	158,889	162,936	161,188	161,829	164,146
Total buildings  Housing and redevelopment  Educational  Hospital  Other¹	76,136	77,390	77,221	75,862	76,751	75,610	74,536	76,544	77,393	79,062	79,674	81,197
	4,481	4,132	4,796	4,982	4,780	4,863	4,755	4,967	4,976	5,070	5,136	5,025
	42,946	44,234	44,120	41,990	43,526	42,614	41,897	43,011	43,708	44,017	44,711	46,693
	3,270	3,063	3,310	3,434	3,750	3,452	3,464	3,399	3,422	3,220	3,499	3,128
	25,438	25,961	24,995	25,456	24,694	24,682	24,420	25,168	25,286	26,755	26,327	26,351
Highways and streets	65,420	49,261	58,020	55,899	51,614	48,132	49,326	52,467	53,618	48,459	48,554	49,890
	2,336	2,700	2,226	1,891	1,774	1,625	1,589	1,490	1,972	2,328	2,081	2,260
Other state and local construction  Sewer systems  Water supply facilities  Miscellaneous nonbuilding <sup>2</sup>	30,337	30,755	31,767	31,149	30,193	28,838	26,845	28,388	29,954	31,339	31,521	30,799
	10,532	10,495	10,643	12,013	10,515	10,809	9,945	9,719	9,617	9,703	9,831	10,009
	7,410	7,468	6,914	6,920	6,979	6,491	5,961	7,137	7,156	7,000	6,989	6,950
	12,394	12,791	14,209	12,216	12,699	11,538	10,938	11,533	13,181	14,637	14,700	13,840
Federal construction	13,049	14,849	15,041	13,549	13,062	13,957	12,225	14,422	13,623	14,781	13,850	13,737
Total buildings.  Housing. Industrial Educational Hospital. Other federal buildings <sup>3</sup> .	5,213	5,228	4,939	5,297	4,723	4,878	4,546	5,435	4,840	6,101	5,000	4,986
	329	363	372	371	359	347	376	375	298	447	440	553
	1,240	1,287	1,064	1,163	1,059	1,078	1,161	1,308	1,099	1,116	1,177	1,201
	1	4	2	93	12	28	14	28	42	3	64	52
	784	734	504	879	505	679	535	656	621	585	652	515
	2,858	2,840	2,997	2,791	2,789	2,746	2,461	3,068	2,780	3,949	2,667	2,665
Highways and streets	(NA)											
	1,849	3,100	2,467	2,289	2,329	2,262	2,196	2,386	2,509	1,883	2,629	2,107
	3,846	4,322	4,364	3,954	3,539	4,189	3,229	4,078	4,454	4,487	3,708	4,080
	1,850	1,925	2,989	1,723	2,182	2,329	1,952	2,214	1,514	2,004	2,211	2,265

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Seasonally Adjusted Annual Rate in 1996 Dollars

	is of dollarsj				Sta	te and local	ly owned pu	ıblic constru	ction			
					Buildings		., ooa po					
	Period	Total state and local	Total	Housing and rede- velop- ment	Educa- tional	Hospital	Other buildings <sup>1</sup>	Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscella- neous construc- tion <sup>2</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	138,608 136,080	62,230 62,616	4,754 4,150	34,126 35,140	2,776 2,668	20,575 20,657	47,460 44,790	1,586 1,622	9,776 9,745	6,335 6,568	11,220 10,738
	July <sup>r</sup> August <sup>r</sup> . September <sup>r</sup> . October <sup>r</sup> . November <sup>r</sup> . December <sup>r</sup> .	137,616 136,825 137,644 137,281 143,089 147,685	62,790 64,105 64,071 63,780 64,473 64,220	4,276 4,580 4,391 4,215 3,881 4,224	34,246 34,934 35,391 35,435 35,954 34,815	2,746 2,875 2,932 2,832 2,984 2,753	21,521 21,716 21,356 21,298 21,655 22,428	45,887 43,575 45,272 44,908 49,269 52,817	1,518 1,742 1,768 1,665 2,303 2,407	9,821 9,496 9,224 9,526 9,564 10,355	6,883 6,759 6,495 6,037 6,154 6,050	10,718 11,148 10,814 11,365 11,327 11,837
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> June <sup>r</sup> June <sup>r</sup> June <sup>r</sup> June <sup>r</sup> June	154,308 141,155 149,437 144,212 139,622 134,110	65,999 66,978 66,894 65,402 65,991 64,889	3,907 3,606 4,189 4,351 4,160 4,214	37,215 38,265 38,199 36,167 37,394 36,547	2,834 2,649 2,866 2,958 3,222 2,960	22,044 22,457 21,641 21,926 21,215 21,168	58,463 43,827 51,711 49,035 44,921 41,817	2,139 2,455 2,023 1,717 1,616 1,485	9,645 9,541 9,676 10,911 9,576 9,880	6,855 6,852 6,343 6,240 6,220 5,754	11,206 11,503 12,790 10,907 11,298 10,284
	July <sup>r</sup> August <sup>r</sup> . September <sup>r</sup> . October <sup>r</sup> . November <sup>r</sup> . December <sup>r</sup> .	131,663 137,080 140,356 138,346 138,583 140,431	63,646 65,202 65,809 67,061 67,405 68,506	4,107 4,285 4,282 4,356 4,397 4,281	35,748 36,605 37,135 37,303 37,795 39,370	2,955 2,893 2,907 2,728 2,958 2,638	20,836 21,419 21,484 22,674 22,255 22,218	42,632 45,309 46,222 41,524 41,499 42,678	1,440 1,346 1,776 2,093 1,872 2,036	9,017 8,779 8,664 8,725 8,841 9,017	5,248 6,266 6,272 6,103 6,083 6,054	9,680 10,179 11,613 12,839 12,884 12,140
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	152,863 153,226 152,476 161,480 168,121	70,547 70,130 70,140 76,915 81,694	4,995 4,640 4,550 5,287 5,450	39,668 39,478 39,287 42,664 46,809	2,807 2,861 2,804 2,995 3,189	23,077 23,151 23,499 25,969 26,246	49,818 50,035 50,157 50,818 51,642	2,455 2,611 2,601 2,431 2,194	10,219 10,379 10,096 11,262 11,446	7,033 7,337 7,693 8,961 8,162	12,789 12,734 11,789 11,094 12,983
						Federally o	wned public	construction	n			
					Build	lings					Conser- vation	Miscella-
		Total federal	Total	Housing	Industrial	Educa- tional	Hospital	Other buildings <sup>3</sup>	Highways and streets	Military facilities	and develop- ment	neous construc- tion <sup>4</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	11,499 12,447	4,681 4,637	365 406	924 744	8 11	749 720	2,634 2,757	(NA) (NA)	1,914 1,935	3,091 3,705	1,584 1,945
	July <sup>r</sup>	12,598 12,169 11,881 13,194 13,736 13,273	4,867 4,539 4,765 5,311 5,052 4,808	395 371 370 403 429 336	906 759 898 569 801 887	26 41 7 1 1 6	873 501 591 623 475 689	2,667 2,866 2,899 3,716 3,345 2,890	(NA) (NA) (NA) (NA) (NA) (NA)	2,056 1,477 1,739 1,977 1,787 2,135	3,607 4,079 3,979 3,567 3,867 4,162	1,843 1,848 1,175 2,110 2,796 1,924
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>r</sup> June <sup>r</sup> June <sup>r</sup>	11,600 13,148 13,353 11,936 11,491 12,305	4,519 4,526 4,279 4,567 4,061 4,187	287 317 325 324 312 301	1,075 1,113 922 1,002 909 924	1 3 2 80 10 24	680 635 436 757 434 583	2,477 2,457 2,594 2,404 2,396 2,355	(NA) (NA) (NA) (NA) (NA) (NA)	1,626 2,719 2,166 1,989 2,013 1,953	3,522 3,929 3,967 3,591 3,223 3,829	1,672 1,731 2,691 1,538 1,941 2,076
	July <sup>r</sup>	10,684 12,581 11,872 12,836 11,997 11,915	3,883 4,630 4,116 5,176 4,231 4,209	325 323 257 384 376 471	990 1,113 934 946 995 1,013	12 23 36 2 54 44	456 559 527 496 551 435	2,100 2,611 2,362 3,347 2,254 2,247	(NA) (NA) (NA) (NA) (NA) (NA)	1,885 2,046 2,146 1,606 2,235 1,788	2,928 3,684 4,012 4,035 3,334 3,675	1,728 1,954 1,334 1,758 1,937 1,987
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	12,809 12,968 12,242 11,649 11,804	4,366 4,151 4,197 3,982 3,843	395 371 352 268 372	1,336 1,168 1,126 1,334 1,097	23 26 48 36 24	451 424 486 365 476	2,162 2,162 2,185 1,979 1,874	(NA) (NA) (NA) (NA) (NA)	1,927 1,985 1,779 2,114 1,888	4,185 4,440 4,189 3,461 4,066	2,057 2,133 1,824 1,852 1,762

NA Not available, but estimates are included in totals.

Preliminary.

rRevised.

<sup>&</sup>lt;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: 1998-2000—Seasonally Adjusted Annual Rate in 1996 Dollars [Millions of dollars]

Time of construction						19	98					
Type of construction	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	127,262	124,744	125,203	126,855	125,298	133,758	133,354	131,664	134,242	134,517	133,174	135,895
Total buildings. Housing and redevelopment. Educational Hospital Other <sup>1</sup> .	59,207	59,049	58,223	59,766	59,497	62,435	64,181	61,985	62,418	62,072	62,037	63,679
	4,028	4,010	4,373	4,368	4,044	4,456	4,833	4,026	3,809	3,897	3,989	4,061
	31,445	31,486	30,379	31,977	32,027	33,303	33,804	32,212	32,895	32,233	32,556	34,157
	3,064	2,827	2,943	2,633	2,766	2,608	2,468	2,567	2,466	2,713	2,726	2,792
	20,670	20,725	20,528	20,788	20,660	22,067	23,076	23,180	23,250	23,230	22,767	22,669
Highways and streets	41,374	40,233	41,180	41,468	40,393	43,916	42,075	42,838	44,111	45,802	43,879	43,825
	2,254	2,005	2,103	1,662	1,837	2,126	1,666	1,718	1,700	1,767	1,689	1,761
Other state and local construction	24,427	23,457	23,698	23,958	23,571	25,281	25,434	25,122	26,013	24,876	25,568	26,630
	8,991	8,876	8,807	8,668	8,377	8,681	9,131	8,873	8,891	9,148	9,638	9,711
	5,940	5,935	5,751	5,937	5,833	5,597	5,818	5,827	6,302	6,335	6,353	6,732
	9,495	8,646	9,140	9,354	9,361	11,004	10,485	10,423	10,820	9,394	9,578	10,188
Federal construction	12,787	13,880	13,426	12,639	12,403	13,012	14,445	13,329	14,194	12,682	14,513	14,211
Total buildings. Housing. Industrial Educational Hospital Other federal buildings <sup>3</sup> .	5,189	5,742	5,983	5,578	5,527	5,218	6,015	5,677	5,846	5,558	5,678	5,492
	485	645	389	449	493	469	642	652	488	439	576	405
	911	1,009	1,127	961	924	824	966	989	913	735	1,078	887
	2	10	4	16	16	19	17	28	25	3	7	13
	862	839	1,240	716	1,024	861	988	971	1,247	1,153	757	559
	2,928	3,239	3,223	3,437	3,070	3,045	3,403	3,037	3,173	3,229	3,260	3,628
Highways and streets Military facilities. Conservation and development Miscellaneous nonbuilding <sup>4</sup>	(NA)											
	2,368	2,603	2,616	2,462	2,221	2,446	3,060	2,609	1,957	2,135	2,045	2,112
	2,516	3,797	3,123	2,966	2,978	3,324	3,485	3,341	4,153	3,062	3,715	3,558
	2,476	1,502	1,471	1,390	1,437	1,778	1,641	1,458	1,990	1,679	2,829	2,808

See footnotes at end of table.

Table 9b. Monthly Value of Public Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.

Turns of assessmention						19	99					
Type of construction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	140,350	143,213	142,660	141,111	138,608	136,080	137,616	136,825	137,644	137,281	143,089	147,685
Total buildings Housing and redevelopment Educational Hospital Other <sup>1</sup>	62,576	63,640	64,329	64,450	62,230	62,616	62,790	64,105	64,071	63,780	64,473	64,220
	4,031	4,054	4,327	4,330	4,754	4,150	4,276	4,580	4,391	4,215	3,881	4,224
	33,836	34,197	34,098	35,396	34,126	35,140	34,246	34,934	35,391	35,435	35,954	34,815
	2,634	2,772	2,487	2,557	2,776	2,668	2,746	2,875	2,932	2,832	2,984	2,753
	22,075	22,617	23,417	22,167	20,575	20,657	21,521	21,716	21,356	21,298	21,655	22,428
Highways and streets	48,676	49,957	48,341	47,304	47,460	44,790	45,887	43,575	45,272	44,908	49,269	52,817
	2,274	2,013	1,850	1,848	1,586	1,622	1,518	1,742	1,768	1,665	2,303	2,407
Other state and local construction	26,824	27,603	28,139	27,509	27,331	27,052	27,421	27,402	26,533	26,928	27,044	28,241
	9,736	9,527	9,797	9,493	9,776	9,745	9,821	9,496	9,224	9,526	9,564	10,355
	6,245	6,606	6,759	6,319	6,335	6,568	6,883	6,759	6,495	6,037	6,154	6,050
	10,844	11,470	11,584	11,698	11,220	10,738	10,718	11,148	10,814	11,365	11,327	11,837
Federal construction	12,468	14,704	12,893	13,102	11,499	12,447	12,598	12,169	11,881	13,194	13,736	13,273
Total buildings.  Housing. Industrial Educational Hospital. Other federal buildings <sup>3</sup> .	4,796	5,751	5,010	4,581	4,681	4,637	4,867	4,539	4,765	5,311	5,052	4,808
	321	328	407	458	365	406	395	371	370	403	429	336
	769	853	911	810	924	744	906	759	898	569	801	887
	35	9	9	12	8	11	26	41	7	1	1	6
	979	1,512	884	645	749	720	873	501	591	623	475	689
	2,691	3,048	2,799	2,656	2,634	2,757	2,667	2,866	2,899	3,716	3,345	2,890
Highways and streets Military facilities. Conservation and development Miscellaneous nonbuilding <sup>4</sup>	(NA)											
	1,802	2,355	2,002	2,078	1,914	1,935	2,056	1,477	1,739	1,977	1,787	2,135
	3,200	3,956	3,944	3,468	3,091	3,705	3,607	4,079	3,979	3,567	3,867	4,162
	2,435	2,415	1,702	2,743	1,584	1,945	1,843	1,848	1,175	2,110	2,796	1,924

See footnotes at end of table.

## Table 9b. Monthly Value of Public Construction Put in Place: 1998-2000—Seasonally Adjusted Annual Rate in 1996 Dollars—Con.

[Millions of dollars]

Time of construction						20	000					
Type of construction	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	154,308	141,155	149,437	144,212	139,622	134,110	131,663	137,080	140,356	138,346	138,583	140,431
Total buildings.  Housing and redevelopment  Educational  Hospital  Other¹	65,999	66,978	66,894	65,402	65,991	64,889	63,646	65,202	65,809	67,061	67,405	68,506
	3,907	3,606	4,189	4,351	4,160	4,214	4,107	4,285	4,282	4,356	4,397	4,281
	37,215	38,265	38,199	36,167	37,394	36,547	35,748	36,605	37,135	37,303	37,795	39,370
	2,834	2,649	2,866	2,958	3,222	2,960	2,955	2,893	2,907	2,728	2,958	2,638
	22,044	22,457	21,641	21,926	21,215	21,168	20,836	21,419	21,484	22,674	22,255	22,218
Highways and streets	58,463	43,827	51,711	49,035	44,921	41,817	42,632	45,309	46,222	41,524	41,499	42,678
	2,139	2,455	2,023	1,717	1,616	1,485	1,440	1,346	1,776	2,093	1,872	2,036
Other state and local construction Sewer systems Water supply facilities Miscellaneous nonbuilding <sup>2</sup>	27,706	27,896	28,809	28,058	27,095	25,918	23,944	25,224	26,549	27,667	27,807	27,211
	9,645	9,541	9,676	10,911	9,576	9,880	9,017	8,779	8,664	8,725	8,841	9,017
	6,855	6,852	6,343	6,240	6,220	5,754	5,248	6,266	6,272	6,103	6,083	6,054
	11,206	11,503	12,790	10,907	11,298	10,284	9,680	10,179	11,613	12,839	12,884	12,140
Federal construction	11,600	13,148	13,353	11,936	11,491	12,305	10,684	12,581	11,872	12,836	11,997	11,915
Total buildings.  Housing. Industrial Educational Hospital Other federal buildings <sup>3</sup> .	4,519	4,526	4,279	4,567	4,061	4,187	3,883	4,630	4,116	5,176	4,231	4,209
	287	317	325	324	312	301	325	323	257	384	376	471
	1,075	1,113	922	1,002	909	924	990	1,113	934	946	995	1,013
	1	3	2	80	10	24	12	23	36	2	54	44
	680	635	436	757	434	583	456	559	527	496	551	435
	2,477	2,457	2,594	2,404	2,396	2,355	2,100	2,611	2,362	3,347	2,254	2,247
Highways and streets Military facilities. Conservation and development Miscellaneous nonbuilding <sup>4</sup>	(NA)											
	1,626	2,719	2,166	1,989	2,013	1,953	1,885	2,046	2,146	1,606	2,235	1,788
	3,522	3,929	3,967	3,591	3,223	3,829	2,928	3,684	4,012	4,035	3,334	3,675
	1,672	1,731	2,691	1,538	1,941	2,076	1,728	1,954	1,334	1,758	1,937	1,987

NA Not available, but estimates are included in total.

<sup>&</sup>lt;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 1999-May 2001—Not Seasonally Adjusted in 1996 Dollars

					Sta	te and local	ly owned pu	blic constru	ction			
					Buildings							
	Period	Total state and local	Total	Housing and rede- velop- ment	Educa- tional	Hospital	Other buildings <sup>1</sup>	Highways and streets	Conservation and development	Sewer systems	Water supply facilities	Miscella- neous construc- tion <sup>2</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	11,552 12,804	5,134 5,721	395 357	2,747 3,312	226 245	1,766 1,808	3,971 4,516	134 146	819 884	548 571	946 966
	July <sup>r</sup> August <sup>r</sup> . September <sup>r</sup> October <sup>r</sup> November <sup>r</sup> December <sup>r</sup>	13,299 14,326 14,018 13,227 12,018 10,531	5,842 6,255 5,932 5,630 5,296 4,930	358 387 401 385 341 348	3,419 3,685 3,365 3,065 2,822 2,576	227 242 261 252 254 225	1,838 1,940 1,904 1,927 1,879 1,781	4,807 5,262 5,357 4,813 4,155 3,301	143 176 175 166 199 178	871 895 890 899 843 784	626 616 594 588 546 465	1,010 1,123 1,070 1,133 979 874
2000:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> Mayr	9,269 8,835 10,079 10,951 11,796 12,548	4,709 4,751 4,954 5,183 5,461 5,900	293 275 329 351 353 362	2,593 2,608 2,728 2,782 3,013 3,435	214 212 229 237 279 256	1,609 1,656 1,668 1,813 1,816 1,847	2,602 2,078 2,943 3,428 3,886 4,192	134 156 137 134 136 134	659 648 722 845 822 897	463 470 457 509 541 501	702 731 865 853 950 925
	July <sup>r</sup> August <sup>r</sup> September <sup>r</sup> October <sup>r</sup> November <sup>r</sup> December <sup>r</sup> .	12,627 14,521 14,106 13,325 11,671 9,977	5,936 6,392 6,087 5,923 5,528 5,225	341 367 384 400 388 346	3,566 3,868 3,528 3,217 2,973 2,900	247 245 258 251 244 213	1,781 1,912 1,917 2,054 1,923 1,766	4,377 5,558 5,296 4,488 3,552 2,571	136 136 175 209 161 151	791 837 827 833 779 664	477 573 573 592 539 466	912 1,026 1,147 1,281 1,111 899
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	9,504 9,368 10,258 12,444 14,310	5,024 4,890 5,153 6,057 6,782	380 339 354 433 470	2,740 2,635 2,776 3,232 3,792	225 216 215 242 271	1,679 1,700 1,807 2,151 2,248	2,333 2,314 2,826 3,714 4,553	156 167 177 190 184	705 678 741 886 988	474 502 558 728 713	812 816 804 868 1,089
						Federally o	wned public	construction	n			
					Build	lings					Conser- vation	Miscella-
		Total federal	Total	Housing	Industrial	Educa- tional	Hospital	Other buildings <sup>3</sup>	Highways and streets	Military facilities	and develop- ment	neous construc- tion <sup>4</sup>
1999:	May <sup>r</sup> June <sup>r</sup>	943 1,075	378 406	30 36	75 65	1 1	61 63	213 241	(NA) (NA)	163 168	254 314	130 165
	July' August' September' October' November' December'	1,095 1,060 1,436 873 1,111 1,097	428 371 527 373 400 418	35 30 41 28 34 29	80 62 99 40 63 77	2 3 1 - - 1	77 41 65 44 38 60	234 234 321 261 265 251	(NA) (NA) (NA) (NA) (NA) (NA)	176 127 186 135 153 186	309 368 538 214 312 327	158 167 159 127 226 151
2000:	January <sup>r</sup> . February <sup>r</sup> . March <sup>r</sup> . April <sup>r</sup> . May <sup>r</sup> . June <sup>r</sup> .	849 938 1,101 939 958 1,075	338 339 369 357 342 380	21 24 28 25 26 27	80 83 80 78 77 84	- - 6 1 2	51 48 38 59 37 53	185 184 224 188 202 214	(NA) (NA) (NA) (NA) (NA) (NA)	123 186 186 156 171 169	255 279 316 285 265 324	121 123 215 122 159 176
	July <sup>r</sup>	914 1,104 1,451 839 975 964	326 387 467 353 335 348	27 27 29 26 30 39	83 93 106 64 79 84	1 2 4 - 4 4	38 47 60 34 44 36	176 218 268 228 178 186	(NA) (NA) (NA) (NA) (NA) (NA)	161 177 230 110 192 155	251 332 542 242 269 289	148 176 180 106 156
2001:	January <sup>r</sup> February <sup>r</sup> March <sup>r</sup> April <sup>r</sup> May <sup>p</sup>	949 922 1,001 928 976	340 307 355 322 314	31 27 30 22 30	104 86 95 108 89	2 2 4 3 2	35 31 41 30 39	168 160 185 160 153	(NA) (NA) (NA) (NA) (NA)	145 136 153 167 160	303 315 333 275 336	149 151 145 147 146

<sup>-</sup> Less than \$0.5 million.

NA Not available, but estimates are included in totals.

<sup>&</sup>lt;sup>p</sup>Preliminary.

rRevised.

<sup>&</sup>lt;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: 1998-2000—Not Seasonally Adjusted in 1996 Dollars

Time of construction							1998						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	130,880	7,772	7,611	8,319	9,693	10,429	12,588	13,049	13,728	13,624	13,123	11,182	9,762
Total buildings.  Housing and redevelopment.  Educational.  Hospital.  Other¹	61,297	4,212	4,158	4,323	4,719	4,907	5,694	5,966	6,021	5,790	5,499	5,112	4,896
	4,153	307	294	340	359	336	384	407	334	351	360	345	335
	32,417	2,172	2,125	2,164	2,433	2,573	3,142	3,378	3,404	3,133	2,799	2,564	2,530
	2,700	227	213	240	213	226	235	210	209	232	237	224	232
	22,027	1,505	1,525	1,579	1,713	1,773	1,933	1,971	2,075	2,073	2,102	1,979	1,798
Highways and streets	42,842	1,814	1,790	2,179	2,934	3,376	4,439	4,590	5,123	5,161	5,019	3,690	2,728
	1,836	140	127	141	131	155	191	157	174	168	176	146	130
Other state and local construction Sewer systems	24,905	1,607	1,536	1,676	1,909	1,991	2,264	2,336	2,411	2,505	2,429	2,234	2,008
	8,976	613	579	653	688	699	789	819	826	859	875	841	736
	6,035	405	408	412	483	503	486	530	530	575	619	566	518
	9,894	589	549	611	738	789	989	987	1,054	1,070	935	828	754
Federal construction	13,505	957	988	1,080	1,017	1,025	1,130	1,269	1,157	1,709	860	1,164	1,150
Total buildings. Housing. Industrial Educational Hospital Other federal buildings <sup>3</sup>	5,624	406	423	477	460	454	461	540	470	640	402	440	451
	510	38	48	31	37	40	41	58	54	53	32	45	33
	941	71	74	90	79	76	73	87	82	100	53	84	73
	14	-	1	-	1	1	2	1	2	3	-	1	1
	941	67	62	99	59	84	76	89	80	136	83	59	46
	3,217	229	239	257	283	252	269	306	251	347	234	253	298
Highways and streets  Military facilities  Conservation and development  Miscellaneous nonbuilding <sup>4</sup>	243	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	2,377	178	178	225	194	189	212	262	225	210	146	175	184
	3,387	182	269	249	236	244	282	299	301	561	184	300	280
	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: 1998-2000—Not Seasonally Adjusted in 1996 Dollars—Con.

Time of construction		1999											
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	139,348	8,494	8,690	9,575	10,814	11,552	12,804	13,299	14,326	14,018	13,227	12,018	10,531
Total buildings.  Housing and redevelopment  Educational  Hospital.  Other <sup>1</sup>	63,578	4,461	4,495	4,781	5,100	5,134	5,721	5,842	6,255	5,932	5,630	5,296	4,930
	4,269	303	297	340	356	395	357	358	387	401	385	341	348
	34,807	2,349	2,323	2,432	2,711	2,747	3,312	3,419	3,685	3,365	3,065	2,822	2,576
	2,754	199	209	208	204	226	245	227	242	261	252	254	225
	21,749	1,610	1,666	1,801	1,829	1,766	1,808	1,838	1,940	1,904	1,927	1,879	1,781
Highways and streets	46,629	2,130	2,265	2,671	3,382	3,971	4,516	4,807	5,262	5,357	4,813	4,155	3,301
	1,855	142	128	125	145	134	146	143	176	175	166	199	178
Other state and local construction Sewer systems	27,286	1,761	1,803	1,998	2,186	2,313	2,420	2,507	2,634	2,554	2,619	2,368	2,122
	9,653	661	622	733	754	819	884	871	895	890	899	843	784
	6,431	423	454	485	515	548	571	626	616	594	588	546	465
	11,202	677	727	780	917	946	966	1,010	1,123	1,070	1,133	979	874
Federal construction	12,774	919	1,047	1,057	1,060	943	1,075	1,095	1,060	1,436	873	1,111	1,097
Total buildings.  Housing.  Industrial  Educational  Hospital  Other federal buildings <sup>3</sup>	4,896	364	424	421	387	378	406	428	371	527	373	400	418
	384	24	24	34	39	30	36	35	30	41	28	34	29
	827	58	63	77	68	75	65	80	62	99	40	63	77
	14	3	1	1	1	1	1	2	3	1	-	-	1
	762	74	112	74	54	61	63	77	41	65	44	38	60
	2,909	205	225	235	224	213	241	234	234	321	261	265	251
Highways and streets	229	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	1,926	136	161	172	163	163	168	176	127	186	135	153	186
	3,739	232	281	315	275	254	314	309	368	538	214	312	327
	1,983	177	171	136	218	130	165	158	167	159	127	226	151

See footnotes at end of table.

### Table 10b. Annual and Monthly Value of Public Construction Put in Place: 1998-2000—Not Seasonally Adjusted in 1996 Dollars—Con.

[Millions of dollars]

Tune of construction							2000						
Type of construction	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
State and local construction	139,704	9,269	8,835	10,079	10,951	11,796	12,548	12,627	14,521	14,106	13,325	11,671	9,977
Total buildings.  Housing and redevelopment  Educational  Hospital  Other¹	66,049	4,709	4,751	4,954	5,183	5,461	5,900	5,936	6,392	6,087	5,923	5,528	5,225
	4,190	293	275	329	351	353	362	341	367	384	400	388	346
	37,212	2,593	2,608	2,728	2,782	3,013	3,435	3,566	3,868	3,528	3,217	2,973	2,900
	2,884	214	212	229	237	279	256	247	245	258	251	244	213
	21,763	1,609	1,656	1,668	1,813	1,816	1,847	1,781	1,912	1,917	2,054	1,923	1,766
Highways and streets	44,971	2,602	2,078	2,943	3,428	3,886	4,192	4,377	5,558	5,296	4,488	3,552	2,571
	1,798	134	156	137	134	136	134	136	136	175	209	161	151
Other state and local construction Sewer systems	26,886	1,824	1,849	2,044	2,206	2,313	2,322	2,179	2,436	2,547	2,706	2,430	2,029
	9,324	659	648	722	845	822	897	791	837	827	833	779	664
	6,160	463	470	457	509	541	501	477	573	573	592	539	466
	11,402	702	731	865	853	950	925	912	1,026	1,147	1,281	1,111	899
Federal construction	12,106	849	938	1,101	939	958	1,075	914	1,104	1,451	839	975	964
Total buildings.  Housing. Industrial Educational Hospital Other federal buildings <sup>3</sup>	4,341	338	339	369	357	342	380	326	387	467	353	335	348
	331	21	24	28	25	26	27	27	27	29	26	30	39
	991	80	83	80	78	77	84	83	93	106	64	79	84
	25	-	-	-	6	1	2	1	2	4	-	4	4
	543	51	48	38	59	37	53	38	47	60	34	44	36
	2,452	185	184	224	188	202	214	176	218	268	228	178	186
Highways and streets  Military facilities  Conservation and development  Miscellaneous nonbuilding <sup>4</sup>	258	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	2,016	123	186	186	156	171	169	161	177	230	110	192	155
	3,651	255	279	316	285	265	324	251	332	542	242	269	289
	1,839	121	123	215	122	159	176	148	176	180	106	156	156

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

<sup>&</sup>lt;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.
- 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 that 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:

- 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.
- 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 that 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 town houses. The classification excludes residential units in buildings that 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 that 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 that are used primarily for doctors' offices are classified as "office."

Miscellaneous nonresidential includes nonresidential buildings that are not classified in any of the above categories. Motion picture studios, theatres, casinos, health clubs, and buildings that 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 that 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)

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) that 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 that 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 that 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 that 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 Housing Starts Survey (HSS). A description of this survey is provided in Current Construction Reports, C20/01-1 *Housing Starts*, issued March 2001.

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

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

- a. Basic weight. The basic weight is the reciprocal of the probability of selection. Since the projects in the Two Plus Survey area subsample of the HSS sample, the basic weight includes the reciprocal of the sampling rate used in HSS.
- 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 due to the necessity of forecasting. For estimates beginning in 1993, time series techniques with the X-12-ARIMA Program have been used to remove the irregular effect.

#### PRIVATE NONRESIDENTIAL BUILDINGS

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

- 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 noncertainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Projects from source 3 (nonpermit areas) are selected with virtual certainty. Once a project is selected, monthly construction progress reports are requested from the owner until the project is completed. About 8,500 projects are in the survey at any one time.

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

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

- a. **Basic weight.** The basic weight varies with each source and project.
- 1. For projects from sources 1 and 2, the basic weight is the reciprocal of the probability of selecting a project.
- 2. For projects from source 3, the basic weight is the reciprocal of the probability of selecting a nonpermit segment.
  - a. Outlier adjustment factor. This factor reduces the influence on the VIP of an extreme noncertainty observation that reports an extremely large total construction value.
  - b. Adjustment factor for architectural, engineering, and miscellaneous costs. This factor is computed in the same manner as in the Two Plus Survey (see above).

Imputations are made for projects that have not reported at the time of the monthly tabulation, based on estimated total construction value and month of start of the project. Weighted data are summed overall sample projects by type of construction. The results are increased by 27 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 27 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 noncertainty strata, a systematic sample of projects is selected each month continuing from the sample selected from the previous month. Once a project is selected it remains in the survey until completion of the project, and monthly construction progress reports are requested from the appropriate agency in charge of the project or its designated agent, such as the builder or architect responsible for the project. The average number of projects in the survey at any one time is about 8,500. These include newly selected projects, as well as projects carried over from previous months.

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

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

#### **Federal**

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

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

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

[Percent of the value of units started monthly]

Month of activity <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>&</sup>lt;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 2000 (private multifamily residential, private residential improvements, private nonresidential buildings, farm nonresidential construction, public utility construction, all other private construction, and virtually all of public construction). On a monthly basis, directly measured data are available for about 51 percent of the value-in-place estimates.

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

#### **MEASURE OF SAMPLING ERRORS**

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

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

Standard error of a change = k (100 + (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 incomplete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For preliminary value-in-place estimates, the average imputation rates for major components are as follows: private nonresidential construction, 49 percent; state and locally owned public construction, 33 percent; private residential construction of 2 units or more, 42 percent; and private residential improvements, 15 percent. Each of these imputation rates is not an explicit indication of the potential error in statistics, but the degree of uncertainty regarding the accuracy of the statistics increases as the percentage of imputation increases.

Other potential sources of bias are the upward adjustment of 27 percent made to the private nonresidential construction and the adjustment of the state and local owned public construction to the construction outlays from the Annual Survey of Government Finances in order to account for construction projects not included in their respective sampling frames. The adjustment for the nonresidential construction results from a coverage evaluation sample; hence, the estimated percentage adjustment is subject to sampling error and nonsampling errors associated with the evaluation study. In addition, the percentage was estimated from data collected during a limited time period; therefore, these adjustments do not reflect any recent changes in the proportion of projects not included in the frame.

For state and locally owned construction, construction outlays from the Survey of Government Finances are available only through Fiscal Year 1998. (Outlays

are included if a government agency's fiscal year ending date falls within July 1997 to June 1998 inclusive, and for three state agencies with fiscal years ending in August or September 1998.) As a result, the adjustment to the construction outlay levels of this survey must be projected ahead for 4 years from 1998 through April 2002. The relationship between the state and locally owned value-in-place and the capital outlays estimate changes from year to year so that revisions of 4 to 5 percent are expected in state and local construction and substantially larger revisions can be expected in the individual types of construction. In addition, because of the definition of fiscal year for the Survey of Government Finances, the reported capital outlays do not correspond to any 12 month period but result from capital outlays made over a 26 month period. There are also definitional and timing differences between the concepts of capital outlays and value put in place.

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

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

#### **MONTHLY REVISIONS TO ESTIMATES**

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

For total construction, the range of the difference between the last 12 preliminary and second revision estimates for the same months was from -2.4 percent to 1.1 percent with a median of -0.1 percent (see Table C-2). The range of the difference between first revision and second revision was from -1.8 to 0.9 percent, with a median of 0.1 percent.

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

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

NA Not available.

Note: All statistics are based upon 2000 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

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

		Percent ch	anges between	estimates - last	12 months	
Time of construction	Preliminary	versus secon	d revision	First revis	ion versus seco	nd revision
Type of construction	Rang	ge		Rai	nge	
	From	То	Median	From	То	Median
Total construction	-2.4	1.1	-0.1	-1.8	0.9	0.1
Private construction	-3.0	0.4	-0.5	-2.0	0.6	-0.3
Residential buildings	-3.2	1.5	-0.1	-2.8	1.1	0.2
New housing units	-0.4	0.3	0.2	-0.3	0.4	0.2
1 unit	-0.2	0.6	0.2	-0.5	0.8	0.0
2 units or more	-2.7	4.5	-1.5	-3.0	2.4	0.3
Nonresidential buildings	-4.6	1.3	-1.9	-2.3	0.1	-1.0
Industrial	-9.5	8.1	-3.7	-5.2	2.2	-1.1
Office	-2.6	4.7	0.6	-1.9	2.5	1.2
Hotel, motel	-8.4	3.4	-3.7	-5.9	0.6	-2.3
Other commercial	-5.9	0.1	-3.5	-3.5	0.3	-1.8
Religious	-4.7	3.7	-0.4	-2.8	1.6	-0.4
Educational	-8.0	3.1	-3.8	-5.3	2.3	-2.1
Hospital and institutional	-6.9	4.8	-0.4	-4.5	2.8	-1.5
Miscellaneous buildings	-4.7	2.7	-1.4	-4.2	1.6	-1.5
Telecommunications	-12.1	29.2	4.4	-2.3	38.6	-0.1
All other private	-17.7	15.9	-1.9	-3.4	13.1	-0.5
Public construction	-0.2	7.0	1.3	-1.0	7.2	0.8
Housing and redevelopment	-6.5	10.3	3.9	-4.6	6.8	1.8
Industrial	-1.2	101.2	0.1	-0.4	47.4	-0.1
Educational	-1.8	37.2	2.9	-2.0	34.5	0.1
Hospital	-13.7	3.4	-2.9	-6.8	1.8	-1.8
Other public buildings	-2.3	2.5	-0.4	-0.8	1.3	-0.1
Highways and streets	-2.8	9.0	0.8	-2.0	3.4	1.2
Military facilities	-1.7	10.7	-0.7	-0.6	1.1	0.0
Conservation and development	-2.1	8.8	1.4	-1.4	3.3	-0.2
Sewer systems	-3.4	6.3	0.0	-3.6	2.4	1.0
Water supply facilities	-6.5	8.4	1.7	-4.0	3.2	0.6
Miscellaneous public	-4.6	31.5	2.8	-7.7	21.0	2.1

# 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-tomonth, change in an unadjusted series between February and March is 20 percent. Then an increase in the unadjusted series of less than 20 percent will be seen as a decrease in the seasonally adjusted series; an increase of exactly 20 percent will result in no change in the adjusted series; and an increase of more than 20 percent will be shown as an increase in the adjusted series.

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

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

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

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

www.census.gov/const/www/faq2.html.

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

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

#### ADJUSTMENT FOR COST CHANGES

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

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

The index or combinations of indexes that 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 that are available quarterly or semiannually are linked with a "monthly trend index" shown in Table D-3. The results are monthly indexes that 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.

**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.

<sup>&</sup>lt;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.

# **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 index is employed in place of the Laspeyres. The Fisher ideal index is the geometric mean of a Laspeyres index and a Paasche index.

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.

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

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

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

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

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

The annual index is an average of the quarterly indexes.

This index is available on the Internet at www.turner-construction.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

Town of annahusation		Average perce	entage change			
Type of construction	ō	CI	Ī	C	Ī/C	MCD
Total construction	5.93	1.18	0.96	0.65	1.49	2
Private construction		1.23 1.26 2.07	0.94 0.67 1.78	0.70 0.95 0.94	1.34 0.71 1.88	2 1 3
Public construction Buildings Military facilities Highways Conservation and development All other public	18.13 18.76	2.26 2.51 11.68 4.11 9.25 4.51	2.08 2.31 11.29 3.83 9.11 4.27	0.78 0.91 2.26 1.13 1.75 1.14	2.68 2.54 5.01 3.40 5.19 3.74	4 3 6 4 8 4

#### **DEFINITIONS OF SUMMARY MEASURES**

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

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

- $\overline{O}$  is the average month-to-month percentage change (without regard to sign) in the original series before seasonal adjustment.
- $\overline{\text{CI}}$  is the average month-to-month percentage change (without regard to sign) in the seasonally adjusted figures.
  - 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.
- C is the average month-to-month percentage change (without regard to sign) for the cyclical component, which is a smooth, flexible moving average.
- Ī/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	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sep.	Aug.	July	May
	2001 <sup>p</sup>	2001	2001	2001	2001	2000 <sup>r</sup>	2000 <sup>r</sup>	2000 <sup>r</sup>	2000 <sup>r</sup>	2000 <sup>r</sup>	2000 <sup>r</sup>	2000 <sup>r</sup>
PRIVATE CONSTRUCTION												
Residential buildings: New housing units: 1 unit	102.8	96.4	91.7	77.2	82.2	88.8	104.9	109.2	111.8	113.3	112.5	102.9
	105.4	99.2	96.5	89.1	89.1	94.3	101.0	104.4	103.3	106.5	103.0	105.0
Nonresidential buildings: Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous nonresidential	101.2	95.2	94.4	89.0	90.8	103.7	102.8	108.7	106.9	105.1	98.6	101.1
	104.2	99.3	97.1	93.1	93.1	95.9	102.6	103.8	104.2	104.6	100.0	104.6
	102.8	100.6	101.0	93.4	93.1	96.2	100.4	102.3	100.4	104.8	101.8	101.7
	100.5	95.3	90.9	85.2	84.4	93.8	104.1	110.5	112.3	111.6	106.7	100.6
	98.7	94.3	92.6	88.7	91.7	96.3	110.4	114.3	107.5	111.1	98.9	97.7
	103.4	95.0	90.4	84.3	83.6	87.6	95.3	99.6	106.9	119.9	118.3	103.3
	100.8	100.7	99.1	94.2	93.8	99.1	103.7	104.3	103.2	102.6	97.6	100.8
	101.5	103.1	98.8	91.4	89.2	96.9	102.4	105.8	103.8	103.3	101.8	101.5
Telecommunications	101.9	93.9	98.6	84.0	82.8	104.1	106.8	109.0	103.5	111.0	95.7	101.8
	96.1	90.9	90.1	80.5	86.4	101.0	104.9	115.2	110.6	115.3	106.2	96.4
PUBLIC CONSTRUCTION												
State and Local												
Buildings: Housing and redevelopment Educational Hospital Other buildings Highways and streets	103.6 97.2 102.1 102.8 105.8	98.2 90.9 96.9 99.4 87.7	93.4 84.8 91.9 92.3 67.6	87.8 80.1 90.6 88.1 55.5	91.2 82.9 96.1 87.3 56.2	96.9 88.4 96.9 95.4 72.3	105.8 94.4 99.1 103.7 102.7	110.3 103.5 110.4 108.7	107.6 114.0 106.4 107.1 137.5	102.9 126.8 101.5 107.1	99.7 119.7 100.3 102.6 123.2	101.9 96.7 103.9 102.7
Conservation and development Sewer systems	100.7	93.9	81.8	76.9	76.2	88.9	103.5	119.7	118.5	121.0	113.0	100.9
	103.6	94.4	88.1	78.4	82.8	88.4	105.8	114.6	114.5	114.4	105.3	103.0
	104.8	97.5	87.0	82.1	80.9	92.3	106.3	116.4	109.7	109.7	109.0	104.4
	100.7	93.9	81.8	76.9	76.2	88.9	103.5	119.7	118.5	121.0	113.0	100.9
Federal												
Buildings: Housing and redevelopment Industrial Educational Hospital Other buildings	97.9	97.1	101.5	88.6	93.4	99.2	95.0	81.8	136.3	100.2	100.8	101.0
	97.9	97.1	101.5	88.6	93.4	99.2	95.0	81.8	136.3	100.2	100.8	101.0
	97.9	97.1	101.5	88.6	93.4	99.2	95.0	81.8	136.3	100.2	100.8	101.0
	97.9	97.1	101.5	88.6	93.4	99.2	95.0	81.8	136.3	100.2	100.8	101.0
	97.9	97.1	101.5	88.6	90.5	99.2	95.0	82.0	136.3	100.2	100.8	101.0
Conservation and development Miscellaneous construction	99.2	95.2	95.4	85.2	86.8	94.3	96.9	72.1	162.2	108.2	102.9	98.5
	99.2	95.2	95.4	85.2	86.8	94.3	96.9	72.1	162.2	108.2	102.9	98.5

<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

Time of construction	Applicable deflating index		Monthly trond index
Type of construction	Name of index	Availability	- Monthly trend index
Residential buildings	U.S. Census Bureau Single-Family Houses Under Construction	Monthly	
Industrial buildings		Quarterly Monthly	Engineering News-Record—buildings
Miscellaneous nonresidential buildings			
Railroads	Unweighted average of— Federal Highway Admincomposite Bureau of Reclamation	Quarterly Quarterly	Engineering News-Record—construction Engineering News-Record—construction
Telecommunications	C.A. Turner Telephone Plant	Semiannually	Engineering News-Record—construction
Electric light and power	Weighted average of— Handy-Whitman—electric (weight 9) Handy-Whitman—utility building (weight 1)	Semiannually Semiannually	Engineering News-Record—construction Engineering News-Record—buildings
Gas and petroleum pipelines	Handy-Whitman—gas	Semiannually	Engineering News-Record—construction
Military facilities	Weighted average of— Federal Highway Admincomposite (weight 2)	Quarterly  Monthly Quarterly	Engineering News-Record—construction  Engineering News-Record—construction
Highways and streets	Federal Highway Admincomposite	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 Admincomposite Bureau of Reclamation	Quarterly Quarterly	Engineering News-Record—construction 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.

U.S. Census Bureau

NA Not available.

PPreliminary.

rRevised.

Table D-4. Indexes Used in Deriving Estimates of the Value of Construction Put in Place in Constant Dollars [1996 = 100]

	U.S. Cens	us Bureau		ing news- ord	U.S. Cens houses constr		Federal Highway				Handy-\ public			
Period	Com- posite fixed- weighted	Implicit price deflator	Buildings	Construc-	Fixed- weighted	Price deflator	Adminis- tration compos- ite	Bureau of Reclama- tion	Turner Con- struction Company	Buildings	Electric	Gas	Water	C.A. Turner telephone plant
							Annual	indexes						
1996	100.0	100.0	100.0	100.0	100.0	100.0	100.0		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 <sup>r</sup>	110.3	110.4	107.9	107.8	110.4	110.4	112.7	107	113	107	105	107	107	101
2000 <sup>r</sup>	115.3	115.4	110.5	110.6	115.5	115.6	119.3	111	118	110	109	111	112	103
			Monthly	indexes			Qu	arterly inde	xes		Sen	niannual ind	lexes	
1999: January	<sup>r</sup> 108.4	<sup>r</sup> 108.5	106.9	106.7	108.5	108.5								
February	<sup>r</sup> 108.6	'108.6	106.7	106.6	108.7	108.6	107.1	105	111					
March	r109.0	<sup>r</sup> 109.0	106.5	106.5	109.0	108.9				105	105	105	106	102
April	r109.3	<sup>r</sup> 109.3	106.8	106.9	109.5	109.4								
May	<sup>r</sup> 109.7	<sup>r</sup> 109.8	106.8	106.8	109.8	109.8	117.5	106	112					
June	<sup>r</sup> 110.4	<sup>r</sup> 110.3	107.2	107.4	110.4	110.4								
July	<sup>r</sup> 110.6	<sup>r</sup> 110.5	108.0	108.1	110.8	110.9								
August	<sup>r</sup> 110.8	<sup>r</sup> 110.8	108.5	108.3	110.9	111.0	108.0	108	114					
September	<sup>r</sup> 110.9	<sup>r</sup> 110.8	109.4	109.0	111.0	111.1				106	105	106	106	100
October	<sup>r</sup> 111.4	<sup>r</sup> 111.3	109.4	109.1	111.5	111.5								
November	<sup>r</sup> 112.0	<sup>r</sup> 111.8	109.2	109.0	112.1	112.0	118.1	109	115					
December	<sup>1</sup> 112.3	<sup>r</sup> 112.1	109.2	109.0	112.3	112.4								
2000: January	<sup>r</sup> 113.9	<sup>r</sup> 114.0	109.4	109.0	<sup>r</sup> 114.5	<sup>r</sup> 114.7								
February	<sup>r</sup> 114.1	<sup>r</sup> 114.1	110.0	109.6	<sup>r</sup> 114.5	<sup>r</sup> 114.6	113.2	109	116					
March	r114.0	<sup>r</sup> 113.9	110.4	110.3	<sup>r</sup> 114.4	<sup>r</sup> 114.5				109	106	110	108	101
April	<sup>1</sup> 114.5	<sup>r</sup> 114.4	110.3	110.3	<sup>r</sup> 114.5	<sup>r</sup> 114.5								
May	<sup>1</sup> 114.8	<sup>r</sup> 114.8	111.1	110.9	<sup>1</sup> 114.8	<sup>1</sup> 114.9	128.4	111	117					
June	[115.0	<sup>r</sup> 115.1	110.9	111.0	<sup>r</sup> 115.2	<sup>r</sup> 115.4								
July	[115.6	<sup>r</sup> 115.7	110.7	110.7	<sup>r</sup> 115.7	<sup>r</sup> 115.8								
August	[115.7]	<sup>r</sup> 115.8	110.7	110.9	<sup>r</sup> 115.8	<sup>r</sup> 115.9	113.0	111	119					
September	<sup>1</sup> 116.1	<sup>1</sup> 115.9	110.5	110.7	<sup>r</sup> 116.2	<sup>r</sup> 116.2				111	110	111	113	103
October	<sup>r</sup> 116.4	<sup>r</sup> 116.3	110.5	110.7	<sup>r</sup> 116.5	<sup>r</sup> 116.4	400.0		400					
November	'116.7	<sup>r</sup> 116.6	110.6	111.4	<sup>r</sup> 116.8	<sup>r</sup> 116.8	122.9	111	120					
December	117.1	<sup>r</sup> 116.9	110.8	111.7	<sup>1</sup> 117.4	<sup>r</sup> 117.4								
2001: January	<sup>r</sup> 117.8	<sup>r</sup> 117.3	110.7	111.7	<sup>r</sup> 118.2	<sup>r</sup> 118.1								
February	[118.3	<sup>r</sup> 117.7	110.4	111.6	<sup>r</sup> 118.7	<sup>r</sup> 118.6	123.9	112	121					
March	<sup>r</sup> 118.8	<sup>r</sup> 118.5	110.5	111.7	<sup>r</sup> 119.4	<sup>r</sup> 119.2				112	111	113	115	104
April		<sup>r</sup> 118.6	110.5	111.8	<sup>r</sup> 119.5	<sup>r</sup> 119.3		l .						
May	<sup>p</sup> 119.2	<sup>p</sup> 118.9	110.7	111.8	<sup>p</sup> 119.6	<sup>p</sup> 119.3	(NA)	112	121					
June			111.5	112.4										

Table D-5. Monthly U.S. Census Bureau Composite Fixed-Weighted Price Index: 1964 to 2001 [1996=100]

Year	Month												Annual
Teal	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	composite index
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 <sup>r</sup>	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>	113.9	114.1	114.0	114.5	114.8	115.0	115.6	115.7	116.1	116.4	116.7	117.1	115.3
2001	<sup>r</sup> 117.8	<sup>r</sup> 118.3	<sup>r</sup> 118.8	<sup>r</sup> 118.9	<sup>p</sup> 119.2								

 ${}^{p} Preliminary. \\$ 

rRevised.

Table D-6. Monthly U.S. Census Bureau Implicit Price Deflator: 1964 to 2001 [1996=100]

Year	Month												
rear	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Annual deflator
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
	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 66.8	64.8 66.7	65.2 66.6	65.1 66.4	65.7 66.7	66.2 67.0	66.1 67.1	66.5 67.1	66.6 67.1	66.3 67.6	66.4 67.6	66.4 67.7	65.9 67.1
	68.1				68.7		69.2	69.7	69.8			70.1	69.3
1984	70.5	68.5 70.6	68.6 70.8	68.6 70.6	70.7	68.8	70.9	71.1	71.3	70.0 71.6	70.0 71.7	70.1	71.1
1986	70.5	70.6	70.6	70.6	70.7	70.8 73.4	73.7	73.9	71.3	74.5	74.7	71.6 75.0	73.6
1987	75.3	75.4 75.4	75.4	72.6 75.7	75.1 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	76.3 79.2
1989	80.7	81.1	81.3	81.8	82.3	82.4	82.6	82.8	83.0	83.1	83.2	83.5	82.4
1990	84.0	84.1	84.2	84.4	84.6	84.9	85.3	85.6	85.5	85.7	85.7	85.7	85.0
1991	85.6	85.6	85.2	85.4	85.6	86.0	86.2	86.3	86.3	86.2	85.9	85.9	85.9
1992	86.0	86.3	86.3	86.4	86.4	86.6	86.8	86.9	87.2	87.6	88.0	88.4	86.9
1993	88.7	89.0	89.6	89.9	89.6	89.5	90.0	90.5	90.8	91.0	91.5	91.8	90.2
1994	92.2	92.4	92.5	92.7	92.9	93.3	93.6	94.1	94.6	95.2	95.8	96.4	93.9
1995	96.9	97.0	97.0	97.2	97.4	97.8	97.9	98.0	98.4	98.5	98.6	98.7	97.8
1996	98.8	99.0	99.1	99.0	99.2	99.6	100.2	100.4	100.7	100.9	101.0	101.3	100.0
1997	101.8	101.8	102.3	102.5	102.7	102.9	103.3	103.6	103.9	104.2	104.7	104.8	103.3
1998	105.0	104.9	104.9	105.0	105.2	105.9	106.1	106.4	106.6	107.0	107.4	107.9	106.1
1999 <sup>r</sup>	108.5	108.6	109.0	109.3	109.8	110.3	110.5	110.8	110.8	111.3	111.8	112.1	110.4
2000 <sup>r</sup>	114.0	114.1	113.9	114.4	114.8	115.1	115.7	115.8	115.9	116.3	116.6	116.9	115.4
2001	<sup>r</sup> 117.3	<sup>r</sup> 117.7	<sup>r</sup> 118.5	<sup>r</sup> 118.6	<sup>p</sup> 118.9								

 ${}^{p} Preliminary. \\$ 

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