

Lumber Production and Mill Stocks: 2006

Issued July 2007

MA321T(06)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (XLS format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. Production of lumber in the United States amounted to 48.8 billion board feet in 2006, which is a 4.2 percent decrease compared to the 50.9 billion board feet produced in 2005. Eastern lumber

production was 31.0 billion board feet in 2006, 2.0 percent below the 2005 level of 31.7 billion board feet. Southern yellow production amounted to 17.6 billion board feet in 2006, which is 2.7 percent below the 2005 production level of 18.1 billion board feet. Production of eastern hardwoods was 10.7 billion board feet in 2006, which 0.9 percent below the 2005 level of 10.8 billion board feet. Western lumber production was 17.7 billion board feet in 2006, a decrease of 7.9 percent from the 2005 production level of 19.2 billion board feet. Production of western softwoods decreased by 7.9 percent to 17.4 billion board feet in 2006, from 18.9 billion board feet in 2005. Total western hardwood production decreased by 8.8 percent to 363 million board feet, from 398 million board feet in 2005.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Steven Hood, 301-763-4830.
For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-4673

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

Helping You Make Informed Decisions

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

Table 1. Lumber Production: 2000 to 2006
[Millions of board feet, lumber tally]

Year	Softwoods				
	Total	Total	Southern yellow pine	Other	Hardwoods
2006.....	48,773	37,747	17,643	20,104	11,026
2005.....	50,928	39,770	18,124	21,646	11,158
2004.....	49,611	38,552	17,460	21,092	11,059
2003.....	47,181	36,687	16,334	20,353	10,494
2002.....	47,499	36,377	16,167	20,210	11,122
2001.....	46,588	35,479	15,835	19,644	11,109
2000.....	49,445	37,147	16,588	20,559	12,298

Table 2. Lumber Mill Stock: 2000 to 2006
[Millions of board feet, lumber tally]

End-of-year	Total mill stocks		Softwoods	Hardwoods
2006.....	5100	r/	3385	1714
2005.....	4921		3262	1659
2004.....	4630		3061	1569
2003.....	4446		3073	1373
2002.....	4592		3238	1354
2001.....	4748		3266	1482
2000.....	4772		3373	1399

r/Revised by 5 percent or more from previously published data.

Table 3. Lumber Production of Softwoods and Hardwoods by State: 2006 and 2005
[Millions of board feet, lumber tally]

State	Total		Softwoods		Hardwoods	
	2006	2005	2006	2005	2006	2005
United States.....	48,773	50,928	37,747	39,770	11,026	11,158
Eastern United States.....	31,035	31,668	20,372	20,908	10,663	10,760
Alabama.....	2,687	2,732	2,480	2,472	207	260
Arkansas.....	3,053	3,289	2,425	2,578	628	711
Connecticut.....	37	46	(D)	10	(D)	36
Delaware.....	(D)	(D)	-	-	(D)	(D)
Florida.....	1,070	1,177	(D)	1,170	(D)	7
Georgia.....	2,966	3,052	2,569	2,674	397	378
Illinois.....	173	133	-	-	173	133
Indiana.....	343	346	3	2	340	344
Iowa.....	80	81	(D)	(D)	(D)	(D)
Kansas.....	(D) r/	12	-	-	(D) r/	12
Kentucky.....	619	643	14 r/	12	605	631
Louisiana.....	1,707	1,592	1,479	1,375	228	217
Maine.....	985	978	864	852	121	126
Maryland.....	231	245	59	70	172	175
Massachusetts.....	51	54	21	23	30	31
Michigan.....	927 r/	1,000	472 r/	544	455	456
Minnesota.....	167 r/	157	50 r/	50	117	107
Mississippi.....	2,671	2,865	2,223	2,400	448 r/	465
Missouri.....	507	525	11	13	496	512
Nebraska.....	(D)	(D)	-	-	(D)	(D)
New Hampshire.....	246	241	186	173	60	68
New Jersey.....	29	25	(D)	(D)	(D)	(D)
New York.....	591 r/	519	79	73	512 r/	446
North Carolina.....	2,680	2,605	2,026	1,959	654	646
North Dakota.....	1	1	-	-	1	1
Ohio.....	371	407	1	-	370	407
Oklahoma.....	391	370	(D)	356	(D)	14
Pennsylvania.....	1,121	1,154	66	65	1,055	1,089
Rhode Island.....	6	6	3	3	3	3
South Carolina.....	1,426	1,567	1,330	1,453	96 r/	114
Tennessee.....	1,010	1,029	34 r/	32	976	997
Texas.....	1,880	1,862	1,627	1,622	253	240
Vermont.....	173	184	64	72	109	112
Virginia.....	1,562	1,492	725	722	837	770
West Virginia.....	670	682	8	8	662	674
Wisconsin.....	540	552	100	103	440	449
Western United States.....	17,738	19,260	17,375	18,862	363	398
Alaska.....	(D)	(D)	(D)	(D)	-	-
Arizona.....	93 r/	98	93 r/	98	-	-
California.....	2,787	2,850	(D)	(D)	(D)	(D)
Colorado.....	106	97	(D)	(D)	(D)	(D)
Hawaii.....	(D)	(D)	(Z)	(Z)	(D)	(D)
Idaho.....	1,541 r/	1,621	1,541 r/	1,621	-	-
Montana.....	976	1,078	976	1,078	-	-
Nevada.....	(Z)	(Z)	(Z)	(Z)	-	-
New Mexico.....	(D)	(D)	(D)	(D)	-	-
Oregon.....	6,810 r/	7,719	(D)	(D)	(D)	(D)
South Dakota.....	(D)	(D)	(D)	(D)	-	-
Utah.....	49 r/	51	(D)	(D)	(D)	(D)
Washington.....	4,977 r/	5,301	4,738	(D)	239	(D)
Wyoming.....	164	170	164	170	-	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data. Z Represents less than 500,000 board feet.

Table 4. Lumber Production by Species: 2002 to 2006
[Millions of board feet, lumber tally]

Product description	2006	2005	2004	2003	2002
United States.....	48,773	50,928	49,611	47,181	47,499
Eastern United States.....	31,035	31,668	30,815	29,068	29,452
Eastern softwoods.....	20,372	20,908	20,148	18,960	18,802
Pine, southern yellow.....	17,643	18,124	17,460	16,334	16,167
Pine, eastern white.....	601	637	649	625	655
Pine, other 1/.....	507	569	518	509	455
Spruce and fir 2/.....	544	499	520	536	558
Other eastern softwoods 3/.....	161	160	113	126	140
Eastern softwoods, n.s.k.	916	919	888	830	827
Eastern hardwoods.....	10,663	10,760	10,667	10,108	10,650
Ash.....	210	r/ 208	207	192	193
Beech.....	53	54	56	56	63
Birch.....	68	r/ 65	70	72	77
Cherry.....	251	251	247	223	221
Cottonwood.....	79	75	81	78	87
Aspen.....	99	110	119	121	142
Gum.....	183	207	202	183	204
Hickory and pecan.....	168	160	163	148	150
Maple, hard.....	514	472	440	458	510
Maple, soft.....	313	349	336	346	340
Oak, red.....	2,124	2,305	2,328	2,097	2,227
Oak, white.....	1,073	1,109	1,081	1,050	1,031
Walnut, black.....	75	r/ 65	54	56	59
Yellow-poplar.....	1,055	r/ 1,026	1,039	990	1,049
Other eastern hardwoods 4/.....	181	165	145	135	155
Mixed hardwoods 5/.....	1,170	r/ 1,121	1,056	1,022	1,151
Eastern hardwoods, n.s.k.	3,047	3,018	3,043	2,881	2,991
Western United States.....	17,738	19,260	18,796	18,113	18,047
Western softwoods.....	17,375	18,862	18,404	17,727	17,575
Cedar, western red.....	739	681	703	675	618
Cedar, other 6/.....	191	179	187	174	182
Fir, Douglas.....	8,336	9,288	8,969	8,444	8,257
Fir, hem-fir, white, and other.....	4,200	4,498	4,332	4,032	3,753
Pine, ponderosa.....	1,604	r/ 1,738	1,643	1,678	1,799
Pine, western white.....	32	r/ 31	30	31	37
Pine, lodgepole.....	369	428	427	564	567
Pine, sugar.....	124	101	117	120	125
Redwood.....	550	r/ 484	485	503	603
Spruce 7/.....	244	263	306	343	375
Other western softwoods 8/.....	443	580	619	596	696
Western softwoods, n.s.k.	543	591	586	567	563
Western hardwoods 9/.....	363	398	392	386	472

N.s.k. Not specified by kind. r/Revised by 5 percent or more from previously published data.

1/Includes jack pine and red (Norway) pine.

2/Includes balsam fir and eastern spruce.

3/Includes eastern red cedar, northern white cedar, southern white cedar, cypress, eastern hemlock, tamarack, and mixed softwoods.

4/Includes basswood, boxwood, butternut, elm, hackberry, and sycamore.

5/Mixed hardwoods includes mixed, ungraded hardwoods sawn for ties, timbers, blocking, cants, and pallet stock.

6/Includes Alaska cedar, incense cedar, and Port Orford cedar.

7/Includes Sitka and western/Engelmann spruce.

8/Includes western hemlock, western larch, and mixed softwoods.

9/Includes alder, aspen, birch, cottonwood, maple, oak, mixed hardwoods, and western hardwoods not specified.

Table 5. Lumber Production of Softwoods and Hardwoods by Lumber Industry Region: 2006 and 2005
[Millions of board feet, lumber tally]

Lumber industry region	Total		Softwoods		Hardwoods	
	2006	2005	2006	2005	2006	2005
United States.....	48,773	50,928	37,747	39,770	11,026	11,158
Eastern lumber regions.....	31,035	31,668	20,372	20,908	10,663	10,760
Southern pine.....	17,643	18,124	17,643	18,124	-	-
Southern hardwood.....	4,524 r/	4,668	-	-	4,524 r/	4,668
Appalachian.....	(D)	(D)	(D)	(D)	(D)	(D)
Northern hemlock and hardwood.....	1,467 r/	1,552	572 r/	647	895	905
Northeastern.....	(D)	(D)	(D)	(D)	(D)	(D)
Other.....	1,879	1,873	751 r/	753	1,128	1,120
Western lumber regions.....	17,738	19,260	17,375	18,862	363	398
Douglas fir.....	9,110	10,236	(D)	(D)	(D)	(D)
Western pine.....	(D)	(D)	(D)	(D)	(D)	(D)
California redwood.....	(D)	(D)	(D)	(D)	(D)	(D)
Alaska and Hawaii.....	(D)	(D)	(D)	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data.

Note:

Lumber industry regions:

Eastern lumber regions:

Southern pine: Southern yellow pine

Southern hardwood: All hardwoods in Alabama, Arkansas, Delaware, Florida, Louisiana, Mississippi, Missouri, Oklahoma, and Texas; and the lowland counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia.

Appalachian: All hardwoods and softwoods, except southern yellow pine, in West Virginia and the Appalachian range counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia.

Northern hemlock and hardwood: All hardwoods and softwoods, except southern yellow pine, in Michigan and Wisconsin.

Northeastern: All hardwoods and softwoods, except southern yellow pine, in Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont.

Other: All hardwoods and softwoods, except southern yellow pine, in Illinois, Indiana, Iowa, Kansas, Minnesota, Nebraska, New Jersey, North Dakota, and Ohio; all softwoods, except southern yellow pine, in the lowland counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia; and all softwoods, except southern yellow pine, in Alabama, Arkansas, Delaware, Florida, Louisiana, Mississippi, Missouri, Oklahoma, and Texas.

Western lumber regions:

Douglas fir: All softwoods and hardwoods in Oregon and Washington west of the Cascades, and in Jackson and Josephine counties in Oregon.

Western pine: All softwoods and hardwoods in Oregon and Washington east of the Cascades, except in Jackson and Josephine counties in Oregon; in California, except in the California redwood counties; and in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, South Dakota, Utah, and Wyoming.

California redwood: All softwoods and hardwoods in the following fifteen counties of California: Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.

Alaska and Hawaii: All softwoods and hardwoods in Alaska and Hawaii.

Table 6. Lumber Production, Exports, Imports, and Apparent Consumption by Species: 2006 and 2005
[Thousands of cubic meters]

Product code	Product description	Production 1/	Exports of domestic merchandise 2/	Percent exports to production	Imports for consumption 2/	Apparent consumption 3/	Percent imports to apparent consumption
2006							
	United States.....	115,092	5,183	4.5	54,310	164,219	33.1
	Softwoods 4/.....	89,074	2,060	2.3	53,428	140,442	38.0
	Pine.....	49,272	952	1.9	2,677	50,997	5.2
3211133933	Lodgepole pine.....	871	13	1.5	40	898	4.5
3211133929	Ponderosa pine.....	3,785	91	2.4	19	3,713	0.5
3211133911, 913, 915, 931, 935	Other pine, including southern yellow and eastern white pine.....	44,616	848	1.9	2,618	46,386	5.6
3211133925	Douglas fir.....	19,671	238	1.2	839	20,272	4.1
3211133921	Western red cedar.....	1,744	56	3.2	1,512	3,200	47.3
3211133917, 919, 923, 927, 937, 939, 941, 943	Other softwoods, including hemlock, spruce, fir (other than Douglass fir), cedar (other than western red cedar), and mixed softwoods.....	14,944	814	5.4	48,400	62,530	77.4
32111339XX	Softwoods, n.s.k.	3,443	(X)	(X)	(X)	3,443	(X)
	Hardwoods 4/.....	26,018	3,123	12.0	882	23,777	3.7
3211131951	Ash.....	496	180	36.3	2	318	0.6
3211131953	Beech.....	125	13	10.4	36	148	24.3
3211131955	Birch.....	160	48	30.0	70	182	38.5
3211131957	Cherry.....	592	164	27.7	11	439	2.5
3211131965	Hickory and pecan.....	396	27	6.8	1	370	0.3
3211131967, 969	Maple.....	1,952	404	20.7	133	1,681	7.9
3211131971	Red oak.....	5,012	486	9.7	6	4,532	0.1
3211131973	White oak.....	2,532	603	23.8	6	1,935	0.3
3211131975	Black walnut.....	177	96	54.2	3	84	3.6
3211131977	Yellow-poplar.....	2,490	388	15.6	1	2,103	0.0
3211131959, 961, 963, 979, 981, 983	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods.....	4,804	714	14.9	613	4,703	13.0
32111319XX	Hardwoods, n.s.k.	7,282	(X)	(X)	(X)	7,282	(X)
2005							
	United States.....	120,174	4,912	4.1	59,662	174,924	34.1
	Softwoods 4/.....	93,846	1,901	2.0	57,768	149,713	38.6
	Pine.....	51,036	842	1.6	2,833	53,027	5.3
3211133933	Lodgepole pine.....	1,010	15	1.5	54	1,049	5.1
3211133929	Ponderosa pine.....	r/ 4,101	121	3.0	32	4,012	0.8
3211133911, 913, 915, 931, 935	Other pine, including southern yellow and eastern white pine.....	45,925	706	1.5	2,747	47,966	5.7
3211133925	Douglas fir.....	21,917	173	0.8	1,166	22,910	5.1
3211133921	Western red cedar.....	1,607	44	2.7	1,435	2,998	47.9
3211133917, 919, 923, 927, 937, 939, 941, 943	Other softwoods, including hemlock, spruce, fir (other than Douglass fir), cedar (other than western red cedar), and mixed softwoods.....	15,723	842	5.4	52,334	67,215	77.9

Table 6. Lumber Production, Exports, Imports, and Apparent Consumption by Species: 2006 and 2005
[Thousands of cubic meters]

Product code	Product description	Production 1/	Exports of domestic merchandise 2/	Percent exports to production	Imports for consumption 2/	Apparent consumption 3/	Percent imports to apparent consumption
32111339XX	Softwoods, n.s.k.	3,563	(X)	(X)	(X)	3,563	(X)
	Hardwoods 4/.....	26,328	3,011	11.4	1,894	25,211	7.5
3211131951	Ash..... r/	491	167	34.0	6	330	1.8
3211131953	Beech.....	127	11	8.7	45	161	28.0
3211131955	Birch..... r/	153	35	22.9	152	270	56.3
3211131957	Cherry.....	592	189	31.9	14	417	3.4
3211131965	Hickory and pecan.....	378	22	5.8	3	359	0.8
3211131967, 969	Maple.....	1,937	415	21.4	320	1,842	17.4
3211131971	Red oak.....	5,439	513	9.4	12	4,938	0.2
3211131973	White oak.....	2,617	577	22.0	16	2,056	0.8
3211131975	Black walnut..... r/	153	86	56.2	4	71	5.6
3211131977	Yellow-poplar..... r/	2,421	276	11.4	1	2,146	0.0
3211131959, 961, 963, 979, 981, 983	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods..... r/	4,804	720	15.0	1,321	5,405	24.4
32111319XX	Hardwoods, n.s.k.	7,216	(X)	(X)	(X)	7,216	(X)

N.s.k. Not specified by kind. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Import and export data were collected in cubic meters. A conversion factor of 2.35973725 thousands of cubic meters per 1 million of board feet was used to convert production from millions of board feet to thousands of cubic meters.

2/Import and export data for 2006 and 2005 do not include cross-ties.

3/Apparent consumption is equal to production plus imports minus exports.

4/The totals for softwoods and hardwoods include the n.s.k. production data.

Note: For a comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see Table 7.

Table 7. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3211133933	Lodgepole pine.....	4407.10.0044 4407.10.0045	4407.10.0044 4407.10.0045
3211133929	Ponderosa pine.....	4407.10.0048 4407.10.0049	4407.10.0048 4407.10.0049
3211133911, 12, 15, 31, 35	Other pine, including southern yellow pine and eastern white pine.....	4407.10.0042 4407.10.0043 4407.10.0046 4407.10.0047 4407.10.0052 4407.10.0053	4407.10.0042 4407.10.0043 4407.10.0046 4407.10.0047 4407.10.0052 4407.10.0053
3211133925	Douglas fir.....	4407.10.0054 4407.10.0055 4407.10.0056 4407.10.0057	4407.10.0054 4407.10.0055 4407.10.0056 4407.10.0057
3211133921	Western red cedar.....	4407.10.0068 4407.10.0069	4407.10.0068 4407.10.0069
3211133917, 19, 23, 27, 37, 39, 41, 43	Other softwoods, including hemlock, spruce, fir (other than Douglas fir), cedar (other than western red cedar), and mixed softwoods.....	4407.10.0001 4407.10.0002 4407.10.0015 4407.10.0016 4407.10.0017 4407.10.0018 4407.10.0019 4407.10.0020 4407.10.0058 4407.10.0059 4407.10.0064 4407.10.0065 4407.10.0066 4407.10.0067 4407.10.0074 4407.10.0075 4407.10.0076 4407.10.0077 4407.10.0082 4407.10.0083 4407.10.0092 4407.10.0093	4407.10.0001 4407.10.0002 4407.10.0015 4407.10.0016 4407.10.0017 4407.10.0018 4407.10.0019 4407.10.0020 4407.10.0058 4407.10.0059 4407.10.0064 4407.10.0065 4407.10.0066 4407.10.0067 4407.10.0074 4407.10.0075 4407.10.0076 4407.10.0077 4407.10.0082 4407.10.0083 4407.10.0092 4407.10.0093
3211131951	Ash.....	4407.99.0065 4407.99.0066	4407.99.0065 4407.99.0066
3211131953	Beech.....	4407.92.0020 4407.92.0040	4407.92.0020 4407.92.0040
3211131955	Birch.....	4407.99.0050 4407.99.0051	4407.99.0050 4407.99.0051
3211131957	Cherry.....	4407.99.0040 4407.99.0041	4407.99.0040 4407.99.0041
3211131965	Hickory and pecan.....	4407.99.0070 4407.99.0071	4407.99.0070 4407.99.0071
3211131967, 69	Maple.....	4407.99.0020 4407.99.0021 4407.99.0025	4407.99.0020 4407.99.0021 4407.99.0025
3211131971	Red oak.....	4407.91.0020 4407.91.0021	4407.91.0020 4407.91.0021

Table 7. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3211131973	White oak.....	4407.91.0060 4407.91.0061	4407.91.0060 4407.91.0061
3211131975	Black walnut.....	4407.99.0075 4407.99.0076	4407.99.0075 4407.99.0076
3211131977	Yellow-poplar.....	4407.99.0045 4407.99.0046	4407.99.0045 4407.99.0046
3211131959, 61, 63, 79, 81, 83	Other hardwoods, including cottonwood, aspen, and gum.....	4407.24.0000	4407.24.0005 4407.24.0010 4407.24.0025 4407.24.0030 4407.24.0090 4407.24.0095
		4407.25.0000	4407.25.0000
		4407.26.0000	4407.26.0000
		4407.29.0000	4407.29.0005 4407.29.0010 4407.29.0025 4407.29.0030 4407.29.0090 4407.29.0095
		4407.99.0030	4407.99.0030
		4407.99.0031	4407.99.0031 4407.99.0047 4407.99.0048
		4407.99.0090	4407.99.0091
		4407.99.0095	4407.99.0096

1/Source: 2006 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: 2006 Harmonized Tariff Schedule of the United States, Annotated (2006).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped,

net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on lumber production and stocks have been collected by the Census Bureau since 1904. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.