

Lumber Production and Mill Stocks: 2002

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SUMMARY OF FINDINGS. Production of lumber in the United States amounted to 47.4 billion board feet in 2002, which is

1.7 percent greater than the 46.6 billion board feet in 2001. Eastern lumber production was 29.4 billion board feet in 2002, 1.4 percent above the 2001 level of 28.9 billion board feet. Southern yellow pine production amounted to 16.2 billion board feet in 2002, 2.2 percent above the 2001 production level. Production of eastern hardwoods amounted to 10.6 billion board feet in 2002, 0.7 percent below the 2001 level. Western lumber production amounted to 18.0 billion board feet in 2002, an increase of 2.0 percent from the 2001 production level of 17.7 billion board feet. Production of western softwoods increased by 2.1 percent to 17.5 billion board feet for 2002, from 17.2 billion board feet in 2001. Total western hardwood production decreased by 1.1 percent to 470 thousand board feet.

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 Tim Althouse, 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

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Table 1. Lumber Production: 1996 to 2002
[Millions of board feet, lumber tally]

Year	Total production	Softwoods			Total hardwoods
		Total	Southern yellow pine	Other	
2002.....	47,359	36,329	16,179	20,150	11,030
2001.....	46,588	35,479	15,835	19,644	11,109
2000.....	49,445	37,147	16,588	20,559	12,298
1999.....	50,556	38,033	16,842	21,191	12,523
1998.....	47,263	35,896	15,557	20,339	11,367
1997.....	46,560	35,457	15,408	20,049	11,103
1996.....	44,755	34,065	15,060	19,005	10,690

Table 2. Lumber Mill Stocks: 1996 to 2002
[Millions of board feet, lumber tally]

End-of-year	Total mill stocks	Softwoods	Hardwoods
2002.....	4,625	3,237	1,388
2001.....	4,748	3,266	1,482
2000.....	4,772	3,373	1,399
1999.....	4,674	3,253	1,421
1998.....	4,290	2,986	1,304
1997.....	4,333	3,114	1,219
1996.....	4,247	2,964	1,283

Table 3. Lumber Production of Softwoods and Hardwoods by State: 2002 and 2001
 [Millions of board feet, lumber tally]

State	Total		Softwoods		Hardwoods	
	2002	2001	2002	2001	2002	2001
United States.....	47,359	46,588	36,329	35,479	11,030	11,109
Eastern United States.....	29,350	28,934	18,790	18,300	10,560	10,634
Alabama.....	2,546	2,494	2,224	2,190	322	304
Arkansas.....	2,596	2,606	2,153	2,133	443	473
Connecticut.....	45	48	5 r/	6	40	42
Delaware.....	12	14	-	-	12	14
Florida.....	888	864	(D)	(D)	(D)	(D)
Georgia.....	3,042	2,944	2,657 r/	2,547	385 r/	397
Illinois.....	130 r/	138	-	-	130 r/	138
Indiana.....	324	321	2	2	322	319
Iowa.....	77	77	(D)	(D)	(D)	(D)
Kansas.....	12	13	-	-	12	13
Kentucky.....	691	711	24	38	667	673
Louisiana.....	1,343	1,249	1,197	1,085	146	164
Maine.....	988	937	878	774	140 r/	163
Maryland.....	268	266	107	113	161	153
Massachusetts.....	(D)	(D)	(D)	(D)	(D)	(D)
Michigan.....	744	688	313	256	431 r/	432
Minnesota.....	272	260	137	131	135 r/	129
Mississippi.....	2,538	2,676	2,071	2,219	467	457
Missouri.....	616	622	21	22	595	600
Nebraska.....	25	33	-	-	25	33
New Hampshire.....	287	277	213	195	74	82
New Jersey.....	20	21	2	2	18 r/	19
New York.....	464	490	75 r/	82	389	408
North Carolina.....	2,545	2,450	1,849	1,765	696	685
North Dakota.....	1	1	-	-	1	1
Ohio.....	381	363	-	-	381	363
Oklahoma.....	(D)	(D)	(D)	(D)	(D)	(D)
Pennsylvania.....	1,109	1,110	56 r/	53	1,053	1,057
Rhode Island.....	10	10	3	3	7	7
South Carolina.....	1,398 r/	1,377	1,271 r/	1,250	127 r/	127
Tennessee.....	899	863	31	36	868	827
Texas.....	1,598	1,515	1,375	1,291	223	224
Vermont.....	206	215	86	92	120	123
Virginia.....	1,502	1,570	691	729	811	841
West Virginia.....	724	734	14	13	710	721
Wisconsin.....	583	582	98	90	485	492
Western United States.....	18,009	17,654	17,539	17,179	470	475
Alaska.....	(D)	(D)	(D)	(D)	-	-
Arizona.....	62	60	62	60	-	-
California.....	2,897	3,021	(D)	(D)	(D)	(D)
Colorado.....	135	114	(D)	(D)	(D)	(D)
Hawaii.....	(D)	(D)	(Z)	(Z)	(D)	(D)
Idaho.....	1,730 r/	1,595	1,730 r/	1,595	-	-
Montana.....	1,222	1,197	1,222	1,197	-	-
Nevada.....	(Z)	(Z)	(Z)	(Z)	-	-
New Mexico.....	111 r/	119	111 r/	119	-	-
Oregon.....	6,401	6,338	6,259	6,211	142	127
South Dakota.....	(D)	(D)	(D)	(D)	-	-
Utah.....	53 r/	61	53 r/	61	-	-
Washington.....	4,924	4,723	4,608	4,386	316	337
Wyoming.....	230 r/	212	230 r/	212	-	-

- 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: 1998 to 2002
 [Millions of board feet, lumber tally]

Product description	2002	2001	2000	1999	1998
United States.....	47,359	46,588	49,445	50,556	47,263
Eastern United States.....	29,350	28,934	31,177	31,701	29,727
Eastern softwoods.....	18,790	18,300	19,397	19,686	18,767
Pine, southern yellow.....	16,179	15,835	16,588	16,842	15,557
Pine, eastern white.....	655	632	712	712	600
Pine, other 1/.....	455	424	399	411	292
Spruce and fir 2/.....	558	476	687	676	637
Other eastern softwoods 3/.....	153	r/	158	236	218
Eastern softwoods, n.s.k.	790	775	812	809	1,463
Eastern hardwoods.....	10,560	10,634	11,780	12,015	10,960
Ash.....	195	197	234	236	199
Beech.....	64	67	79	78	68
Birch.....	80	89	100	104	77
Cherry.....	221	228	242	249	208
Cottonwood.....	87	84	100	108	72
Aspen.....	142	131	148	166	128
Gum.....	201	203	241	247	204
Hickory and pecan.....	149	138	155	147	111
Maple, hard.....	511	504	512	515	450
Maple, soft.....	336	337	354	348	282
Oak, red.....	2,203	2,239	2,377	2,399	2,055
Oak, white.....	1,038	1,032	1,122	1,150	970
Walnut, black.....	59	48	49	43	26
Yellow-poplar.....	1,029	994	1,097	1,090	971
Other eastern hardwoods 4/.....	158	r/	178	290	259
Mixed hardwoods 5/.....	1,140	1,241	1,415	1,538	1,289
Eastern hardwoods, n.s.k.	2,947	r/	2,924	3,307	3,591
Western United States.....	18,009	17,654	18,268	18,855	17,536
Western softwoods.....	17,539	17,179	17,750	18,347	17,129
Cedar, western red.....	615	669	710	639	593
Cedar, other 6/.....	182	r/	181	197	185
Fir, Douglas.....	8,265	8,133	8,197	8,167	7,406
Fir, hem-fir, white, and other.....	3,753	3,563	3,669	3,940	3,622
Pine, ponderosa.....	1,842	1,843	1,951	2,088	2,064
Pine, western white.....	45	36	39	36	31
Pine, lodgepole.....	567	503	570	664	707
Pine, sugar.....	125	154	128	159	139
Redwood.....	604	565	577	647	701
Spruce 7/.....	375	r/	379	465	387
Other western softwoods 8/.....	696	r/	707	892	826
Western softwoods, n.s.k.	470	446	450	453	468
Western hardwoods 9/.....	470	475	518	508	407

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 Regions: 2002 and 2001
 [Millions of board feet, lumber tally]

Lumber industry region	Total		Softwoods		Hardwoods	
	2002	2001	2002	2001	2002	2001
United States.....	47,359	46,588	36,329	35,479	11,030	11,109
Eastern lumber regions.....	29,350	28,934	18,790	18,300	10,560	10,634
Southern pine.....	16,179	15,835	16,179	15,835	-	-
Southern hardwood.....	4,625	4,710	-	-	4,625	4,710
Appalachian.....	(D)	(D)	(D)	(D)	(D)	(D)
Northern hemlock and hardwood.....	1,327	1,270	411	346	916	924
Northeastern.....	(D)	(D)	(D)	(D)	(D)	(D)
Other.....	1,851	1,834	751	744	1,100	1,090
Western lumber regions.....	18,009	17,654	17,539	17,179	470	475
Douglas fir.....	9,180	8,932	8,721	8,468	459	464
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.

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. Production, Exports, Imports, and Apparent Consumption of Lumber by Species: 2002 and 2001
 [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
2002							
	United States.....	111,756	4,588	4.1	50,682	157,851	32.1
	Softwoods 4/.....	85,727	1,823	2.1	49,143	133,047	36.9
	Pine.....	46,884	811	1.7	2,423	48,497	5.0
3211133933	Lodgepole pine.....	1,338	33	2.5	97	1,402	6.9
3211133929	Ponderosa pine	4,347	77	1.8	62	4,332	1.4
3211133911, 13, 15, 31, 35	Other pine, including southern yellow and eastern white pine.....	41,199	700	1.7	2,264	42,763	5.3
3211133925	Douglas fir.....	19,503	261	1.3	908	20,150	4.5
3211133921	Western red cedar.....	1,451	54	3.7	1,440	2,837	50.7
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.....	14,916	698	4.7	44,372	58,590	75.7
32111339XX	Softwoods, n.s.k.	2,973	(X)	(X)	(X)	2,973	(X)
	Hardwoods 4/.....	26,029	2,765	10.6	1,539	24,803	6.2
3211131951	Ash.....	460	159	34.6	7	308	2.2
3211131953	Beech.....	151	9	6.2	21	162	12.8
3211131955	Birch.....	189	35	18.6	137	291	47.1
3211131957	Cherry.....	522	164	31.5	10	367	2.6
3211131965	Hickory and pecan.....	352	17	4.9	3	337	0.7
3211131967, 69	Maple.....	1,999	348	17.4	239	1,889	12.6
3211131971	Red oak.....	5,199	551	10.6	22	4,671	0.5
3211131973	White oak.....	2,449	542	22.1	19	1,926	1.0
3211131975	Black walnut.....	139	84	60.5	3	58	5.0
3211131977	Yellow-poplar.....	2,428	238	9.8	(Z)	2,190	-
3211131959, 61, 63, 79, 81, 83	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods.....	5,104	616	12.1	1,080	5,568	19.4
32111319XX	Hardwoods, n.s.k.	7,037	(X)	(X)	(X)	7,037	(X)
2001							
	United States.....	109,936	4,741	4.3	48,353	153,548	31.5
	Softwoods 4/.....	83,722	2,108	2.5	46,928	128,542	36.5
	Pine.....	45,483	876	1.9	2,034	47,001	4.3
3211133933	Lodgepole pine.....	1,187	17	1.4	68	1,238	5.5
3211133929	Ponderosa pine	4,349	84	1.9	77	4,342	1.8
3211133911, 13, 15, 31, 35	Other pine, including southern yellow and eastern white pine.....	40,307	775	1.9	1,889	41,421	4.6
3211133925	Douglas fir.....	19,192	353	1.8	1,113	19,952	5.6
3211133921	Western red cedar.....	1,579	27	1.7	1,478	3,030	48.8
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.....	14,227	852	6.0	42,303	55,678	76.0
32111339XX	Softwoods, n.s.k.	2,881	(X)	(X)	(X)	2,881	(X)

Continued

Table 6. Production, Exports, Imports, and Apparent Consumption of Lumber by Species: 2002 and 2001
 [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
	Hardwoods 4/.....	26,214	2,633	10.0	1,425	25,006	5.7
3211131951	Ash.....	465	131	28.2	10	344	2.9
3211131953	Beech.....	158	6	3.8	6	158	3.8
3211131955	Birch.....	210	39	18.6	116	287	40.4
3211131957	Cherry.....	538	158	29.4	7	387	1.8
3211131965	Hickory and pecan.....	326	22	6.7	3	307	1.0
3211131967, 69	Maple.....	1,985	365	18.4	222	1,842	12.1
3211131971	Red oak.....	5,283	549	10.4	21	4,755	0.4
3211131973	White oak.....	2,435	538	22.1	14	1,911	0.7
3211131975	Black walnut.....	113	60	53.1	3	56	5.4
3211131977	Yellow-poplar.....	2,346	225	9.6	2	2,123	0.1
3211131959, 61, 63, 79, 81, 83	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods.....	5,380	540	10.0	1,021	5,861	17.4
32111319XX	Hardwoods, n.s.k.	6,975	(X)	(X)	(X)	6,975	(X)

- Represents zero. n.s.k. Not specified by kind. X Not applicable. Z Represents less than 500,000 cubic meters.

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 meters.

2/Import and export data for 2002 and 2001 do not include cross-ties.

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

4/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: 2002

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, 13, 15, 31, 35	Other pine, including southern yellow 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

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Table 7. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2002

Product code	Product description	Export code 1/	Import code 2/
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
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 4407.25.0000 4407.26.0000 4407.29.0000 4407.99.0030 4407.99.0031 4407.99.0090 4407.99.0095	4407.24.0005 4407.24.0010 4407.24.0025 4407.24.0030 4407.24.0090 4407.24.0095 4407.25.0000 4407.26.0000 4407.29.0005 4407.29.0010 4407.29.0025 4407.29.0030 4407.29.0090 4407.29.0095 4407.99.0030 4407.99.0031 4407.99.0047 4407.99.0048 4407.99.0091 4407.99.0096

1/Source: 2002 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.
 2/Harmonized Tariff Schedule of the United States, Annotated (2002).

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.