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Criterion 6 Indicator 28: Total and Per Capita Consumption of Wood and Wood Products in Roundwood Equivalents

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Abstract

Total consumption of wood and paper products and fuelwood, in roundwood equivalents, increased between 1965 and 1988 from 13.3 to 19.6 billion cubic feet per year. Since 1988, it has been about 20 billion cubic feet per year. Total per capita consumption increased between 1965 and 1988, 68 to 80 ft³ per year. Since 1988 through 2011, per capita consumption has declined 42 ft³ per year. Consumption excluding fuelwood increased steadily between 1965 and 1988, from 12.3 to 16.8 billion cubic feet, before flattening out between 1989 and 2007. Per capita consumption, excluding fuelwood, has been declining since 1988. So, in roundwood equivalents, wood has been increasing at roughly the pace of population while paper consumption is moving in the opposite direction. Total consumption has been increasing faster than domestic harvest as net imports of wood and paper products have increased. If consumption continues to increase faster than domestic harvest, then an increasing proportion of the environmental and economic effects of our consumption will be felt in forests in other countries that export products to the United States.

Keywords: Roundwood consumption, roundwood harvest, per capita consumption, per capita harvest

Conversion table

English unit	Conversion factor	SI unit
inch (in.)	25.4	millimeter (mm)
square feet (ft ²)	0.092903	square meter (m ²)
cubic feet (ft ³)	0.028317	cubic meter (m ³)
pounds (lb)	0.45359	kilograms (kg)
tons	0.90718	tonne (t) (×10 ³ kg)
British thermal units (Btu)	0.00105506	megajoules (MJ)

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Indicator Background

The purpose of this report is to provide information on the rationale and data provided for Indicator 28 for the *U.S. National Report on Sustainable Forests—2015*. Information on the rationale for the Indicator and recommended data to be developed are taken from the report of the Technical Advisory Committee (TAC) of the Montreal Process (MP) (Montreal Process Working Group 2007).

Verbatim Montreal Process Technical Advisory Committee Notes

Rationale

The quantity of wood and wood products consumed is an indicator of the relative importance of forests as a source of raw materials. Information on the consumption of forest products, especially when compared with production levels, helps to illustrate the balance between supply and demand. When demands for consumption are not balanced by supplies—net domestic production plus imports—the imbalance creates price pressures that often have repercussions in the forest sector or elsewhere in the economy and society that may call into question long-term forest sustainability.

Measurement

The measures desired are the following:

- Volume of wood-based forest products consumed, estimated as domestic production plus imports and minus exports. Fuelwood should be included. Converting all products into a common volume-based unit (roundwood equivalent) allows for aggregation as well as comparison with indicators that measure the productive capacity of forests (2.b–2.d and 6.1a).
- Per capita consumption is the calculated ratio of the volume consumed and the reported national population. Government statistics are the preferred source for population information.

Production data should be based on indicator 6.1.a. Import and export data should be taken from official government

sources, indicator 6.1.f. Conversion of product units to roundwood equivalent could be based on conversion factors derived from recent studies that take into account national circumstances. As an alternative, conversion factors reported by international organizations (for example, the United Nations Food and Agriculture Organization, or the International Tropical Timber Organization) could be used.

Comments and Clarifications

Additions and Clarifications to Rationale

It was agreed that consumption was equivalent to national production plus net imports. Supply was equivalent to domestic national production. (Net imports = Total imports – Exports.)

Trade is an important element in the interpretation of this indicator. High per capita consumption may also reflect abundant resources. It was suggested that price information be included in the interpretation of this indicator, perhaps with references to prices of other materials (e.g., substitute materials such as plastics).

Additions and Clarifications to Measurement

Useful data might include the following:

- Description of wood products available for consumption
- Amount of various wood and wood products consumed
- Size of market (population data)

Current and past data may be available from government and industry sources, product distributors, and consumer organizations.

Indicator Development

Data Used to Address Indicator

General Description

The data provided for this indicator focus on quantifying the demand (consumption) for wood and wood products in the United States and the portion that is provided by domestic production. The data are also shown on consumption per capita.

Consumption may be expressed in terms of 1) the roundwood used to make products consumed in the United States and 2) the volume or weight of actual primary products consumed in the United States. We provide measures for both roundwood consumed and primary products consumed, as well as the portions from domestic production.

Specific Data Sources

Consumption of roundwood, the portion from domestic production, and consumption per capita

- Table 1—Production, imports, exports, and consumption of softwood timber products, by major product, 1965–2011 (million cubic feet, roundwood equivalent)
- Table 2—Production, imports, exports, and consumption of hardwood timber products, by major product, 1965–2011 (million cubic feet, roundwood equivalent)
- Table 3—Production, imports, exports, and consumption of timber products, by major product, 1965–2006 (million cubic feet, roundwood equivalent)

These tables require special explanation. Apparent consumption of roundwood is given by production of roundwood from U.S. forests (total harvest) plus roundwood equivalent of products imported to the United States minus roundwood equivalent of products exported from the United States. Roundwood equivalent of imports and exports is an amount of wood used if the products were made of roundwood in the United States. Also, the roundwood used for lumber products, plywood and veneer products, and pulpwood products is the roundwood that is received at mills and includes wood that ends up as mill residue and may be redirected to burning or to making other products such as panels or pulp.

- Table 4—Apparent U.S. roundwood consumption, U.S. production for domestic use, and percentage of consumption from U.S. consumption from domestic use by species group, 1965–2011 (million cubic feet roundwood equivalent)
- Table 5—Apparent roundwood production, trade, and consumption, and production and trade versus consumption, 1900–2011 (million cubic feet roundwood equivalent and percent)
- Table 6—U.S. per capita apparent roundwood production, trade, and consumption, 1900–2011 (million cubic feet roundwood equivalent)

Consumption of primary products, the proportion from production for domestic use and consumption per capita

- Table 7—Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2011
- Table 8—Plywood production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2011 (3/8-in. basis)

- Table 9—Production, imports, exports, and consumption of structural panel products, by type, 1980–2011 (million square feet, 3/8-in. basis)
- Table 10—Paper shipments, imports, exports, and consumption, 1965–2011
- Table 11—Paperboard production, imports, exports, and consumption, 1965–2011
- Table 12—Wood energy consumption per capita by end use and in roundwood equivalent, 1949–2011
- Table 13—Wood and paper product consumption per capita (pounds per capita), 1970–2011

Analysis Techniques

General Description

This report contains data for 1965 through 2011. Some data were derived from mathematical calculations and some show conversions from different units of measurement. All data, trade, production, or consumption are reported in roundwood equivalents measurements.

Specific Steps Taken

The data were compiled from official government and trade association reports by state, region, national level, and year. The data were then organized by primary product commodity over time. These primary products were then converted to their roundwood equivalents using government- or industry-approved conversion factors.

Data Issues

The data on roundwood equivalent of consumption use estimates of the roundwood equivalent of imports and exports assuming the products are made of roundwood in the United States. The estimate of roundwood use may be too large for paper imports or exports to the extent that recovered paper, rather than roundwood, is used for paper production. The amount of roundwood harvest that ends up in domestically used paper products may be too low to the extent that domestic wood ends up in exported recovered paper that is used overseas then imported to the United States.

For primary wood products—lumber, panels, and paper—the estimate of the proportion of consumption from domestic supply is accurate when focusing on products produced in the United States, but it should be recognized that a portion of this domestic supply is made using imported logs, chips, or market pulp. So, the portion of consumption made from domestic production that uses domestic roundwood is somewhat lower.

Data are not available generally on consumption by region. Consumption is determined by levels of end use in each region—construction, manufacturing, education, and a wide range of general business activities—advertising, packaging, and communications. The level of these activities is associated with population and the level of economic activity.

Indicator Interpretation and Discussion

Indicator Results

What Does the Indicator Show?

Total consumption of wood and paper products and fuelwood, in roundwood equivalents, increased between 1965 and 1987 from 13.2 to 20.2 billion ft³. Between 1988 and 2011 total consumption has been between 19.9 and 12.9 billion ft³ per year (Table 3). Over this period, U.S. wood harvest declined. In 2011, per capita consumption had fallen to 46 ft³, near the low point in per capita consumption which was achieved in 1960s (Table 6).

Excluding fuelwood, wood, and paper products consumption, in roundwood equivalents, increased steadily between 1965 and 1987, from 12.2 to 18.6 billion ft³ before falling to 12.4 billion ft³ in 2011 (Tables 3, 6, 10, and 11). Over this period, use of softwood and hardwood roundwood increased 53% and 56%, respectively, until 1988 before declining. Fuelwood consumption increased to a high of 3.6 billion ft³ in 1984 and had declined to 1.4 billion ft³ in 2011. Most of the increase in wood and paper products consumption occurred between 1965 and 2005. The rate of growth in consumption was significantly less between 2006 and 2011 (Fig. 1).

Per capita consumption of wood and paper products and fuelwood, in roundwood equivalents, decreased between 1965 and 2011, from 68 to 46 ft³ per year. Since 1987 through 2011, per capita consumption has declined by 44% to 46 ft³ per year (Tables 4, 6, 10, and 11). Over this period, per capita harvest decreased 41% (Fig. 2).

Excluding fuelwood, per capita consumption of wood and paper products, in roundwood equivalents, has been relatively stable, averaging 63 ft³ per year. So, in roundwood equivalents, wood and paper products consumption has been increasing at roughly the pace of population (Tables 4, 6, 10, and 11). Fuelwood use per capita increased to 15.3 ft³ in 1984 and declined to 5.2 ft³ in 2011 (Figs. 3, 4).

How Has It Changed Since 2006?

Trends have changed significantly since 2006. Total consumption of wood and paper products (including and excluding fuelwood) have continued to decrease. Per capita consumption of wood and paper products alone has fallen to about 46 ft³. Per capita fuelwood consumption has continued to decline.

Regional Variation and Associated Issues

If per capita consumption of wood and paper products (excluding fuelwood) is relatively uniform across the country then, for 2011, wood and paper products consumption (in roundwood equivalent) was highest in the North (5.1 billion ft³), followed by the South (4.6 billion ft³), Pacific

Coast (1.6 billion ft³) and Rocky Mountains (1.1 billion ft³) (Fig. 5).

Assessment of Ability to Measure Underlying Concern

General Assessment

Since the data are national in origin and the wood products industries as well as various government agencies keep consistent wood products information, the ability to measure the concern of Indicator 28 is good.

Congruence of U.S. Results with TAC Recommendations

Because the availability of national data for this indicator is good, the U.S. results are consistent with TAC recommendations. We were able to compile national data to measure in roundwood equivalents total and per capita consumption of wood and wood products in roundwood equivalents.

Suggested Steps for Improvement

The data on roundwood equivalent of consumption use estimates of the roundwood equivalent of imports and exports assuming the products are made of roundwood in the United States. The estimate of roundwood use may be too large for paper imports or exports to the extent that recovered paper is used for paper production rather than roundwood. The amount of roundwood harvest that ends up in domestically used paper products may be too low to the extent that domestic wood ends up in exported recovered paper that is used overseas then imported to the United States.

For primary wood products—lumber, panels, and paper—the estimate of the proportion of consumption from domestic supply is accurate when focusing on products produced in the United States, but it should be recognized that a portion of this domestic supply is made using imported logs, chips, or market pulp. So, the portion of consumption made from domestic production that uses domestic roundwood is somewhat lower.

Cross-Cutting Issues and Relation to Other Indicators

Data from this indicator are being constructed to be consistent with indicators on consumption (31), recycling (33), employment (44), and injury rates (45) by using consistent data sources and data categories to allow comparisons.

Concluding Remarks

Since 2006, many sources of wood products data have been discontinued and trade codes have changed, making year-to-year comparisons of many wood commodities difficult to impossible. This trend is very likely to continue. The primary products data were available for this indicator so we were able to derive roundwood equivalents estimates of consumption.

Literature and Data Sources

Howard, J.L.; Westby, R.M. 2013. U.S. Timber production, trade, consumption, and price statistics, 1965–2011. Research Paper FPL–RP–676. USDA Forest Service, Forest Products Laboratory. 91 p. http://www.fpl.fs.fed.us/documents/fplrp/fpl_rp676.pdf.

Montreal Process Working Group. 2007. Technical Advisory Committee. Annex D—Technical note on implementation; Montreal process criteria and indicators for the conservation and sustainable management of temperate and boreal forests. www.montrealprocess.org/documents/meetings/working/an-4.pdf. Accessed 2/15/2015.

National Report on Sustainable Forests—2010. United States Department of Agriculture Forest Service. FS-979. June 2011.

National Report on Sustainable Forests—2015. United States Department of Agriculture Forest Service. FS-979. (In Progress).

USDA Forest Service. 1988. U.S. timber production, trade, consumption, and price statistics, 1950–1987. Misc. Pub. 1471. Washington, D.C.: U.S. Department of Agriculture.

USDC Bureau of Census. 1975. Historical statistics of the United States: colonial times to 1970; part 1. Washington, D.C.: U.S. Department of Commerce. 609 p. <http://www2.census.gov/prod2/statcomp/documents/CT1970p1-01.pdf>

USDC Bureau of Census. 2014. National population datasets: population, population change and estimated components of population change: April 1, 2010 to July 1, 2014. Washington, D.C.: U.S. Department of Commerce. <http://www.census.gov/popest/datasets.html>. Accessed 2/12/2015.

USDOE Energy Information Administration. 2001. Annual energy review 2000. DOE/EIA-0384(2000). Washington, D.C.: U.S. Department of Energy. 379 p. <http://tonto.eia.doe.gov/ftp/energy/multi-fuel/038400.pdf>

USDOE Energy Information Administration. 2002. Monthly energy review, January 2002. DOE/EIA-0035(2002/01). Washington, D.C.: U.S. Department of Energy. 193 p. <http://www.eia.doe.gov/emeu/mer/>

USDOE Energy Information Administration. 2012. Monthly energy review, January 2012. DOE/EIA-0035(2012/01). Washington, D.C.: U.S. Department of Energy. 191 p. <http://tonto.eia.doe.gov/FTP/energy/monthlyhistory.htm>

Appendix—Tables and Figures

Table 1—Production, imports, exports, and consumption of softwood timber products, by major product, 1965–2011 (million cubic feet, roundwood equivalent)

Industrial roundwood use																								
Year	All products			Total			Lumber			Plywood and veneer			Pulpwood-based products			Other industrial products, production and consumption ^b			Logs		Pulpwood chips		Fuel-wood production and consumption	
	Pro-duction	Con-sump-tion	Ex-ports	Pro-duction	Ex-ports	Con-sump-tion	Pro-duction	Ex-ports	Con-sump-tion	Pro-duction	Ex-ports	Con-sump-tion	Pro-duction	Ex-ports ^a	Con-sump-tion	Pro-duction	Ex-ports ^a	Con-sump-tion	Im-ports	Ex-ports	Im-ports	Ex-ports		
1965	8,499	9,331	8,319	1,297	465	9,151	4,583	771	130	5,223	945	14	2	957	2,313	510	155	2,668	300	2	178	—	—	180
1966	8,646	9,442	8,476	1,325	529	9,272	4,514	756	147	5,123	990	17	4	1,003	2,451	546	168	2,829	310	7	210	—	—	170
1967	8,592	9,235	8,432	1,296	653	9,075	4,408	756	163	5,002	981	16	6	991	2,458	518	184	2,791	285	5	300	—	—	160
1968	9,096	9,788	8,956	1,462	770	9,648	4,583	913	163	5,333	1,111	25	5	1,131	2,602	518	206	2,914	265	5	396	—	—	140
1969	9,029	9,788	8,904	1,542	783	9,663	4,437	930	164	5,202	1,035	29	15	1,049	2,812	577	233	3,155	250	7	371	—	—	125
1970	9,206	9,821	9,101	1,545	929	9,716	4,309	914	180	5,044	1,082	27	9	1,099	3,052	587	313	3,326	230	17	427	—	—	105
1971	9,402	10,348	9,302	1,706	759	10,248	4,702	1,133	149	5,686	1,253	33	7	1,278	2,760	530	245	3,045	230	9	357	—	—	100
1972	9,659	10,681	9,569	1,948	926	10,591	4,849	1,416	197	6,068	1,379	42	17	1,404	2,623	489	225	2,887	230	2	487	—	—	90
1973	9,779	10,679	9,679	1,954	1,053	10,579	4,947	1,418	293	6,072	1,374	34	31	1,377	2,603	501	210	2,894	235	1	520	—	—	100
1974	9,103	9,795	8,993	1,669	977	9,685	4,341	1,075	263	5,154	1,190	22	41	1,171	2,823	565	270	3,118	235	7	404	—	—	110
1975	8,551	8,969	8,431	1,346	928	8,849	4,189	900	229	4,861	1,198	25	59	1,164	2,393	409	225	2,577	235	11	416	—	—	120
1976	9,511	10,226	9,381	1,760	1,045	10,096	4,624	1,255	261	5,618	1,382	32	54	1,360	2,630	463	225	2,868	240	11	505	—	—	130
1977	9,899	11,099	9,709	2,146	946	10,909	4,966	1,637	233	6,370	1,460	31	22	1,469	2,566	456	214	2,808	240	22	477	—	—	190
1978	10,185	11,613	9,900	2,425	997	11,328	5,009	1,870	235	6,644	1,495	37	22	1,509	2,629	505	212	2,922	240	13	528	—	—	285
1979	10,506	11,679	10,096	2,355	1,182	11,269	4,877	1,749	296	6,330	1,452	29	30	1,451	2,920	558	253	3,225	245	19	603	—	—	410
1980	9,563	10,414	8,988	2,061	1,210	9,839	4,011	1,477	320	5,168	1,194	18	27	1,185	3,041	547	365	3,223	245	18	497	—	—	575
1981	9,200	10,135	8,610	1,991	1,056	9,545	3,839	1,441	310	4,971	1,209	21	49	1,181	2,937	514	317	3,134	245	14	380	—	—	590
1982	9,009	9,930	8,389	2,018	1,097	9,310	3,726	1,387	268	4,845	1,134	25	32	1,127	2,782	476	298	2,960	248	16	498	114	—	620
1983	10,122	11,419	9,527	2,469	1,172	10,824	4,577	1,780	298	6,060	1,391	39	41	1,389	2,767	488	291	2,964	249	23	542	139	—	595
1984	10,351	11,947	9,716	2,690	1,094	11,312	4,715	1,931	258	6,389	1,390	36	26	1,401	2,821	555	271	3,105	250	19	539	148	—	635
1985	10,334	12,005	9,729	2,803	1,132	11,400	4,713	2,132	246	6,599	1,392	46	22	1,415	2,772	561	267	3,066	256	11	597	53	—	605
1986	11,109	12,646	10,591	2,766	1,228	12,128	5,259	2,070	303	7,027	1,501	47	42	1,507	3,011	591	321	3,281	257	8	562	49	—	518
1987	11,748	13,184	11,235	2,843	1,408	12,671	5,629	2,103	381	7,352	1,537	62	53	1,546	3,158	632	341	3,449	277	11	633	35	—	513
1988	11,796	12,884	11,288	2,743	1,654	12,376	5,603	1,992	495	7,100	1,497	51	66	1,482	3,182	631	358	3,456	270	9	735	59	—	508
1989	11,672	12,693	11,169	2,873	1,853	12,190	5,423	2,164	504	7,083	1,357	30	90	1,296	3,223	628	386	3,465	294	3	719	48	154	503
1990	11,466	12,577	10,968	2,880	1,769	11,779	5,154	1,865	439	6,580	1,328	26	101	1,253	3,376	644	417	3,603	298	2	639	43	174	498
1991	10,900	11,509	10,402	2,344	1,734	11,011	4,785	1,672	455	6,002	1,178	23	83	1,118	3,433	608	483	3,558	292	1	556	40	157	498
1992	11,062	12,035	10,563	2,575	1,602	11,536	4,981	1,911	389	6,503	1,209	29	91	1,147	3,436	598	509	3,526	323	6	489	31	125	499
1993	10,592	12,041	10,090	2,878	1,429	11,539	4,745	2,180	350	6,575	1,205	29	88	1,146	3,261	611	443	3,430	329	14	422	45	127	502
1994	10,781	12,419	10,268	3,016	1,378	11,906	4,883	2,329	319	6,893	1,219	27	75	1,172	3,336	622	460	3,498	305	15	387	22	138	513
1995	10,639	12,441	10,158	3,230	1,427	11,961	4,703	2,461	276	6,788	1,195	31	77	1,149	3,548	682	534	3,696	272	9	408	47	132	481
1996	10,528	12,413	10,080	3,243	1,359	11,964	4,703	2,550	259	6,994	1,176	30	75	1,130	3,434	599	522	3,512	265	13	381	50	122	448
1997	10,596	12,531	10,180	3,267	1,333	12,114	4,886	2,541	239	7,188	1,105	35	92	1,048	3,456	634	526	3,564	257	13	332	44	144	416
1998	10,577	12,827	10,097	3,336	1,085	12,348	4,866	2,594	166	7,295	1,089	43	46	1,085	3,476	631	465	3,642	257	24	263	45	146	480
1999	10,872	13,310	10,389	3,551	1,113	12,827	5,128	2,688	198	7,618	1,092	62	37	1,118	3,486	714	452	3,748	257	41	266	46	160	483
2000	10,738	13,241	10,430	3,673	1,170	12,933	5,180	2,805	209	7,776	1,063	58	43	1,078	3,568	746	459	3,856	159	62	330	1	129	308
2001	10,359	13,080	10,051	3,763	1,042	12,772	4,981	2,895	147	7,729	939	73	31	982	3,430	731	437	3,724	272	64	307	1	121	308
2002	10,404	13,288	10,115	3,895	1,011	12,999	5,161	3,026	146	8,040	947	95	27	1,016	3,347	699	447	3,599	269	75	279	0	112	289
2003	10,622	13,731	10,334	4,042	934	13,443	5,273	3,055	145	8,183	933	117	26	1,024	3,587	801	390	3,998	169	69	262	1	111	288
2004	11,105	14,750	10,812	4,590	944	14,457	5,628	3,531	125	9,033	957	176	31	1,102	3,683	819	412	4,090	169	62	256	2	120	293
2005	11,297	14,947	11,002	4,624	974	14,652	5,861	3,550	136	9,275	943	197	26	1,113	3,644	778	426	3,996	169	98	257	1	128	295
2006	10,809	14,280	10,514	4,309	838	13,985	5,554	3,282	141	8,694	887	173	26	1,034	3,644	768	410	4,002	169	85	261	2	0	295
2007	9,701	12,111	9,396	3,488	1079	11,805	5,064	2,652	150	7,566	793	114	33	874	2,949	659	478	3,130	172	62	268	1	149	305
2008	8,591	9,981	8,304	2,554	1164	9,694	4,204	1,831	180	5,855	652	80	37	695	2,868	612	521	2,958	154	30	244	2	182	287
2009	7,439	8,239	7,173	1,864	1064	7,973	3,350	1,281	149	4,483	536	64	28	572	2,717	504	473	2,748	156	14	263	1	152	266
2010	7,714	8,389	7,448	1,932	1,256	8,123	3,575	1,369	201	4,743	574	61	46	588	2,612	485	478	2,619	156	16	332	1	199	266
2011	8,016	8,485	7,750	1,885	1,416	8,218	3,856	1,343	247	4,952	569	63	43	588	2,551	483	507	2,507	156	15	419	1	199	266

Source: Howard 2013, Table 6a.

^aIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.^bIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 2—Production, imports, exports, and consumption of hardwood timber products, by major product, 1965–2011 (million cubic feet, roundwood equivalent)

Industrial roundwood use																							
Year	All products			Total			Lumber			Plywood and veneer			Pulpwood-based products			Other industrial products, production and consumption ^b		Logs		Pulpwood chips		Fuel-wood production and consumption	
	Pro-duction	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Im-ports ^a	Ex-ports ^a	Con-sump-tion	Im-ports	Ex-ports	Im-ports	Ex-ports		
1965	3,647	3,865	2,912	306	89	3,130	1,650	52	17	1,685	125	55	0	180	864	191	58	997	260	9	13	—	735
1966	3,719	3,961	3,044	353	112	3,286	1,709	70	35	1,743	128	65	0	193	941	210	65	1,086	255	8	12	—	675
1967	3,520	3,717	2,900	315	119	3,097	1,628	52	35	1,646	119	65	1	184	907	191	68	1,030	230	7	16	—	620
1968	3,388	3,625	2,828	345	108	3,065	1,529	52	17	1,564	127	98	1	224	937	187	74	1,050	220	7	15	—	560
1969	3,409	3,692	2,914	402	119	3,197	1,529	70	17	1,581	118	110	1	227	1,049	216	87	1,178	205	6	13	—	495
1970	3,180	3,401	2,750	352	131	2,971	1,459	52	17	1,494	115	107	3	219	970	187	100	1,057	195	6	11	—	430
1971	3,212	3,478	2,812	401	135	3,078	1,480	70	35	1,515	125	132	1	257	1,012	195	90	1,117	185	5	9	—	400
1972	3,272	3,568	2,887	440	144	3,183	1,489	70	35	1,524	133	164	2	296	1,074	201	92	1,183	175	4	15	—	385
1973	3,431	3,730	3,026	450	151	3,325	1,543	87	35	1,595	122	132	3	251	1,173	227	95	1,305	170	4	18	—	405
1974	3,463	3,698	3,038	417	181	3,273	1,484	70	35	1,519	97	86	4	178	1,277	257	123	1,411	160	5	19	—	425
1975	2,923	3,101	2,473	318	140	2,651	1,282	52	35	1,300	79	100	5	174	952	163	90	1,025	150	3	11	—	450
1976	3,192	3,413	2,722	369	149	2,943	1,402	52	35	1,419	84	123	5	202	1,086	192	94	1,184	135	2	15	—	470
1977	3,631	3,852	2,821	364	143	3,042	1,495	52	35	1,513	91	117	4	205	1,075	192	90	1,177	145	2	14	—	810
1978	4,270	4,516	3,030	432	186	3,276	1,578	70	70	1,578	92	130	2	220	1,188	230	97	1,321	155	3	18	—	1,240
1979	4,920	5,135	3,125	414	198	3,340	1,640	70	70	1,640	89	108	2	195	1,216	234	106	1,343	160	2	21	—	1,795
1980	5,623	5,698	3,093	334	259	3,168	1,611	52	87	1,576	78	62	3	138	1,209	218	145	1,282	170	2	24	—	2,530
1981	5,447	5,547	2,857	351	251	2,957	1,319	52	87	1,284	75	77	3	149	1,258	219	135	1,342	180	2	25	—	2,590
1982	5,675	5,816	2,940	354	212	3,081	1,407	31	64	1,374	95	97	3	189	1,236	222	130	1,328	187	3	15	—	2,735
1983	6,004	6,201	3,364	457	260	3,561	1,543	35	86	1,492	104	140	3	241	1,503	278	153	1,628	196	4	18	—	2,640
1984	6,638	6,880	3,653	498	256	3,895	1,775	44	92	1,728	103	125	2	226	1,549	325	142	1,732	205	5	20	—	2,985
1985	6,516	6,835	3,671	562	244	3,990	1,691	52	71	1,673	93	149	3	239	1,660	357	153	1,864	209	5	18	—	2,845
1986	6,631	6,906	4,053	585	310	4,328	1,846	49	91	1,804	96	152	4	244	1,869	381	193	2,057	219	4	22	—	2,578
1987	6,712	6,995	4,150	630	347	4,432	1,982	70	130	1,922	102	179	4	277	1,824	380	190	2,013	218	2	24	—	2,563
1988	6,888	7,036	4,330	600	452	4,479	2,064	58	208	1,914	101	150	6	245	1,892	390	205	2,077	240	2	33	—	2,558
1989	7,091	7,108	4,553	547	530	4,570	2,118	64	150	2,032	97	85	7	174	1,926	395	221	2,099	261	3	34	1	2,538
1990	7,130	7,103	4,608	511	538	4,582	2,163	45	151	2,057	95	71	9	157	1,937	394	229	2,102	264	2	35	0	2,521
1991	7,023	6,829	4,493	465	659	4,299	1,961	42	164	1,839	89	60	11	138	1,964	361	264	2,062	259	1	45	0	2,530
1992	7,262	7,035	4,717	515	742	4,490	2,003	50	172	1,880	85	71	15	142	2,080	393	293	2,181	287	1	36	0	2,545
1993	7,503	7,377	4,922	587	714	4,795	2,142	60	182	2,019	89	71	13	148	2,162	454	281	2,335	292	1	38	1	2,582
1994	7,659	7,515	5,038	616	760	4,894	2,168	67	193	2,042	101	67	11	156	2,240	480	298	2,422	271	3	42	1	2,621
1995	7,728	7,578	5,272	688	838	5,122	2,212	62	184	2,089	107	76	12	172	2,423	545	354	2,614	241	4	43	2	2,456
1996	7,469	7,245	5,178	656	880	4,954	2,183	66	190	2,059	105	67	11	161	2,319	515	343	2,490	235	5	41	3	2,291
1997	6,735	6,530	4,609	597	803	4,404	2,217	79	213	2,082	109	79	12	176	1,727	429	249	1,908	228	7	51	3	2,126
1998	6,845	6,761	4,802	643	727	4,718	2,432	96	185	2,343	112	88	9	191	1,711	451	214	1,947	228	6	53	2	2,043
1999	6,702	6,669	4,643	680	712	4,611	2,501	122	206	2,417	116	98	10	204	1,477	453	175	1,755	228	6	60	0	2,059
2000	6,514	6,595	5,201	949	869	5,281	2,203	138	226	2,115	124	96	8	212	2,415	704	317	2,802	141	9	92	1	1,314
2001	6,169	6,341	4,857	937	765	5,028	2,070	112	213	1,970	149	103	8	244	2,350	712	305	2,757	48	10	96	0	1,313
2002	5,993	6,248	4,762	981	727	5,016	2,056	129	212	1,972	120	127	8	240	2,353	712	321	2,744	48	11	109	2	1,231
2003	5,507	5,928	4,280	1,022	601	4,701	1,904	138	202	1,840	119	123	9	233	1,970	746	253	2,464	149	11	94	4	1,227
2004	5,731	6,228	4,484	1,154	658	4,980	2,043	173	222	1,994	125	178	12	291	2,009	789	266	2,532	149	10	110	4	1,247
2005	5,712	6,219	4,457	1,179	672	4,964	2,022	187	253	1,956	125	176	11	290	2,035	792	283	2,545	149	15	88	8	1,255
2006	5,632	6,123	4,377	1,098	608	4,868	1,999	158	249	1,907	116	196	9	303	2,035	733	272	2,496	149	9	78	2	1,255
2007	5,464	5,674	4,164	857	647	4,374	1,857	91	209	1,738	106	150	7	248	1,911	610	292	2,229	153	5	82	2	1,300
2008	4,468	4,486	3,245	633	615	3,263	1,191	63	165	1,089	93	104	8	189	1,680	457	297	1,840	136	5	70	4	1,223
2009	4,438	4,467	3,305	589	561	3,333	1,226	66	140	1,153	81	82	6	157	1,757	419	312	1,864	138	14	50	8	1,134
2010	4,346	4,323	3,212	591	614	3,189	995	52	140	907	81	100	9	172	1,889	415	355	1,949	138	16	75	8	1,134
2011	4,478	4,420	3,344	584	641	3,287	1,094	60	140	1,014	85	100	8	177	1,926	401	392	1,935	138	16	65	8	1,134

Source: Howard 2013, Table 7a.

^aIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.^bIncludes coeprage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Industrial roundwood use

Source: Howard 2013, Table 5a.

¹Includes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

Table 4—Apparent U.S. roundwood consumption, U.S. production for domestic use, and percentage of consumption from U.S. consumption from domestic use by species group, 1965–2011 (million cubic feet roundwood equivalent)

Year	Softwoods			Hardwoods			Total		
	Total consumption	U.S. production for domestic use	Percentage of consumption from U.S. production for domestic use	Total consumption	U.S. production for domestic use	Percentage of consumption from U.S. production for domestic use	Total consumption	U.S. production for domestic use	Percentage of consumption from U.S. production for domestic use
1965	9,331	8,033	86	3,865	3,558	92	13,196	11,592	88
1966	9,442	8,117	86	3,961	3,607	91	13,403	11,724	87
1967	9,235	7,939	86	3,717	3,401	91	12,952	11,340	88
1968	9,788	8,326	85	3,625	3,281	91	13,414	11,606	87
1969	9,788	8,246	84	3,692	3,290	89	13,480	11,536	86
1970	9,821	8,276	84	3,401	3,049	90	13,222	11,325	86
1971	10,348	8,643	84	3,478	3,077	88	13,827	11,720	85
1972	10,681	8,733	82	3,568	3,128	88	14,248	11,861	83
1973	10,679	8,725	82	3,730	3,280	88	14,409	12,005	83
1974	9,795	8,126	83	3,698	3,281	89	13,493	11,407	85
1975	8,969	7,623	85	3,101	2,783	90	12,070	10,406	86
1976	10,226	8,466	83	3,413	3,043	89	13,639	11,509	84
1977	11,099	8,953	81	3,852	3,487	91	14,951	12,441	83
1978	11,613	9,188	79	4,516	4,084	90	16,129	13,272	82
1979	11,679	9,324	80	5,135	4,722	92	16,815	14,046	84
1980	10,414	8,353	80	5,698	5,364	94	16,113	13,717	85
1981	10,135	8,144	80	5,547	5,196	94	15,682	13,340	85
1982	9,930	7,912	80	5,816	5,463	94	15,746	13,375	85
1983	11,419	8,950	78	6,201	5,744	93	17,619	14,693	83
1984	11,947	9,257	77	6,880	6,382	93	18,827	15,639	83
1985	12,005	9,202	77	6,835	6,272	92	18,840	15,474	82
1986	12,646	9,880	78	6,906	6,321	92	19,552	16,201	83
1987	13,184	10,341	78	6,995	6,365	91	20,179	16,706	83
1988	12,884	10,142	79	7,037	6,436	91	19,921	16,578	83
1989	12,693	9,819	77	7,108	6,561	92	19,800	16,380	83
1990	12,277	9,697	79	7,103	6,592	93	19,380	16,289	84
1991	11,509	9,165	80	6,829	6,364	93	18,338	15,530	85
1992	12,035	9,459	79	7,035	6,520	93	19,070	15,980	84
1993	12,041	9,162	76	7,377	6,790	92	19,418	15,952	82
1994	12,419	9,403	76	7,515	6,899	92	19,934	16,302	82
1995	12,441	9,212	74	7,578	6,890	91	20,019	16,102	80
1996	12,413	9,169	74	7,245	6,589	91	19,658	15,758	80
1997	12,531	9,264	74	6,530	5,933	91	19,061	15,196	80
1998	12,827	9,491	74	6,761	6,118	90	19,588	15,609	80
1999	13,310	9,759	73	6,669	5,990	90	19,980	15,749	79
2000	13,241	10,738	81	6,595	6,514	99	19,836	17,253	87
2001	13,080	10,359	79	6,341	6,169	97	19,421	16,528	85
2002	13,288	10,404	78	6,248	5,993	96	19,536	16,398	84
2003	13,731	10,622	77	5,928	5,507	93	19,658	16,129	82
2004	14,750	11,105	75	6,228	5,731	92	20,978	16,836	80
2005	14,947	11,297	76	6,219	5,712	92	21,166	17,009	80
2006	14,280	10,809	76	6,123	5,632	92	20,403	16,441	81
2007	11,805	8,317	70	4,374	3,517	80	16,179	11,834	73
2008	9,694	7,140	74	3,263	2,630	81	12,957	9,770	75
2009	7,973	6,109	77	3,333	2,744	82	11,306	8,853	78
2010	8,123	6,192	76	3,189	2,598	81	11,312	8,790	78
2011	8,218	6,334	77	3,287	2,703	82	11,505	9,037	79

Sources: Tables 1, 2, and 3.

Table 5—Apparent roundwood production, trade, and consumption, and production and trade versus consumption, 1900–2011 (million cubic feet roundwood equivalent and percent)

Year	Production			Trade			Consumption	Production and trade versus consumption		
	Industrial roundwood (1)	Fuelwood (2)	Total (3) = (1)+(2)	Imports (4)	Exports (5)	Net imports (6) = (4)–(5)	(7) = (3)+(6)	Percent of consumption from U.S. production for domestic use (8) = ((3)–(5))/(7)	Imports as a percent of consumption (9) = (4)/(7) [100%–(8)]	Net imports as a percent of consumption (6)/(7)
1900	7,280	4,800	12,080	—	—	–140	11,940	—	—	–1
1901	7,580	4,650	12,230	—	—	–110	12,120	—	—	–1
1902	7,880	4,500	12,380	—	—	–60	12,320	—	—	0
1903	8,215	4,350	12,565	—	—	–140	12,425	—	—	–1
1904	8,490	4,200	12,690	—	—	–150	12,540	—	—	–1
1905	8,625	4,050	12,675	—	—	–90	12,585	—	—	–1
1906	9,225	3,900	13,125	—	—	–95	13,030	—	—	–1
1907	9,555	3,825	13,380	—	—	–115	13,265	—	—	–1
1908	8,725	3,975	12,700	—	—	–80	12,620	—	—	–1
1909	9,275	3,825	13,100	—	—	–50	13,050	—	—	0
1910	9,295	3,910	13,205	—	—	–80	13,125	—	—	–1
1911	9,020	4,035	13,055	—	—	–150	12,905	—	—	–1
1912	9,330	3,760	13,090	—	—	–145	12,945	—	—	–1
1913	9,170	3,780	12,950	—	—	–165	12,785	—	—	–1
1914	8,565	3,975	12,540	—	—	–15	12,525	—	—	0
1915	8,285	3,975	12,260	—	—	–135	12,125	—	—	–1
1916	8,530	3,955	12,485	—	—	165	12,650	—	—	1
1917	7,940	4,040	11,980	—	—	170	12,150	—	—	1
1918	7,310	4,290	11,600	—	—	180	11,780	—	—	2
1919	7,725	4,075	11,800	—	—	125	11,925	—	—	1
1920	7,770	4,065	11,835	—	—	205	12,040	—	—	2
1921	6,565	4,270	10,835	—	—	165	11,000	—	—	2
1922	7,605	3,760	11,365	—	—	290	11,655	—	—	2
1923	8,535	3,375	11,910	—	—	345	12,255	—	—	3
1924	8,245	3,380	11,625	—	—	285	11,910	—	—	2
1925	8,350	3,225	11,575	—	—	360	11,935	—	—	3
1926	8,220	3,065	11,285	—	—	375	11,660	—	—	3
1927	7,775	3,200	10,975	—	—	340	11,315	—	—	3
1928	7,670	3,225	10,895	—	—	290	11,185	—	—	3
1929	8,045	3,170	11,215	—	—	330	11,545	—	—	3
1930	6,305	3,790	10,095	—	—	400	10,495	—	—	4
1931	4,610	4,390	9,000	—	—	335	9,335	—	—	4
1932	3,400	4,980	8,380	—	—	305	8,685	—	—	4
1933	4,040	5,005	9,045	—	—	345	9,390	—	—	4
1934	4,340	4,825	9,165	—	—	355	9,520	—	—	4
1935	5,095	4,510	9,605	—	—	420	10,025	—	—	4
1936	5,980	4,265	10,245	—	—	560	10,805	—	—	5
1937	6,370	4,075	10,445	—	—	610	11,055	—	—	6
1938	5,570	4,325	9,895	—	—	470	10,365	—	—	5
1939	6,370	4,190	10,560	—	—	535	11,095	—	—	5
1940	6,990	3,890	10,880	—	—	420	11,300	—	—	4
1941	8,055	3,595	11,650	—	—	650	12,300	—	—	5
1942	8,085	2,865	10,950	—	—	705	11,655	—	—	6
1943	7,560	2,785	10,345	—	—	565	10,910	—	—	5
1944	7,455	2,915	10,370	—	—	555	10,925	—	—	5
1945	6,605	2,975	9,580	—	—	685	10,265	—	—	7
1946	7,705	2,675	10,380	—	—	810	11,190	—	—	7
1947	8,090	2,685	10,775	—	—	815	11,590	—	—	7
1948	8,375	2,665	11,040	—	—	1,090	12,130	—	—	9
1949	7,355	2,820	10,175	—	—	935	11,110	—	—	8
1950	8,530	2,270	10,800	1,525	140	1,385	12,185	87	13	11
1951	8,745	2,230	10,975	1,465	260	1,205	12,180	88	12	10
1952	8,775	2,010	10,785	1,375	215	1,160	11,945	88	12	10
1953	8,790	1,920	10,710	1,425	190	1,235	11,945	88	12	10
1954	8,755	1,835	10,590	1,465	270	1,195	11,785	88	12	10
1955	9,225	1,745	10,970	1,610	340	1,270	12,240	87	13	10
1956	9,620	1,655	11,275	1,640	315	1,325	12,600	87	13	11

Table 5—Apparent roundwood production, trade, and consumption, and production and trade versus consumption, 1900–2011 (million cubic feet roundwood equivalent and percent)—con.

Year	Production			Trade			Consumption	Production and trade versus consumption		
	Industrial roundwood (1)	Fuelwood (2)	Total (3) = (1)+(2)	Imports (4)	Exports (5)	Net imports (6) = (4)–(5)	(7) = (3)+(6)	Percent of consumption from U.S. production for domestic use (8) = ((3)–(5))/(7)	Imports as a percent of consumption (9) = (4)/(7) [100%–(8)]	Net imports as a percent of consumption (6)/(7)
1957	8,615	1,565	10,180	1,495	340	1,155	11,335	87	13	10
1958	8,530	1,480	10,010	1,495	310	1,185	11,195	87	13	11
1959	9,390	1,390	10,780	1,700	355	1,345	12,125	86	14	11
1960	8,925	1,300	10,225	1,680	455	1,225	11,450	85	15	11
1961	8,745	1,215	9,960	1,745	500	1,245	11,205	84	16	11
1962	9,035	1,125	10,160	1,910	505	1,405	11,565	83	17	12
1963	9,560	1,055	10,615	1,990	640	1,350	11,965	83	17	11
1964	10,170	985	11,155	2,035	735	1,300	12,455	84	16	10
1965	11,238	915	12,146	1,604	561	1,042	13,188	88	12	8
1966	11,537	845	12,365	1,679	658	1,020	13,385	87	13	8
1967	11,380	780	12,113	1,612	819	792	12,905	88	12	6
1968	11,884	700	12,484	1,807	978	829	13,313	86	14	6
1969	11,963	620	12,438	1,944	1,047	897	13,335	85	15	7
1970	12,001	535	12,386	1,896	1,211	685	13,071	85	15	5
1971	12,237	500	12,614	2,107	1,017	1,090	13,704	85	15	8
1972	12,613	475	12,931	2,388	1,227	1,161	14,092	83	17	8
1973	12,921	505	13,210	2,404	1,421	983	14,193	83	17	7
1974	12,271	535	12,566	2,086	1,399	687	13,253	84	16	5
1975	11,102	570	11,474	1,664	1,266	398	11,872	86	14	3
1976	12,348	600	12,703	2,130	1,439	691	13,394	84	16	5
1977	12,790	1,000	13,530	2,510	1,350	1,160	14,690	83	17	8
1978	13,155	1,525	14,455	2,857	1,408	1,449	15,904	82	18	9
1979	13,501	2,205	15,426	2,769	1,660	1,109	16,535	83	17	7
1980	12,359	3,105	15,186	2,395	1,747	648	15,834	85	15	4
1981	11,687	3,180	14,647	2,342	1,527	815	15,462	85	15	5
1982	11,506	3,355	14,683	2,371	1,487	885	15,568	85	15	6
1983	13,047	3,235	16,126	2,926	1,589	1,337	17,463	83	17	8
1984	13,513	3,620	16,988	3,189	1,494	1,695	18,683	83	17	9
1985	13,544	3,450	16,850	3,366	1,520	1,846	18,696	82	18	10
1986	14,795	3,096	17,740	3,351	1,689	1,661	19,401	83	17	9
1987	15,543	3,076	18,461	3,473	1,913	1,560	20,021	83	17	8
1988	15,836	3,066	18,684	3,343	2,324	1,019	19,703	83	17	5
1989	15,722	3,041	18,763	3,420	2,383	1,037	19,800	83	17	5
1990	15,577	3,019	18,596	3,091	2,307	784	19,380	84	16	4
1991	14,894	3,028	17,922	2,808	2,393	415	18,337	85	15	2
1992	15,280	3,044	18,324	3,090	2,344	746	19,070	84	16	4
1993	15,011	3,084	18,095	3,465	2,143	1,323	19,418	82	18	7
1994	15,306	3,134	18,440	3,632	2,139	1,493	19,933	82	18	7
1995	15,430	2,937	18,367	3,917	2,265	1,652	20,019	80	20	8
1996	15,258	2,739	17,997	3,899	2,239	1,661	19,658	80	20	8
1997	14,790	2,542	17,332	3,864	2,136	1,729	19,061	80	20	9
1998	14,899	2,523	17,422	3,979	1,812	2,166	19,588	80	20	11
1999	15,032	2,542	17,574	4,231	1,825	2,406	19,980	79	21	12
2000	15,631	1,622	17,253	4,622	2,039	2,583	19,836	77	23	13
2001	14,907	1,621	16,528	4,700	1,807	2,893	19,421	76	24	15
2002	14,878	1,520	16,398	4,877	1,738	3,139	19,537	75	25	16
2003	14,614	1,515	16,129	5,064	1,535	3,529	19,658	74	26	18
2004	15,296	1,540	16,836	5,744	1,602	4,142	20,978	73	27	20
2005	15,459	1,550	17,009	5,802	1,646	4,156	21,165	73	27	20
2006	14,891	1,550	16,441	5,408	1,446	3,962	20,403	73	27	19
2007	13,560	1,605	15,165	4,345	1,726	2,919	18,084	74	26	16
2008	11,549	1,510	13,059	3,187	1,779	1,408	14,467	78	22	10
2009	10,478	1,400	11,878	2,453	1,661	792	12,670	81	19	6
2010	10,660	1,400	12,060	2,523	1,791	732	12,792	80	20	6
2011	11,094	1,400	12,494	2,469	2,058	411	12,905	81	20	3

Sources: 1900–1949: USDC BOC 1975, Table L 72–86; 1950–1965: USDA FS 1988, Table 4; 1965–2011: Howard 2013, Table 5a.

**Table 6—U.S. per capita apparent roundwood production, trade, and consumption, 1900–2011
(cubic feet roundwood equivalent)**

Year	Population (millions)	Production per capita			Trade per capita			Consumption per capita
		Industrial roundwood (1)	Fuelwood (2)	Total (3) = (1)+(2)	Imports (4)	Exports (5)	Net imports (6) = (4)–(5)	Consumption (7) = (3)+(6)
1900	76.4	95	63	158	—	—	–2	156
1901	77.9	97	60	157	—	—	–1	156
1902	79.4	99	57	156	—	—	–1	155
1903	80.9	102	54	155	—	—	–2	154
1904	82.5	103	51	154	—	—	–2	152
1905	84.0	103	48	151	—	—	–1	150
1906	85.5	108	46	154	—	—	–1	152
1907	87.0	110	44	154	—	—	–1	152
1908	88.5	99	45	144	—	—	–1	143
1909	90.0	103	43	146	—	—	–1	145
1910	91.5	102	43	144	—	—	–1	143
1911	93.0	97	43	140	—	—	–2	139
1912	94.5	99	40	139	—	—	–2	137
1913	96.0	96	39	135	—	—	–2	133
1914	97.6	88	41	128	—	—	0	128
1915	99.1	84	40	124	—	—	–1	122
1916	100.6	85	39	124	—	—	2	126
1917	102.1	78	40	117	—	—	2	119
1918	103.6	71	41	112	—	—	2	114
1919	105.1	74	39	112	—	—	1	113
1920	106.8	73	38	111	—	—	2	113
1921	108.4	61	39	100	—	—	2	101
1922	110.1	69	34	103	—	—	3	106
1923	111.8	76	30	107	—	—	3	110
1924	113.5	73	30	102	—	—	3	105
1925	115.1	73	28	101	—	—	3	104
1926	116.8	70	26	97	—	—	3	100
1927	118.5	66	27	93	—	—	3	95
1928	120.1	64	27	91	—	—	2	93
1929	121.8	66	26	92	—	—	3	95
1930	122.7	51	31	82	—	—	3	86
1931	123.7	37	35	73	—	—	3	75
1932	124.6	27	40	67	—	—	2	70
1933	125.6	32	40	72	—	—	3	75
1934	126.5	34	38	72	—	—	3	75
1935	127.4	40	35	75	—	—	3	79
1936	128.3	47	33	80	—	—	4	84
1937	129.2	49	32	81	—	—	5	86
1938	130.1	43	33	76	—	—	4	80
1939	131.0	49	32	81	—	—	4	85
1940	132.6	53	29	82	—	—	3	85
1941	134.2	60	27	87	—	—	5	92
1942	135.7	60	21	81	—	—	5	86
1943	137.3	55	20	75	—	—	4	79
1944	138.9	54	21	75	—	—	4	79
1945	141.1	47	21	68	—	—	5	73
1946	143.2	54	19	72	—	—	6	78
1947	145.4	56	18	74	—	—	6	80
1948	147.5	57	18	75	—	—	7	82
1949	149.7	49	19	68	—	—	6	74
1950	152.4	56	15	71	10	1	9	80
1951	155.0	56	14	71	9	2	8	79
1952	157.7	56	13	68	9	1	7	76
1953	160.3	55	12	67	9	1	8	75
1954	163.0	54	11	65	9	2	7	72
1955	166.0	56	11	66	10	2	8	74
1956	168.9	57	10	67	10	2	8	75

Table 6—U.S. per capita apparent roundwood production, trade, and consumption, 1900–2011 (cubic feet roundwood equivalent)—con.

Year	Population (millions)	Production per capita			Trade per capita			Consumption per capita
		Industrial roundwood (1)	Fuelwood (2)	Total (3) = (1)+(2)	Imports (4)	Exports (5)	Net imports (6) = (4)–(5)	Consumption (7) = (3)+(6)
1957	171.9	50	9	59	9	2	7	66
1958	174.8	49	8	57	9	2	7	64
1959	177.8	53	8	61	10	2	8	68
1960	180.6	49	7	57	9	3	7	63
1961	183.4	48	7	54	10	3	7	61
1962	186.3	48	6	55	10	3	8	62
1963	189.1	51	6	56	11	3	7	63
1964	191.9	53	5	58	11	4	7	65
1965	194.3	58	5	63	8	3	5	68
1966	196.6	59	4	63	9	3	5	68
1967	198.7	57	4	61	8	4	4	65
1968	200.7	59	3	62	9	5	4	66
1969	202.7	59	3	61	10	5	4	66
1970	205.1	59	3	60	9	6	3	64
1971	207.7	59	2	61	10	5	5	66
1972	209.9	60	2	62	11	6	6	67
1973	211.9	61	2	62	11	7	5	67
1974	213.9	57	3	59	10	7	3	62
1975	216.0	51	3	53	8	6	2	55
1976	218.0	57	3	58	10	7	3	61
1977	220.2	58	5	61	11	6	5	67
1978	222.6	59	7	65	13	6	7	71
1979	225.1	60	10	69	12	7	5	73
1980	227.7	54	14	67	11	8	3	70
1981	230.0	51	14	64	10	7	4	67
1982	232.2	50	14	63	10	6	4	67
1983	234.3	56	14	69	12	7	6	75
1984	236.3	57	15	72	13	6	7	79
1985	238.5	57	14	71	14	6	8	78
1986	240.7	61	13	74	14	7	7	81
1987	242.8	64	13	76	14	8	6	82
1988	245.0	65	13	76	14	9	4	80
1989	247.3	64	12	76	14	10	4	80
1990	249.9	62	12	74	12	9	3	78
1991	252.6	59	12	71	11	9	2	73
1992	255.4	60	12	72	12	9	3	75
1993	258.1	58	12	70	13	8	5	75
1994	260.7	59	12	71	14	8	6	76
1995	263.2	59	11	70	15	9	6	76
1996	265.6	57	10	68	15	8	6	74
1997	266.5	55	10	65	15	8	6	72
1998	268.8	55	9	65	15	7	8	73
1999	271.7	55	9	65	16	7	9	74
2000	282.1	55	6	61	16	7	9	70
2001	284.8	52	6	58	17	6	11	69
2002	287.5	52	5	57	17	6	11	68
2003	291.1	50	5	55	17	5	12	67
2004	294.0	52	5	57	20	5	15	72
2005	296.7	52	5	57	20	6	14	71
2006	299.2	50	5	55	18	5	13	68
2007	301.7	50	5	55	14	6	8	63
2008	304.5	43	5	47	10	6	4	51
2009	307.2	39	5	44	8	5	3	47
2010	309.8	39	5	44	8	6	2	46
2011	312.0	40	5	45	8	7	1	46

Sources: Howard 2013, Table 1 (population), Table 5.

Table 7—Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2011

Year	Production				Imports				Exports				Consumption				Percentage of consumption from production for domestic use							
	Total (billion board feet)		Soft-woods (billion board feet)		Hard-woods (billion board feet)		Total (billion board feet)		Soft-woods (billion board feet)		Hard-woods (billion board feet)		Total (billion board feet)		Soft-woods (billion board feet)		Hard-woods (billion board feet)		Total (billion board feet)		Soft-woods (billion board feet)		Hard-woods (billion board feet)	
	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet	board	feet
1965	38.7	29.3	9.4	5.2	4.9	0.3	0.9	0.8	0.1	43.0	33.4	9.6	88	85	97	221	172	50						
1966	38.6	28.8	9.8	5.2	4.8	0.4	1.1	0.9	0.2	42.7	32.7	10.0	88	85	96	217	167	51						
1967	37.5	28.2	9.3	5.1	4.8	0.3	1.2	1.0	0.2	41.4	32.0	9.4	88	85	97	208	161	47						
1968	38.0	29.3	8.7	6.1	5.8	0.3	1.1	1.0	0.1	43.0	34.1	8.9	86	83	97	214	170	45						
1969	37.1	28.3	8.7	6.3	5.9	0.4	1.1	1.0	0.1	42.3	33.2	9.0	85	82	96	209	164	45						
1970	35.9	27.5	8.3	6.1	5.8	0.3	1.2	1.1	0.1	40.8	32.2	8.5	85	82	96	199	157	42						
1971	38.5	30.0	8.4	7.6	7.2	0.4	1.1	0.9	0.2	45.0	36.3	8.6	83	80	95	217	175	42						
1972	39.5	31.0	8.5	9.4	9.0	0.4	1.4	1.2	0.2	47.5	38.8	8.7	80	77	95	226	185	41						
1973	40.4	31.6	8.8	9.5	9.0	0.5	2.0	1.8	0.2	47.9	38.8	9.1	80	77	95	226	183	43						
1974	36.2	27.7	8.4	7.2	6.8	0.4	1.8	1.6	0.2	41.6	32.9	8.6	83	79	95	194	154	40						
1975	34.1	26.7	7.3	6.0	5.7	0.3	1.6	1.4	0.2	38.5	31.0	7.4	84	82	96	178	144	34						
1976	37.7	29.7	8.0	8.3	8.0	0.3	1.8	1.6	0.2	44.2	36.1	8.1	81	78	96	203	166	37						
1977	40.2	31.7	8.5	10.7	10.4	0.3	1.6	1.4	0.2	49.3	40.7	8.6	78	74	97	224	185	39						
1978	41.0	32.1	9.0	12.3	11.9	0.4	1.8	1.4	0.4	51.5	42.6	9.0	76	72	96	231	191	40						
1979	40.7	31.4	9.3	11.6	11.2	0.4	2.2	1.8	0.4	50.1	40.8	9.3	77	73	96	223	181	41						
1980	35.4	26.2	9.2	9.9	9.6	0.3	2.5	2.0	0.5	42.8	33.8	9.0	77	72	97	188	149	39						
1981	32.2	24.7	7.5	9.5	9.2	0.3	2.4	1.9	0.5	39.3	32.0	7.3	76	71	96	171	139	32						
1982	31.8	23.8	8.0	9.0	8.8	0.2	2.0	1.6	0.4	38.8	31.0	7.8	77	72	98	167	133	34						
1983	38.5	29.7	8.8	11.7	11.5	0.2	2.3	1.8	0.5	47.9	39.4	8.5	76	71	98	204	168	36						
1984	41.3	31.2	10.1	13.0	12.7	0.3	2.1	1.6	0.5	52.1	42.3	9.8	75	70	97	220	179	42						
1985	40.9	31.3	9.6	14.1	14.1	0.3	1.9	1.5	0.4	53.4	43.9	9.5	73	68	97	224	184	40						
1986	45.8	35.3	10.5	14.1	13.8	0.3	2.4	1.9	0.5	57.4	47.2	10.2	75	71	97	239	196	43						
1987	49.5	38.2	11.3	14.6	14.2	0.4	3.2	2.5	0.7	60.9	50.0	10.9	76	72	96	251	206	45						
1988	49.9	38.1	11.7	13.8	13.5	0.3	4.5	3.3	1.2	59.2	48.3	10.9	77	72	97	242	197	44						
1989	49.6	37.5	12.1	15.3	14.9	0.4	4.2	3.4	0.9	60.6	49.1	11.6	75	70	97	245	198	47						
1990	48.1	35.8	12.3	13.1	12.9	0.3	3.8	2.9	0.9	57.4	45.7	11.7	77	72	98	230	183	47						
1991	44.3	33.2	11.2	11.8	11.5	0.2	4.0	3.1	0.9	52.1	41.6	10.5	77	72	98	206	165	41						
1992	45.9	34.5	11.4	13.2	13.2	0.3	3.6	2.6	1.0	55.8	45.1	10.7	76	71	97	219	177	42						
1993	45.2	32.9	12.2	15.4	15.1	0.3	3.4	2.3	1.0	57.2	45.7	11.5	73	67	97	222	177	45						
1994	46.5	34.1	12.4	16.6	16.2	0.4	3.3	2.2	1.1	59.8	48.2	11.7	72	66	97	230	185	45						
1995	44.9	32.2	12.6	17.6	17.2	0.4	2.9	1.9	1.1	59.5	47.6	11.9	70	64	97	226	181	45						
1996	45.8	33.3	12.5	18.4	18.0	0.4	2.9	1.8	1.1	61.3	49.5	11.8	70	64	97	231	186	44						
1997	47.3	34.7	12.7	19.7	18.5	0.5	2.9	1.6	1.2	62.9	51.0	11.9	71	65	96	235	190	44						
1998	48.6	34.7	13.9	19.0	18.5	0.5	2.2	1.1	1.1	65.4	52.0	13.4	71	65	96	242	192	50						
1999	51.0	36.7	14.3	19.9	19.2	0.7	2.5	1.4	1.2	68.3	54.5	12.8	71	65	95	250	200	51						
2000	48.6	36.0	12.6	20.2	19.4	0.8	2.7	1.4	1.3	66.1	54.0	13.1	74	66	96	234	191	43						
2001	46.4	34.6	11.8	20.7	20.1	0.6	2.2	1.0	1.2	64.9	53.7	11.3	72	64	96	228	188	40						
2002	47.6	35.8	11.8	21.7	21.0	0.7	2.2	1.0	1.2	67.1	55.8	11.3	71	64	96	233	194	39						
2003	47.5	36.6	10.9	22.0	21.2	0.8	2.1	1.0	1.2	67.4	56.8	10.5	70	64	96	231	195	36						
2004	50.8	39.1	11.7	25.5	24.5	1.0	2.1	0.8	1.3	74.1	62.8	11.4	81	62	97	252	213	39						
2005	52.3	40.7	11.6	25.7	24.6	1.1	2.3	0.9	1.5	75.6	64.4	11.2	69	63	97	255	217	38						
2006	50.0	38.6	11.4	23.7	22.8	0.9	2.4	0.9	1.4	71.3	60.4	10.9	73	64	96	238	202	36						
2007	45.8	35.2	10.6	18.9	18.4	0.5	2.2	1.0	1.2	62.5	52.6	9.9	70	63	96	207	174	33						
2008	36.0	29.2	6.8	13.0	12.7	0.4	2.1	1.2	0.9	46.9	40.7	6.2	77	72	91	154	134	20						
2009	30.2	23.2	7.0	9.2	8.9	0.4	1.8	1.0	0.8	37.7	31.1	6.6	80	75	94	123	101	21						
2010	30.5	24.8	5.7	9.8	9.5	0.3	1.5	1.3	0.5	38.7	32.9	5.8	93	75	98	125	106	19						
2011	33.0	26.8	6.2	9.6	9.3	0.3	1.9	1.7	0.2	40.8	34.4	6.4	96	78	96	131	110	20						

Source: Howard 2013, Table 28.

Table 8—Plywood production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2011 (3/8-in. basis)

Year	Production			Imports			Exports			Consumption			Percentage of consumption from production for domestic use		
	Total ($\times 10^6$ ft ³)	Soft- woods ($\times 10^6$ ft ³)	Hard- woods ($\times 10^6$ ft ³)	Total ($\times 10^6$ ft ³)	Soft- woods ($\times 10^6$ ft ³)	Hard- woods ($\times 10^6$ ft ³)	Total ($\times 10^6$ ft ³)	Soft- woods ($\times 10^6$ ft ³)	Hard- woods ($\times 10^6$ ft ³)	Total ($\times 10^6$ ft ³)	Soft- woods ($\times 10^6$ ft ³)	Hard- woods ($\times 10^6$ ft ³)	Total (%)	Soft- woods (%)	Hard- woods (%)
1965	14,496	12,447	2,049	1,052	5	1,047	36	30	6	15,512	12,422	3,090	93	100	66
1966	15,132	13,056	2,076	1,257	3	1,254	56	48	8	16,333	13,011	3,322	92	100	62
1967	14,874	12,958	1,916	1,247	3	1,244	93	85	8	16,028	12,876	3,152	92	100	61
1968	16,704	14,695	2,009	1,896	10	1,886	78	64	14	18,522	14,641	3,881	90	100	51
1969	15,563	13,694	1,869	2,122	15	2,107	215	199	16	17,470	13,510	3,960	88	100	47
1970	16,136	14,340	1,796	2,049	2	2,047	172	114	58	18,013	14,228	3,785	89	100	46
1971	18,559	16,635	1,924	2,545	3	2,542	114	99	15	20,990	16,539	4,451	88	100	43
1972	20,354	18,324	2,030	3,162	6	3,156	247	221	26	23,269	18,109	5,160	86	100	39
1973	20,112	18,305	1,807	2,536	9	2,527	451	411	40	22,197	17,903	4,294	89	100	41
1974	17,279	15,878	1,401	1,648	4	1,644	610	542	68	18,317	15,340	2,977	91	100	45
1975	17,102	16,050	1,052	1,925	7	1,918	859	791	68	18,168	15,266	2,902	89	100	34
1976	19,523	18,440	1,083	2,368	12	2,356	795	716	79	21,096	17,736	3,360	89	100	30
1977	20,563	19,376	1,187	2,272	18	2,254	357	287	70	22,478	19,107	3,371	90	100	33
1978	21,149	19,964	1,185	2,555	63	2,492	329	298	31	23,375	19,729	3,646	89	100	32
1979	20,803	19,653	1,150	2,097	27	2,070	431	402	29	22,469	19,278	3,191	91	100	35
1980	17,371	16,333	1,038	1,235	37	1,198	413	373	40	18,193	15,997	2,196	93	100	45
1981	17,728	16,752	976	1,512	30	1,482	733	686	47	18,507	16,096	2,411	92	100	39
1982	17,231	15,846	1,385	1,878	9	1,869	493	452	41	18,616	15,403	3,213	90	100	42
1983	20,960	19,480	1,480	2,747	18	2,729	615	574	41	23,092	18,924	4,168	88	100	35
1984	21,431	19,926	1,505	2,527	48	2,480	408	371	37	23,550	19,603	3,948	89	100	37
1985	21,511	20,169	1,342	3,112	54	3,058	365	321	44	24,259	19,903	4,356	87	100	30
1986	23,508	22,118	1,390	3,234	63	3,171	676	614	61	26,067	21,567	4,500	88	100	30
1987	24,423	22,899	1,524	3,932	129	3,803	855	796	60	27,500	22,232	5,268	86	99	28
1988	24,151	22,599	1,552	3,358	96	3,262	1,108	1,004	104	26,401	21,691	4,711	87	100	31
1989	22,926	21,385	1,541	1,983	49	1,935	1,562	1,442	119	23,348	19,991	3,356	92	100	42
1990	22,456	20,919	1,537	1,687	38	1,649	1,766	1,613	153	22,377	19,344	3,033	92	100	46
1991	20,148	18,652	1,496	1,457	28	1,429	1,553	1,322	231	20,052	17,358	2,695	93	100	47
1992	20,755	19,332	1,423	1,776	47	1,729	1,760	1,442	318	20,771	17,937	2,834	91	100	39
1993	20,826	19,315	1,511	1,786	41	1,745	1,677	1,409	268	20,935	17,946	2,989	91	100	42
1994	21,439	19,638	1,801	1,693	47	1,646	1,455	1,211	244	21,677	18,474	3,203	92	100	49
1995	21,209	19,367	1,842	1,951	60	1,892	1,517	1,267	250	21,643	18,160	3,483	91	100	46
1996	20,965	19,181	1,784	1,780	85	1,695	1,499	1,248	251	21,246	18,018	3,228	92	100	47
1997	19,835	17,963	1,872	2,111	104	2,007	1,802	1,548	254	20,143	16,519	3,625	90	99	45
1998	19,738	17,776	1,962	2,429	179	2,250	970	764	206	21,198	17,191	4,007	89	99	44
1999	19,832	17,816	2,016	2,989	469	2,519	833	595	238	21,988	17,690	4,297	86	97	41
2000	19,741	17,475	2,266	2,902	408	2,494	916	735	181	21,727	17,148	4,579	91	98	50
2001	17,225	15,121	2,104	3,220	665	2,555	676	514	162	19,768	15,272	4,496	87	99	47
2002	17,296	15,200	2,096	4,115	907	3,208	619	439	180	20,792	15,668	5,124	83	97	41
2003	16,753	14,706	2,047	4,489	1,306	3,183	640	410	230	20,603	15,602	5,001	81	94	41
2004	16,687	14,665	2,022	6,629	2,023	4,606	783	492	291	22,532	16,196	6,336	74	91	32
2005	16,327	14,330	1,997	6,964	2,421	4,543	686	411	275	22,604	16,340	6,264	72	88	32
2006	15,238	13,428	1,810	6,926	1,848	5,078	635	424	211	21,529	14,852	6,677	71	90	27
2007	14,013	12,243	1,770	4,972	1,087	3,885	732	553	179	18,253	5,476	5,476	77	96	32
2008	11,936	10,237	1,699	3,462	759	2,703	824	621	203	14,573	4,198	4,198	82	99	40
2009	10,192	8,608	1,584	2,751	616	2,135	619	473	146	12,325	3,574	3,574	83	98	44
2010	10,632	9,131	1,501	3,042	439	2,603	1,004	795	209	12,670	3,895	3,895	84	96	39
2011	10,582	8,980	1,602	3,081	478	2,603	949	740	209	12,714	3,996	3,996	83	97	40

Source: Howard 2013, Table 28.

Table 9—Production, imports, exports, and consumption of structural panel products, by type, 1980–2011 (million square feet, 3/8-in. basis)

Year	Production			Imports			Exports			Percentage of consumption from production for domestic use			Consumption			Per capita consumption		
	OSB and wafer-board			Softwood plywood			Softwood plywood			OSB and wafer-board			Total			Total		
	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	($\times 10^6$ ft ²)	(ft ²)	(ft ²)	(ft ²)
1980	16,468	16,333	135	360	37	323	373	373	NA	NA	—	—	16,455	15,997	458	72	70	2
1981	17,023	16,752	271	349	30	319	686	686	NA	NA	—	—	16,686	16,096	590	73	70	3
1982	16,403	15,846	557	268	9	259	452	452	NA	NA	—	—	16,219	15,403	816	70	66	4
1983	20,821	19,480	1,341	423	18	405	574	574	NA	NA	—	—	20,670	18,924	1,746	88	81	7
1984	21,968	19,926	2,042	727	48	679	371	371	NA	NA	—	—	22,324	19,603	2,721	94	83	12
1985	22,838	20,169	2,669	848	54	794	321	321	NA	NA	—	—	23,366	19,903	3,463	98	83	15
1986	25,631	22,118	3,513	723	63	660	614	614	NA	NA	—	—	25,740	21,567	4,173	107	90	17
1987	26,975	22,899	4,076	889	129	760	796	796	NA	NA	—	—	27,068	22,232	4,836	111	92	20
1988	27,203	22,599	4,604	911	96	815	1,004	1,004	NA	NA	—	—	27,110	21,691	5,419	111	89	22
1989	26,490	21,385	5,105	1,160	49	1,111	1,442	1,442	NA	NA	—	—	26,207	19,991	6,216	106	81	25
1990	26,337	20,919	5,418	1,351	38	1,313	1,613	1,613	NA	NA	—	—	26,075	19,344	6,731	104	77	27
1991	24,265	18,652	5,613	1,016	28	988	1,379	1,322	57	57	85	85	23,901	17,358	6,544	95	69	26
1992	25,985	19,332	6,653	1,619	47	1,572	1,491	1,442	49	49	81	81	26,113	17,937	8,176	102	70	32
1993	26,317	19,315	7,002	2,203	41	2,163	1,470	1,409	60	60	76	76	27,051	17,946	9,105	105	70	35
1994	27,124	19,638	7,486	2,635	47	2,588	1,289	1,211	78	78	74	74	28,469	18,474	9,995	109	71	38
1995	27,270	19,367	7,903	3,274	60	3,214	1,348	1,267	82	82	71	71	29,196	18,160	11,036	111	69	42
1996	28,495	19,181	9,314	4,500	85	4,414	1,405	1,248	157	157	67	67	31,590	18,018	13,572	119	68	51
1997	28,497	17,963	10,534	5,376	104	5,272	1,715	1,548	167	167	66	66	32,158	16,519	15,639	121	62	59
1998	29,003	17,776	11,227	6,671	179	6,492	864	764	100	100	63	63	34,810	17,191	17,619	130	64	66
1999	29,428	17,816	11,612	7,820	469	7,351	774	595	179	179	61	61	36,474	17,690	18,783	134	65	69
2000	29,381	17,475	11,906	8,030	408	7,622	914	735	195	195	62	62	36,498	17,148	19,350	129	61	69
2001	27,653	15,121	12,532	8,755	665	8,090	681	514	167	167	61	61	35,727	15,272	20,455	125	54	72
2002	28,626	15,200	13,426	9,368	907	8,461	634	439	195	195	62	62	37,360	15,668	21,692	130	54	75
2003	28,321	14,706	13,615	10,386	1,306	9,080	567	410	157	157	60	60	38,140	15,602	22,538	131	54	77
2004	28,936	14,665	14,271	11,870	2,023	9,847	685	492	193	193	60	60	40,120	16,196	23,924	136	55	81
2005	29,315	14,330	14,985	12,965	2,421	10,544	580	411	169	169	59	59	41,700	16,340	25,360	141	55	85
2006	28,388	13,428	14,960	11,974	1,848	10,126	602	424	178	178	60	60	39,760	14,852	24,908	133	50	83
2007	27,006	12,243	14,763	7,916	1,087	6,829	817	553	264	264	69	69	34,105	12,777	21,328	113	42	71
2008	23,240	10,237	13,003	4,425	759	3,666	1071	621	450	450	80	80	26,594	10,375	16,219	87	34	53
2009	18,206	8,608	9,598	3,372	616	2,756	653	473	180	180	78	78	20,915	8,741	12,174	68	28	40
2010	19,430	9,131	10,299	3,266	439	2,827	1074	795	279	279	80	80	21,622	8,775	12,847	70	28	41
2011	19,019	8,980	10,039	3,406	478	2,928	1079	740	339	339	79	79	21,346	8,718	12,628	68	28	40

Source: Howard 2013, Table 38.

NA, not available.

Table 10—Paper shipments, imports, exports, and consumption, 1965–2011

Year	Shipments (thousand tons)	Imports (thousand tons)	Exports (thousand tons)	Percent of consumption from production for domestic use	Consumption (thousand tons)	Per capita consumption (lb)
1965	19,157	6,528	491	74	25,194	259
1966	20,725	7,128	530	74	27,323	278
1967	20,926	6,805	501	75	27,230	274
1968	22,181	6,625	529	77	28,277	282
1969	23,449	7,040	517	77	29,972	296
1970	23,351	6,835	534	77	29,652	289
1971	23,722	6,915	550	77	30,087	290
1972	25,359	7,237	559	77	32,037	305
1973	26,797	7,832	601	77	34,028	321
1974	26,863	8,094	909	76	34,049	318
1975	23,260	5,953	947	79	28,266	262
1976	26,577	6,866	928	79	32,515	298
1977	27,722	7,162	716	79	34,168	310
1978	28,320	8,211	543	77	35,988	323
1979	29,666	8,380	601	78	37,445	333
1980	30,116	7,915	907	79	37,124	326
1981	30,901	7,649	1,008	80	37,542	326
1982	30,245	7,206	840	80	36,611	315
1983	32,802	8,189	774	80	40,217	343
1984	34,446	9,905	811	77	43,540	369
1985	34,061	10,260	779	76	43,542	365
1986	35,550	10,641	884	77	45,307	376
1987	36,919	11,494	921	76	47,492	391
1988	38,353	11,843	1,102	76	49,094	401
1989	38,266	11,494	1,466	76	48,295	391
1990	39,361	11,569	1,519	77	49,411	395
1991	39,084	10,313	2,072	78	47,325	375
1992	40,973	10,786	2,635	78	49,124	385
1993	41,745	11,905	2,587	77	51,063	396
1994	43,356	12,384	2,980	77	52,760	405
1995	42,868	12,874	3,011	76	52,731	401
1996	42,481	11,694	3,500	77	50,676	382
1997	44,697	13,028	3,599	76	54,127	404
1998	44,777	12,872	3,288	76	54,361	402
1999	45,552	14,946	3,405	74	57,093	418
2000	45,519	15,373	3,767	80	57,125	405
2001	42,104	14,502	3,389	79	53,217	374
2002	41,510	14,502	3,111	79	52,901	368
2003	40,367	16,224	3,107	76	53,484	367
2004	41,814	16,938	3,464	76	55,288	376
2005	41,321	15,995	3,739	77	53,578	361
2006	41,380	15,648	3,690	78	53,338	356
2007	41,170	14,408	4,346	80	51,231	340
2008	39,955	12,892	4,716	83	48,132	316
2009	33,808	9,671	4,216	86	39,263	256
2010	35,508	9,284	4,700	89	40,092	259
2011	34,344	8,887	4,782	89	38,449	246

Source: Howard 2013, Table 44.

Table 11—Paperboard production, imports, exports, and consumption, 1965–2011

Year	Production (thousand tons)	Imports (thousand tons)	Exports (thousand tons)	Percent of consumption from production for domestic use	Consumption (thousand tons)	Per capita consumption (lb)
1965	21,332	8	1,039	100	20,301	209
1966	23,179	50	1,166	100	22,063	224
1967	22,819	13	1,334	100	21,498	216
1968	24,904	18	1,596	100	23,326	232
1969	26,376	11	1,860	100	24,527	242
1970	25,368	10	1,899	100	23,479	229
1971	26,019	17	2,115	100	23,921	230
1972	28,483	8	2,231	100	26,260	250
1973	29,549	33	2,015	100	27,567	260
1974	28,894	34	2,149	100	26,779	250
1975	24,736	8	1,453	100	23,291	216
1976	28,416	13	1,709	100	26,720	245
1977	28,935	28	1,830	100	27,133	246
1978	30,251	100	2,040	100	28,311	254
1979	31,404	82	2,263	100	29,223	260
1980	30,926	98	3,334	100	27,690	243
1981	31,208	130	2,622	100	28,716	250
1982	29,045	115	2,654	100	26,506	228
1983	32,146	168	3,012	99	29,302	250
1984	34,002	243	2,731	99	31,514	267
1985	32,922	184	2,511	99	30,595	257
1986	35,355	281	3,088	99	32,548	270
1987	37,442	361	3,190	99	34,613	285
1988	38,234	341	3,137	99	35,438	289
1989	38,519	533	3,247	99	35,805	290
1990	39,318	626	3,644	98	36,300	291
1991	40,343	773	4,363	98	36,753	291
1992	41,895	944	4,386	98	38,453	301
1993	43,113	1,085	4,248	97	39,950	310
1994	45,724	1,267	4,556	97	42,435	326
1995	46,641	1,418	4,610	97	43,449	330
1996	47,900	1,329	5,618	97	43,611	329
1997	50,332	1,497	6,769	97	45,060	336
1998	49,749	1,666	5,815	96	45,600	337
1999	51,059	1,971	6,072	96	46,958	344
2000	48,972	1,983	4,934	94	46,021	326
2001	46,809	1,948	4,670	94	44,087	310
2002	48,126	2,065	5,865	92	44,326	308
2003	48,018	1,884	3,131	97	46,771	321
2004	50,085	2,098	3,278	98	48,905	333
2005	49,710	1,963	3,387	97	48,287	326
2006	50,420	2,076	3,395	98	49,101	339
2007	50,400	1,913	3,719	96	48,594	322
2008	48,591	1,783	3,939	96	46,435	305
2009	44,491	1,547	3,534	96	42,504	277
2010	47,460	1,860	4,081	95	45,239	292
2011	47,659	1,783	4,549	94	44,893	288

Source: Howard 2013, Table 45.

Table 12—Wood energy consumption per capita by end use and in roundwood equivalent, 1949–2011

Year	Residential (million Btu)	Commercial (million Btu)	Industrial (million Btu)	Electric power (million Btu)	Total (million Btu)	Total in roundwood equivalent (cubic feet)
1949	7.2	0.1	3.2	0.0	10.5	42
1950	6.7	0.1	3.6	0.0	10.4	42
1951	6.3	0.1	3.6	0.0	10.1	40
1952	5.8	0.1	3.6	0.0	9.5	38
1953	5.3	0.1	3.6	0.0	9.0	36
1954	5.0	0.1	3.6	0.0	8.7	35
1955	4.8	0.1	3.9	0.0	8.7	35
1956	4.5	0.1	4.0	0.0	8.5	34
1957	4.2	0.1	3.6	0.0	7.9	32
1958	4.0	0.1	3.6	0.0	7.7	31
1959	3.7	0.1	4.0	0.0	7.7	31
1960	3.5	0.1	3.8	0.0	7.4	30
1961	3.2	0.1	3.9	0.0	7.2	29
1962	3.1	0.1	4.0	0.0	7.1	28
1963	2.9	0.1	4.2	0.0	7.1	28
1964	2.6	0.1	4.4	0.0	7.1	28
1965	2.4	0.0	4.5	0.0	7.0	28
1966	2.3	0.0	4.6	0.0	7.0	28
1967	2.2	0.0	4.6	0.0	6.8	27
1968	2.1	0.0	4.9	0.0	7.1	29
1969	2.1	0.0	5.1	0.0	7.2	29
1970	2.0	0.0	5.0	0.0	7.0	28
1971	1.9	0.0	5.1	0.0	7.0	28
1972	1.8	0.0	5.4	0.0	7.2	29
1973	1.7	0.0	5.5	0.0	7.3	29
1974	1.8	0.0	5.5	0.0	7.3	29
1975	2.0	0.0	5.0	0.0	7.0	28
1976	2.2	0.0	5.6	0.0	7.9	32
1977	2.5	0.0	5.9	0.0	8.4	34
1978	2.8	0.1	6.4	0.0	9.2	37
1979	3.3	0.1	6.3	0.0	9.7	39
1980	3.8	0.1	7.1	0.0	11.0	44
1981	3.8	0.1	7.0	0.0	11.0	44
1982	4.1	0.1	6.6	0.0	10.8	43
1983	4.0	0.1	7.3	0.0	11.4	45
1984	3.9	0.1	7.2	0.0	11.2	45
1985	3.8	0.1	7.0	0.0	10.9	44
1986	3.7	0.1	6.8	0.0	10.6	42
1987	3.5	0.1	6.5	0.0	10.2	41
1988	3.6	0.1	6.7	0.0	10.5	42
1989	3.7	0.1	5.7	1.2	10.8	43
1990	2.3	0.1	5.1	1.3	8.8	35
1991	2.5	0.2	4.8	1.4	8.8	35
1992	2.6	0.2	4.9	1.5	9.1	36
1993	2.1	0.2	4.9	1.5	8.7	35
1994	2.1	0.2	5.2	1.5	9.0	36
1995	2.3	0.2	5.4	1.4	9.3	37
1996	2.3	0.2	5.5	1.4	9.4	37
1997	1.6	0.2	5.7	1.3	8.8	35
1998	1.5	0.2	5.9	1.2	8.7	35
1999	1.5	0.2	6.4	1.4	9.5	38
2000	1.6	0.2	6.3	1.5	9.5	38
2001	1.3	0.3	5.1	1.2	7.8	31
2002	1.3	0.2	4.9	1.3	7.8	31
2003	1.4	0.2	4.7	1.4	7.7	31
2004	1.4	0.2	5.0	1.3	8.0	32
2005	1.4	0.2	4.9	1.4	7.9	32
2006	1.3	0.2	5.1	1.4	8.0	32
2007	1.4	0.2	4.7	0.6	6.9	28
2008	1.5	0.2	4.4	0.6	6.7	28
2009	1.4	0.2	3.9	0.6	6.1	24
2010	1.4	0.2	4.2	0.6	6.4	26
2011	1.3	0.2	4.2	0.6	6.3	25

Sources: Howard 2013, Table 60, USDOE EIA 2001, USDOE EIA 2002, USDOE EIA 2008, USDOE EIA 2013.

Table 13—Wood and paper product consumption per capita (pounds per capita), 1970–2011

Year	Wood products consumption	Recovered paper consumption	Total wood products and recovered paper consumption
1970	1,181	115	1,296
1971	1,246	117	1,362
1972	1,299	123	1,423
1973	1,316	133	1,449
1974	1,197	131	1,327
1975	1,051	109	1,160
1976	1,186	125	1,311
1977	1,262	128	1,390
1978	1,299	133	1,431
1979	1,275	136	1,411
1980	1,144	131	1,275
1981	1,094	131	1,225
1982	1,065	124	1,189
1983	1,208	133	1,341
1984	1,304	142	1,446
1985	1,274	137	1,411
1986	1,330	149	1,479
1987	1,387	154	1,541
1988	1,363	161	1,524
1989	1,351	164	1,514
1990	1,307	174	1,481
1991	1,211	187	1,398
1992	1,234	205	1,439
1993	1,261	217	1,478
1994	1,274	235	1,509
1995	1,252	239	1,490
1996	1,231	256	1,487
1997	1,253	263	1,516
1998	1,271	265	1,535
1999	1,287	269	1,556
2000	1,249	251	1,500
2001	1,185	242	1,427
2002	1,189	241	1,430
2003	1,193	231	1,424
2004	1,253	236	1,489
2005	1,250	229	1,479
2006	1,242	238	1,480
2007	1,060	225	1,285
2008	845	213	1,058
2009	707	189	896
2010	695	202	898
2011	712	194	906

Source: Howard 2011, Tables 1, 8, and 46.

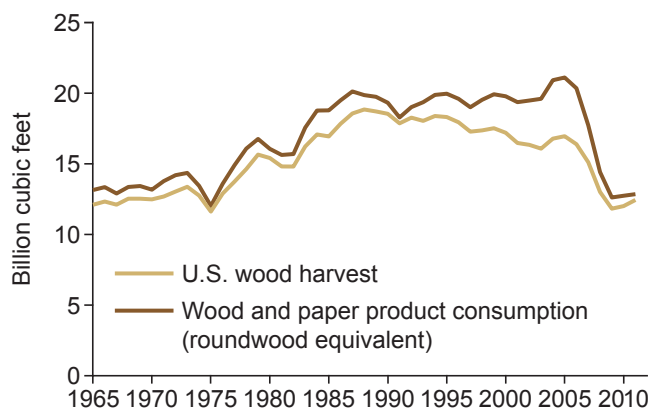


Figure 1—U.S. wood production (harvest) and wood and paper product and fuelwood consumption, in roundwood equivalents, 1965–2011.

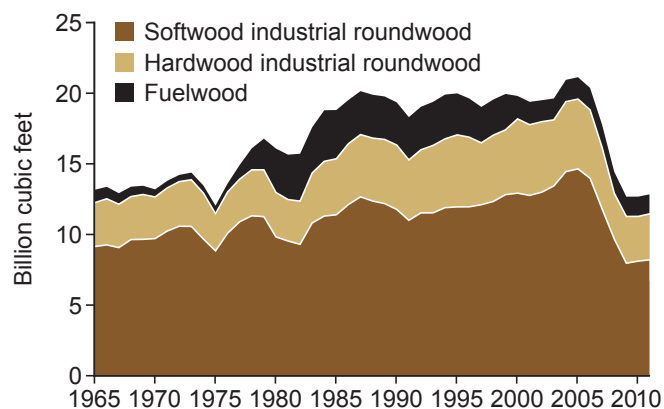


Figure 3—U.S. wood and paper product consumption – subdivided into softwood, hardwood and fuelwood, in roundwood equivalents, 1965–2011 (each line is added to the line below).

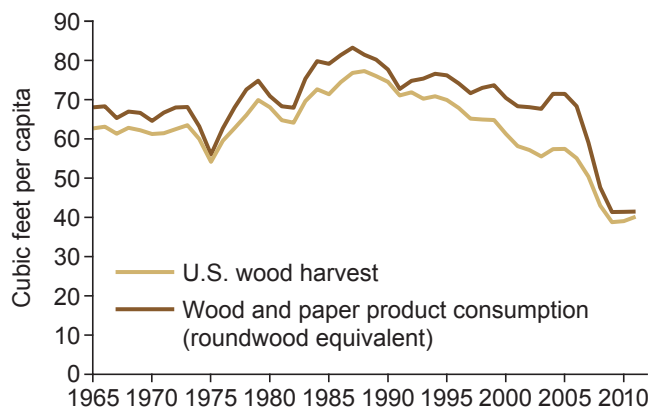


Figure 2—Per capita wood production (harvest) and wood and paper product production in roundwood equivalent, 1965–2011.

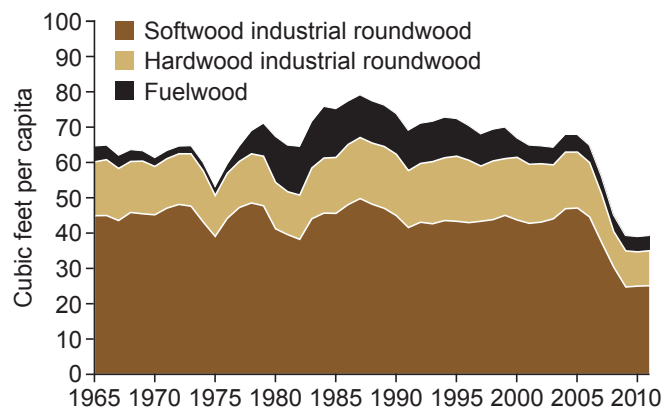


Figure 4—Per capita U.S. wood and paper product consumption – subdivided into softwood, hardwood, and fuelwood, in roundwood equivalents, 1965–2011 (each line is added to the line below).

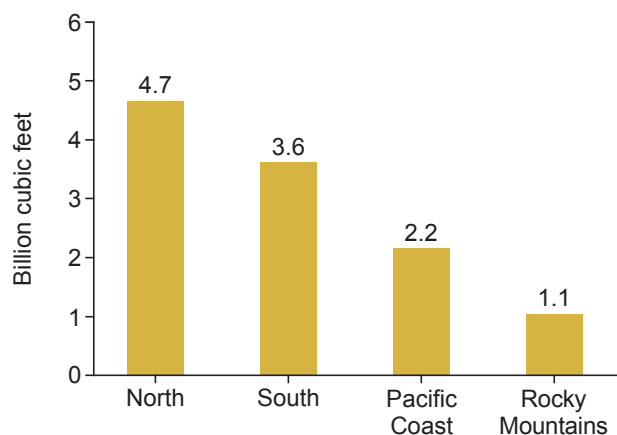


Figure 5—Estimated wood and paper products consumption by RPA region assuming uniform per capita consumption, in roundwood equivalent, 2011.