



United States  
Department of  
Agriculture

Forest Service

Forest  
Products  
Laboratory

Research  
Paper  
FPL-RP-615



# U.S. Timber Production, Trade, Consumption, and Price Statistics 1965–2002

James L. Howard



## Abstract

This report presents annual data but is published every 2 years. The data present current and historical information on the production, trade, consumption, and prices of timber products in the United States. The report focuses on national statistics but includes some data for individual States and regions and for Canada. The data were collected from industry trade associations and government agencies. They are intended for use by forest land managers, forest industries, trade associations, forestry schools, renewable resource organizations, individuals in the major timber producing and consuming countries of the world, and the general public. A major use of the data is tracking industry production and consumption trends with time. One of the major shifts occurring recently in the wood using industry is that both production and consumption of roundwood per capita have declined even though consumption of products per capita is increasing—due to increased paper recycling, increased imports, and increased processing efficiency. Consumption per capita in roundwood equivalent has decreased during the past 15 years from 80 ft<sup>3</sup> per capita to 67 ft<sup>3</sup> per capita in 2002. In the 1960s and 1970s, consumption averaged about 70 ft<sup>3</sup> per capita.

Keywords: production, consumption, import, export

## Acknowledgments

This update required assistance from several dedicated individuals. Jennifer Larson and Errin Hiltbrand, computer assistants in the Timber Demand and Technology Assessment Project, created and updated computer files that will aid in future updates of this report. Jennifer also helped with literature searches to locate much of the needed data and performed many of the statistical procedures such as changing base years and converting to required units. Jennifer also updated the graphics in this report and assisted in the overall report layout. Thanks to Irene Durbak for her continued dedication and consultation in the area of foreign trade, David McKeever for his consultation on the lumber and solid wood section, and Peter Ince for his continued consultation in the area of pulp, paper, and paperboard.

December 2003

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Howard, James L. 2003. U.S. timber production, trade, consumption, and price statistics 1965 to 2002. Res. Pap. FPL-RP-615. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 90 p.

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# **U.S. Timber Production, Trade, Consumption, and Price Statistics 1965 to 2002**

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# Preface

This report includes 59 tables of data for 1965 through 2002. Data for the years prior to 1965 can be found in earlier reports in the series. Since the last publication of this series in 2001 (data compiled through 1999), many agencies have discontinued the collection of various data. This change is indicated on the tables, where applicable. Some data were derived from mathematical calculations, and some show conversions from different units of measurement. Throughout the tables and text, billion denotes  $10^9$ . The references cited in the text and in the tables are listed separately. Text references are listed in literature cited. The sources for data in the tables are listed in an annotated bibliography, which is cross-referenced to the tables. This report is available through the Forest Products Laboratory web site (<http://www.fpl.fs.fed.us/>). Tables of conversion factors and a map of Forest Service Administrative regions follow.

## Factors for converting units of measurement to metric or English units<sup>a</sup>

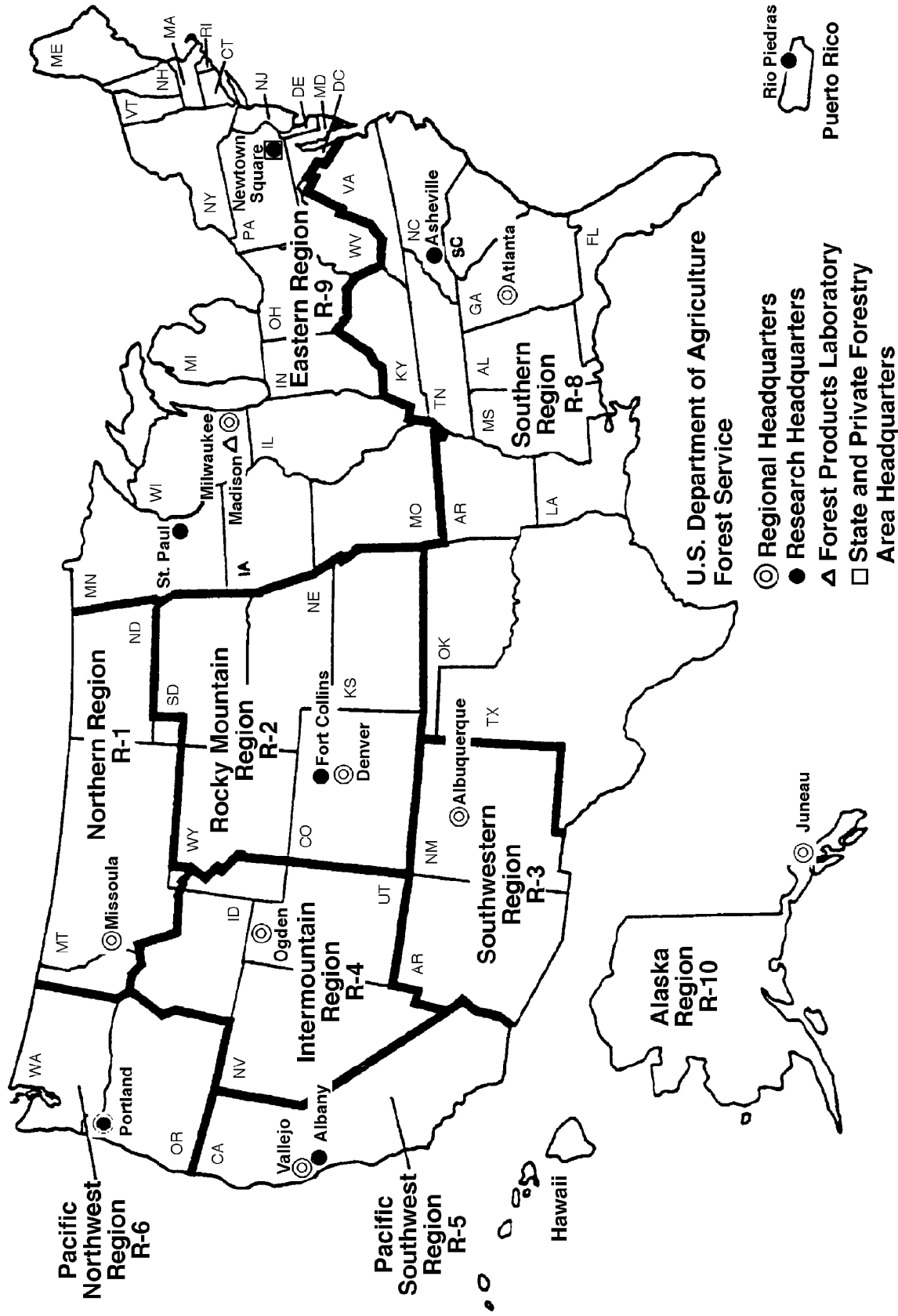
Inch-pound unit	Conversion factor	Metric or English unit
square foot	0.0929	square meter
cubic foot (log trade)	0.028317	cubic meter
short tons (chips)	0.0185	cubic feet
board foot (hardwood lumber)	0.00236	cubic meter
board foot (softwood lumber)	0.00170	cubic meter
board foot (lumber export and imports)	0.00236	cubic meter
board foot (logs)	0.00453	cubic meter
1,000 square feet (1/8-in. panels)	0.295	cubic meters
1,000 square feet (1/4-in. panels)	0.59	cubic meters
1,000 square feet (3/8-in. panels)	0.885	cubic meters
1,000 square feet (3/8-in. panels)	2.036	square feet (surface measure)
1,000 square feet (1/2-in. panels)	1.18	cubic meters
1,000 square feet (3/4-in. panels)	1.77	cubic meters
cubic meters	0.0023	1 million square feet (surface measure)
square meters	10.7639	square feet (surface measure)
cord	2.27	cubic meter
cord	2.65	green ton
tons	0.0003	1,000 cords
ton (short ton)	0.907	metric ton
pound	0.453592	kilogram
inch	25.4	Millimeter

## Factors for converting standard units to short tons<sup>a</sup>

Product	Standard unit	Weight of wood per standard unit (short tons)
Roundwood products		
Softwood	1,000 cubic feet	17,500 air dried
Hardwood	1,000 cubic feet	20,000 air dried
Softwood	cord (80 cubic feet)	1.400
Hardwood	cord (80 cubic feet)	1.600
Lumber		
Softwood	1,000 board feet	0.974
Hardwood	1,000 board feet	1.680
Laminated veneer lumber	cubic foot	17.5
Structural panels		
Softwood plywood	1,000 square feet, 3/8-in. basis	0.544
Waferboard and OSB <sup>b</sup>	1,000 square feet, 3/8-in. basis	0.866
Medium-density fiberboard	1,000 square feet, 3/4-in. basis	1.406
Nonstructural panels		
Hardboard	1,000 square feet, 1/8-in. basis	0.380
Insulation board	1,000 square feet, 1/2-in. basis	0.367
Particleboard	1,000 square feet, 3/4-in. basis	1.406
Hardwood plywood	1,000 square feet, 3/8-in. basis	0.657
Hardwood plywood	1,000 square feet, surface measure	0.2
Pulp, paper, and board	thousand tons	1.0
Other industrial products	thousand cubic feet	16.5

<sup>a</sup>U.S. Department of Agriculture, Forest Service (20,51).

<sup>b</sup>Oriented strandboard.



## Highlights

Economic activity in most of the major timber products markets increased in 2002. New housing construction, which accounts for more than a third of the United States consumption of softwood lumber and structural panels and for substantial consumption of other softwood and hardwood products, strengthened considerably in 2001 and continued to be strong in 2002. The consumption of oriented strandboard (OSB) during 2002 continued to exceed plywood consumption even as industry globalization continued to have a negative impact on some forest products sectors such as furniture manufacturing. The total industrial production index, an important demand determinant for pallet lumber, containerboard, and some grades of paper, fell 0.7% in 2002 (Table 1). Private nonresidential construction expenditures continued to decline during 2002.

The United States housing market remained strong during 2002, but some sectors did weaken. Sales of both new and previously occupied homes surged to record levels. More than 1.7 million new housing units were started, and \$173 billion was spent to maintain and improve the existing housing stock. The single-family housing market was particularly strong, and the U.S. home-ownership rate climbed to a new record high. Starts of conventionally built homes (excluding mobile homes) rose by 6.3% from a year earlier to 1.7 million units during 2002. Home sales reached a new record high during 2002 with 6.5 million units sold. Of the 6.5 million units sold, 5.598 million units were previously occupied homes and 979,000 were new units. In terms of market share within region, for-sale housing was strongest in the West where the 269,000 for-sale units started in 2002 represented 80% of all sales begun in that region. Several other indicators of demand for wood products declined in 2002 compared with 2001. The manufacturing sector as measured by industrial production declined 0.9% during 2002 compared with 2001. The decline in furniture and fixtures output (a determinant for pallet lumber, containerboard, and some grades of paper) is reflected in the decline in durable goods production, which fell 1.1% in 2002 from 2001. Total industrial production declined in 2002, falling by 0.7%, but production at utilities increased by 4.2%. But the increase in economic growth and very low mortgage rates helped the lumber industry exceed production levels of a year earlier during 2002. United States softwood lumber production exceeded 1-year-ago levels by 5.1%.

United States consumption of wood and paper products requires input to make products produced in the United States (for domestic consumption), plus roundwood is required to make imported products. This consumption of roundwood to meet needs of U.S. consumers (including fuelwood) increased 1.0% per year between 1965 and 1995, from 13.3 to 19.2 billion ft<sup>3</sup>. This consumption declined to 19.1 billion ft<sup>3</sup> in 1997 and has since increased to 19.7 billion ft<sup>3</sup> in 2002 (Table 5a). United States production of wood and paper products plus fuelwood use required roundwood harvest from U.S. forests, which also increased 1.0% per year from 1965 to 1995, from 12.3 to 17.6 billion ft<sup>3</sup>. In contrast to roundwood needed for U.S. product consumption, U.S. roundwood harvest for U.S. production declined from 17.6 billion ft<sup>3</sup> in 1995 to 16.5 billion ft<sup>3</sup> in 2002.

Despite record demand from the housing sector fueled by very low mortgage rates, which drove high demand in the lumber industry during 2002, U.S. National Forest sawlog stumpage prices continued to decline in current dollars for Douglas Fir and Southern Pine in recent years. Southern Pine recovered modestly in 2001, but Douglas Fir continued downward. Increasing Canadian lumber imports, as well mill closures in the western U.S., contributed to the slump in softwood prices.

During 2002, apparent consumption of most timber products increased compared with 1-year-ago levels. Although western production of softwood lumber from the California redwood region was down 8.5%, western softwood lumber production increased by 3.6%. Because of declining markets for hardwood lumber, production decreased by 6.5% in 2002. The combined roundwood and forest chip production for pulp and OSB mills declined by 1.0% in 2002. Softwood plywood production reversed its trend, increasing slightly in 2002. For the first time, consumption of OSB exceeded plywood consumption during 1998 and remained greater than plywood consumption through 2002. Shipments of particleboard and medium-density fiberboard (MDF) were up 4.0% and 17.9%, respectively, for 2002. Tremendous growth in U.S. imports of Chinese furniture presents an increasing problem for American furniture manufacturers and the companies that supply them with nonstructural panels such as particleboard and MDF. Chinese furniture exports to the United States rose 13% in value in 2002, and China has become the world's largest furniture exporter.

The long-term outlook is one of continued growth in the demand for most timber products. Timber volumes supplied by the National Forest have fallen sharply in recent years. In 2002, valued at about \$164 million, National Forest harvest totaled 1.7 billion board feet (2.3% of total U.S. timber harvest, down 75% from the peak in 1991). Therefore private timber harvest and imports will continue to be major contributors in meeting the needs of increasing demand for most timber products.

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# U.S. Timber Production, Trade, Consumption, and Price Statistics 1965 to 2002

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## General Economic Trends

**Timber products markets stay strong during 2002—continued growth forecast for 2003**

The decade-long economic expansion came to a screeching halt in 2001 as the U.S. economy entered a downturn. The U.S. economy rebounded and performed well in 2002 and continues to grow into 2003. Economic activity, as measured by the

Gross Domestic Product (GDP), rose at an annual rate of 2.4% in 2002 to \$9,440.2 billion (1996 dollars). This was up from \$9,214.2 billion (1996 dollars) during 2001. U.S. economic activity as measured by the GDP continued to increase slightly in the first quarter 2003, increasing by 1.4%, then followed by 2.4% growth in the second quarter 2003. Real GDP in private-service industries led the broad-based economic growth in 2002, increasing 2.8% followed by 1.3% growth in real GDP in private-goods-producing industries. The increase in real GDP growth of 1.8% in manufacturing was mixed. Nondurable goods manufacturing increased 4.3% but was offset by a slight decline in durable goods manufacturing of -0.1%. Real GDP growth in retail trade increased 5.9%. Electric, gas, and sanitary services and wholesale trade all increased sharply. Prices paid by U.S. residents for goods and services, the price index for gross domestic purchases, increased 3.6% during the first quarter 2003 after increasing 1.8% during the fourth quarter 2002. This increase was driven by sharply higher energy prices. Growth in per capita personal income slowed during 2002 to 1.7% down from 2.2% in 2001.

New housing construction, which accounts for more than a third of U.S. annual consumption of softwood lumber and structural panels and for consumption of substantial volumes of other softwood and hardwood products, established new highs for 2002 (Tables 1 and 2, Fig. 1). Starts of single-family units led the increase, but multi-family housing starts also increased by 4.6% during 2002, the first increase since 1998. Housing starts for 2002 were 1.7 million, and sales of new houses set a new record in 2002 of 977,000 units.

The home ownership rate reached 69.2%, also a new high. Builders' expectations for housing starts in 2003 remain strong as mortgage rates for the first 6 months of the year have increased slightly but remain at historically low levels. New housing and repair and remodeling continue to drive wood product demand. For the first 5 months ending in May, starts were up compared with 2002. Sales of new single-family homes increased throughout the second quarter, rising 12.5% from April. Existing home sales were also up in May 2003, gaining 1.2% to an adjusted 5.920 million. 2003 could be another record year for home construction.

Shipments of manufactured housing declined further during 2002 to 168,000 units of production. This was 24,000 units less than what was shipped in 2001. In the first 4 months of 2003, manufactured housing shipments were well behind 2002 shipments for this period. The seasonally adjusted shipments for 2002 totaled 134,000 units.

Investment in residential repair and remodeling rose to \$173.3 billion (current dollars) in 2002, increasing about 9% compared with 2001. About two-thirds of the improvements were additions and alterations, and the balance was replacements of major housing components such as roofs or heating systems. Actual expenditures for repairs to residential properties in 2002 amounted to an estimated \$47.3 billion during 2002 compared with \$47.4 billion in 2001. Investment for

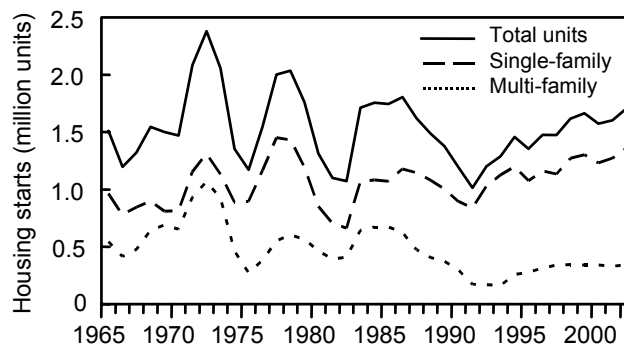


Figure 1—Housing starts by type of unit, 1965–2002.

new residential improvements was \$125.9 billion in 2002, up from \$110.3 billion in 2001. Investment for new residential units has been stronger than for nonresidential structures. Spending on new residential housing units was \$240 billion (1996 dollars) in 2002 compared with \$139 billion dollars for nonresidential building construction.

Industrial production, an important demand determinant for pallet lumber, containerboard, and some grades of paper, declined 5.4% in 2002 compared with 2000 levels and fell 0.7% from 1 year ago (Table 1, Fig. 2). Output of the furniture and fixtures industry, a major market for hardwood lumber, plywood, veneer, particleboard, and hardboard as measured by durable goods production, fell 11.3% in 2002. Further decreases are likely because of continued growth in Chinese furniture imports.

## Timber Production, Prices, Trade, and Consumption

**Industrial roundwood production fell less than 1% in 2002**

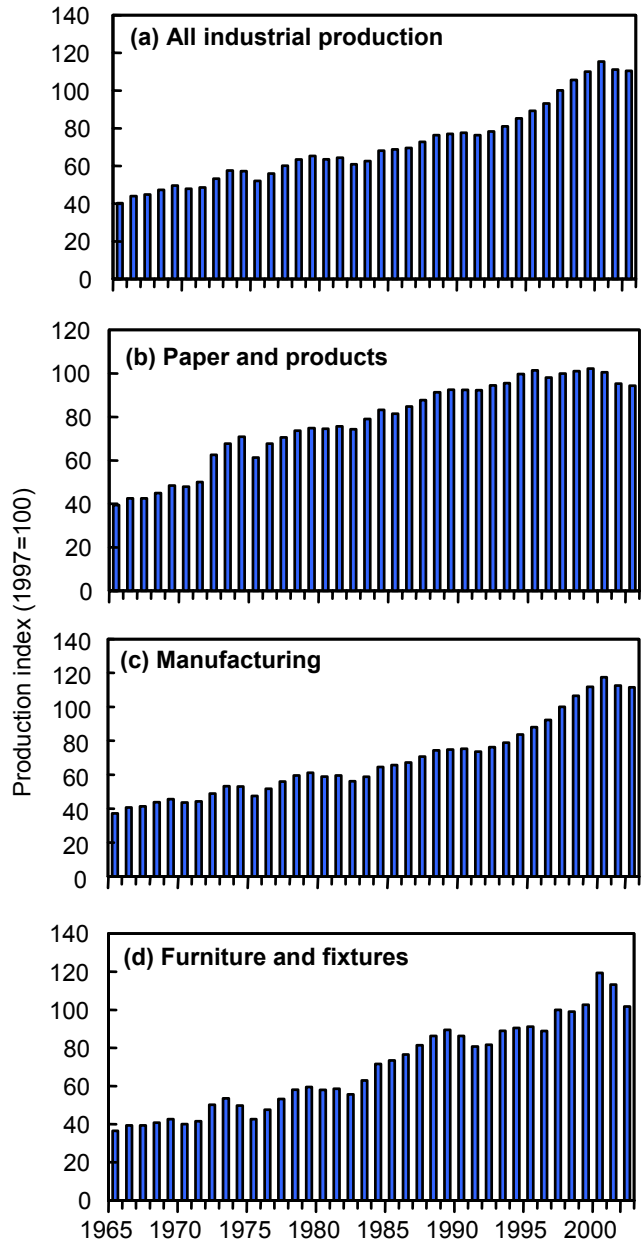
Industrial roundwood production decreased to 16.5 billion ft<sup>3</sup> in 2002, down slightly from the 16.6 billion ft<sup>3</sup> of production of a year earlier (Fig. 3). The highpoint for roundwood harvest was 1991 when industrial roundwood production was 18.8 billion ft<sup>3</sup>.

The lumber and engineered wood products sectors are the main contributors to the current volume level. The production of saw logs used in the domestic manufacture of lumber rose slightly in 2002 to 7.3 billion ft<sup>3</sup>. This represented about 49% of total industrial roundwood production. Softwood lumber production represented about 52% of softwood roundwood harvest, and hardwood lumber made up 42%. Pulpwood roundwood, which composed about 38% of total industrial roundwood, declined 1% from a year earlier. Although roundwood pulpwood production has fallen since the late 1990s, during the 1990s the pulpwood share of industrial roundwood production increased close to 1 billion ft<sup>3</sup> since 1991. During that time, roundwood used to produce lumber increased slightly.

## Lumber Production, Prices, Trade, and Consumption

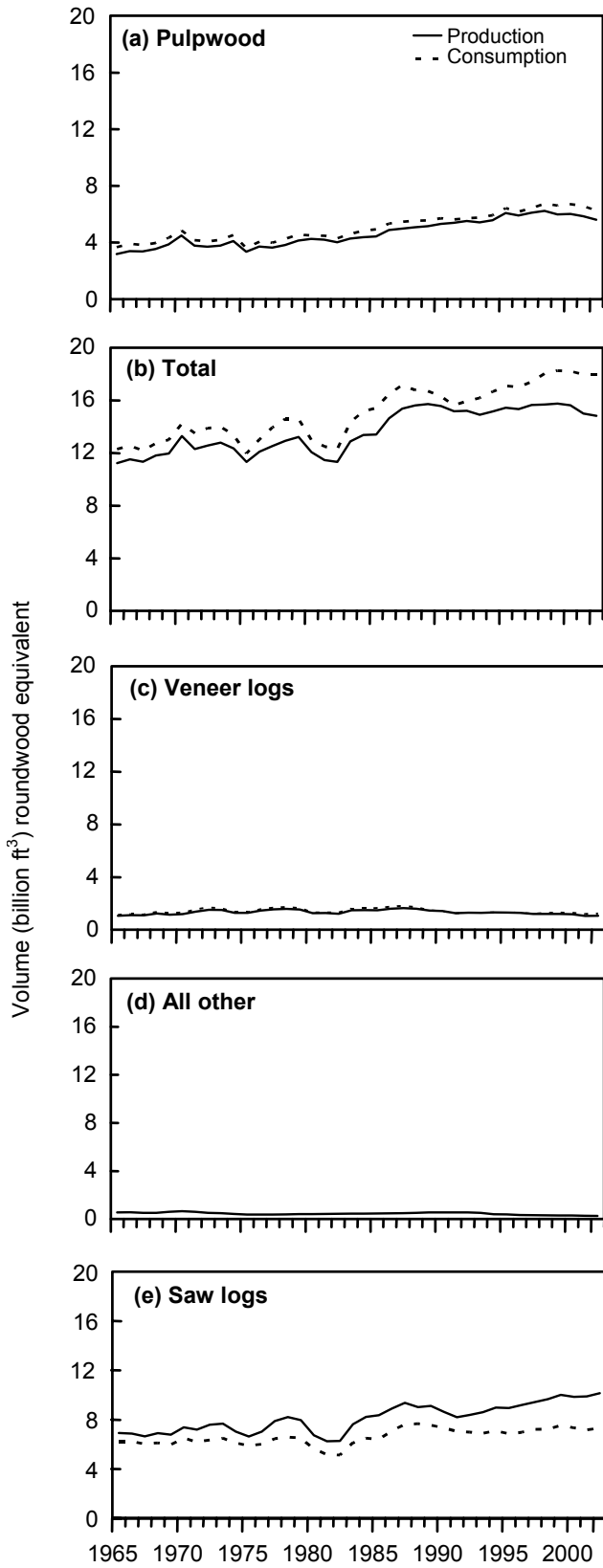
### Lumber

**Production**—An estimated 48.0 billion board feet ( $\times 10^9$  bf) of lumber (softwoods plus hardwoods) was produced in the United States in 2002 (Table 28). This is consistent with near record high production levels since 1999, but about  $1.5 \times 10^9$  bf below the record high production of  $49.5 \times 10^9$  bf in 1999 (Table 28, Fig. 4). Lumber production

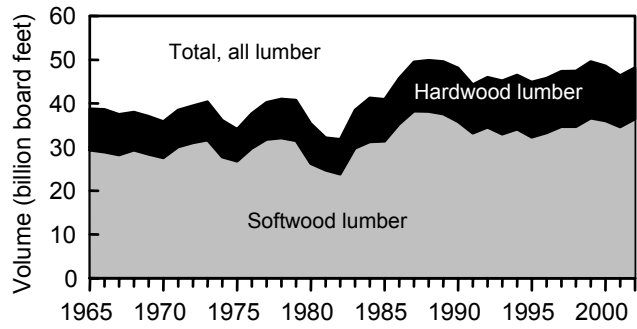


**Figure 2—Economic activity in major industrial timber markets.**

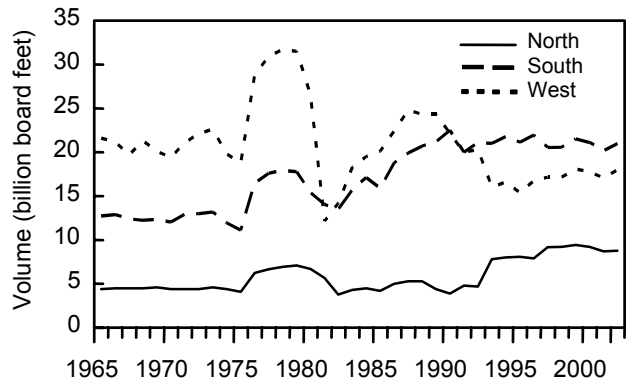
climbed upward from 1965 to a peak in 1988 but then declined. Lumber has again been increasing modestly since 1995 but remains below record output levels of the late 1980s. In the late 1980s, legislation was passed to curtail timber harvesting on Federally owned lands in the western United States. Many western mills dependent on Federal timber were forced to dramatically reduce production or close entirely. This resulted in an overall decline in lumber production, shifts in production to other regions, and increased levels of foreign imports. These trends have continued through 2002.



**Figure 3—Production and consumption of timber products.**



**Figure 4—U.S. lumber production by wood type, 1965–2002.**



**Figure 5—U.S. lumber production by region, 1965–2002.**

Softwood lumber production in 2002 was about  $36.4 \times 10^9$  bf (Table 28, Fig. 4), 76% of total lumber production. Hardwood lumber production was about  $11.5 \times 10^9$  bf. The overall decline in lumber production in the 1990s was entirely at the expense of softwood lumber. Softwood lumber production has had a bumpy ride during the first 3 years of this decade but is generally growing toward record production levels, while hardwood lumber production has generally dropped downward from the high production levels of the late 1990s.

In 2002, the South was the largest lumber-producing region in the United States at  $20.9 \times 10^9$  bf (Table 29, Fig. 5). The West was the second largest region at  $17.9 \times 10^9$  bf, followed by the North at  $8.6 \times 10^9$  bf. The West, although the second largest overall producing region, has traditionally been the largest softwood lumber producing region, with nearly 97% ( $17.0 \times 10^9$  bf) of its total production being softwood species. Softwood lumber production in the South was about 78% of its total production, nearly equal in volume to that of the West. The North produced  $2.2 \times 10^9$  bf softwood lumber in 2002.

Until recently, the West had been the largest lumber-producing region in the United States. In 1966 for example, more than half (55%) of all lumber produced in the United

States came from the West. Much of this production came from old-growth timber on Federally owned lands in the Pacific Coast (Washington, Oregon, and California). During the next 25 years, the proportion of lumber coming from the West slowly fell to just under half, due to declining levels of timber from public lands, and increasing levels of production in the South. Then in the late 1980s and early 1990s, large areas of Federally owned land in the West were removed from harvest. This removal further exacerbated the situation. In 1990, the South became the Nation's largest lumber-producing region, accounting for 35% of all softwood lumber and 80% of all hardwoods. Since 1990, softwood lumber production in the South has increased and that in the West has decreased. Currently, both regions produce nearly equal amounts of softwood lumber.

Total lumber production in the North remained fairly steady from 1965 through the early 1990s at about  $4.5 \times 10^9$  bf per year (Table 29, Fig. 5). It then increased rapidly to  $9.2 \times 10^9$  bf. Nearly all of this increase was in hardwood lumber production.

**Imports and exports**—In 2002, lumber imports to the United States from all countries totaled  $21.7 \times 10^9$  bf, an all time record high (Table 28 and 31). During the same year, exports from the United States to all countries totaled just  $2.2 \times 10^9$  bf (Tables 28 and 32). The difference,  $19.5 \times 10^9$  bf, was net foreign trade and represented lumber consumption in the United States in excess of that which was produced domestically. Net foreign trade represented about one-fourth of total domestic lumber consumption in 2002. With few exceptions, lumber imports to the United States have grown steadily since 1965. Nearly all of the growth was in softwood lumber imports. In 1965, softwood lumber imports totaled  $4.9 \times 10^9$  bf. By 2002, softwood lumber imports exceeded  $21.0 \times 10^9$  bf, an increase of  $16.1 \times 10^9$  bf. In contrast, hardwood lumber imports were  $0.3 \times 10^9$  bf in 1965 and  $0.7 \times 10^9$  bf in 2002.

Canada has always been the principal source of lumber imported into the United States (Table 31). In 2002, 90% of all imports were from Canada. This percentage has changed little since 1950, ranging from a low of 94% in 1973 to more than 98% in 1991 and 1992. Canada is the principal source of both softwood lumber and hardwood lumber imports to the United States. In 2002, nearly 91% of all softwood lumber and 73% of all hardwood lumber imported to the United States were from Canada. Hardwood imports from Canada as a percentage of total hardwood imports fell fairly steadily from 1950 through the 1970s. Since then, Canada's share of the U.S. hardwood lumber import market has risen. Overall, the United States imported nearly 63% of Canadian lumber production.

Lumber exports grew fairly steadily from 1965 through 1990, reaching a record high of nearly  $4.6 \times 10^9$  bf in 1988 (Tables 28 and 32). Since 1990, lumber exports have fallen

steadily to  $2.1 \times 10^9$  bf in 2002. Numerous factors contributed to the decline in lumber exports in recent years. Some of these were reduced softwood sawtimber supplies, particularly from the Pacific Coast, changing economic conditions in the major importing countries, strength of the U.S. dollar in relation to other world currencies, and increased levels of exports from other major timber-producing countries. During the mid 1980s and early 1990s, Japan was by far the largest single market for United States' exported lumber. In 1989, Japan purchased  $1.6 \times 10^9$  bf of lumber (Table 32). Since then, exports to Japan have fallen to just one-tenth of their previous level. Canada is currently the largest single market for exported lumber, followed closely by the European Union (EU). They accounted for 26% and 16%, respectively, of all exports.

More than half (62%) of total exports in 1996 were softwood species,  $1.8 \times 10^9$  bf (Table 32). In the late 1960s and early 1970s, softwood lumber accounted for about 85% of total exports. Since then, softwood lumber's share of total exports has fallen steadily from around 78% in the 1980s to just 44% currently. The most important softwood lumber export markets in 2002 were Canada, which accounted for about 18% of total softwood lumber exports, Japan at 12%, and the EU at 7.6%. All other countries accounted for the remaining exports. Canada and EU were the two largest markets respectively for exported hardwood lumber from the United States in 2002.

**Consumption**—Lumber consumption in the United States in 2002 for all uses totaled  $67.5 \times 10^9$  bf, continuing record consumption years through the early 2000s (Table 28). Consumption in 2002 also exceeded levels in the early 1900s, when lumber was the most important raw material used in the United States for construction, manufactured products, and shipping.

Per capita consumption in 2002 was 235 bf, below the high of 245 bf set in 1999, but still greater than per capita use in the 1960s, 1970s, and early 1980s (Table 28). However, per capita consumption was below averages for most years prior to 1965 and dramatically below the early 1900s when consumption exceeded 500 bf per person.

Overall, about 40% of the lumber consumed in 2002 was used for housing, with about half for the construction of new units and 30% for the upkeep and improvement of existing units. New nonresidential construction (including railroads) accounted for about 8%. Manufacturing accounted for 13% of lumber consumption and shipping (pallets, containers, and dunnage) 11%. The remaining 10% was for all other uses. The "all other" category includes an unknown amount of lumber used for other construction purposes such as non-residential upkeep and improvements.

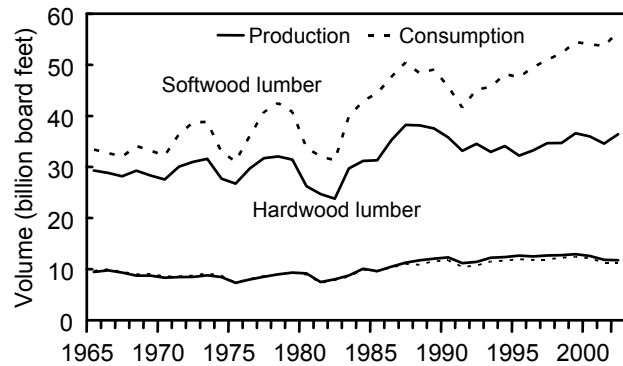
In 2002,  $56.4 \times 10^9$  of the  $67.5 \times 10^9$  bf of lumber consumed in the United States was softwood species, or about 83%

(Table 28, Fig. 6). Slight annual variations in the percentage of softwood and hardwood lumber used are common and are a result of differing levels of activity in the various end use markets and variations in species consumption between them. About 97% of the lumber used in new housing in 2002 was estimated to have been softwood species, up from 93% in 1962. In contrast, only 28% of the lumber used in shipping was softwood, down from 40% in 1962. The increase in percentage softwood lumber use in housing was largely due to a decline in hardwood flooring use and the rapid increase in house size requiring larger amounts of softwood dimension lumber for framing. Increased use of engineered wood products in recent years to substitute for dimension lumber in both residential and nonresidential construction reduces the softwood percentage. The rapid and continued growth in the use of hardwood pallets for materials handling and transportation was the principal cause for the increased percentage of hardwood lumber used in shipping. Even with the variations caused by differences in end use markets, softwood lumber consumption as a percentage of total lumber consumption has remained around 80% since the 1960s.

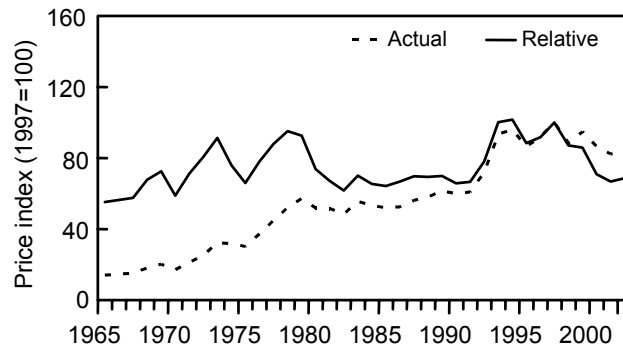
**Prices**—Overall, softwood lumber prices in 2002 remained well below their historic record highs. The actual producer price index for softwood lumber was 82.7 in 2002 (1997=100), up from 82.4 in 2001 (Table 35, Fig. 7). Historically, the producer price index for lumber rose rapidly between 1965 and 1979, from 14.0 to 57.2. This represented an average increase of about 10.3% per year. A mild recession in the early to mid 1980s depressed lumber prices. It wasn't until late in the decade that those prices again reached record levels. On average, lumber prices increased just 1.9% per year during the 1980s. The price index again began to move upward in the early 1990s due in part to the effect on the sawmill industry from timber harvest reductions in the West. Since 1995, the softwood lumber producer price index has fluctuated from a low of 86.5 in 1995 to a high of 94.9 in 1999. Overall, the softwood lumber producer price index increased at a rate of about 5.7% per year between 1965 and 1999.

Hardwood lumber prices, as measured by the hardwood lumber producer price index, have historically been much less volatile than softwood lumber. In 2002, the producer price index for hardwood lumber was 102.4, still below the historic record high levels (Table 35, Fig. 8). Since 1965, hardwood lumber prices have increased at a rate of about 4.9% per year but prices in recent years are still below record high levels.

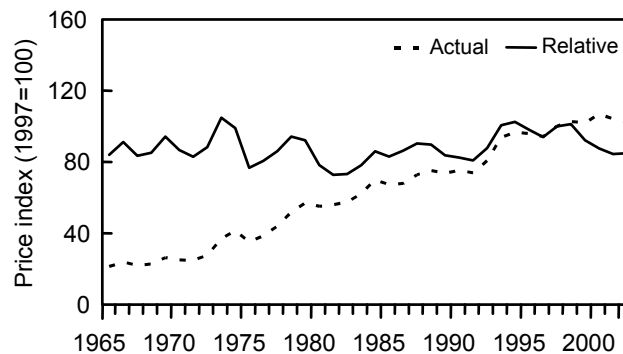
The relative producer price index for a given commodity measures the change in its price relative to all other commodities and is calculated by dividing its producer price index by that for all commodities. If the relative price index is less than 100, then the given commodity is relatively less expensive than other commodities. If it is greater than 1,



**Figure 6—Lumber production and consumption by wood type, 1965–2002.**



**Figure 7—Price indexes for softwood lumber, 1965–2002.**



**Figure 8—Price indexes for hardwood lumber, 1965–2002.**

then it is relatively more expensive. In 2002, the relative price of softwood lumber was 68.3, down 31.4 points from 1997 (Table 35, Fig. 7). Since 1965, relative softwood lumber prices ranged from a low of 55.2 in 1965 to a high of 101.6 in 1994. The relative hardwood lumber price in 2002 was 84.9, down from 102.4 in 1994 (Table 35, Fig. 8). Long-term hardwood prices have been more stable than those for softwood lumber, ranging from a low of 72.8 in 1981 to a high of 102.4 in 1994.

**Engineered wood products production increased in 2002**

Engineered wood products such as glulam, I-joists, and laminated veneer lumber (LVL) are relatively new to the market and are forecast to increase steadily. Glulam production during 2002 was 321 million board feet, down 4.4% from 2001 (Table 34, Fig. 9). A little more than half of U.S. glulam goes to new residential construction and remodeling uses. Nonresidential construction consumes the next largest proportion of glulam production.

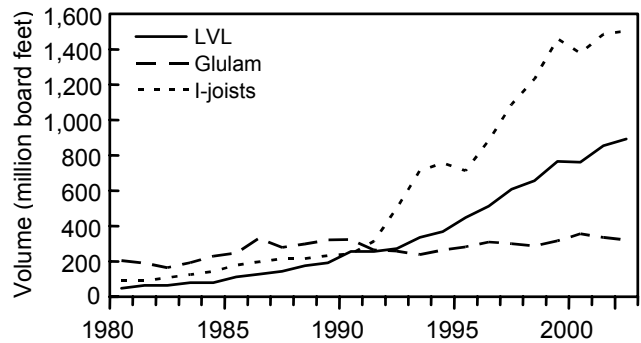
Laminated veneer lumber production during 2002 was 56 million ft<sup>3</sup>, and I-joists production was 756 million linear feet. The volume of LVL production used for I-joists has kept pace with I-joist production in recent years. In 2002, approximately 77% of I-joists were used in new residential floor construction and 6% in residential roofs and walls. Approximately 10% were used in remodeling and 7% in nonresidential construction. A small volume of I-joists is exported to Japan.

**Pulpwood Production, Prices, Trade, and Consumption**

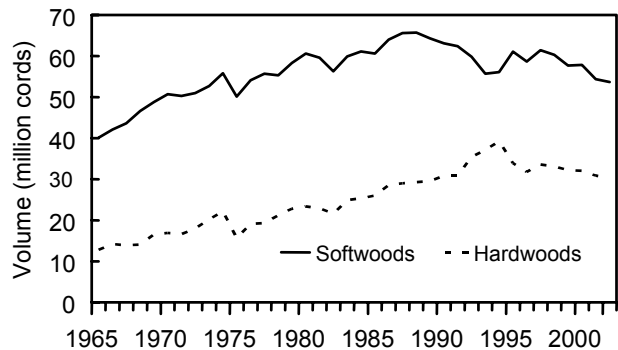
**Pulpwood production in 2002 estimated at 84 million cords**

Total wood pulp production for paper and paperboard only in U.S. mills in 2002 is estimated at 58.1 million tons based on data published by the American Forest & Paper Association (AF&PA). This excludes dissolving pulp and pulp produced for hardboard, fiberboard, and related products. This is down and relatively unchanged from 2001 but 12% below the previous high produced in 1995. Most U.S. paper companies have experienced poor financial returns for nearly a decade. With the exception of a short-lived boom in 1995, the 1990s were a decade of low profitability, plagued by overcapacity and low commodity prices. The AF&PA's 2002 capacity survey revealed that paper and paperboard new capacity growth in the United States declined by 0.3% per year in the period between 1999 and 2002. The negative growth of the past 2 years was the first time that capacity had ever declined for 2 years in a row in more than 40 years, according to the AF&PA (and American Paper Institute (API)) compiled capacity data.

On the basis of the above volumes, related data on pulpwood production published by the American Pulpwood Association (APA), which includes both roundwood and chips, is estimated to be 84 million cords in 2002 (Table 24, Fig. 10). This volume is about 1.4% below 2001 and 13.4% below the record high level established in 1994. The decline in pulpwood production continues the downward trend that began in 1996, coinciding with the decline in woodpulp production. Mill shutdowns had a strong impact with nearly



**Figure 9—Production of glulam, I-joists, and laminated veneer, 1980–2002.**



**Figure 10—Pulpwood production by wood type, 1965–2002.**

3.7 million tons of paper and paperboard capacity removed between 1998 and 1999. Softwood roundwood and chip production in 2002 was 53.7 million cords, down 1.3% from 2001 (Table 24). The slowdown in pulpwood production identified in 1999 has continued into 2002. There were continued small declines in output in all three major producing regions in 2002. In the west, production of softwood in 2002 dropped slightly from 2001 to 3.5 million cords. Output in the North was down less than 1.0% to 5.5 million cords. Southern softwood roundwood production also declined in 2002, falling by less than 1% to 44.8 million cords. More than 83% of U.S. softwood roundwood pulpwood produced came from southern forests.

Output of hardwood roundwood and chips in 2002 was 30.3 million cords down from 30.7 million cords in 2001. Although the output of hardwood pulpwood and chips was down, the proportion of total round pulpwood and chips from hardwood species increased. This continues the reversal of the downward trend that occurred in 1974. Through the 1960s and early 1970s hardwoods became an increasingly important source of round pulpwood, a reflection of changes in pulping technology, the types of pulp produced, and the relative price of different species. During 2002,

hardwood pulpwood comprised 36% of total U.S. pulpwood production. This is down from 41% of pulpwood production at the high point in production during 1994. Further erosion in pulpwood demand is likely as capacity to produce paper and paperboard remains flat and the percentage of recycled fiber inches higher.

**Southern pulpwood production continues decline falling to 66.4 million cords in 2002**

The Forest Resource Association data on pulpwood receipts indicate that pulpwood production in the South in 2002 was 66.4 million cords, down slightly from 2001 production

but 10.4% below the high production year in 1994 when 74.1 million cords of pulpwood was produced (Table 25, Fig. 11). This marks the fifth consecutive year of small pulpwood declines in the South. The 66.4 million cords of production also represents the lowest pulpwood production level during the last 12 years. The South has accounted for more than 65% of total U.S. pulpwood production in the past 10 years.

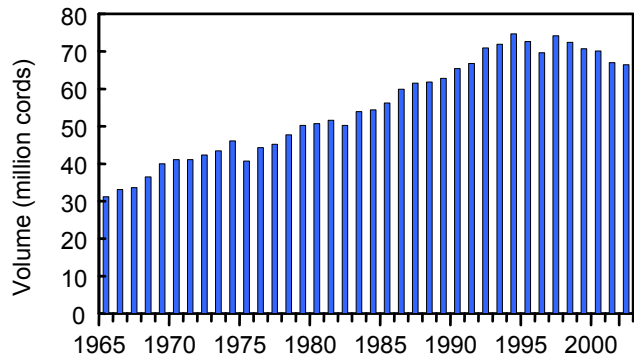
All of the 14 States in the South have been affected by the decline in pulpwood production noted above. However, this decline has been greatest in Georgia and Alabama, which together account for a third of the pulpwood output in this region. This is consistent with the location of the industry within the area. Of the total number of pulpmills in the South, some 26% are located in Alabama and Georgia.

About 67% of the 66.4 million cords of round pulpwood harvested in the South in 2002 was softwoods. This proportion has been falling during the last decade. Southern softwood roundwood output has been declining more than hardwoods during the past 5 years. Between 1998 and 2002, for example, hardwood roundwood production declined by an average of 0.4 million cords per year while softwood roundwood declined on average by 0.8 million cords per year since 1998.

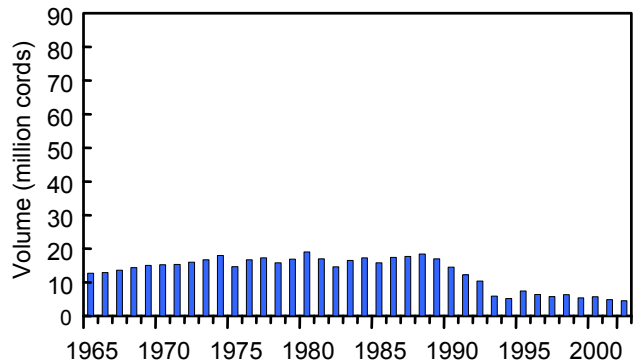
**Production in the West has declined during the last decade**

Receipts of domestically produced pulpwood in the West continued the declines that have lasted throughout the 1990s. Softwood production in the West has fallen in each year since 1988. Softwood

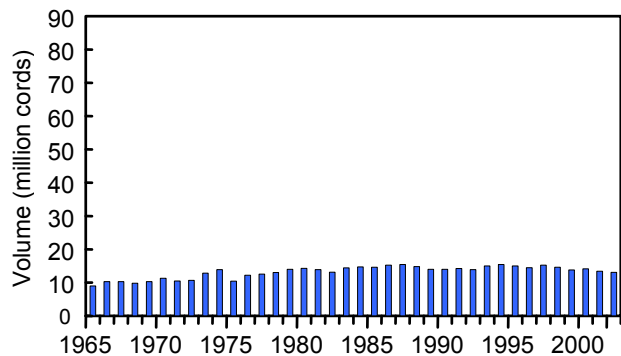
production was 3.5 million cords in 2002 down from 3.8 million cords last year and down from 17.4 million cords of production in 1988 (Table 25, Fig. 12). Chips accounted for roughly the same percentage of pulpwood production in 2002 as they did in 2001, declining slightly during the last 5 years. Of the total production of pulpwood (roundwood and chips), 77% was from softwood species. Production of hardwood roundwood has also declined during the last 5 years.



**Figure 11—Pulpwood production in U.S. South, 1965–2002.**



**Figure 12—Pulpwood production in U.S. West, 1965–2002.**



**Figure 13—Pulpwood production in U.S. North, 1965–2002.**

**Output in the North declines slightly**

Data on domestically produced mill receipts indicate that pulpwood production in the North, roundwood plus chips, was 13.1 million cords in 2002, down slightly from 13.4 million cords in 2001 (Table 25, Fig. 13). About

58.3% of the total was from hardwood species, a little below the proportion in 2001. Seventy-two percent of total

pulpwood output in the North was from roundwood, about equal to the proportion for the South in 2002. The use of chip residues in the North has been declining steadily as in other U.S. regions.

**Pulpwood prices declined during 2002**

The combination of falling prices and lower volumes removed an estimated \$1 billion from the U.S. woodfiber markets in 1999, compared with 1 year earlier, a loss of 14% (Miller Freeman 1999). The decline in prices contributed to the decrease in both U.S. softwood and hardwood demand as more than a quarter of the country's 186 pulpmills shut down since 1996. Pulpwood stumpage prices during 2002 continued the decline started in 1999. Pine and hardwood pulpwood prices peaked in the South, the Nation's largest fiber market during 1998 when the stumpage price for Louisiana pine was \$28.8 per cord (1997 dollars), before falling to \$16.2 per cord in 2002 (Table 26). Delivered pulpwood price for Southern Pine was \$59.60 per cord in 2001 before increasing slightly during 2002 to \$60.6 dollars per cord (Table 27).

Pulpwood prices vary a great deal among species and regions. In general, prices are highest for softwoods, especially the long fiber northern species such as spruce and fir. In some areas in response to changes in pulping technology and pulpwood availability and quality, the relationship between hardwood and softwood prices has changed. But softwoods still command a higher price than hardwoods. For example, in Louisiana, the softwood pulpwood price per cord stayed at a higher level than hardwoods during the 1990s for every year other than 1995 when the price of hardwood pulpwood exceeded the softwood price. This trend continued into 2002 but has since changed.

Pulpwood stumpage prices for most species followed the same trends and slowed during 1999 (Tables 26 and 27). In Louisiana for example, Southern Pine pulpwood stumpage decreased from \$17.31 (1997 dollars) in 2001 to \$16.20 (1997 dollars) in 2002. In contrast to softwoods, Louisiana hardwood stumpage prices increased from 2001 to 2002 rising 13% compared with a 6.4% decline for Southern Pine in real prices. Pulpwood and pulpwood stumpage prices have been quite volatile during the last 10 years. Most of the volatility has been due to falling capacity and industry restructuring resulting in lowered demand. The U.S. pulp and paper industry has brought capital spending to levels well under depreciation and amortization, effectively pulling capital out of the industry. U.S. companies have also been consolidating their operations in response to increased global competition and poor financial returns. The result has been a rationalization of marginal mills, further reducing the capacity base.

**Apparent pulpwood consumption in U.S. wood pulp mills declined to 82.7 million cords in 2002**

Apparent pulpwood consumption in U.S. wood pulp mills in 2002 was an estimated 82.7 million cords (Table 24, Fig. 14). This was a small decline from the 83.4 million cords of consumption in 2001. This marks the fifth consecutive year of decline in pulpwood consumption. In total, about 84 million cords of pulpwood domestic production plus net imports were required to meet the relatively flat demand for paper, paperboard, and pulp products in 2002. Wood requirements for exports amounted to an additional 1.4 million cords.

## Structural Panels and Veneer

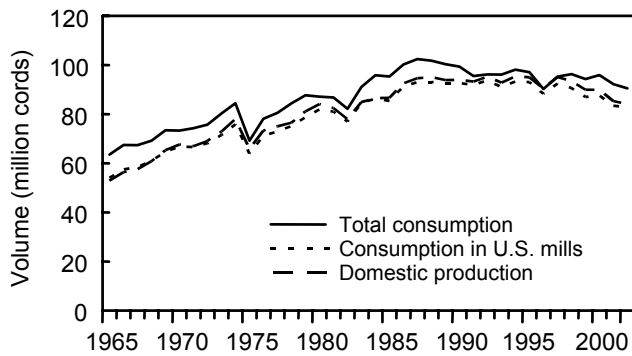
Softwood plywood production in 2002 was estimated at 15.2 billion ft<sup>2</sup> (3/8-in. basis) based on data published by APA (Table 37, Figs. 15 and 16). This is slightly above 1-year-ago softwood plywood production, marking the first time since 1999 that softwood plywood production increased. The rise in production during 2002 may be short lived as OSB continues to increase its market share of the market once dominated by plywood. For example, between 1994 and 2002, plywood production declined by 22%.

Historically, production of softwood plywood has been concentrated in the West, chiefly in the Pacific Coast States of Washington, Oregon, and California. However, these three States during 2002 accounted for only 22.9% of plywood production. In the years since the first plywood plant began production in the South, production in that region has grown to 68% of total U.S. production. For example, during the last 12 years (1990 to 2002), production has increased to 10.3 billion ft<sup>2</sup> (3/8-in. basis) in 2002 while falling to 3.5 billion ft<sup>2</sup> in the West. Although the volume produced was down somewhat during the last 3 years in the South, the percentage of total U.S. production from southern plants continued to increase. About two-thirds of the softwood plywood manufactured in 2002 was from Southern Pine.

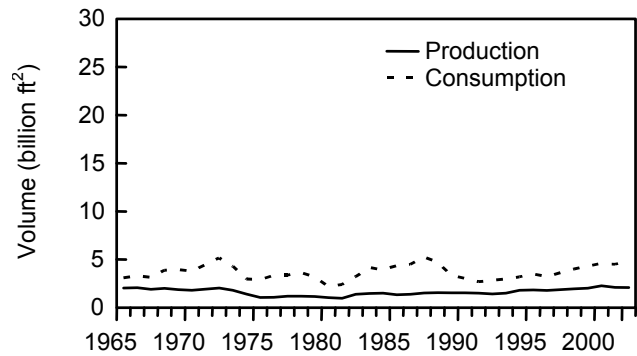
**Production of hardwood plywood declined slightly during 2002**

Hardwood plywood production fell 0.4% from 1 year ago to an estimated 2.0 billion ft<sup>2</sup> in 2002 (3/8-in. basis) (Table 37, Fig. 17). This volume, the lowest since 1999, continues the recent trend of small annual decreases during the last 2 years. Weak demand from the furniture, cabinetry, and fixtures sector was the main factor causing the 0.4% decline in production. Stock hardwood plywood accounts for slightly more than half of all the hardwood plywood produced. Of this amount, eastern producers, with their proximity to the hardwood forest resource, produce 60% of hardwood plywood while western producers account for 38% of production, with the Great Lakes States making up the remainder.

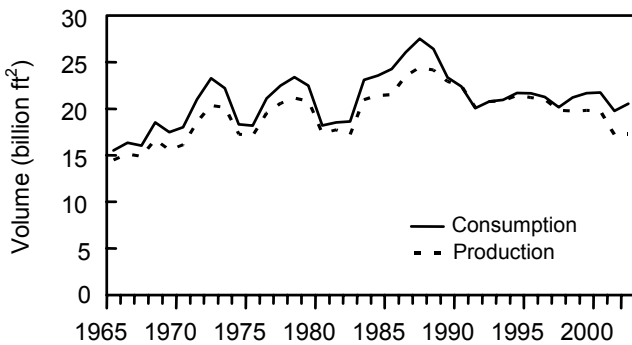




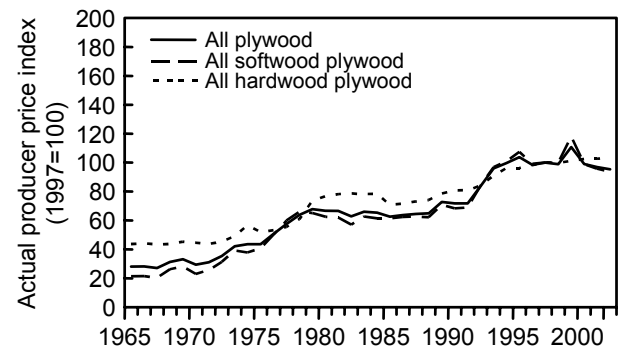
**Figure 14—Total pulpwood production and consumption, 1965–2002.**



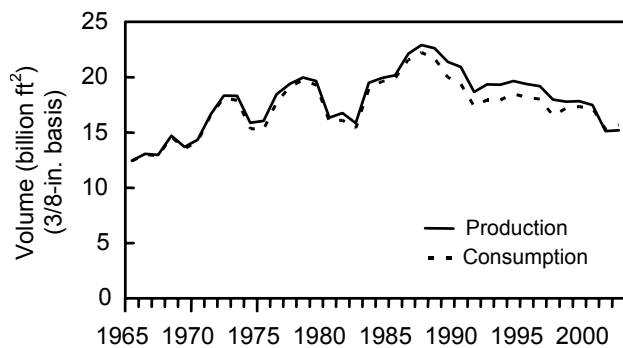
**Figure 17—Hardwood plywood production and consumption, 1965–2002.**



**Figure 15—Total plywood production and consumption, 1965–2002.**



**Figure 18—Actual producer price indexes for plywood, 1965–2002.**



**Figure 16—Softwood plywood production and consumption, 1965–2002.**

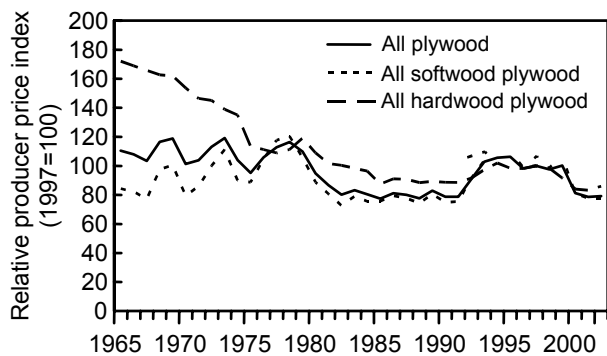
Hardwood plywood producers use a wide range of species for the face veneers of their products. Red oak remains the most popular species at 38% of the market, followed by birch at 29%, and maple at 17%. The cores used in the hardwood plywood industry vary from veneer plys at 63% of the market to MDF cores at 16%. The use of MDF and particleboard cores has increased steadily since 1991.

**Softwood plywood prices declined in 2002**

Softwood plywood prices as measured by the actual producer price index, have fallen sharply since 1999 (Table 42, Fig. 18), reaching 93.7 (1997=100), which was 26.2% below the high of 1999. The extent of the decrease, particularly for the types and grades used in construction will depend primarily on continued strength in the housing markets and the market penetration of OSB. The 2002 relative softwood plywood price index was 77.7 (Table 42, Fig. 19). This was slightly above the 1-year-ago level. Industry experts believe this could signal the beginning rise in structural panel prices for 2003.

**Hardwood plywood prices increase slightly**

Hardwood plywood prices have risen slowly upward since 1999 (Table 42, Figs. 18 and 19). The actual hardwood plywood price as indicated by the actual producer price index for 2002 was 103.5 (1997=100), slightly above the 102.6 level registered a year earlier. The relative index also registered a small increase for 2002.



**Figure 19—Relative producer price indexes for plywood, 1965–2002.**

**Softwood plywood imports and exports showed varying results in 2002**

Imports of softwood plywood, about 924 million ft<sup>2</sup> (3/8-in. basis) in 2002 increased 25% compared with 2001 (Table 37). Imports of softwood plywood are small rela-

tive to overall U.S. plywood consumption. Exports, estimated at about 382 million ft<sup>2</sup>, registered the fifth year of decline after 10 years of growth. Exports in 2002 were 9.4% below exports in 2001. In spite of the decreases in exports since 1998, softwood plywood exports composed only 2.2% of total domestic production during 2002.

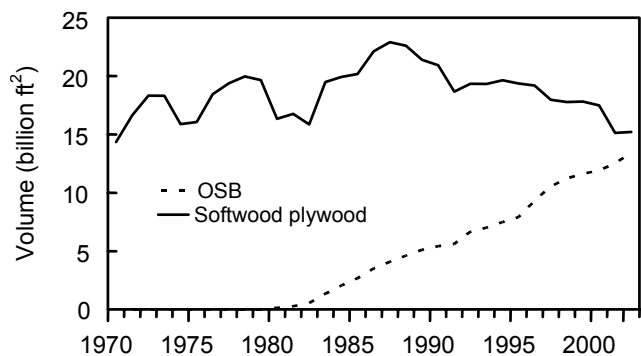
Softwood veneer imports were an estimated 2.4 billion ft<sup>2</sup> surface measure in 2002 (Table 40). This is 12.1% greater than the volume of imports compared with 1 year ago, composing about 50.6% of total veneer imports. Softwood veneer exports increased to 260.3 million ft<sup>2</sup> surface measure in 2002. This was a slight increase of 0.45% compared with 2001.

**Hardwood plywood imports up 13.2% in 2002**

Hardwood plywood imports in 2002 were 2.9 billion ft<sup>2</sup> (3/8-in. basis), 13.2% above 1 year ago. The 2.9 billion ft<sup>2</sup> is the highest level of imports since 1988 when 3.2 billion ft<sup>2</sup> were also imported. This

continues the trend of import growth for hardwood plywood to the U.S. since 1988 (Table 37).

During the 1960s and 1970s, Korea was the principal source of hardwood plywood imports to the United States. This has changed during the last decade with Canada, Brazil, Malaysia, and the Russian Federation becoming the major source of hardwood plywood imports. Asia is still the largest source of U.S. hardwood plywood imports, accounting for 52.1% of all hardwood plywood imported to the United States in 2002 (Table 39).



**Figure 20—Softwood plywood and oriented strandboard (OSB) production, 1970–2002.**

Imports of hardwood veneer, used chiefly in the manufacture of hardwood plywood in U.S. mills, totaled 2.3 billion ft<sup>2</sup> (surface measure) in 2002 (Table 40). This was 16.4% above 2001 and 16.4% below the peak import year of 1972. Since 1972, imports of hardwood veneer have been falling downward.

Hardwood plywood exports in 2002 totaled 180 million ft<sup>2</sup> (3/8-in. basis) (Table 37). This was 1.0% above 2001 reversing a 5-year decline that started in 1998. The increase in exports represents demand from the European and Canadian markets. Brazil, Indonesia, Malaysia, and the Russian Federation are the top four markets, representing nearly 71.4% of U.S. exports of these products. Hardwood veneer exports were an estimated 3.7 billion ft<sup>2</sup> (surface measure) in 2002, 9.4% above 2001 and the highest volume on record.

**Softwood plywood consumption up 2.2% in 2002 as OSB increases market share**

Consumption of softwood plywood in 2002 was an estimated 15.7 billion ft<sup>2</sup> (3/8-in. basis) (Table 37, Fig. 20). This is 2.2% above consumption in 2001 and represented the second consecutive year that softwood plywood consumption has increased.

The small rise in consumption in 2002 after small declines during the last decade represents the gains made in the plywood market by OSB. Since 1992 when OSB was certified to perform as well as softwood plywood, OSB has been rapidly eroding the market share of softwood plywood. This certification allows OSB to compete directly for the same markets while offering the consumer a lower cost product. However, certain applications are still dominated by the use of softwood plywood, such as underlayment for floors.

In the United States, there were 96 plywood-producing mills and 37 OSB mills (APA—The Engineered Wood Association 2000) in 1999. Nearly 68% of all grades of softwood plywood are produced in the South. The West, the traditional producer of softwood plywood, especially Douglas Fir

plywood, is slowly adapting to serving niche markets because of the reduced timber supplies from public lands.

Although OSB is increasing market share in the previously dominated softwood plywood market, a strong residential construction market can explain some of the consumption increase for softwood plywood during 2002. Also important are nonresidential construction, manufacturing, and maintenance, repair, and remodeling. The large proportion of single-family houses, which use more plywood per unit than multi-family structures, also contributed to the overall rise. These factors suggest that future changes in demand for softwood plywood will probably be closely related to changes in the volumes of residential construction and OSB production.

**Consumption of hardwood plywood increased 7.5%, and this trend is expected to continue**

Apparent consumption of hardwood plywood rose 7.5% in 1999 to an estimated 4.8 billion ft<sup>2</sup> (3/8-in. basis) (Table 37, Fig. 17). This was 364 million ft<sup>2</sup> more than in 2001 and represents a con-

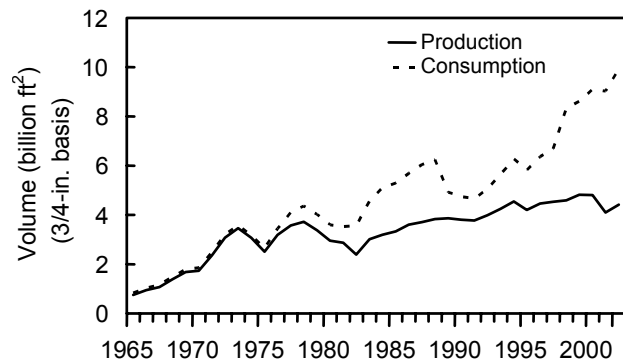
tinuation of the rising trend since the past decade. The continued increase in 2002 in part reflected the strong housing market, an important market for hardwood plywood for wall paneling, kitchen cabinets, and door skins. Although mobile home output weakened in 2002, mobile home production as well as furniture output contributed to the increase.

In 2002, 60.5% of the hardwood plywood consumed in the U.S. was supplied by imports (Table 37). This has been the trend throughout the 1990s and into 2002 as hardwood plywood imports consistently account for at least 60% of hardwood plywood consumption.

**Log trade during 2002 remains mixed**

Total softwood log exports decreased 10.1% during 2002 from 1 year ago (Table 18). Softwood log exports from the western United States though continued a downward trend as Douglas Fir log exports declined

3.8% in 2002 compared with 2001 and are down more than 300% since 1988. Canada was the largest importer of logs from the United States; receiving 56% of U.S. softwood logs exports. Japan was second importing 27.8% from the United States, with South Korea being a distant third. During 2002, Log imports from Canada continued strong with Canada remaining the principal exporter of softwood logs to the United States. Softwood log imports accounted for 86% of all log imports (Table 16). Hardwood log imports from Canada decreased by 0.9% in 2002 compared with 2001. Total hardwood log imports from all sources increased by 15.3% from a year earlier.



**Figure 21—Particleboard production and consumption 1965–2002.**

## Particleboard, Hardboard, and Insulation Board Production, Prices, Trade, and Consumption

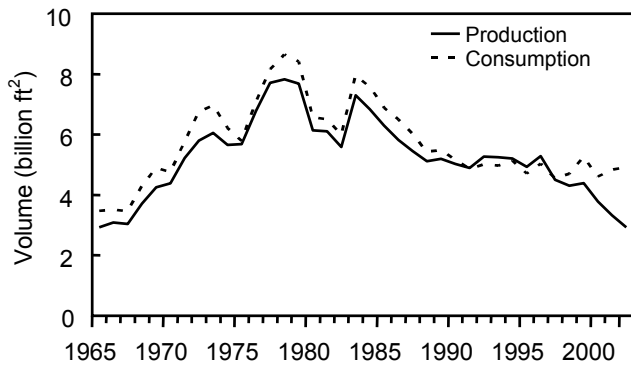
According to estimates of the National Particleboard Association, production of particleboard in 2002 totaled 4.4 billion ft<sup>2</sup> (3/4-in. basis), up from 4.0 billion ft<sup>2</sup> in 2001 (Table 53, Fig. 21). Particleboard is a generic term for a panel primarily composed of cellulose materials (usually wood), generally in the form of discrete pieces or particles. The cellulose materials are combined with a synthetic resin or another bonding system. Because of its uniformity, flatness, and dimensional stability, particleboard is used primarily for floor underlayment, kitchen counter underlayment, furniture components, and cabinet components. Part of the continued rise of particleboard production in the 1990s was the continued strength of the housing industry.

Foreign trade in particleboard was insignificant before the mid-1960s, and very small through the early 1970s; however, both imports and exports experienced growth during the 1980s. Exports increased to an estimated 119 million ft<sup>2</sup> (3/4-in. basis) in 2002, the third consecutive year of increases. Imports of particleboard fell by 42% in 2002.

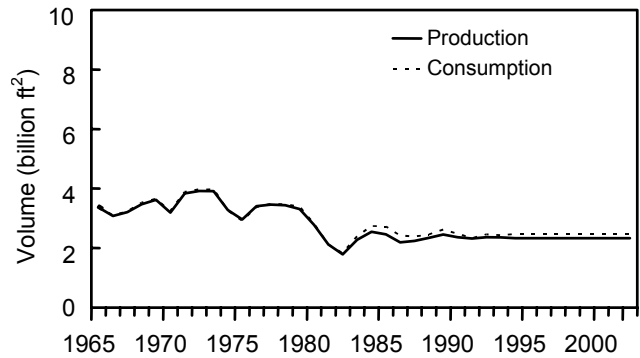
Apparent consumption of particleboard rose 6.1% during 2002 compared with 2001, after decreasing during 2001.

**Medium-density fiberboard output increasing**

Production of MDF in 2002 was 1.6 billion ft<sup>2</sup> (3/4-in. basis). This is up from the 1.4 billion ft<sup>2</sup> of production in 2001. The major market for MDF at the present time is furniture and cabinetry applications because of its smoothness, dimensional stability, paintability, and the sharp lines that are left after a decorative cut is made on the panel.



**Figure 22—Hardboard production and consumption, 1965–2002.**



**Figure 23—Insulation board production and consumption, 1965–2002.**

**Hardboard production declines as consumption rises**

Hardboard production in 2002 was estimated to be 2.9 billion ft<sup>2</sup> (1/8-in. basis) (Table 56, Fig. 22). This was 13.8% below 1 year ago but 44.7% below 1996. Hardboard production has been down since 1983 when hardboard production was 7.3 billion ft<sup>2</sup>.

Imports of hardboard in 2002 amounted to 2.7 billion ft<sup>2</sup>, 14.1% above 2001, continuing the upward trend of hardboard imports that started in 1993. Imports accounted for 48% of total U.S. hardboard consumption in 2001. Exports of hardboard declined further in 2002 after a short-lived growth period during the mid-1990s. Exports of hardboard, although declining, still account for 22.3% of total production.

Consumption of hardboard in 2002 was 4.9 billion ft<sup>2</sup>, 1.9% above 2001. This increase in consumption is reflected in part by a strong housing sector. Hardboard is used primarily in the construction industry for exterior siding in new residential construction. In 2002, just more than half of all hardboard consumed was for residential exterior siding. Compressing wood fibers under extreme heat and pressure to form a panel produces hardboard.

**Insulation board production remains flat in 2002**

Production of insulation board in 2002 was about 2.3 billion ft<sup>2</sup> (1/2-in. basis) or 857,000 tons (Tables 54 and 55, Fig. 23). Imports and exports of insulation board were relatively small, amounting to

112,000 and 62,000 tons, respectively. Production and trade of insulation board has been flat since 1993. The long-run outlook is one of no growth. Further developments of structural grades of particleboard at competitive prices could further accelerate particleboard demand for sheathing and other construction uses. MDF should also continue to provide increasing competition for the traditional board uses.

## Miscellaneous Timber Products Production, Prices, Trade, and Consumption

**Use of roundwood for miscellaneous industrial products hold steady**

Production of miscellaneous industrial roundwood products, which includes cooperage logs, poles and piling, fenceposts, mine timbers, and an assortment of other products such as

hewn ties and box bolts is estimated at 263 million ft<sup>3</sup> in 2002. This volume has been declining annually during the last 12 years (Table 5a).

**Estimated round fuelwood production rises**

Production of round fuelwood in 2002 is estimated at 1.6 billion ft<sup>3</sup>, down slightly from 2001. Fuelwood consumption dropped sharply in the first five decades of

the past century because of the substitution of oil, gas, coal, and electricity in home cooking, heating, and industrial uses. In recent years however, substantial markets have developed for fireplace wood. Projected increases in income, population, and residential construction indicate this market will continue to grow.

**Turpentine production continued to increase in 2002**

Total domestic turpentine production increased 7.1% to 24.2 million gallons in 2002 (Table 59). This equals the 1999 volume and is a continuation of the volatility that has seen production fluctuate

during the last decade. Total production in 2002 was composed of 100% sulphate turpentine. Historically, gum and steam distilled constituted about 15% of total turpentine production. But since 1985, the industry has declined and crude turpentine has dominated production. In the United States, the principal sources of turpentine are the longleaf and slash pine in the South. The substance obtained from

these and other species of trees consists of 75% to 90% resin and 10% to 25% oil. Crude commercial turpentine is valuable mainly as a source of resins.

### **Production of rosin rebounds after a year of decline**

Domestic production of rosin in 2002 rebounded after a year in decline during 2001. During 2002, rosin production was 229,800 tons, an increase of 10.1% compared with 2001. The 2002 production

was 25.1% below the all time high of 308.4 set in 1997. Historically, gum and steam rosin composed about 15% of the industry. Since the mid-1980s tall oil rosin has dominated the industry. Tall oil rosin is the rosin remaining after the removal of substantially all of the fatty acids from tall oil fractional distillation or other suitable means. The fatty acid content shall not exceed 5%.

## **Sustainable Forest Management Criteria and Indicators**

The Montreal criteria and indicators (C&I) of sustainable forest management (SFM) include seven criteria and sixty-seven indicators that measure the diverse sets of values that society places on forest resources (USDA Forest Service 1997). The support and development of the C&I for the United States reflects the evolution of forest policies and priorities in forest management among the diverse stewards of U.S. forest resources. Six of the nineteen indicators under Criterion 6, maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies, assess the production and consumption of forest products. A subset of four of the six production and consumption indicators parallel and complement the standard measures in this report. These indicators are as follows:

- Value and volume of wood and wood products production, including value-added through downstream processing (indicator 29)
- Value of wood and nonwood product production as a percentage of GDP (indicator 32)
- Degree of recycling of forest products (indicator 33)

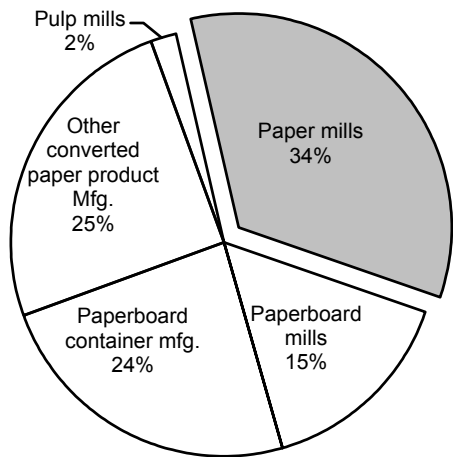
Measures of production, consumption, and value are important to the goals underlying sustainable forest management. These types of measures reflect the importance of forest resources in supplying raw materials for manufacturing and the value that society places on the production of wood and wood products. Strategies to achieve sustainable forest management must reflect the role of forest resources in maintaining a dynamic and strong economy as a primary component of meeting the need of society.

## **Volume and Value of Wood and Wood Products Production**

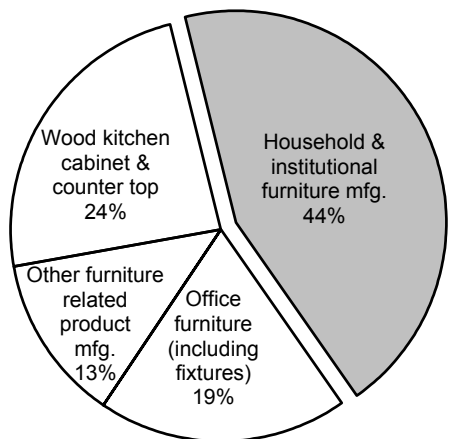
The total volume of wood products production continues to grow, reflecting the value society places on wood raw materials. However, the mix of wood products reflects changing needs for specific types of products as well as technological change to accommodate increased competition for forest resources and to maintain an affordable supply of goods and services for consumers. The total volume of wood products production (in roundwood equivalent inputs) in the United States, including fuelwood, has increased from 12.3 billion ft<sup>3</sup> in 1965 to 16.5 billion ft<sup>3</sup> in 2002 (Table 5a). Of that production, approximately 63% and 37% was softwood and hardwood, respectively, in 2002, based on roundwood equivalent inputs (Tables 6a and 7a). The value of shipment for all wood, furniture, and paper products production surpassed \$315 billion in 2001 (Department of Commerce 2003) down from \$334 billion in 2000. Value-added from all wood, furniture (including nonwood furniture), and paper products surpassed \$148 billion in 2001 down from \$154 billion of a year ago (Department of Commerce 2003). Although lumber and wood products value-added accounted for 22% of total value added or 33 billion dollars, the highest value-added continues to come from the paper and allied products sector of forest products (Fig. 24). In 2001, this sector produced more than \$74 billion of value-added, primarily by paper mills and paperboard container and box manufacturing. Furniture and fixtures (excluding nonwood furniture) represented 22% of value-added, or more than \$32 billion, in 2001.

The total volume of sawnwood production has decreased in proportion to other wood products from 51% of industrial roundwood production in 1965 to 44% in 2002 (Table 5a). Nevertheless, the volume of sawnwood production increased by 15% during the 37-year period; the lowest volume was 5.1 billion ft<sup>3</sup> in 1982 and the highest almost 7.6 billion ft<sup>3</sup> in 1988. On average, the value of sawnwood production has continued to increase in real terms (net of inflation), although in effect, it is still recovering from sharp declines in the early 1980s (Fig. 25). Meanwhile, the value-added by sawnwood production remained fairly stable during the 1990s at around \$8 billion in real terms before declining to \$7 billion in 2001. The volume of sawnwood production increased by as much as 1.1 billion ft<sup>3</sup> from the low in 1982 to the current level of 7.2 billion ft<sup>3</sup> in 2002. Rising real lumber prices are significant drivers in the introduction of new technologies to use more species, smaller dimension wood, and residues to make composite structural panels and engineered wood components such as OSB, I-beams, laminated beams, and truss framing.

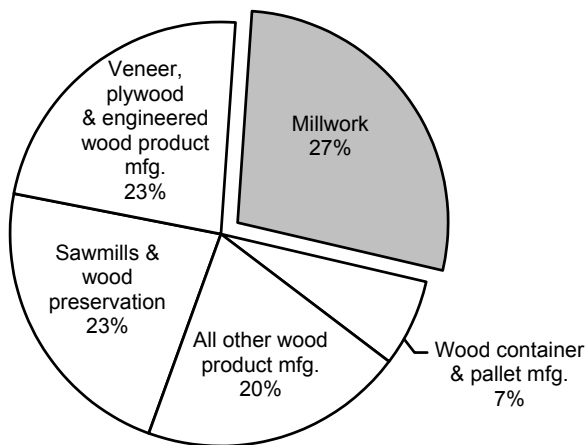
The production of plywood and veneer has declined in recent years, falling to the level produced in 1965. Other wood-based panels production has increased since 1965.



Paper manufacturing  
(more than \$74 billion of value-added)

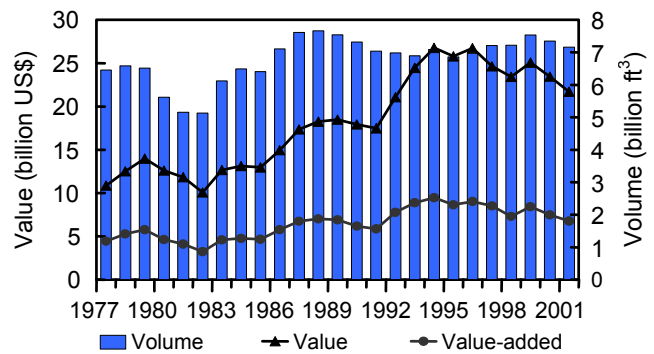


Furniture & related product manufacturing  
(excluding nonwood)



Lumber and wood product manufacturing

**Figure 24—Value-added categories of wood and wood fiber products in 2001.**



**Figure 25—Volume, value, and value-added of U.S. sawn wood production (Howard 2001).**

Although current levels of plywood production are well below the peak level of 22.8 billion ft<sup>2</sup> (3/8-in. basis) in 1987 (Table 33), the total value of plywood shipments decreased slightly to \$7.6 billion in 2001 and made up more than 10% of the total value-added of all wood products (Department of Commerce 2003).

Pulp and paper products provide the highest value among wood commodities produced in the United States. The recent decrease in pulp and paper production reflects significant link between increased use of electronic media and decreased demand for pulp and paper products. Paper and board products by weight increased more than 121% since 1965 (Table 42). The value-added of pulp and paper production has fluctuated widely during some periods but was \$44 billion in 2001 (Department of Commerce 2003). The decrease in pulp and paper volumes with somewhat falling values reflects advances in recycling as well as efficiency gains and lower production costs of foreign competitors.

## Supply and Consumption of Wood and Wood Products

In addition to knowing the historic and current levels of production, we need to assess our ability to maintain, increase, or decrease levels of production in response to the changing needs of society. The rationale for this indicator is that we will know to what extent we have met and can continue to meet wood demands with our available supply. The additional information gained with this measure compared with the production and value indicators is that supply reflects all sources, domestic and international, of wood. However, no C&I variables directly measure the balance of trade in wood products; thus, potential dependence on outside sources (a possible indicator of management away from sustainable levels) is not evident.

The deficit in U.S. production compared with U.S. consumption of industrial wood products (in roundwood equivalents) increased net imports from just more than 1 billion ft<sup>3</sup> in

1965 to almost 3.1 billion ft<sup>3</sup> in 2002 (Table 5a). This figure includes wood imports of more than 4.9 billion ft<sup>3</sup> and exports of 1.8 billion ft<sup>3</sup>. Imports (in roundwood equivalents) constituted more than 25% of the volume consumed in 2002, compared with 12% in 1965 (Table 5a). Softwood lumber remains the primary import into the United States; approximately 62% or 3.0 billion ft<sup>3</sup> (in roundwood equivalents) of total wood imports in 2002 (Table 5a and 6a).

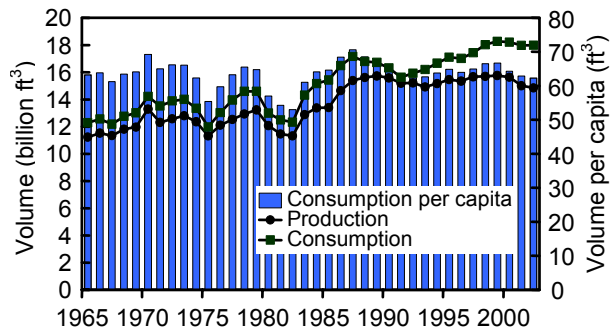
The roundwood equivalent of the total consumption of wood products in the United States has steadily increased during the last 37 years from 13.3 to 19.6 billion ft<sup>3</sup>. Fluctuations in wood products flow reflects periods of economic downturns and recovery as the demand for wood and wood products generally tracks basic macroeconomic indicators, such as those summarized in Table 1. Slower rates of increase in the consumption of wood products since 1990 have resulted in relatively stable trends in per capita wood consumption averaging about 72 ft<sup>3</sup> compared with the previous decade (Fig. 26). Per capita consumption by wood products sector shows a fairly stable proportion of individual consumption of most products, with slight decreases in plywood and veneer consumption (Fig. 27).

### Value of Wood and Nonwood Production as a Percentage of GDP

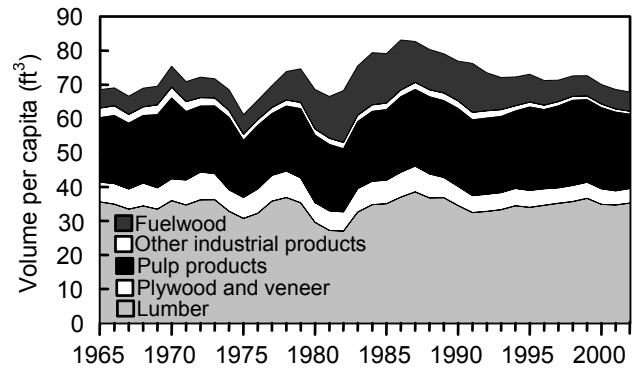
The rationale for this indicator is that the percentage of production that an industry contributes to total domestic production reflects its value to society through contributions to national income and its competitiveness among other economic sectors. The value-added of wood production as a percentage of GDP has remained fairly stable at approximately 2% in real terms during the past three decades (USDA Forest Service 2002). The total value of shipments of wood and wood products as a percentage of GDP has averaged more than 4.3% annually in the latter part of the 1990s and in 2002. A simple measure of percentage of GDP might mask the move towards unsustainable levels of production if the resource is becoming scarce from overexploitation. If assessed relative to biophysical measures of land availability, rates of fragmentation, and timber productivity, this measure will provide a more comprehensive picture of sustainable forest management levels of production and consumption.

### Recycling of Forest Products

The rationale for this indicator is that resource use and the conservation of forest resources are impacted by our re-use, recycling, and recovery of materials as well as direct consumption of resources. The value of a resource can be reflected in the level of recycling of products from that resource (USDA Forest Service 2002).



**Figure 26—U.S. production and consumption of roundwood, 1965–2002.**



**Figure 27—U.S. per capita consumption of wood products, 1965–2002.**

Traditionally, recovery and recycling in the forestry sector has been associated primarily with paper and paper products, namely newsprint and office wastepaper. The majority of available data reflects these products. Recently, research and data on the recycling of solid wood materials from demolished structures, construction sites, and mill residues reflects the increasing value that society places on forest resources. Paper and paperboard recycling has increased steadily during the last few decades, with significant increases in the 1990s. As of 2002, paper and paperboard were being recovered in the United States at a rate of 48.1%, up from 22% in 1970, while utilization of recovered paper was 38%, up from 25% in 1965 (Tables 45 and 46).

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Table 1—Measures of economic growth, population, and prices, 1965–2002

Year	Gross domestic product <sup>a</sup>		Disposable personal income <sup>b</sup>		Expenditures for new construction <sup>b</sup>		Non-residential fixed investment <sup>ca</sup>		Number of housing starts <sup>d</sup>		Mobile homes <sup>d</sup>		Population <sup>a</sup>		Index of industrial production					Producer price index all items <sup>e</sup>		Consumer price index all items <sup>e</sup>		
	Billion current dollars	Billion 1996 dollars	Billion current dollars	Billion 1996 dollars	Billion current dollars	Billion 1996 dollars	Billion current dollars	Billion 1996 dollars	Thousand units	Thousand units	Thousand units	Thousand units	Millions	Total industrial production <sup>a,e</sup>	Manufacturing <sup>a,e</sup>	Furniture and fixtures <sup>e</sup>	Paper and products <sup>e</sup>	1997=100	1997=100	1997=100	1997=100	1997=100	1997=100	1997=100
1965	719.1	2,998.7	493.9	2,059.6	81.9	341.5	226.7	1,473	217	194.3	40.3	37.3	36.6	39.4	25.4	19.6								
1966	787.8	3,193.4	533.7	2,163.4	85.8	347.8	255.0	1,165	217	196.6	43.9	40.7	39.4	42.5	26.1	20.2								
1967	833.6	3,278.0	571.9	2,248.9	87.2	342.9	251.5	1,292	240	198.7	44.8	41.4	39.4	42.5	26.2	20.8								
1968	910.6	3,432.3	621.4	2,342.3	96.8	364.9	262.5	1,508	318	200.7	47.3	43.8	40.8	45.0	26.8	21.7								
1969	982.2	3,531.8	688.4	2,403.5	104.9	377.2	282.4	1,467	413	202.7	49.5	45.7	42.7	48.4	27.9	22.9								
1970	1,035.6	3,535.7	727.1	2,482.4	105.9	361.6	280.8	1,434	401	205.1	47.9	43.6	40.0	47.9	29.0	24.2								
1971	1,125.4	3,650.3	790.2	2,563.1	122.4	397.0	280.6	2,052	497	207.7	48.5	44.3	41.6	50.0	29.9	25.2								
1972	1,237.3	3,844.9	855.3	2,657.9	139.1	432.3	306.1	2,357	576	209.9	53.2	48.9	50.2	62.5	31.3	26.1								
1973	1,382.6	4,064.1	965.0	2,836.6	153.8	452.1	350.7	2,045	567	211.9	57.5	53.3	53.5	67.7	35.3	27.7								
1974	1,496.9	4,050.1	1,054.2	2,852.3	155.2	419.9	353.5	1,338	329	213.9	57.2	53.1	49.8	70.8	41.9	30.7								
1975	1,630.6	4,039.1	1,159.2	2,871.4	152.6	378.0	318.4	1,160	213	216.0	52.0	47.5	42.6	61.3	45.8	33.6								
1976	1,819.0	4,251.0	1,273.0	2,975.0	172.1	402.2	334.1	1,538	246	218.0	56.0	51.7	47.6	67.7	47.9	35.6								
1977	2,026.9	4,445.9	1,401.4	3,073.9	200.5	439.8	371.6	1,987	277	220.2	60.1	56.1	53.2	70.6	50.9	37.8								
1978	2,291.4	4,700.3	1,580.1	3,241.2	239.9	492.1	424.1	2,020	276	222.6	63.4	59.5	58.1	73.6	54.8	40.7								
1979	2,557.5	4,852.9	1,769.5	3,357.7	272.9	517.8	466.6	1,745	277	225.1	65.3	61.2	59.5	74.8	61.8	45.2								
1980	2,784.2	4,852.2	1,973.3	3,439.0	273.9	477.3	466.3	1,292	222	227.7	63.5	58.9	58.0	74.6	70.4	51.3								
1981	3,115.9	4,969.5	2,200.2	3,509.1	289.1	461.1	492.6	1,084	241	230.0	64.3	59.5	58.5	75.7	76.9	56.7								
1982	3,241.2	4,874.6	2,347.3	3,529.2	279.3	419.9	474.2	1,062	240	232.2	60.9	56.2	55.7	74.3	78.4	60.1								
1983	3,514.5	5,075.8	2,522.4	3,643.0	311.6	450.0	469.4	1,703	296	234.3	62.5	58.8	63.0	79.0	79.4	62.1								
1984	3,902.4	5,435.1	2,810.0	3,913.6	369.0	513.9	552.0	1,750	295	236.3	68.1	64.6	71.5	83.2	81.4	64.8								
1985	4,180.7	5,645.8	3,002.0	4,054.0	401.4	542.1	589.0	1,742	284	238.5	68.8	65.7	73.5	81.4	81.0	67.1								
1986	4,422.2	5,844.8	3,187.6	4,213.1	429.9	568.2	573.1	1,805	244	240.7	69.5	67.1	76.6	84.8	78.6	68.3								
1987	4,692.3	6,028.1	3,363.1	4,320.5	441.6	567.3	572.5	1,821	233	242.8	72.8	70.7	81.4	87.7	80.6	70.8								
1988	5,049.6	6,275.9	3,640.8	4,525.0	455.6	566.2	603.6	1,488	218	245.0	76.3	74.3	86.4	91.3	83.8	73.7								
1989	5,438.7	6,508.7	3,894.5	4,660.7	469.8	562.2	637.0	1,376	198	247.3	77.0	74.8	89.5	92.5	88.0	77.3								
1990	5,743.8	6,615.0	4,166.8	4,798.8	468.5	539.6	641.7	1,193	188	249.9	77.6	75.2	86.3	92.4	91.2	81.5								
1991	5,916.7	6,599.0	4,343.7	4,844.6	424.2	473.1	610.1	1,014	171	252.7	76.3	73.7	80.8	92.3	91.4	84.9								
1992	6,244.4	6,799.2	4,613.7	5,023.6	452.1	492.3	630.6	1,200	211	255.4	78.3	76.3	81.6	94.5	91.9	87.4								
1993	6,553.0	6,967.6	4,790.2	5,093.2	482.7	513.2	683.6	1,288	254	258.1	80.9	78.9	89.0	95.5	93.3	90.1								
1994	6,935.7	7,223.9	5,021.7	5,230.4	519.5	541.1	744.6	1,457	304	260.7	85.2	83.7	90.5	99.7	94.4	92.4								
1995	7,253.8	7,394.3	5,320.8	5,423.9	538.1	548.5	817.5	1,354	340	263.0	89.3	88.1	91.1	101.4	97.8	95.0								
1996	7,575.9	7,575.9	5,588.5	5,588.5	583.6	583.6	899.4	1,475	363	265.5	93.2	92.2	88.9	98.0	100.2	97.8								
1997	8,110.9	7,955.8	5,886.6	5,854.5	618.2	606.4	1,009.3	1,474	354	270.9	100.0	100.0	100.0	100.0	100.0	100.0								
1998	8,511.0	8,247.1	6,027.8	6,168.6	655.4	635.1	1,135.9	1,617	373	267.3	105.6	106.5	99.1	101.0	101.5	101.6								
1999 <sup>f</sup>	9,274.3	8,858.8	6,639.2	6,328.4	765.9	731.6	1,228.4	1,641	349	273.2	110.1	111.8	102.7	102.2	110.5	103.8								
2000	9,824.6	9,191.3	7,120.2	6,630.3	820.3	767.5	1,324.2	1,569	251	282.1	115.3	117.4	119.4	100.5	122.0	107.3								
2001	10,082.2	9,214.2	7,393.2	6,748.0	842.5	770.0	1,255.1	1,603	193	284.8	111.2	112.6	113.2	95.3	123.4	110.3								
2002	10,445.6	9,440.2	7,829.1	7,049.8	846.1	764.6	1,183.4	1,706	168	287.5	110.5	111.5	101.7	94.3	120.5	112.1								

<sup>a</sup>U.S. Council of Economic Advisors (39,40).

<sup>b</sup>U.S. Department of Commerce, Bureau of the Census (70).

<sup>c</sup>U.S. Council of Economic Advisors (39); series (1965–1999) revised.

<sup>d</sup>U.S. Department of Commerce, Bureau of the Census (56); National Association of Home Builders (26, 27); Manufactured Housing Institute (25).

<sup>e</sup>U.S. Federal Reserve System, Board of Governors (78).

<sup>f</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).

Revised.

**Table 2—Number of households and housing market indicators, 1965–2002**

Year	Number of households <sup>a</sup>	New home mortgage interest rates <sup>b</sup>	New housing units								Expenditures for residential upkeep and improvements <sup>f</sup>	
			New housing starts									
			Total units	Total starts <sup>c,d</sup>	Single family		Multi-family		Mobile homes			
					Number starts <sup>c</sup>	Floor area <sup>e</sup>	Number starts <sup>c,d</sup>	Floor area <sup>e</sup>	Number shipments <sup>c</sup>	Floor area <sup>e</sup>		
					Thousand units	Thousand units	Thousand units	Average square feet	Thousand units	Average square feet	Thousand units	Average square feet
Millions	Average percent	Thousand units	Thousand units	Thousand units	Average square feet	Thousand units	Average square feet	Thousand units	Average square feet	Million current dollars	Million 1996 dollars	
1965	57.4	5.81	1,727	1,510	965	1,498	545	1,053	217	650	11,442	52,009
1966	58.4	6.25	1,413	1,196	780	1,544	416	1,076	217	660	11,691	50,830
1967	59.2	6.46	1,562	1,322	845	1,585	477	1,094	240	670	11,687	49,312
1968	60.8	6.97	1,863	1,545	900	1,642	645	1,123	318	670	12,703	50,812
1969	62.2	7.81	1,913	1,500	811	1,616	689	1,095	413	684	13,535	50,504
1970	63.4	8.45	1,870	1,469	815	1,482	654	995	401	732	14,770	52,007
1971	64.8	7.74	2,582	2,085	1,153	1,520	932	1,011	497	780	16,299	53,792
1972	66.7	7.60	2,955	2,379	1,311	1,555	1,068	1,035	576	780	17,498	54,342
1973	68.3	7.96	2,625	2,058	1,133	1,660	925	1,031	567	882	18,512	52,891
1974	69.9	8.92	1,682	1,353	889	1,695	464	1,021	329	910	21,114	53,184
1975	71.1	9.00	1,384	1,171	896	1,645	275	1,000	213	952	25,239	58,154
1976	72.9	9.00	1,794	1,548	1,166	1,700	382	940	246	966	29,034	63,811
1977	74.1	9.02	2,279	2,002	1,451	1,720	551	938	277	1,000	31,280	63,707
1978	76.0	9.56	2,312	2,036	1,433	1,755	603	902	276	1,010	37,461	68,610
1979	77.3	10.78	2,037	1,760	1,194	1,760	566	938	277	1,050	42,231	69,118
1980	80.8	12.66	1,535	1,313	852	1,740	461	979	222	1,050	46,338	68,345
1981	82.4	14.70	1,341	1,100	705	1,720	395	980	241	1,015	46,351	63,582
1982	83.5	15.14	1,312	1,072	663	1,710	409	990	240	1,000	45,291	59,830
1983	83.9	12.57	2,009	1,713	1,068	1,725	645	942	296	1,035	49,295	63,936
1984	85.4	12.38	2,051	1,756	1,084	1,780	672	914	295	1,060	70,597	105,369
1985	86.8	11.55	2,029	1,745	1,072	1,785	673	922	284	1,080	82,127	120,245
1986	88.5	10.17	2,049	1,805	1,179	1,825	626	911	244	1,110	94,329	132,113
1987	89.5	9.31	1,854	1,621	1,146	1,905	475	980	233	1,140	98,413	131,744
1988	91.1	9.19	1,706	1,488	1,081	1,995	407	990	218	1,175	106,864	137,534
1989	92.8	10.13	1,574	1,376	1,003	2,035	373	1,000	198	1,195	108,054	133,730
1990	93.3	10.05	1,381	1,193	895	2,080	298	1,005	188	1,205	115,432	138,408
1991	94.3	9.32	1,185	1,014	840	2,075	174	1,020	171	1,225	107,692	128,052
1992	94.6	8.24	1,411	1,200	1,030	2,095	170	1,040	211	1,255	115,569	134,696
1993	95.3	7.20	1,542	1,288	1,126	2,095	162	1,065	254	1,295	121,899	135,443
1994	96.0	7.49	1,761	1,457	1,198	2,100	259	1,035	304	1,330	130,625	138,963
1995	97.3	7.87	1,694	1,354	1,076	2,095	278	1,080	340	1,355	124,971	127,391
1996	98.7	7.80	1,838	1,475	1,161	2,120	314	1,070	363	1,380	131,362	131,362
1997	99.9	7.71	1,828	1,474	1,134	2,150	340	1,095	354	1,420	133,577	129,812
1998	101.0	7.07	1,990	1,617	1,271	2,190	346	1,065	373	1,450	133,693	126,603
1999 <sup>g</sup>	103.9	7.04	2,012	1,663	1,303	2,223	341	1,104	349	1,465	142,900	129,438
2000	104.7	7.52	1,824	1,573	1,231	2,266	342	1,114	251	1,505	152,975	132,561
2001	108.2	7.00	1,796	1,603	1,273	2,324	330	1,171	193	1,540	157,765	131,911
2002	109.3	6.43	1,874	1,706	1,359	2,320	347	1,166	168	1,595	173,324	141,952

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census (62).

<sup>b</sup>U.S. Council of Economic Advisors (39).

<sup>c</sup>U.S. Department of Commerce, Bureau of the Census (55, 57, 67); U.S. Department of Commerce, Bureau of Economic Analysis (72); National Association of Home Builders (26,27).

<sup>d</sup>Data for privately owned housing starts from 1986 to present.

<sup>e</sup>U.S. Department of Agriculture, Forest Service, estimates based on data from the Manufactured Housing Institute; U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Housing and Urban Development (56,57,71); Manufactured Housing Institute (25).

<sup>f</sup>U.S. Department of Commerce, Bureau of the Census (65).

<sup>g</sup>Revised.

**Table 3—Average hourly earnings<sup>a</sup> in timber-based industries and all manufacturing in the United States, 1972–2002<sup>b</sup>**

Year	Lumber and wood products except furniture		Logging camps and logging contractors		Sawmills and planing mills		Millwork, plywood, and structural members		Paper and allied products		Furniture and fixtures		Manufacturing	
	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100	U.S. dollars 1996=100	Index 1996=100
1972	3.33	31.9	4.25	36.1	3.29	31.1	3.37	35.5	3.95	26.9	3.08	30.3	3.82	29.9
1973	3.61	34.6	4.56	38.8	3.62	34.2	3.62	34.4	4.20	28.6	3.29	32.4	4.09	32.0
1974	3.89	37.3	4.91	41.8	3.88	36.6	3.91	37.2	4.53	30.9	3.53	34.8	4.42	34.6
1975	4.26	40.8	5.28	44.9	4.34	41.0	4.26	40.5	5.01	34.1	3.78	37.2	4.83	37.8
1976	4.72	45.2	6.03	51.3	4.86	45.9	4.67	44.4	5.47	37.3	4.34	42.8	5.68	44.4
1977	5.10	48.9	6.58	56.0	5.28	49.9	5.04	48.0	5.96	40.6	4.34	42.8	5.68	44.4
1978	5.60	53.6	7.25	61.6	5.83	55.1	5.55	52.8	6.52	44.4	4.68	46.1	6.17	48.3
1979	6.07	58.1	7.97	67.8	6.32	59.7	5.95	56.6	7.13	48.6	5.06	49.9	6.70	52.4
1980	6.55	62.7	8.64	73.5	6.70	63.3	6.41	61.0	7.84	53.4	5.49	54.1	7.27	56.9
1981	6.99	67.0	9.11	77.5	7.19	67.9	6.89	65.6	8.60	58.6	5.91	58.2	7.99	62.5
1982	7.43	71.2	9.79	83.2	7.73	73.0	7.33	69.7	9.32	63.5	6.31	62.2	8.49	66.4
1983	7.80	74.7	10.17	86.5	8.20	77.4	7.64	72.7	9.93	67.6	6.62	65.2	8.83	69.1
1984	8.03	76.9	10.70	91.0	8.42	79.5	7.81	74.3	10.41	70.9	6.84	67.4	9.19	71.9
1985	8.22	78.7	10.92	92.9	8.52	80.5	8.06	76.7	10.83	73.8	7.17	70.6	9.54	74.6
1986	8.34	79.9	10.82	92.0	8.58	81.0	8.23	78.3	11.18	76.2	7.46	73.5	9.73	76.1
1987	8.40	80.5	10.68	90.8	8.58	81.0	8.35	79.4	11.43	77.9	7.67	75.6	9.91	77.5
1988	8.61	82.5	10.78	91.7	8.75	82.6	8.55	81.4	11.69	79.6	7.94	78.2	10.18	79.7
1989	8.84	84.7	11.13	94.6	9.03	85.3	8.73	83.1	11.96	81.5	8.25	81.3	10.48	82.0
1990	9.08	87.0	11.22	95.4	9.22	87.1	9.04	86.0	12.31	83.9	8.52	83.9	10.83	84.7
1991	9.24	88.5	11.06	94.0	9.37	88.5	9.28	88.3	12.72	86.6	8.76	86.6	11.18	87.5
1992	9.44	90.4	11.17	95.0	9.59	90.6	9.48	90.2	13.07	89.0	9.01	88.8	11.46	89.7
1993	9.61	92.0	11.37	96.7	9.78	92.4	9.65	91.8	13.42	91.4	9.27	91.3	11.74	91.9
1994	9.84	94.3	11.44	97.3	10.05	94.9	9.89	94.1	13.77	93.8	9.55	94.1	12.06	94.4
1995	10.12	96.9	11.64	99.0	10.31	97.4	10.12	96.3	14.23	96.9	9.82	96.7	12.37	96.8
1996	10.44	100.0	11.76	100.0	10.59	100.0	10.51	100.0	14.68	100.0	10.15	100.0	12.78	100.0
1997	10.76	103.1	12.16	103.4	10.85	102.5	10.89	103.6	15.06	102.6	10.55	103.9	13.17	103.1
1998	11.10	106.3	12.48	106.1	11.12	105.0	11.25	107.0	15.51	105.7	10.90	107.4	13.49	105.6
1999	11.46	109.8	13.24	112.6	11.40	107.6	11.59	110.3	15.97	108.8	11.23	110.6	13.91	108.8
2000	11.94	114.4	13.70	116.5	11.90	112.4	12.08	114.9	16.25	110.7	11.74	115.7	14.37	112.4
2001	12.26	117.4	14.40	122.4	12.19	115.1	12.45	118.5	16.87	114.9	12.24	120.6	14.83	116.0
2002	12.50	119.7	14.76	125.5	12.42	117.3	12.60	119.9	17.50	119.2	12.65	124.6	15.30	119.7

<sup>a</sup>For production or nonsupervisory workers.

<sup>b</sup>U.S. Department of Commerce, Bureau of Economic Analysis (72); U.S. Department of Labor, Bureau of Labor Statistics (75).

**Table 4—Average employment in lumber-producing and lumber-dependent industries in the United States, in thousand people, 1972–2002<sup>a</sup>**

Year	Lumber-producing				Lumber-dependent									
	Logging	Sawmills and planning mills, general	Millwork	Wood kitchen cabinets	Wood containers	Wood buildings and mobile homes	Misc. wood products	Lumber, plywood, and millwork	Lumber and other building materials	Residential building construction	Operative builders	Special trade contractors		
1972	69.0	182.0	78.5	38.1	45.8	110.5	86.3	z	268.3	577.6	93.6	1,950.6		
1973	75.9	185.9	83.3	41.9	47.5	115.0	91.1	z	286.1	594.2	101.8	2,086.7		
1974	80.7	191.3	75.1	38.5	46.3	82.2	90.0	z	287.6	576.0	92.1	2,029.0		
1975	73.5	169.6	67.6	31.5	38.9	63.1	78.1	z	267.9	479.9	68.3	1,778.8		
1976	81.5	184.4	75.2	36.9	41.2	71.4	84.5	z	283.4	513.8	67.2	1,805.8		
1977	84.2	189.3	80.8	44.2	42.0	82.1	87.0	z	302.1	578.1	75.4	1,982.7		
1978	84.8	192.3	85.5	50.0	44.4	87.3	91.3	z	325.5	637.3	81.9	2,172.6		
1979	88.5	196.4	84.5	54.1	46.9	83.4	92.7	z	337.5	625.1	83.3	2,292.6		
1980	87.5	178.2	76.3	48.4	42.5	65.6	87.9	z	325.3	554.3	66.6	2,278.3		
1981	82.1	168.4	74.8	47.0	41.2	66.7	87.5	z	315.1	508.1	59.7	2,228.6		
1982	75.4	148.1	70.4	42.0	37.6	60.0	78.9	77.2	298.3	446.9	47.9	2,119.2		
1983	82.9	160.3	81.1	48.7	37.8	69.3	81.2	83.1	320.9	492.9	54.8	2,173.6		
1984	87.5	166.5	90.3	57.0	41.0	73.5	84.4	92.9	346.8	578.9	57.9	2,461.7		
1985	84.4	160.2	95.0	60.4	40.9	72.0	83.3	97.2	363.2	622.6	58.4	2,652.2		
1986	84.1	158.3	100.9	65.4	40.8	69.4	84.2	100.1	380.4	665.4	57.0	2,770.6		
1987	85.4	163.7	109.0	70.8	41.9	69.0	87.4	106.5	412.8	692.3	53.5	2,901.4		
1988	88.0	165.8	111.7	72.7	43.8	68.0	89.8	116.2	436.6	710.6	46.6	3,005.2		
1989	86.9	163.2	109.6	73.6	44.7	64.4	87.3	119.4	441.0	680.9	41.9	3,072.1		
1990	84.6	160.1	106.6	72.3	45.1	59.4	84.8	117.9	432.8	642.8	38.0	3,051.0		
1991	78.7	148.0	97.9	64.6	44.0	54.1	80.2	109.7	417.1	553.7	30.7	2,783.3		
1992	78.7	144.6	100.3	65.7	43.5	56.4	80.8	110.1	429.3	528.2	27.2	2,704.1		
1993	81.1	145.2	103.3	68.8	45.9	64.2	83.8	113.1	450.6	560.8	27.2	2,835.6		
1994	82.1	150.3	110.2	74.7	49.3	73.5	87.7	119.5	491.9	604.7	27.9	3,058.4		
1995	82.5	148.0	111.4	76.0	51.2	81.4	87.8	123.5	512.6	608.8	26.6	3,201.1		
1996	80.7	143.5	113.9	78.4	52.4	89.1	88.6	126.0	535.2	642.0	26.2	3,383.6		
1997	82.2	144.6	117.4	81.4	54.5	93.4	89.1	130.0	562.6	672.5	26.6	3,582.3		
1998	80.0	144.1	121.4	87.6	55.8	99.7	87.6	134.3	576.7	706.1	27.5	3,803.6		
1999	79.0	141.7	124.8	95.6	56.8	102.9	85.4	142.2	612.3	767.3	29.9	4,084.2		
2000	79.0	142.2	126.5	103.1	58.4	90.3	83.5	145.4	643.4	798.4	32.0	4,251.2		
2001	73.5	134.1	123.2	103.6	56.2	76.9	79.5	137.8	680.5	753.4	33.0	4,300.5		
2002	69.1	131.7	122.3	107.2	55.1	70.7	75.2	138.6	709.2	773.9	32.8	4,194.2		

<sup>a</sup>U.S. Department of Commerce, Bureau of Economic Analysis (72); U.S. Department of Labor, Bureau of Labor Statistics (75).

<sup>z</sup>Not available.

Table 5a—Production, imports, exports, and consumption of timber products, by major product, 1965–2002 (million cubic feet, roundwood equivalent)<sup>a</sup>

Year	Industrial roundwood use											Fuel-wood production and consumption														
	All products			Total			Lumber			Plywood and veneer			Pulpwood-based products			Other industrial production and consumption <sup>b</sup>			Logs <sup>b</sup>			Pulpwood chips <sup>c</sup>				
	Production	Consumption	Imports	Production	Consumption	Imports	Production	Consumption	Imports	Production	Consumption		Imports	Production	Consumption	Imports	Production	Consumption	Imports	Production	Consumption	Imports	Production	Consumption	Imports	Production
1965	12,276	13,325	11,230	1,610	554	12,287	6,233	829	148	6,914	1,070	69	3	1,137	3,176	701	213	3,665	560	11	191	z	7	1,038		
1966	12,578	13,598	11,520	1,679	641	12,558	6,222	826	182	6,867	1,118	82	4	1,196	3,392	755	232	3,915	565	15	223	z	17	1,040		
1967	12,445	13,245	11,332	1,619	772	12,179	6,037	816	197	6,655	1,100	81	7	1,175	3,365	709	253	3,822	515	12	315	z	47	1,066		
1968	13,013	13,851	11,814	1,816	877	12,753	6,112	975	181	6,906	1,238	124	6	1,355	3,539	705	280	3,964	515	13	411	z	101	1,098		
1969	13,208	14,106	11,963	1,945	901	13,006	5,965	1,001	182	6,784	1,153	138	16	1,276	3,861	792	320	4,333	600	13	383	z	146	1,100		
1970	14,702	15,487	13,287	2,019	1,084	14,222	6,511	1,089	221	7,379	1,197	133	12	1,318	4,488	773	413	4,849	652	23	438	z	150	1,265		
1971	13,656	14,744	12,300	2,105	894	13,511	6,182	1,201	184	7,199	1,378	166	8	1,535	3,773	725	336	4,162	602	13	366	z	123	1,233		
1972	13,994	15,162	12,567	2,394	1,070	13,892	6,339	1,492	232	7,598	1,512	206	18	1,700	3,698	690	317	4,070	517	6	502	z	157	1,270		
1973	14,213	15,208	12,795	2,416	1,204	14,006	6,490	1,516	327	7,679	1,496	165	34	1,628	3,775	729	305	4,199	495	5	538	z	216	1,202		
1974	13,909	14,662	12,352	2,169	1,175	13,346	6,114	1,228	314	7,028	1,287	107	45	1,349	4,100	822	393	4,529	428	12	423	z	240	1,316		
1975	12,774	13,233	11,317	1,747	1,090	11,974	5,884	1,036	285	6,635	1,277	125	64	1,338	3,345	572	314	3,602	385	14	427	z	198	1,259		
1976	13,580	14,263	12,102	2,121	1,193	13,031	6,026	1,298	295	7,029	1,466	154	59	1,562	3,715	655	319	4,052	375	13	520	z	245	1,232		
1977	14,218	15,382	12,929	2,513	1,089	13,954	6,461	1,692	268	7,885	1,551	148	26	1,674	3,641	648	304	3,985	385	25	491	z	261	1,428		
1978	15,012	16,448	12,930	2,843	1,183	14,591	6,586	1,925	304	8,207	1,587	167	25	1,729	3,817	735	309	4,243	395	15	545	z	225	1,857		
1979	15,730	16,828	13,221	2,758	1,381	14,599	6,516	1,808	366	7,958	1,541	137	32	1,646	4,136	792	359	4,568	405	21	623	z	280	2,230		
1980	14,998	15,641	12,074	2,390	1,469	12,995	5,623	1,524	407	6,739	1,265	81	30	1,316	4,250	765	510	4,505	415	20	522	z	278	2,645		
1981	14,495	15,313	11,458	2,345	1,307	12,496	5,158	1,497	397	6,258	1,275	99	53	1,321	4,195	734	452	4,476	425	16	404	z	220	2,817		
1982	15,037	15,868	11,320	2,317	1,309	12,328	5,133	1,478	332	6,279	1,220	122	35	1,307	4,019	698	429	4,288	435	19	513	z	178	3,540		
1983	16,433	17,716	12,879	2,872	1,432	14,319	6,121	1,902	384	7,638	1,483	179	44	1,618	4,270	766	444	4,592	445	26	560	z	156	3,397		
1984	17,138	18,789	13,368	3,144	1,349	15,163	6,491	2,080	350	8,220	1,493	161	28	1,627	4,370	880	412	4,838	455	24	559	z	145	3,626		
1985	16,999	18,882	13,400	3,404	1,376	15,428	6,404	2,275	317	8,362	1,485	194	25	1,654	4,432	918	419	4,931	465	16	615	z	144	3,454		
1986	18,328	20,087	15,385	3,528	1,755	17,158	7,105	2,196	394	8,907	1,598	199	45	1,751	4,881	972	514	5,338	475	13	585	z	151	3,533		
1987	18,472	20,087	15,385	3,528	1,755	17,158	7,105	2,196	394	8,907	1,598	199	45	1,751	4,881	972	514	5,338	475	13	585	z	151	3,533		
1988	18,736	19,691	15,618	3,279	2,106	16,790	7,667	2,045	704	9,009	1,598	201	72	1,728	5,075	1,021	563	5,533	510	11	767	z	218	2,901		
1989	18,572	19,565	15,722	3,376	2,383	16,715	7,541	2,225	655	9,112	1,454	114	97	1,471	5,149	1,022	608	5,564	555	6	753	z	271	2,850		
1990	18,477	19,214	15,577	3,044	2,307	16,314	7,317	1,905	589	8,633	1,423	97	109	1,410	5,313	1,038	646	5,704	562	4	674	z	288	2,900		
1991	18,823	19,288	15,187	2,864	2,420	15,632	7,039	1,810	646	8,203	1,267	83	95	1,255	5,397	969	746	5,620	551	2	602	z	332	3,636		
1992	18,065	18,776	15,215	3,056	2,344	15,926	6,982	1,955	561	8,376	1,294	100	106	1,288	5,516	992	801	5,706	546	7	524	z	351	2,850		
1993	17,358	18,637	14,914	3,423	2,143	16,193	6,894	2,238	533	8,599	1,293	100	100	1,293	5,423	1,065	724	5,764	517	15	460	z	326	2,444		
1994	17,365	18,861	15,164	3,636	2,141	16,660	7,085	2,409	514	8,979	1,320	94	86	1,328	5,576	1,102	758	5,920	401	18	429	z	354	2,201		
1995	17,604	19,248	15,454	3,929	2,285	17,098	6,857	2,545	462	8,939	1,303	107	89	1,321	6,079	1,245	905	6,419	387	13	451	z	377	2,150		
1996	17,268	18,934	15,344	3,935	2,289	17,010	6,975	2,664	454	9,185	1,281	97	87	1,291	5,908	1,144	891	6,161	342	18	422	z	416	1,924		
1997	17,362	19,127	15,662	4,063	2,267	17,427	7,210	2,675	457	9,428	1,213	114	103	1,224	6,101	1,250	930	6,422	330	20	384	z	424	1,700		
1998	17,319	19,655	15,687	4,310	1,974	18,023	7,222	2,791	354	9,658	1,201	131	55	1,277	6,230	1,353	835	6,748	305	30	316	z	414	1,632		
1999	17,308	19,808	15,683	4,449	1,949	18,183	7,533	2,884	410	10,007	1,208	151	55	1,304	5,910	1,366	750	6,526	298	47	326	z	409	1,625		
2000	17,252	19,845	15,630	4,647	2,054	18,223	7,384	2,943	435	9,892	1,187	154	51	1,290	5,983	1,476	792	6,667	300	72	422	z	354	1,622		
2001	16,527	19,429	14,906	4,724	1,821	17,808	7,051	3,007	359	9,699	1,088	176	39	1,225	5,780	1,467	757	6,490	320	73	403	z	264	1,621		
2002	16,483	19,614	14,963	4,886	1,754	18,094	7,301	3,154	359	10,097	1,067	209	34	1,241	5,699	1,435	784	6,351	317	86	388	z	189	1,520		

<sup>a</sup>U.S. Department of Agriculture, Forest Service (21); U.S. Geological Survey (80); Data may not add to totals because of rounding; Data have been revised.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>Prior to 1989, pulpwood chips are not included in total production.

<sup>d</sup>Includes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

<sup>e</sup>Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

<sup>f</sup>Not available.



Table 6a—Production, imports, exports, and consumption of softwood timber products, by major product, 1965–2002 (million cubic feet, roundwood equivalent)<sup>a</sup>

Year	Industrial roundwood use												Fuel-wood production and consumption											
	All products						Pulpwood-based products							Other industrial products, production and consumption <sup>e</sup>		Pulpwood chip <sup>c</sup>								
	Production	Consumption	Imports	Exports	Total		Production	Consumption	Imports	Exports	Total	Production		Consumption	Imports	Exports	Total	Production	Consumption					
1965	8,506	9,337	8,319	1,297	465	9,150	4,583	771	130	5,223	945	14	2	957	2,313	510	155	2,668	300	2	178	z	z	187
1966	8,663	9,456	8,476	1,322	529	9,269	4,514	753	147	5,120	990	17	4	1,003	2,451	546	188	2,829	310	7	210	z	z	187
1967	8,624	9,267	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	z	z	192
1968	9,170	9,864	8,972	1,464	770	9,666	4,583	915	163	5,334	1,111	25	5	1,131	2,602	518	206	2,914	281	5	396	z	z	198
1969	9,181	9,933	8,983	1,535	783	9,735	4,437	923	164	5,195	1,035	29	15	1,049	2,812	577	233	3,155	330	7	371	z	z	198
1970	10,303	11,005	10,075	1,652	950	10,777	4,838	1,021	201	5,658	1,082	27	9	1,099	3,376	587	313	3,650	353	17	427	z	z	228
1971	9,621	10,573	9,405	1,710	759	10,357	4,702	1,138	149	5,691	1,253	33	7	1,278	2,760	530	245	3,045	334	9	357	z	z	216
1972	9,855	10,875	9,632	1,945	926	10,652	4,849	1,413	197	6,066	1,379	42	17	1,404	2,623	489	225	2,887	294	2	487	z	z	222
1973	9,942	10,845	9,731	1,957	1,053	10,635	4,947	1,421	293	6,075	1,374	34	31	1,377	2,603	501	210	2,894	287	1	520	z	z	211
1974	9,532	10,281	9,301	1,744	994	10,051	4,630	1,149	279	5,500	1,190	22	41	1,171	2,823	565	270	3,118	255	7	404	z	z	230
1975	9,064	9,552	8,844	1,438	950	9,331	4,602	992	250	5,344	1,198	25	59	1,164	2,393	409	225	2,577	235	11	416	z	z	220
1976	9,596	10,306	9,381	1,754	1,045	10,090	4,624	1,248	261	5,612	1,382	32	54	1,360	2,630	463	225	2,868	240	11	505	z	z	216
1977	9,899	11,094	9,709	2,141	946	10,904	4,966	1,632	233	6,365	1,460	31	22	1,469	2,566	456	214	2,808	240	22	477	z	z	190
1978	10,185	11,606	9,900	2,417	997	11,321	5,009	1,862	235	6,637	1,495	37	22	1,509	2,629	505	212	2,922	240	13	528	z	z	285
1979	10,506	11,672	10,096	2,348	1,182	11,262	4,877	1,742	296	6,322	1,452	29	30	1,451	2,920	558	253	3,225	245	19	603	z	z	410
1980	9,556	10,403	8,981	2,067	1,210	9,828	4,011	1,473	320	5,164	1,187	18	27	1,178	3,041	547	365	3,223	245	18	497	z	z	575
1981	9,191	10,131	8,601	1,996	1,056	9,541	3,839	1,446	310	4,976	1,200	21	49	1,172	2,937	514	317	3,134	245	14	380	z	z	590
1982	9,000	9,861	8,380	1,958	1,097	9,241	3,726	1,442	268	4,899	1,125	25	32	1,118	2,782	476	298	2,960	248	16	498	z	z	620
1983	10,110	11,343	9,515	2,405	1,172	10,748	4,577	1,856	298	6,135	1,379	39	41	1,377	2,767	488	291	2,964	249	23	542	z	z	595
1984	10,351	11,890	9,716	2,633	1,094	11,255	4,715	2,022	258	6,480	1,392	46	26	1,401	2,821	555	271	3,105	250	19	539	z	z	635
1985	10,334	12,032	9,729	2,830	1,132	11,427	4,713	2,212	246	6,678	1,392	46	22	1,415	2,772	561	267	3,066	256	11	597	z	z	605
1986	11,209	12,763	10,591	2,782	1,228	12,144	5,259	2,135	303	7,092	1,501	47	42	1,507	3,011	591	321	3,281	257	8	562	z	z	619
1987	11,748	13,219	11,235	2,879	1,408	12,706	5,629	2,174	381	7,422	1,537	62	53	1,546	3,158	632	341	3,449	277	11	633	z	z	513
1988	11,796	12,825	11,288	2,683	1,654	12,317	5,603	1,992	495	7,100	1,497	51	66	1,482	3,182	631	358	3,456	270	9	735	z	z	508
1989	11,711	12,686	11,169	2,828	1,853	12,144	5,423	2,164	504	7,083	1,357	30	90	1,296	3,223	628	386	3,465	294	3	719	3	154	542
1990	11,520	12,287	10,968	2,537	1,769	11,736	5,154	1,865	439	6,580	1,328	26	101	1,253	3,376	644	417	3,603	298	2	639	0	174	551
1991	11,386	12,030	10,694	2,405	1,761	11,338	5,078	1,773	482	6,370	1,178	23	83	1,118	3,433	608	483	3,558	292	1	556	0	157	691
1992	11,039	11,982	10,498	2,545	1,602	11,440	4,979	1,910	389	6,500	1,209	29	91	1,147	3,436	599	509	3,526	260	6	489	1	125	542
1993	10,457	11,868	9,992	2,840	1,430	11,403	4,752	2,183	350	6,585	1,205	29	88	1,146	3,261	611	443	3,430	225	14	422	4	127	465
1994	10,627	12,265	10,209	3,018	1,380	11,847	4,916	2,344	321	6,940	1,219	27	75	1,172	3,336	622	460	3,498	213	15	387	9	138	418
1995	10,518	12,307	10,166	3,224	1,435	11,955	4,645	2,483	278	6,850	1,195	31	77	1,149	3,580	686	539	3,727	205	9	408	14	132	352
1996	10,473	12,359	10,158	3,262	1,376	12,044	4,791	2,599	264	7,126	1,176	30	75	1,130	3,507	613	534	3,587	181	13	381	7	122	315
1997	10,619	12,563	10,340	3,307	1,362	12,285	4,994	2,596	244	7,346	1,105	35	92	1,048	3,589	661	548	3,701	175	13	332	1	146	278
1998	10,738	13,093	10,428	3,491	1,137	12,782	4,995	2,695	170	7,520	1,089	43	46	1,085	3,771	725	509	3,987	162	24	263	5	149	310
1999	10,738	13,194	10,429	3,563	1,107	12,885	5,272	2,766	204	7,834	1,092	53	46	1,099	3,994	702	444	4,059	158	41	266	1	146	309
2000	10,738	13,251	10,430	3,698	1,185	12,943	5,181	2,805	209	7,777	1,063	58	43	1,078	3,588	771	474	3,865	159	62	330	1	129	308
2001	10,359	13,089	10,051	3,787	1,057	12,781	4,981	2,895	147	7,729	939	73	31	982	3,430	755	451	3,734	272	64	307	1	121	308
2002	10,489	13,378	10,200	3,915	1,026	13,089	5,246	3,026	146	8,125	947	92	27	1,012	3,347	722	462	3,607	269	75	279	1	112	289

<sup>a</sup>U.S. Department of Agriculture, Forest Service (21); U.S. Geological Survey (80). Data may not add to totals because of rounding. Data have been revised.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>Prior to 1989, pulpwood chips are not included in total production.

<sup>d</sup>Includes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

<sup>e</sup>Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle wood, and miscellaneous items.

<sup>f</sup>Not available.





**Table 7a—Production, imports, exports, and consumption of hardwood timber products, by major product, 1965–2002 (million cubic feet, roundwood equivalent)<sup>a</sup>**  
Industrial roundwood use

Year	All products			Total			Lumber			Plywood and veneer			Pulpwood-based products			Other industrial products, and con- sumption <sup>e</sup>			Logs <sup>b</sup>			Pulpwood chip <sup>c</sup>			Fuel- wood produc- tion and sumption
	Produc- tion	Consump- tion	Im- ports	Ex- ports	Produc- tion	Consump- tion	Im- ports	Ex- ports	Produc- tion	Consump- tion	Im- ports	Ex- ports	Produc- tion	Consump- tion	Im- ports	Ex- ports	Produc- tion	Consump- tion	Im- ports	Ex- ports	Produc- tion	Consump- tion	Im- ports	Ex- ports	
1965	3,763	3,987	2,912	312	89	3,136	1,650	58	17	1,691	125	55	0	180	864	191	58	997	260	9	13	z	z	z	851
1966	3,897	4,142	3,045	357	112	3,290	1,709	73	35	1,747	128	65	0	193	941	210	65	1,086	255	8	12	z	z	z	853
1967	3,774	3,979	2,900	323	119	3,105	1,628	60	35	1,653	119	65	1	184	907	191	68	1,030	230	7	16	z	z	z	874
1968	3,742	3,987	2,842	353	108	3,087	1,529	60	17	1,572	127	98	1	224	937	187	74	1,050	234	7	15	z	z	z	900
1969	3,881	4,173	2,979	410	119	3,271	1,529	78	17	1,589	118	110	1	227	1,049	216	87	1,078	270	6	13	z	z	z	902
1970	4,249	4,482	3,211	367	134	3,445	1,674	67	20	1,721	115	107	3	219	1,112	187	100	1,199	299	6	11	z	z	z	1,037
1971	3,912	4,171	2,895	394	135	3,154	1,480	62	35	1,507	125	132	1	257	1,012	195	90	1,117	268	5	9	z	z	z	1,017
1972	3,983	4,287	2,935	448	144	3,239	1,489	78	35	1,533	133	164	2	296	1,074	201	92	1,183	223	4	15	z	z	z	1,048
1973	4,055	4,363	3,064	459	151	3,372	1,543	96	35	1,604	122	132	3	251	1,173	227	95	1,305	208	4	18	z	z	z	991
1974	4,137	4,381	3,051	426	181	3,295	1,484	78	35	1,528	97	86	4	178	1,277	257	123	1,411	173	5	19	z	z	z	1,086
1975	3,512	3,681	2,473	310	140	2,643	1,282	44	35	1,291	79	100	5	174	952	163	90	1,025	150	3	11	z	z	z	1,039
1976	3,738	3,957	2,722	367	149	2,941	1,402	50	35	1,417	84	123	5	202	1,086	192	94	1,184	135	2	15	z	z	z	1,016
1977	4,059	4,288	2,821	372	143	3,050	1,495	60	35	1,520	91	117	4	205	1,075	192	90	1,177	145	2	14	z	z	z	1,238
1978	4,602	4,842	3,030	426	186	3,270	1,578	63	70	1,571	92	130	2	220	1,188	230	97	1,321	155	3	18	z	z	z	1,572
1979	4,944	5,156	3,125	410	198	3,336	1,640	66	70	1,636	89	108	2	195	1,216	234	106	1,343	160	2	21	z	z	z	1,820
1980	5,163	5,238	3,093	333	259	3,167	1,611	51	87	1,575	78	62	3	138	1,209	218	145	1,282	170	2	24	z	z	z	2,070
1981	5,084	5,183	2,856	349	251	2,955	1,319	51	87	1,282	75	77	3	149	1,258	219	135	1,342	180	2	25	z	z	z	2,227
1982	5,860	6,007	2,940	359	212	3,087	1,407	37	64	1,380	95	97	3	189	1,236	222	130	1,328	187	3	15	z	z	z	2,920
1983	6,166	6,373	3,364	467	260	3,167	1,543	45	86	1,502	104	140	3	241	1,503	278	153	1,628	196	4	18	z	z	z	2,802
1984	6,643	6,899	3,652	511	286	3,909	1,775	57	92	1,741	103	125	2	226	1,549	325	142	1,732	205	5	20	z	z	z	2,991
1985	6,521	6,850	3,671	573	244	4,001	1,691	63	71	1,684	93	149	3	239	1,660	357	153	1,864	209	5	18	z	z	z	2,849
1986	6,967	7,254	4,053	597	310	4,340	1,846	60	91	1,816	96	152	4	244	1,869	381	193	2,057	219	4	22	z	z	z	2,914
1987	6,566	6,868	4,149	649	347	4,451	1,982	89	130	1,941	102	179	4	277	1,824	380	190	2,013	218	2	24	z	z	z	2,416
1988	6,722	6,866	4,330	595	452	4,473	2,064	53	208	1,909	101	150	6	245	1,892	390	205	2,077	240	2	33	z	z	z	2,393
1989	6,861	6,879	4,553	548	530	4,571	2,118	61	150	2,029	97	85	7	174	1,926	395	221	2,099	261	3	34	5	117	z	2,308
1990	6,957	6,927	4,609	507	538	4,578	2,163	40	151	2,053	95	71	9	157	1,937	394	229	2,102	264	2	35	1	114	z	2,349
1991	7,438	7,238	4,493	459	659	4,294	1,961	37	164	1,833	89	60	11	138	1,964	361	264	2,062	259	1	45	0	174	z	2,945
1992	7,025	6,795	4,717	512	742	4,487	2,003	45	172	1,876	85	71	15	142	2,080	393	293	2,181	287	1	36	1	226	z	2,308
1993	6,901	6,770	4,921	582	714	4,790	2,142	55	182	2,014	89	71	13	148	2,162	454	281	2,334	292	1	38	1	199	z	1,979
1994	6,738	6,596	4,956	618	760	4,813	2,168	64	193	2,039	101	67	11	156	2,240	480	298	2,422	188	3	42	5	216	z	1,783
1995	7,086	6,941	5,288	705	850	5,143	2,212	62	184	2,089	107	76	12	172	2,499	559	366	2,692	182	4	43	5	245	z	1,798
1996	6,795	6,575	5,186	674	894	4,966	2,183	66	190	2,059	105	67	11	161	2,401	530	357	2,574	161	5	41	5	295	z	1,609
1997	6,743	6,564	5,322	756	935	5,142	2,217	79	213	2,082	109	79	12	176	2,512	589	381	2,720	155	7	51	2	278	z	1,422
1998	6,580	6,563	5,259	819	837	5,241	2,226	96	185	2,137	112	88	9	191	2,459	624	326	2,761	143	6	53	2	265	z	1,322
1999	6,571	6,614	5,255	886	842	5,298	2,261	118	206	2,173	116	98	9	205	2,416	663	306	2,774	140	6	60	0	262	z	1,316
2000	6,514	6,594	5,200	949	869	5,280	2,203	138	226	2,115	124	96	8	212	2,415	704	318	2,802	141	9	92	1	226	z	1,314
2001	6,168	6,340	4,855	937	765	5,027	2,070	112	213	1,970	149	103	8	244	2,350	712	306	2,756	48	10	96	0	143	z	1,313
2002	5,993	6,236	4,762	971	728	5,005	2,056	129	212	1,972	120	117	8	229	2,353	712	322	2,743	48	11	109	2	76	z	1,231

<sup>a</sup>U.S. Department of Agriculture, Forest Service (21); U.S. Geological Survey (80). Data may not add to totals because of rounding. Data have been revised.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>Prior to 1989, pulpwood chips are not included in total production.

<sup>d</sup>Includes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

<sup>e</sup>Includes coverage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

<sup>f</sup>Not available.







**Table 9—U.S. annual industrial wood product production in thousands of short tons, product weight (includes additives and fillers) , 1965–2002<sup>a</sup>**

Year	Total	Softwood plywood <sup>d</sup>	Oriented strand-board <sup>b</sup>	Laminated veneer lumber <sup>b</sup>	Hardwood plywood and veneer <sup>c</sup>	Softwood lumber <sup>d</sup>	Hardwood lumber <sup>d</sup>	Lumber made at pallet plants <sup>e</sup>	Particle-board production <sup>f</sup>	Hard-board production <sup>g</sup>	Medium-density fiberboard production <sup>f</sup>	Pulp paper and board <sup>h</sup>	Other industrial products, production and consumption <sup>i</sup>	Insulating board <sup>j</sup>
1965	108,868	6,807	z	z	1,345	28,599	15,929	171	1,059	913	105	43,465	9,240	1,234
1966	113,194	7,140	z	z	1,362	28,162	16,488	203	1,333	964	117	46,971	9,323	1,131
1967	110,997	7,086	z	z	1,257	27,503	15,712	204	1,510	949	130	46,969	8,498	1,178
1968	116,505	8,036	z	z	1,318	28,589	14,740	225	1,956	1,160	145	50,561	8,498	1,276
1969	119,987	7,489	z	z	1,227	27,669	14,727	262	2,365	1,327	161	53,530	9,900	1,330
1970	119,523	7,842	z	z	1,179	26,876	14,057	247	2,434	1,370	179	53,408	10,758	1,173
1971	124,453	9,097	z	z	1,263	29,326	14,254	270	3,317	1,633	198	53,753	9,933	1,410
1972	130,569	10,021	z	z	1,332	30,239	14,334	303	4,330	1,812	220	58,009	8,531	1,439
1973	134,386	10,011	z	z	1,186	30,836	14,837	363	4,866	1,891	245	60,548	8,168	1,437
1974	126,340	8,683	z	z	919	27,046	14,257	402	4,324	1,767	272	60,403	7,062	1,205
1975	113,646	8,777	z	z	690	26,112	12,325	312	3,520	1,775	302	52,393	6,353	1,087
1976	128,233	10,084	z	z	711	29,873	13,462	383	4,485	2,120	394	59,283	6,188	1,251
1977	134,926	10,596	z	z	779	31,923	14,343	462	5,019	2,411	620	61,149	6,353	1,271
1978	139,305	10,918	z	z	778	32,704	15,120	529	5,231	2,445	714	63,085	6,518	1,262
1979	141,932	10,748	z	z	755	32,509	15,706	580	4,748	2,402	713	65,873	6,683	1,215
1980	134,084	8,932	84	53	681	27,530	15,452	505	4,148	1,919	693	66,217	6,848	1,021
1981	129,344	9,161	169	70	641	24,797	12,622	494	4,035	1,908	726	66,931	7,013	780
1982	124,212	8,666	348	70	909	23,222	13,494	447	3,365	1,746	627	63,483	7,178	657
1983	141,762	10,653	838	88	971	29,020	14,794	505	4,231	2,282	849	69,352	7,343	836
1984	150,006	10,897	1,276	88	988	30,434	17,027	591	4,494	2,137	892	72,742	7,508	934
1985	148,775	11,030	1,668	123	881	30,577	16,196	650	4,684	1,969	963	71,459	7,673	904
1986	160,772	12,096	2,196	140	912	34,435	17,680	721	5,067	1,819	1,098	75,964	7,838	806
1987	170,449	12,523	2,548	158	1,000	37,415	19,006	797	5,212	1,705	1,264	79,830	8,168	823
1988	174,787	12,359	2,878	193	1,019	37,224	19,813	876	5,385	1,599	1,320	82,847	8,415	859
1989	175,777	11,695	3,191	210	1,011	36,653	20,345	943	5,425	1,624	1,364	83,257	9,158	901
1990	176,550	11,440	3,386	280	1,009	34,941	20,792	996	5,352	1,570	1,336	85,307	9,273	868
1991	171,867	10,200	3,508	280	982	32,373	18,847	1,005	5,304	1,530	1,347	86,546	9,092	853
1992	179,502	10,572	4,158	298	934	33,706	19,276	1,046	5,597	1,648	1,499	90,885	9,016	868
1993	180,831	10,563	4,376	368	992	32,165	20,620	960	5,964	1,640	1,633	92,154	8,532	866
1994	185,905	10,740	4,679	403	1,182	33,297	20,900	863	6,387	1,627	1,759	96,595	6,617	857
1995	185,630	10,591	4,939	490	1,209	31,467	21,337	768	5,906	1,541	1,557	98,582	6,386	857
1996	186,758	10,490	5,821	560	1,171	32,476	21,074	660	6,270	1,650	1,752	98,334	5,643	857
1997	193,114	9,824	6,584	665	1,229	33,844	21,386	733	6,372	1,407	1,948	102,822	5,445	857
1998	191,746	9,721	7,017	718	1,288	33,853	21,480	744	6,459	1,344	1,970	101,262	5,033	857
1999	196,307	9,743	7,258	838	1,323	35,736	21,814	735	6,773	1,371	1,987	102,955	4,917	857
2000	193,162	9,557	7,441	833	1,487	35,113	21,259	735	6,756	1,182	2,093	100,900	4,950	857
2001	182,832	8,269	7,833	935	1,381	33,756	19,970	735	5,760	1,038	1,946	95,080	5,273	857
2002	186,558	8,313	8,391	977	1,376	35,555	19,828	735	6,207	912	2,280	95,890	5,238	857

<sup>a</sup>Sources are for recent production data (some earlier data are Forest Service estimates or from Dept. of Commerce).

<sup>b</sup>APA—The Engineered Wood Association (10).

<sup>c</sup>Dept. of Commerce (to 1988); 1989-1990 data from Hardwood Plywood & Veneer Association; later estimates based on trends in value of shipments (Dept. of Commerce); hardwood veneer based on Census of Manufactures data and trend in value of shipments.

<sup>d</sup>1965-1976 based on Commerce Department data and Forest Service estimates; 1976-1998 American Forest & Paper Association (AF&PA) Statistical Roundup (4) (1996 hardwood estimated by Forest Service; 1997-1998 hardwood estimate from Miller Freeman).

[Note that Commerce Dept. reported hardwood lumber production is understood to underestimate actual production as reflected in Forest Service estimates since 1900.]

<sup>e</sup>Forest Service estimate of lumber cut from roundwood at pallet plants.

Other lumber (e.g., purchased lumber) used by pallet makers is accounted for under hardwood and softwood lumber production.

<sup>f</sup>Composite Panel Association (based on production data 1959-1977, and 1995-1997; otherwise based on shipments; 1998 data are estimated) (16).

<sup>g</sup>Shipments data from American Hardboard Association (1965-1997) and as reported by Miller Freeman (1999); 1998 figure is estimated (8).

<sup>h</sup>AF&PA, formerly API (Statistics of Paper, Paperboard & Woodpulp) (5). Paper and paperboard production includes "Total Paper", "Total Paperboard", and "Building Paper" production. Total production of pulp, paper and paperboard includes market pulp produced for export.

<sup>i</sup>Data through 1988 was obtained from USDA Forest Service (48). Miscellaneous wood product production for 1996 based on timber product output tables in (draft) 1997 RPA Inventory Data Tables; intervening and subsequent data are extrapolated.

<sup>j</sup>Derived using earlier data from Commerce Department MA26A reports (in square feet of product output) to convert tonnage reported in AF&PA and earlier API reports.

<sup>k</sup>Not available.

**Table 10—Industrial wood productivity, 1965-2002<sup>a</sup>**

Year	Industrial wood productivity (industrial wood product output per unit of roundwood input)		Roundwood equivalents of production						Recovered paper utilization rate (%)	U.S. population (Millions)	Per capita industrial wood product production (Lb/capita)
	Lbs/ft <sup>3</sup>	Tons/ton	Total industrial wood product production (from table 9) Thousand tons	Hardwoods <sup>b</sup> Million ft <sup>3</sup>	Softwoods <sup>c</sup> Million ft <sup>3</sup>	Totals					
						Thousand short tons <sup>d</sup>	Thousand metric tons				
1965	19.28	0.6929	108,261	2,912	8,319	11,230	156,247	141,744	23.5%	194.3	1,114
1966	19.52	0.7007	112,432	3,045	8,476	11,520	160,461	145,567	22.6%	196.6	1,144
1967	19.44	0.6991	110,134	2,900	8,432	11,332	157,547	142,924	21.2%	198.7	1,109
1968	19.54	0.7052	115,421	2,842	8,972	11,814	163,678	148,485	20.4%	200.7	1,150
1969	19.85	0.7149	118,703	2,979	8,983	11,963	166,052	150,639	22.1%	202.7	1,171
1970	17.79	0.6420	118,211	3,211	10,075	13,287	184,128	167,038	22.8%	205.1	1,153
1971	19.94	0.7206	122,665	2,895	9,405	12,300	170,218	154,419	22.8%	207.7	1,181
1972	20.40	0.7376	128,216	2,935	9,632	12,567	173,840	157,704	22.5%	209.9	1,222
1973	20.59	0.7433	131,730	3,064	9,731	12,795	177,225	160,775	23.5%	211.9	1,243
1974	20.08	0.7235	123,996	3,051	9,301	12,352	171,383	155,475	23.7%	213.9	1,159
1975	19.76	0.7165	111,787	2,473	8,844	11,317	156,016	141,534	23.0%	216.0	1,035
1976	20.80	0.7533	125,859	2,722	9,381	12,102	167,078	151,570	23.4%	218.0	1,155
1977	21.12	0.7647	132,289	2,821	9,709	12,529	172,986	156,929	23.4%	222.2	1,202
1978	21.12	0.7633	136,542	3,030	9,900	12,930	178,891	162,286	23.8%	222.6	1,227
1979	21.09	0.7620	139,443	3,125	10,096	13,221	182,998	166,012	23.9%	225.1	1,239
1980	21.85	0.7857	131,899	3,093	8,981	12,074	167,867	152,286	23.5%	227.7	1,159
1981	22.22	0.8002	127,276	2,856	8,601	11,458	159,052	144,289	23.4%	230.0	1,107
1982	21.66	0.7782	122,574	2,940	8,380	11,320	157,505	142,886	23.7%	232.2	1,056
1983	21.72	0.7803	139,888	3,364	9,515	12,879	179,269	162,629	23.4%	234.3	1,194
1984	22.16	0.7938	148,099	3,652	9,716	13,368	186,568	169,251	23.8%	236.3	1,253
1985	21.92	0.7852	146,873	3,671	9,729	13,400	187,048	169,686	23.8%	238.5	1,232
1986	21.69	0.7764	158,793	4,053	10,591	14,644	204,535	185,550	24.7%	240.7	1,319
1987	21.90	0.7853	168,479	4,149	11,235	15,385	214,546	194,632	24.6%	242.8	1,388
1988	22.13	0.7921	172,817	4,330	11,288	15,618	218,165	197,915	25.1%	245.0	1,411
1989	22.12	0.7897	173,912	4,553	11,169	15,722	220,233	199,791	25.7%	247.3	1,406
1990	22.44	0.7897	174,796	4,609	10,968	15,577	218,500	198,219	27.0%	249.9	1,399
1991	22.41	0.7989	170,201	4,493	10,694	15,187	213,032	193,259	29.1%	252.7	1,347
1992	23.39	0.8311	177,932	4,717	10,498	15,215	214,088	194,217	30.9%	255.4	1,393
1993	24.02	0.8498	179,125	4,921	9,992	14,914	210,784	191,219	32.3%	258.1	1,388
1994	24.28	0.8594	184,058	4,956	10,209	15,164	214,175	194,295	33.7%	260.7	1,412
1995	23.83	0.8409	184,152	5,288	10,166	15,454	219,002	198,674	34.4%	263.0	1,400
1996	24.17	0.8536	185,428	5,186	10,158	15,344	217,241	197,077	36.9%	265.5	1,397
1997	24.51	0.8653	191,964	5,322	10,340	15,662	221,839	201,248	36.4%	267.9	1,433
1998	24.31	0.8591	190,698	5,259	10,428	15,687	221,969	201,366	37.1%	270.3	1,411
1999	25.18	0.8858	197,420	5,255	10,429	15,683	221,908	201,310	37.1%	273.2	1,445
2000	24.85	0.8785	194,210	5,200	10,430	15,630	221,046	200,528	39.1%	282.1	1,377
2001	24.80	0.8782	184,844	4,855	10,051	14,906	210,474	190,938	39.1%	284.8	1,298
2002	25.18	0.8983	188,404	4,762	10,200	14,963	210,927	191,349	40.0%	287.5	1,311

<sup>a</sup>U.S. Department of Agriculture, Forest Products Laboratory (20).

<sup>b</sup>The average specific gravity for hardwood is 0.52.

<sup>c</sup>The average specific gravity for softwood is 0.42.

<sup>d</sup>The weight density of a cubic foot of water in pounds is 62.4. Example: ((0.52\*62.4/2000)+(0.42\*62.4/2000))\*1000.

**Table 11a—Per capita consumption of timber products, by major product, 1965–2002<sup>a</sup>**

Year	Industrial roundwood used for											
	All products	Total roundwood	Lumber				Plywood and veneer		Pulp products		Other industrial products <sup>b</sup>	
			Cubic feet	Cubic feet	Cubic feet	Board feet (lumber tally)	Cubic feet	Board feet (local log rule)	Cubic feet	Cords	Cubic feet	Cubic feet
1965	68.5	63.2	35.6	194	5.9	27	18.9	0.2	2.9	5.3	0.067	
1966	69.1	63.8	34.9	190	6.1	28	19.9	0.2	2.9	5.3	0.066	
1967	66.6	61.2	33.5	182	5.9	27	19.2	0.2	2.6	5.4	0.067	
1968	68.9	63.5	34.4	187	6.8	31	19.8	0.2	2.6	5.5	0.068	
1969	69.5	64.1	33.5	182	6.3	29	21.4	0.3	3.0	5.4	0.068	
1970	75.4	69.2	36.0	196	6.4	30	23.6	0.3	3.2	6.2	0.077	
1971	70.9	65.0	34.7	189	7.4	34	20.0	0.3	2.9	5.9	0.074	
1972	72.2	66.2	36.2	197	8.1	37	19.4	0.2	2.5	6.1	0.076	
1973	71.7	66.1	36.2	197	7.7	35	19.8	0.2	2.3	5.7	0.071	
1974	68.5	62.3	32.9	179	6.3	29	21.2	0.3	2.0	6.2	0.077	
1975	61.2	55.4	30.7	167	6.2	29	16.7	0.2	1.8	5.8	0.073	
1976	65.4	59.7	32.2	175	7.2	33	18.6	0.2	1.7	5.7	0.071	
1977	69.7	63.3	35.8	195	7.6	35	18.1	0.2	1.7	6.5	0.081	
1978	73.8	65.5	36.9	201	7.8	36	19.1	0.2	1.8	8.3	0.104	
1979	74.7	64.8	35.4	192	7.3	34	20.3	0.3	1.8	9.9	0.124	
1980	68.6	57.0	29.6	161	5.8	27	19.8	0.2	1.8	11.6	0.145	
1981	66.5	54.3	27.2	148	5.7	26	19.5	0.2	1.8	12.2	0.153	
1982	68.3	53.0	27.0	147	5.6	26	18.5	0.2	1.9	15.2	0.191	
1983	75.5	61.0	32.6	177	6.9	32	19.6	0.2	1.9	14.5	0.181	
1984	79.4	64.1	34.8	189	6.9	32	20.5	0.3	1.9	15.3	0.192	
1985	79.1	64.6	35.1	191	6.9	32	20.7	0.3	1.9	14.5	0.181	
1986	83.1	68.4	37.0	201	7.3	34	22.2	0.3	2.0	14.7	0.183	
1987	82.7	70.6	38.6	210	7.5	35	22.5	0.3	2.0	12.1	0.151	
1988	80.3	68.5	36.8	200	7.1	33	22.6	0.3	2.1	11.8	0.148	
1989	79.1	67.5	36.8	200	5.9	27	22.5	0.3	2.2	11.5	0.144	
1990	76.9	65.3	34.5	188	5.6	26	22.8	0.3	2.2	11.6	0.145	
1991	76.2	61.8	32.5	177	5.0	23	22.2	0.3	2.2	14.4	0.180	
1992	73.5	62.3	32.8	178	5.0	23	22.3	0.3	2.1	11.2	0.139	
1993	72.1	62.7	33.3	181	5.0	23	22.3	0.3	2.0	9.5	0.118	
1994	72.2	63.8	34.4	187	5.1	23	22.7	0.3	1.5	8.4	0.106	
1995	73.1	64.9	34.0	185	5.0	23	24.4	0.3	1.5	8.2	0.102	
1996	71.2	64.0	34.6	188	4.9	22	23.2	0.3	1.3	7.2	0.091	
1997	71.3	65.0	35.2	191	4.6	21	24.0	0.3	1.2	6.3	0.079	
1998	72.6	66.5	35.7	194	4.7	22	25.0	0.3	1.1	6.0	0.075	
1999	72.3	66.4	36.6	199	4.8	22	23.9	0.3	1.1	5.9	0.074	
2000	70.1	64.3	35.1	191	4.6	21	23.6	0.3	1.1	5.7	0.072	
2001	68.0	62.3	34.1	185	4.3	20	22.8	0.3	1.1	5.7	0.071	
2002	67.3	62.0	35.1	191	4.3	20	21.5	0.3	1.1	5.3	0.066	

<sup>a</sup>U.S. Department of Agriculture, Forest Service (21,32); U.S. Council of Economic Advisors (40); Data may not add to totals because of rounding.

<sup>b</sup>Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

**Table 11b—Per capita consumption of timber products, by major product, 1965–2002 (cubic meters)<sup>a</sup>**

Year	All products	Industrial roundwood used for					Other industrial products <sup>b</sup>	Fuelwood
		Total roundwood	Lumber	Plywood and veneer	Pulp products			
1965	1.940	1.789	1.008	0.166	0.534	0.082	0.151	
1966	1.956	1.807	0.989	0.172	0.564	0.081	0.150	
1967	1.886	1.734	0.948	0.167	0.545	0.073	0.152	
1968	1.952	1.798	0.974	0.191	0.559	0.073	0.155	
1969	1.969	1.815	0.948	0.178	0.605	0.084	0.154	
1970	2.135	1.960	1.019	0.182	0.669	0.090	0.175	
1971	2.008	1.840	0.981	0.209	0.567	0.082	0.168	
1972	2.045	1.873	1.025	0.229	0.549	0.070	0.171	
1973	2.032	1.871	1.026	0.218	0.561	0.066	0.161	
1974	1.939	1.765	0.930	0.179	0.600	0.057	0.174	
1975	1.733	1.568	0.870	0.175	0.472	0.050	0.165	
1976	1.851	1.691	0.913	0.203	0.526	0.049	0.160	
1977	1.975	1.791	1.014	0.215	0.512	0.050	0.184	
1978	2.090	1.854	1.044	0.220	0.540	0.050	0.236	
1979	2.114	1.834	1.001	0.207	0.575	0.051	0.280	
1980	1.943	1.614	0.838	0.164	0.560	0.052	0.329	
1981	1.883	1.537	0.770	0.163	0.551	0.052	0.347	
1982	1.933	1.501	0.766	0.159	0.523	0.053	0.432	
1983	2.138	1.727	0.923	0.196	0.555	0.054	0.411	
1984	2.249	1.814	0.985	0.195	0.580	0.055	0.434	
1985	2.240	1.830	0.993	0.196	0.585	0.055	0.410	
1986	2.353	1.938	1.048	0.206	0.628	0.056	0.416	
1987	2.341	2.000	1.092	0.213	0.637	0.058	0.342	
1988	2.275	1.939	1.041	0.200	0.639	0.059	0.335	
1989	2.239	1.912	1.043	0.168	0.637	0.064	0.326	
1990	2.177	1.848	0.978	0.160	0.646	0.064	0.329	
1991	2.159	1.751	0.919	0.141	0.630	0.062	0.407	
1992	2.081	1.765	0.929	0.143	0.633	0.061	0.316	
1993	2.043	1.774	0.943	0.142	0.632	0.057	0.268	
1994	2.045	1.806	0.975	0.144	0.643	0.044	0.239	
1995	2.069	1.838	0.963	0.142	0.691	0.042	0.231	
1996	2.016	1.811	0.980	0.138	0.657	0.036	0.205	
1997	2.019	1.840	0.997	0.129	0.679	0.035	0.180	
1998	2.055	1.884	1.012	0.134	0.707	0.032	0.171	
1999	2.048	1.880	1.037	0.135	0.676	0.031	0.168	
2000	1.984	1.822	0.993	0.129	0.669	0.030	0.163	
2001	1.924	1.763	0.964	0.122	0.645	0.032	0.161	
2002	1.906	1.756	0.995	0.122	0.608	0.031	0.150	

<sup>a</sup>U.S. Department of Agriculture, Forest Service (21,32); U.S. Council of Economic Advisors (40); Data may not add to totals because of rounding.

<sup>b</sup>Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.



**Table 12—Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1965–2002<sup>a</sup>**

Year	Lumber						Plywood					
	Total		Softwoods		Hardwoods		Total		Softwoods		Hardwoods	
	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100
	<i>Billion board feet</i>		<i>Billion board feet</i>		<i>Billion board feet</i>		<i>Billion square feet (3/8-in. basis)</i>		<i>Billion square feet (3/8-in. basis)</i>		<i>Billion square feet (3/8-in. basis)</i>	
1965	43.1	70.3	33.4	67.5	9.7	82.2	15.5	73.0	12.4	68.9	3.1	95.7
1966	42.7	69.7	32.7	66.1	10.0	84.9	16.3	76.9	13.0	72.2	3.3	102.9
1967	41.4	67.6	32.0	64.6	9.5	80.3	16.0	75.4	12.9	71.5	3.2	97.6
1968	43.1	70.3	34.1	68.9	9.0	76.3	18.5	87.2	14.6	81.3	3.9	120.2
1969	42.3	69.0	33.2	67.1	9.1	77.1	17.5	82.2	13.5	75.0	4.0	122.7
1970	40.8	66.5	32.2	65.1	8.6	72.8	18.0	84.8	14.2	79.0	3.8	117.3
1971	45.0	73.4	36.4	73.5	8.6	73.1	21.0	98.8	16.5	91.8	4.5	137.9
1972	47.5	77.5	38.8	78.3	8.7	74.2	23.3	109.5	18.1	100.5	5.2	159.9
1973	47.9	78.3	38.8	78.4	9.1	77.6	22.2	104.5	17.9	99.4	4.3	133.0
1974	41.6	67.9	32.9	66.5	8.7	73.9	18.3	86.2	15.3	85.1	3.0	92.2
1975	38.4	62.7	31.1	62.8	7.4	62.5	18.2	85.5	15.3	84.7	2.9	89.9
1976	44.1	72.0	36.1	72.8	8.1	68.5	21.1	99.3	17.7	98.4	3.4	104.1
1977	49.4	80.5	40.7	82.2	8.6	73.4	22.5	105.8	19.1	106.0	3.4	104.4
1978	51.4	83.9	42.5	85.9	8.9	75.8	23.4	110.0	19.7	109.5	3.6	113.0
1979	50.1	81.7	40.8	82.4	9.3	78.8	22.5	105.8	19.3	107.0	3.2	98.8
1980	42.8	69.8	33.8	68.3	9.0	76.0	18.2	85.6	16.0	88.8	2.2	68.0
1981	39.3	64.1	32.0	64.7	7.3	61.7	18.5	87.1	16.1	89.3	2.4	74.7
1982	39.1	63.9	31.3	63.3	7.8	66.6	18.6	87.6	15.4	85.5	3.2	99.5
1983	48.4	79.0	39.9	80.6	8.5	72.5	23.1	108.7	18.9	105.0	4.2	129.1
1984	52.8	86.1	42.9	86.6	9.9	84.0	23.6	110.8	19.6	108.8	3.9	122.3
1985	54.0	88.1	44.4	89.8	9.6	81.1	24.3	114.2	19.9	110.5	4.4	134.9
1986	57.9	94.5	47.6	96.2	10.3	87.5	26.1	122.7	21.6	119.7	4.5	139.4
1987	61.5	100.3	50.5	101.9	11.0	93.7	27.5	129.4	22.2	123.4	5.3	163.2
1988	59.2	96.6	48.3	97.7	10.9	92.2	26.4	124.3	21.7	120.4	4.7	145.9
1989	60.6	98.9	49.1	99.1	11.5	98.0	23.3	109.9	20.0	111.0	3.4	104.0
1990	57.4	93.7	45.7	92.4	11.7	99.3	22.4	105.3	19.3	107.4	3.0	94.0
1991	52.1	85.0	41.6	84.1	10.4	88.6	20.1	94.4	17.4	96.3	2.7	83.5
1992	55.8	91.1	45.1	91.1	10.7	90.8	20.8	97.8	17.9	99.5	2.8	87.8
1993	57.2	93.3	45.7	92.3	11.5	97.5	20.9	98.5	17.9	99.6	3.0	92.6
1994	59.8	97.6	48.2	97.3	11.6	98.9	21.7	102.0	18.5	102.5	3.2	99.2
1995	59.5	97.1	47.6	96.1	11.9	101.4	21.6	101.9	18.2	100.8	3.5	107.9
1996	61.3	100.0	49.5	100.0	11.8	100.0	21.2	100.0	18.0	100.0	3.2	100.0
1997	62.9	102.7	51.0	103.1	11.9	101.1	20.1	94.8	16.5	91.7	3.6	112.3
1998	64.5	105.2	52.2	105.5	12.2	103.8	21.2	99.8	17.2	95.4	4.0	124.1
1999	66.8	109.1	54.4	109.9	12.4	105.5	21.7	102.0	17.3	96.3	4.3	134.2
2000	66.1	107.9	54.0	109.1	12.1	102.7	21.7	102.3	17.1	95.2	4.6	141.9
2001	64.9	106.0	53.7	108.5	11.3	95.6	19.8	93.0	15.3	84.8	4.5	139.3
2002	67.7	110.5	56.4	114.0	11.3	95.7	20.5	96.6	15.7	87.0	4.9	150.5

**Table 12—Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1965–2002<sup>a</sup>—Con.**

Year	Particleboard <sup>b</sup>		Insulating board		Hardboard		Portland cement <sup>c</sup>		Steel products <sup>d</sup>		Brick <sup>e</sup>	
	Consump- tion	Index 1996=100	Consump- tion	Index 1996=100	Index		Index		Index		Index	
	<i>Million square feet (3/4-in. basis)</i>		<i>Million square feet (1/2-in. basis)</i>		<i>Shipments Million square feet (1/8-in. basis)</i>		<i>Shipments Thousand tons</i>		<i>Shipments Thousand tons</i>		<i>Shipments Million bricks</i>	
1965	832	13.1	3,395	137.4	2,921	55.3	70,328	71.2	11,836	149.0	8,089	108.6
1966	1,032	16.2	3,098	125.4	3,083	58.4	71,570	72.5	11,862	149.3	7,552	101.4
1967	1,166	18.3	3,233	130.9	3,038	57.5	70,315	71.2	11,375	143.2	7,117	95.6
1968	1,489	23.4	3,525	142.7	3,710	70.3	74,740	75.7	12,195	153.5	7,557	101.5
1969	1,794	28.2	3,656	148.0	4,247	80.4	77,047	78.0	11,402	143.5	7,290	97.9
1970	1,851	29.1	3,246	131.4	4,384	83.0	73,407	74.4	10,565	133.0	6,496	87.2
1971	2,488	39.1	3,889	157.4	5,225	99.0	79,005	80.0	8,666	109.1	7,570	101.6
1972	3,205	50.3	3,973	160.9	5,798	109.8	82,808	83.9	8,589	108.1	8,402	112.8
1973	3,574	56.2	3,975	160.9	6,050	114.6	88,459	89.6	10,731	135.1	8,674	116.5
1974	3,163	49.7	3,252	131.7	5,654	107.1	81,125	82.2	11,360	143.0	6,673	89.6
1975	2,650	41.6	2,919	118.2	5,681	107.6	69,078	70.0	8,119	102.2	6,262	84.1
1976	3,449	54.2	3,375	136.6	6,785	128.5	72,833	73.8	7,508	94.5	7,218	96.9
1977	4,105	64.5	3,485	141.1	7,714	146.1	78,730	79.7	7,553	95.1	8,663	116.3
1978	4,360	68.5	3,470	140.5	7,825	148.2	84,838	85.9	9,612	121.0	8,586	115.3
1979	4,020	63.2	3,399	137.6	7,688	145.6	84,860	86.0	9,978	125.6	7,708	103.5
1980	3,601	56.6	2,818	114.1	6,140	116.3	76,059	77.0	8,742	110.1	6,090	81.8
1981	3,522	55.3	2,118	85.7	6,105	115.6	71,901	72.8	8,446	106.3	5,059	67.9
1982	3,564	56.0	1,841	74.5	5,587	105.8	64,602	65.4	6,260	78.8	5,119	68.7
1983	4,560	71.6	2,398	97.1	7,303	138.3	70,849	71.8	6,276	79.0	6,218	83.5
1984	5,107	80.2	2,742	111.0	6,837	129.5	81,928	83.0	6,052	76.2	6,991	93.9
1985	5,292	83.1	2,724	110.3	6,300	119.3	84,779	85.9	6,407	80.7	6,605	88.7
1986	5,693	89.4	2,415	97.8	5,822	110.3	88,946	90.1	5,141	64.7	7,184	96.5
1987	6,042	94.9	2,388	96.7	5,458	103.4	90,458	91.6	5,619	70.7	7,601	102.1
1988	6,239	98.0	2,457	99.5	5,118	96.9	90,299	91.5	6,014	75.7	6,930	93.0
1989	4,920	77.3	2,621	106.1	5,196	98.4	89,081	90.2	7,041	88.6	7,494	100.6
1990	4,746	74.6	2,480	100.4	5,025	95.2	87,675	88.8	7,206	90.7	6,873	92.3
1991	4,654	73.1	2,332	94.4	4,895	92.7	78,058	79.1	7,112	89.5	5,975	80.2
1992	5,057	79.5	2,458	99.5	5,273	99.9	82,845	83.9	6,848	86.2	6,231	83.7
1993	5,656	88.9	2,435	98.6	5,248	99.4	86,388	87.5	6,755	85.0	6,655	89.4
1994	6,271	98.5	2,470	100.0	5,206	98.6	92,698	93.9	7,319	92.1	7,238	97.2
1995	5,828	91.6	2,470	100.0	4,930	93.4	93,392	94.6	6,988	88.0	6,665	89.5
1996	6,365	100.0	2,470	100.0	5,280	100.0	98,728	100.0	7,943	100.0	7,448	100.0
1997	6,691	105.1	2,470	100.0	4,501	85.2	99,812	101.1	7,546	95.0	7,576	101.7
1998	8,320	130.7	2,470	100.0	4,300	81.4	114,329	115.8	8,400	105.8	8,241	110.6
1999	8,619	135.4	2,470	100.0	4,386	83.1	120,024	121.6	8,800	110.8	8,932	119.9
2000	9,098	142.9	2,470	100.0	3,781	71.6	121,332	122.9	8,767	110.4	8,617	115.7
2001	9,030	141.9	2,470	100.0	3,322	62.9	124,736	126.3	9,188	115.7	7,955	106.8
2002	9,927	156.0	2,470	100.0	2,919	55.3	121,279	122.8	8,869	111.7	8,110	108.9

<sup>a</sup>American Plywood Association (11,12); Composite Panel Association (16); U.S. Department of Commerce, Bureau of Industrial Economics (73); Wood Technology (87); U.S. International Trade Commission (81).

<sup>b</sup>Includes medium-density fiberboard.

<sup>c</sup>U.S. Geological Survey (80).

<sup>d</sup>American Iron & Steel Institute (9). Construction, including maintenance; Net shipments.

<sup>e</sup>U.S. Department of Commerce, Bureau of the Census (54)

**Table 13—Volume and value of imports and exports of timber products by product, 2002**

Product	Standard unit of measure	Imports <sup>a</sup>		Exports		Trade balance <sup>b</sup>	
		Volume	Value <sup>c</sup>	Volume	Value <sup>d</sup>	Volume	Value <sup>d</sup>
			Million dollars		Million dollars		Million dollars
Logs: <sup>ef,g</sup>	Million board feet						
Softwoods		466.0	161.0	1,744.9	724.5	1,278.9	563.5
Hardwoods		70.7	41.5	683.6	483.3	612.8	441.8
Total		536.7	202.5	2,428.5	1,207.8	1,891.8	1,005.3
Lumber: <sup>e</sup>	Million board feet						
Softwoods		20,985.6	6,271.0	966.4	483.1	(20,019.2)	(5,787.9)
Hardwoods		738.5	594.4	1,219.3	1,311.7	480.8	717.3
Railroad ties <sup>f</sup>		50.0	21.9	245.7	29.7	195.7	7.8
Total		21,774.1	6,887.3	2,431.4	1,824.6	(19,342.7)	(5,062.8)
Veneer:	Million square feet						
Softwoods <sup>f,h</sup>	3/8 in. thickness	2,385.4	136.1	260.3	39.7	(2,125.1)	(96.4)
Hardwoods <sup>ef,h</sup>		2,328.7	318.6	3,460.4	417.9	1,131.7	99.3
Total		4,714.1	454.7	3,720.7	457.6	(993.4)	2.9
Plywood: <sup>h</sup>	Million square feet						
Softwoods	3/8 in. thickness	923.9	195.6	166.2	95.1	(757.7)	(100.5)
Hardwoods	3/8 in. thickness	2,944.0	850.7	78.4	55.7	(2,865.5)	(795.0)
Total		3,867.8	1,046.3	244.6	150.8	(3,623.2)	(895.5)
Particleboard <sup>h</sup>	Million square feet						
	3/4 in. thickness	771.7	269.6	118.9	41.0	(652.9)	(228.6)
Med. dens. fiberboard <sup>h</sup>	Million square feet						
	3/4 in. thickness	2,476.0	205.5	92.8	46.8	(2,383.2)	(158.6)
OSB/waferboard <sup>h</sup>	Million square feet						
	3/8 in. thickness	8,470.8	1,076.8	195.7	41.0	(8,275.2)	(1,035.8)
Hardboard <sup>h</sup>	Million square feet						
	1/8 in. thickness assumed	2,676.4	406.9	669.3	69.3	(2,007.1)	(337.6)
Pulpwood:	Thousand cords						
Round <sup>ef</sup>		23.3	2.1	972.9	102.7	949.7	100.6
Chips <sup>e</sup>		43.9	8.0	911.7	197.1	867.9	189.1
Total		67.1	10.1	1,884.7	299.8	1,817.6	289.7
Wood pulp <sup>e</sup>	Thousand short tons	7,247.4	2,294.2	6,253.7	2,612.2	(993.7)	318.0
Paper and board: <sup>e,l</sup>	Thousand short tons						
Newsprint		6,904.8	3,039.1	729.5	330.2	(6,175.3)	(2,708.8)
Printing & writing paper		7,249.0	4,833.6	1,418.9	1,423.4	(5,830.1)	(3,410.2)
Paperboard		2,065.3	1,017.4	5,865.3	2,872.0	3,800.0	1,854.6
Other paper & board <sup>j</sup>		1,359.4	1,480.0	1,054.0	1,215.1	(305.4)	(264.9)
Converted products		1,854.8	3,714.2	2,496.4	3,964.8	641.6	250.7
Total		19,433.2	14,084.2	11,563.9	9,805.6	(7,869.3)	(4,278.5)
Recovered paper <sup>e</sup>	Thousand short tons	411.5	54.7	11,403.5	1,077.2	10,992.1	1,022.4
Other wood products <sup>k</sup>			5,354.8		1,104.9		(4,250.0)
Total all products <sup>f,g,l</sup>			32,347.6		18,738.6		(13,609.0)

<sup>a</sup>Imports for consumption.

<sup>b</sup>Negative amounts, given in parentheses, indicate imports exceed exports.

<sup>c</sup>Customs value, which is generally defined as the price actually paid or payable for merchandise when sold for exportation to the U.S., excluding U.S. import duties, freight, insurance, and other charges.

<sup>d</sup>Value (free alongside ship) at U.S. ports of export, based on the transaction price, including inland freight, insurance, and other charges.

<sup>e</sup>American Forest and Paper Association (3,4,5).

<sup>f</sup>U.S. International Trade Commission (81).

<sup>g</sup>Includes pulpwood logs.

<sup>h</sup>U.S. Department of Agriculture, Foreign Agricultural Service (41).

<sup>i</sup>Includes wet machine board and converted paper and paperboard products.

<sup>j</sup>Includes tissue, packaging and industrial papers, wet machine board, and construction paper and board.

<sup>k</sup>Includes poles and piling, fuelwood, wood charcoal, cork, wood containers, wood doors, and other miscellaneous products.

<sup>l</sup>Does not include wood furniture nor printed material.

<sup>m</sup>Data may not add to totals because of rounding.

**Table 14—Value of imports and exports of all commodities<sup>a</sup> and timber products,<sup>b</sup> 1965–2002**

Year	Imports <sup>c</sup>					Exports <sup>d</sup>				
	All commodities		Timber products			All commodities		Timber products		
			Total	Proportion <sup>e</sup>				Total	Proportion <sup>e</sup>	
	Million current dollars	Million 1997 dollars <sup>f</sup>	Million current dollars	Million 1997 dollars	Percent	Million current dollars	Million 1997 dollars	Million current dollars	Million 1997 dollars	Percent
1965	21,285	83,892	1,977	7,792	9.3	27,135	106,949	917	3,614	3.4
1966	25,360	97,138	2,165	8,293	8.5	29,884	114,466	1,024	3,922	3.4
1967	26,733	102,038	2,087	7,966	7.8	31,142	118,866	1,150	4,389	3.7
1968	32,970	122,827	2,446	9,112	7.4	33,953	126,489	1,362	5,074	4.0
1969	35,863	128,331	2,734	9,783	7.6	37,462	134,052	1,509	5,400	4.0
1970	39,756	137,293	2,546	8,792	6.4	42,590	147,080	1,816	6,271	4.3
1971	45,516	152,348	2,937	9,831	6.5	43,492	145,574	1,692	5,663	3.9
1972	55,290	176,899	3,632	11,620	6.6	48,887	156,413	2,038	6,521	4.2
1973	69,024	195,536	4,468	12,657	6.5	70,246	198,997	3,006	8,516	4.3
1974	100,140	238,891	4,778	11,398	4.8	97,144	231,744	4,165	9,936	4.3
1975	96,477	210,742	4,141	9,046	4.3	106,102	231,767	4,088	8,930	3.9
1976	121,121	252,894	5,590	11,672	4.6	113,319	236,604	4,695	9,803	4.1
1977	147,976	290,562	6,720	13,195	4.5	117,926	231,556	4,664	9,158	4.0
1978	172,912	315,599	8,028	14,653	4.6	141,126	257,583	4,963	9,058	3.5
1979	205,850	333,226	9,181	14,862	4.5	178,591	289,099	6,854	11,095	3.8
1980	239,943	340,750	8,648	12,281	3.6	216,592	307,589	8,516	12,094	3.9
1981	259,012	337,032	9,042	11,766	3.5	228,961	297,929	7,925	10,312	3.5
1982	242,340	309,053	8,382	10,689	3.5	207,158	264,186	7,151	9,120	3.5
1983	256,680	323,173	10,067	12,675	3.9	195,969	246,735	7,044	8,869	3.6
1984	322,949	396,961	12,235	15,039	3.8	212,056	260,654	7,210	8,862	3.4
1985	343,067	423,604	12,539	15,483	3.7	206,926	255,503	6,699	8,272	3.2
1986	368,251	468,527	13,271	16,885	3.6	206,628	262,894	7,692	9,787	3.7
1987	402,084	498,740	15,268	18,938	3.8	244,417	303,172	9,940	12,329	4.1
1988	437,475	521,814	16,749	19,978	3.8	310,333	370,161	12,782	15,246	4.1
1989	477,400	542,660	19,106	21,718	4.0	362,100	411,598	17,224	19,578	4.8
1990	498,300	546,432	18,806	20,623	3.8	389,300	426,904	18,542	20,333	4.8
1991	491,000	537,344	17,100	18,714	3.5	416,900	456,250	19,500	21,341	4.7
1992	536,500	583,615	18,700	20,342	3.5	440,400	479,076	20,700	22,518	4.7
1993	589,400	631,686	18,874	20,228	3.2	456,800	489,573	16,889	18,101	3.7
1994	668,600	708,195	17,117	18,131	2.6	502,400	532,153	15,320	16,228	3.0
1995	749,600	766,381	19,023	19,449	2.5	575,800	588,691	17,582	17,976	3.1
1996	803,300	801,693	21,264	21,221	2.6	612,000	610,776	18,315	18,278	3.0
1997	877,300	877,155	27,375	27,370	3.1	679,300	679,188	21,386	21,382	3.1
1998	918,800	905,334	28,684	28,263	3.1	670,600	660,772	19,261	18,979	2.9
1999	1,030,400	932,521	32,263	29,198	3.1	683,200	618,302	19,483	17,632	2.9
2000	1,224,400	1,003,713	34,300	28,118	2.8	772,000	632,854	21,760	17,838	2.8
2001	1,145,900	928,862	32,250	26,142	2.8	718,800	582,656	18,931	15,345	2.6
2002	1,166,900	968,251	32,348	26,841	2.8	682,600	566,397	18,739	15,549	2.7

<sup>a</sup>U.S. Council of Economic Advisors (39).

<sup>b</sup>U.S. International Trade Commission (81).

<sup>c</sup>Imports for consumption. Customs value, which is generally defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges.

<sup>d</sup>Value (free alongside ship) at U.S. ports of export, based on the transaction price, including inland freight, insurance, and other charges.

<sup>e</sup>Timber products as a percentage of all commodities.

<sup>f</sup>Converted to 1997 dollars by dividing current dollars by the implicit deflators for gross domestic product for imports and exports.

Table 15—Foreign exchange rates by selected country and year, 1975–2002<sup>a</sup>

Country	Currency	Foreign currency units per U.S. dollar													
		2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1990	1985	1980	1975
North America															
Canada	Dollar	1.5704	1.5487	1.4855	1.4858	1.4836	1.3849	1.3638	1.3725	1.3664	1.2902	1.1668	1.3658	1.1693	1.0173
Asia															
China, PR	Yuan	8.277	8.277	8.2784	8.2781	8.3008	8.3193	8.3389	8.37	8.6404	5.7795	4.7921	2.9434	z	z
Hong Kong	Dollar	7.7997	7.7997	7.7924	7.7594	7.7467	7.7431	7.7345	7.7357	7.729	7.7357	7.7899	7.7911	z	z
India	Rupee	48.63	47.22	45.00	43.13	41.36	36.365	35.506	32.418	31.394	31.291	17.492	12.332	7.8866	8.3854
Japan	Yen	125.22	121.57	107.8	113.73	130.99	121.06	108.78	93.96	102.18	111.08	145	238.47	226.63	296.69
Malaysia	Ringgit	3.8000	3.8000	3.8000	3.8000	3.9254	2.8173	2.5154	2.5073	2.6237	2.5738	2.7057	2.4806	2.1767	2.395
Singapore	Dollar	1.791	1.793	1.7250	1.6951	1.6722	1.4857	1.41	1.4171	1.5275	1.6158	1.8134	2.2008	z	z
South Korea	Won	1250.31	1292.01	1,130.90	1,189.84	950.77	950.77	805	772.69	806.93	805.75	710.64	861.89	z	z
Sri Lanka	Rupee	95.773	89.602	76.964	70.868	59.026	59.026	55.289	51.047	49.17	48.211	40.078	27.187	16.167	6.95
Taiwan	Dollar	34.536	33.824	31.260	32.322	33.547	28.775	27.468	26.495	26.465	26.416	26.918	39.889	z	z
Thailand	Baht	43.019	44.532	40.210	37.887	41.262	31.072	25.359	24.921	25.161	25.333	25.609	27.193	z	z
Africa															
South Africa	Rand	10.52	8.6093	6.9468	6.1191	5.5417	4.6072	4.3011	3.6284	3.5526	3.2729	2.5885	2.2343	0.778	0.7328
Europe															
Austria	Schilling	13.009	12.318	12.704	14.659	12.379	12.206	10.589	10.076	11.409	11.639	11.331	20.676	12.945	17.401
Belgium	Franc	38.137	36.112	37.242	42.974	36.31	35.807	30.968	29.472	33.426	34.581	33.424	59.336	29.237	36.694
Denmark	Krone	7.8862	8.3323	8.0953	6.9900	6.703	6.6092	5.8003	5.5999	6.3561	6.4863	6.1899	10.598	5.6345	5.7351
European Union	Euro	0.9454	0.8952	0.9232	1.0653	z	z	z	z	z	z	z	z	z	z
Finland	Markka	5.6211	5.3226	5.4891	6.3340	5.3473	5.1956	4.5948	4.3763	5.234	5.7251	3.83	6.1971	3.7206	3.6651
France	Franc	6.2014	5.8721	6.0558	6.9879	5.8995	5.8393	5.1158	4.9864	5.5459	5.6669	5.4467	8.9799	4.225	4.2819
Germany	Deutsche mark	1.8490	1.7509	1.8056	2.0835	1.7597	1.7348	1.5049	1.4321	1.6216	1.6545	1.6166	2.9419	1.8175	2.4553
Greece	Drachma	z	z	365.92	306.30	295.7	273.28	240.82	231.68	242.5	229.64	158.59	138.4	z	z
Ireland	Pound <sup>b</sup>	0.7446	0.7050	0.7271	0.8390	142.48	151.63	159.95	160.35	149.69	146.47	165.76	106.62	205.77	222.16
Italy	Lira	1,830.55	1,733.35	1,787.56	2,062.71	1,736.85	1,703.81	1,542.76	1,629.45	1,611.49	1,573.41	1,198.27	1,908.90	856.2	652.4
Netherlands	Guilder	2.0834	1.9728	2.0345	2.3476	1.9837	1.9525	1.6863	1.6044	1.819	1.8585	1.8215	3.3184	1.9875	2.5232
Norway	Krone	7.9839	8.9964	8.8131	7.8017	7.5521	7.0857	6.4594	6.3355	7.0553	7.1009	6.2541	8.5933	4.9381	5.2137
Portugal	Escudo	189.54	179.47	185.08	213.57	180.25	175.44	154.28	149.88	165.93	161.08	142.7	172.07	50.082	25.454
Spain	Peseta	157.30	148.95	153.61	177.25	149.41	148.53	124.64	126.68	133.88	127.48	101.96	169.98	71.758	57.393
Sweden	Krona	9.7233	10.3425	9.1735	8.2740	7.9522	7.6446	6.7082	7.1406	7.7161	7.7956	5.9231	8.6031	4.2309	4.1424
Switzerland	Franc	1.5567	1.6891	1.6904	1.5045	1.4506	1.4514	1.2361	1.1812	1.3667	1.4781	1.3901	2.4551	1.6772	2.5811
United Kingdom	Pound <sup>b</sup>	150.25	143.96	151.56	161.72	165.73	163.76	1.5607	1.5785	153.19	150.16	178.41	129.74	232.58	222.16
Other															
Australia	Dollar <sup>b</sup>	54.37	51.69	58.15	64.54	62.91	74.368	78.283	74.073	73.161	67.993	78.069	70.026	114	130.77
New Zealand	Dollar <sup>b</sup>	46.45	42.02	45.68	52.94	53.61	66.247	68.765	65.625	59.358	54.127	59.619	49.752	97.34	121.16
Index															
United States	Dollar <sup>c,d</sup>	103.09	104.32	98.32	94.07	98.85	96.38	87.34	84.25	91.32	93.18	89.09	143.01	87.39	98.5

<sup>a</sup>U.S. Federal Reserve System, Board of Governors (78).

<sup>b</sup>Value in U.S. cents.

<sup>c</sup>Index of weighted-average exchange value of U.S. dollar against the currencies of ten industrial countries.

The weight for each of the ten countries is the 1972–1976 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978.

<sup>d</sup>Data prior to 1999 was reported using the G-10 index. Data for 1999 and later is reported using the major currency scale.

<sup>z</sup>Not Available

**Table 16—Log imports by major species, 1965–2002 (million board feet, log scale)<sup>a,b</sup>**

Year	Total	Softwoods <sup>c</sup>	Hardwoods				
			Total	Mahogany	Philippine mahogany or lauan	Birch and maple	Other
1965	68.1	13.5	54.6	12.8	11.0	6.2	24.6
1966	95.6	42.5	53.1	16.1	2.8	6.3	27.9
1967	77.0	33.9	43.1	10.5	4.6	6.6	21.4
1968	79.0	33.1	45.9	8.5	1.9	6.5	29.0
1969	81.9	41.7	40.2	6.5	3.1	7.6	23.0
1970	144.4	106.5	37.9	6.8	0.7	8.2	22.2
1971	84.0	55.7	28.3	3.3	0.2	8.7	16.1
1972	39.3	11.3	28.0	3.6	0.7	7.9	15.8
1973	33.5	8.5	25.0	2.1	3.2	9.2	10.5
1974	76.6	45.6	31.0	3.4	0.9	12.3	14.4
1975	85.5	68.5	17.0	1.6	0.3	7.2	7.9
1976	81.6	67.4	14.2	1.2	0.6	8.7	3.7
1977	154.5	139.5	15.0	2.4	0.5	8.9	3.2
1978	96.9	79.1	17.8	1.5	<sup>d</sup>	9.1	7.2
1979	133.0	118.4	14.6	1.1	0.3	8.4	4.8
1980	127.5	114.1	13.4	1.0	<sup>d</sup>	7.4	5.0
1981	101.1	87.6	13.5	0.6	<sup>d</sup>	8.7	4.2
1982	117.1	98.8	18.3	0.8	<sup>d</sup>	10.2	7.3
1983	165.0	142.5	22.5	0.3	0.3	5.1	16.8
1984	146.9	116.8	30.1	0.5	0.3	4.4	24.9
1985	99.2	70.8	28.4	0.3	0.3	2.9	24.9
1986	78.6	52.1	26.4	1.3	1.6	3.0	20.5
1987	82.5	68.7	13.8	0.3	0.3	3.8	9.4
1988	68.1	55.9	12.2	1.7	<sup>d</sup>	3.8	6.7
1989	39.3	20.9	18.4	0.8	0.1	6.7	10.8
1990	23.1	12.9	10.2	1.1	<sup>d</sup>	3.7	5.4
1991	13.6	7.6	6.0	0.9	<sup>d</sup>	2.6	2.5
1992	43.4	36.8	6.6	0.7	0.1	4.4	1.4
1993	93.9	85.7	8.2	1.1	<sup>d</sup>	3.9	3.2
1994	110.4	94.3	16.0	1.3	<sup>d</sup>	6.3	8.4
1995	80.4	54.5	25.9	1.6	0.3	6.6	17.4
1996	115.0	83.6	31.4	1.7	0.3	11.8	17.7
1997	127.6	84.1	43.5	2.3	0.3	8.1	32.8
1998	185.3	146.9	38.4	2.3	0.3	8.7	27.0
1999	294.3	254.3	40.0	2.3	0.3	10.1	27.3
2000	449.6	390.4	59.2	2.3	0.3	9.4	47.2
2001	458.9	399.0	59.9	2.3	0.3	7.6	49.6
2002	536.7	466.0	70.7	2.3	0.3	12.6	55.5

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census (69); U.S. Department of Agriculture, Foreign Agricultural Service (41); U.S. International Trade Commission (81); American Forest and Paper Association (4). Data may not add to totals because of rounding.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>Western Wood Products Association 1965-1999(83); USITC 2000-present (81).

<sup>d</sup>Fewer than 50,000 board feet.

**Table 17—Log imports by major region of origin, 1965–2002**

(million board feet, log scale)<sup>a,b</sup>

Year	Total	Mexico and		Africa	Asia	Other <sup>e</sup>	
		Canada <sup>c</sup>	Central America <sup>d</sup>				South America
1965	68.1	20.3	3.4	18.0	14.1	11.7	0.6
1966	95.6	49.4	3.7	21.3	17.4	3.6	0.2
1967	77.0	40.6	3.0	18.3	9.7	4.9	0.5
1968	79.0	39.9	3.1	26.8	6.8	2.1	0.3
1969	81.9	49.5	2.1	18.3	8.3	3.5	0.2
1970	144.4	114.9	2.3	17.6	8.3	1.0	0.3
1971	84.0	64.6	2.2	13.1	3.2	0.9	f
1972	39.3	17.3	2.6	13.9	3.8	1.4	0.3
1973	33.5	17.8	3.0	2.9	4.8	4.8	0.2
1974	76.6	57.0	z	1.3	4.0	9.1	5.2
1975	85.5	80.3	0.3	z	1.4	0.1	3.4
1976	81.6	78.0	z	z	1.3	0.7	1.6
1977	154.5	150.5	z	z	2.5	0.6	0.9
1978	96.9	85.9	0.4	5.5	4.1	0.5	0.5
1979	133.0	111.2	0.2	17.4	1.5	1.1	1.6
1980	127.5	121.4	0.2	f	1.3	0.2	4.4
1981	101.1	94.4	0.4	f	0.7	0.6	5.0
1982	117.1	115.4	0.2	0.1	0.9	0.4	0.1
1983	165.0	161.5	1.0	0.1	0.3	1.7	0.4
1984	146.9	143.1	0.2	0.1	0.7	1.8	1.0
1985	99.2	81.1	0.1	0.5	3.2	13.9	0.4
1986	78.6	61.1	0.1	0.2	1.2	5.4	10.6
1987	82.5	75.6	0.2	0.2	0.3	2.1	4.1
1988	68.1	62.6	0.4	0.2	1.4	2.6	0.9
1989	39.3	20.0	2.3	0.7	2.1	8.1	6.1
1990	23.1	19.3	0.6	0.5	0.5	1.6	0.6
1991	13.6	9.0	0.4	0.2	0.3	1.1	2.6
1992	43.4	40.7	0.8	0.2	0.6	0.6	0.5
1993	93.9	89.3	f	0.2	0.4	0.6	3.4
1994	110.4	85.0	1.2	0.6	0.6	0.7	22.3
1995	80.4	56.3	1.5	0.6	0.6	0.1	21.3
1996	115.0	94.6	2.1	0.8	0.1	0.1	17.3
1997	127.6	105.7	1.7	1.2	0.1	0.1	18.8
1998	185.3	168.4	0.5	1.2	0.1	0.2	14.9
1999 <sup>g</sup>	294.3	280.3	0.6	1.8	0.3	1.3	9.9
2000	449.6	426.2	0.5	4.6	2.6	0.3	15.4
2001	458.9	445.0	0.7	3.9	0.2	0.8	8.2
2002	536.7	521.4	4.2	3.1	0.2	0.2	7.5

<sup>a</sup>U.S. Department of Agriculture, Forest Service (42); U.S. Department of Agriculture, Foreign Agricultural Service (41); Western Wood Products Association (83); U.S. International Trade Commission (81). Data may not add to totals because of rounding.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>American Forest and Paper Association 1965-1999 (2); USITC 2000-present (81).

<sup>d</sup>Includes the West Indies.

<sup>e</sup>For the years 1974–1977, all imports with a value of less than \$500 are included in Other.

<sup>f</sup>Fewer than 50,000 board feet.

<sup>g</sup>Revised.

<sup>z</sup>Not available.

**Table 18—Log exports by major species, 1965–2002 (million board feet, Scribner log scale)<sup>a</sup>**

Year	Softwoods						Hardwoods		
	Total	Total <sup>b</sup>	Douglas-fir <sup>c</sup>	Port-Orford-cedar <sup>c</sup>	Western hemlock <sup>c</sup>	Other	Total <sup>b</sup>	Walnut <sup>c</sup>	Other
1965	1,195.0	1,113.6	111.3	39.1	d	963.2	81.4	23.6	57.8
1966	1,391.2	1,315.7	130.5	41.2	d	1,144.0	75.5	12.5	63.0
1967	1,972.1	1,875.1	269.5	34.6	d	1,571.0	97.0	16.1	80.9
1968	2,568.1	2,473.2	396.5	38.4	d	2,038.3	94.9	21.8	73.1
1969	2,396.5	2,316.3	380.6	40.7	d	1,895.0	80.2	20.6	59.6
1970	2,740.9	2,672.0	487.0	54.1	1,436.7	694.2	68.9	17.4	51.5
1971	2,288.8	2,229.8	444.5	40.2	1,214.8	530.3	59.0	12.9	46.1
1972	3,141.4	3,047.5	766.5	46.1	1,450.7	784.2	93.9	15.5	78.4
1973	3,366.1	3,252.2	973.0	29.7	1,469.0	780.5	113.9	15.7	98.2
1974	2,642.4	2,523.7	752.7	35.6	1,244.6	490.8	118.7	7.8	110.9
1975	2,666.9	2,600.6	820.4	38.7	1,169.5	572.0	66.3	8.5	57.8
1976	3,250.0	3,155.7	1,022.4	38.4	1,365.7	729.2	94.3	7.4	86.9
1977	3,069.7	2,980.0	1,007.2	20.7	1,306.8	645.3	89.7	7.6	82.1
1978	3,409.2	3,298.4	1,192.2	29.2	1,443.6	633.4	110.8	8.8	102.0
1979	3,897.0	3,768.2	1,351.0	24.6	1,593.7	799.0	128.8	6.8	122.0
1980	3,260.9	3,109.1	1,272.4	14.0	1,183.1	639.6	151.8	9.4	142.4
1981	2,534.2	2,377.1	1,026.9	16.9	867.5	465.8	157.1	7.7	149.5
1982	3,208.1	3,115.0	1,446.5	12.4	1,124.9	531.2	93.2	4.7	88.4
1983	3,502.1	3,390.6	1,616.4	9.5	1,147.5	617.3	111.5	4.6	106.9
1984	3,494.9	3,369.4	1,588.5	13.0	1,120.0	647.9	125.6	5.5	120.0
1985	3,843.2	3,732.0	1,785.5	14.8	1,304.7	626.9	111.2	5.5	105.7
1986	3,655.6	3,516.0	1,625.8	13.4	1,246.3	630.5	139.7	5.6	134.0
1987	4,109.2	3,959.9	1,864.8	12.7	1,385.3	697.1	149.3	6.2	143.1
1988	4,798.1	4,594.4	2,311.2	19.8	1,435.5	827.9	203.7	8.0	195.7
1989	4,706.0	4,492.7	2,064.2	13.8	1,611.8	802.9	213.3	13.7	199.6
1990	4,213.1	3,993.6	1,891.7	11.0	1,193.7	897.1	219.5	13.6	205.9
1991	3,761.0	3,477.7	1,608.7	9.3	1,049.0	810.8	283.3	11.6	271.7
1992	3,278.8	3,054.8	1,402.9	10.3	890.3	751.3	224.0	12.4	211.6
1993	2,876.4	2,639.2	1,186.6	4.2	673.5	774.9	237.1	9.4	227.7
1994	2,683.6	2,419.7	1,174.9	4.1	535.3	705.4	263.8	11.2	252.6
1995	2,820.0	2,552.1	1,128.2	2.3	660.7	760.9	267.9	7.6	260.3
1996	2,635.7	2,382.4	1,214.8	2.3	486.2	679.1	253.3	6.1	247.2
1997	2,398.0	2,078.0	808.3	2.9	419.5	847.3	320.0	6.4	313.6
1998	1,977.8	1,646.2	732.1	0.7	175.1	738.3	331.5	7.3	324.2
1999	2,038.2	1,665.1	672.7	1.1	222.2	769.1	373.1	8.0	365.1
2000	2,638.3	2,065.8	674.1	0.9	186.1	1,204.8	572.5	11.4	561.2
2001	2,519.2	1,921.0	555.3	0.4	155.3	1,210.0	598.2	13.1	585.1
2002	2,428.5	1,744.9	535.0	0.7	121.6	1,087.7	683.6	17.8	665.8

<sup>a</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>b</sup>American Forest and Paper Association 1965-1999 (4); U.S. International Trade Commission 2000-present (81).

<sup>c</sup>U.S. International Trade Commission (81).

Data may not add to totals because of rounding.

<sup>d</sup>Western hemlock is included in Other.



**Table 19—Log exports by major region of destination, 1965–2002**  
(million board feet, Scribner log scale)<sup>a,b</sup>

Year	Total	Canada	European Union <sup>c</sup>	Japan	South Korea	China	Other
1965	1,195.0	355.1	29.4	804.4	2.8	<sup>d</sup>	3.3
1966	1,391.2	266.1	17.2	1,081.4	25.2	<sup>d</sup>	1.3
1967	1,972.1	335.5	20.5	1,585.5	29.9	<sup>d</sup>	0.7
1968	2,568.1	341.8	28.7	2,119.2	75.1	<sup>d</sup>	3.3
1969	2,396.5	324.6	29.6	2,007.3	32.2	<sup>d</sup>	2.8
1970	2,740.9	291.8	23.1	2,366.1	48.2	<sup>d</sup>	11.7
1971	2,288.8	339.9	20.5	1,847.1	73.9	<sup>d</sup>	7.4
1972	3,141.4	519.1	31.9	2,528.0	53.8	<sup>d</sup>	8.6
1973	3,366.1	417.8	41.5	2,779.5	113.7	<sup>d</sup>	13.6
1974	2,642.4	332.3	39.1	2,114.2	149.2	<sup>d</sup>	7.6
1975	2,666.9	277.6	35.3	2,256.4	86.4	<sup>d</sup>	11.2
1976	3,250.0	362.5	48.6	2,675.1	150.5	<sup>d</sup>	13.3
1977	3,069.7	350.0	46.0	2,460.1	203.3	<sup>d</sup>	10.3
1978	3,409.2	368.5	57.5	2,646.1	321.8	<sup>d</sup>	15.3
1979	3,897.0	407.6	65.4	3,149.1	258.9	<sup>d</sup>	16.0
1980	3,260.9	317.8	90.4	2,544.2	201.7	87.8	19.0
1981	2,534.2	247.4	56.1	1,774.2	151.6	222.4	82.5
1982	3,208.1	302.5	47.8	1,978.7	277.7	547.0	54.4
1983	3,502.1	347.1	57.4	2,028.0	320.9	723.2	25.6
1984	3,494.9	421.2	52.6	1,759.8	289.1	866.6	105.7
1985	3,843.2	445.4	39.1	1,899.1	327.5	1,069.0	63.1
1986	3,655.6	450.0	76.7	2,089.4	364.5	615.4	59.6
1987	4,109.2	421.4	62.6	2,397.2	492.5	579.3	156.3
1988	4,798.1	378.9	78.8	2,415.6	612.0	1,121.4	191.4
1989	4,706.0	272.7	93.6	2,992.7	761.5	454.3	131.2
1990	4,213.1	395.8	69.2	2,626.2	619.2	361.9	140.8
1991	3,761.0	423.6	53.4	2,126.8	624.7	371.8	160.8
1992	3,278.8	415.0	44.2	2,043.0	416.6	236.9	123.1
1993	2,876.4	389.9	41.1	1,881.9	303.1	131.3	129.1
1994	2,683.6	435.1	56.8	1,821.6	206.1	75.0	89.0
1995	2,820.0	715.7	47.5	1,728.3	235.2	20.2	73.1
1996	2,635.7	518.0	32.1	1,807.5	200.3	15.9	61.9
1997	2,398.0	711.0	42.1	1,347.7	205.6	18.2	73.4
1998	1,977.8	778.5	47.1	1,004.0	61.9	17.8	68.5
1999	2,038.2	787.8	48.2	998.3	130.1	7.8	66.1
2000	2,638.3	1,349.6	117.7	934.1	137.3	21.5	78.2
2001	2,519.2	1,453.9	78.0	745.7	129.6	29.5	82.5
2002	2,428.5	1,362.2	58.1	676.0	136.8	45.0	150.4

<sup>a</sup>U.S. International Trade Commission (81). Data may not add to totals because of rounding.

<sup>b</sup>Prior to 2000, pulpwood logs are not included in logs.

<sup>c</sup>European Union includes Austria, Belgium–Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, and UK.

<sup>d</sup>Fewer than 50,000 board feet.

Table 20—Average stumpage prices for sawtimber sold from National Forests, by selected species, 1965–2002 (dollars per thousand board feet)<sup>a</sup>

Year	Softwoods						Hardwoods							
	Douglas-fir <sup>b</sup>		Southern pine <sup>c</sup>		Ponderosa pine <sup>d</sup>		Western hemlock <sup>e</sup>		All eastern hardwoods <sup>f</sup>		Oak white, red, and black		Sugar maple <sup>g</sup>	
	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars
1965	42.6	167.9	31.7	124.9	19.8	78.0	19.1	75.3	25.0	98.5	21.3	84.0	z	z
1966	50.0	191.5	38.6	147.9	19.8	75.8	20.5	78.5	29.3	112.2	23.2	88.9	z	z
1967	41.7	159.2	38.3	146.2	22.2	84.7	21.8	83.2	27.0	103.1	16.8	64.1	z	z
1968	61.2	228.0	42.2	157.2	30.2	112.5	35.6	132.6	23.6	87.9	17.3	64.4	z	z
1969	82.2	294.1	51.7	185.0	71.0	254.1	45.1	161.4	30.2	108.1	28.2	100.9	z	z
1970	41.9	144.7	44.1	152.3	32.1	110.9	20.5	70.8	26.9	92.9	26.6	91.9	z	z
1971	49.0	164.0	52.2	174.7	37.6	125.9	20.6	69.0	24.6	82.3	21.2	71.0	z	z
1972	71.7	229.4	65.6	209.9	65.8	210.5	49.0	156.8	34.3	109.7	26.6	85.1	z	z
1973	138.1	391.2	93.4	264.6	92.3	261.5	99.2	281.0	46.0	130.3	43.6	123.5	93.6	265.2
1974	202.4	482.8	76.2	181.8	100.6	240.0	110.8	264.3	45.9	109.5	54.7	130.5	75.9	181.1
1975	169.5	370.3	57.0	124.5	71.2	155.5	68.8	150.3	33.9	74.1	29.7	64.9	42.1	92.0
1976	176.2	367.9	87.0	181.7	101.8	212.6	79.7	166.4	34.9	72.9	43.4	90.6	27.7	57.8
1977	225.9	443.6	100.3	196.9	131.4	258.0	89.3	175.3	37.1	74.4	60.0	117.8	47.4	93.1
1978	250.3	456.8	134.5	245.5	164.7	300.6	113.6	207.3	41.1	75.0	59.2	108.1	60.5	110.4
1979	394.4	638.4	155.2	251.2	239.0	386.9	200.8	325.1	46.8	75.8	68.8	111.4	68.9	111.5
1980	432.2	613.8	155.4	220.7	206.1	292.7	212.7	302.1	52.4	74.4	65.6	93.2	70.1	99.6
1981	350.2	455.7	172.0	223.8	195.2	254.0	163.4	212.6	50.9	66.2	63.2	82.2	67.8	88.2
1982	118.2	150.7	127.2	162.2	66.9	85.3	44.5	56.8	56.4	71.9	70.8	90.3	71.1	90.7
1983	161.6	203.5	140.6	177.0	104.0	130.9	62.2	78.3	60.1	75.7	87.9	110.7	55.1	69.4
1984	132.9	163.4	139.4	171.3	122.7	150.8	61.8	76.0	90.1	110.7	145.0	178.2	80.5	98.9
1985	126.2	155.8	90.7	112.0	101.4	125.2	50.5	62.4	65.4	80.8	94.5	116.7	70.0	86.4
1986	160.7	204.5	103.6	131.8	156.6	199.2	74.7	95.0	69.9	88.9	108.1	137.5	66.2	84.2
1987	190.2	235.9	135.7	168.3	209.3	259.6	105.4	130.7	88.1	109.3	146.8	182.1	80.5	99.9
1988	256.0	305.4	141.9	169.3	182.1	217.2	162.9	194.3	151.3	180.5	146.3	174.5	108.4	129.3
1989	389.8	443.1	313.4	356.2	292.0	331.9	223.3	253.8	135.8	154.4	178.9	203.4	128.6	146.2
1990	466.4	511.5	126.7	138.9	252.2	276.6	203.0	222.6	146.1	160.2	188.3	206.5	135.3	148.4
1991	395.0	432.3	166.1	181.8	237.6	260.0	164.1	179.6	160.1	175.2	163.6	179.0	120.7	132.1
1992	477.2	519.1	198.4	215.8	292.3	318.0	164.6	179.1	166.6	181.2	211.2	229.7	144.6	157.3
1993	317.8	340.6	217.2	232.8	535.2	573.6	363.7	389.8	264.1	283.0	194.6	208.6	219.5	235.2
1994	652.4	691.0	265.9	281.6	291.4	308.6	334.8	354.6	352.1	373.0	317.4	336.2	313.4	332.0
1995	453.5	463.7	248.5	254.1	149.9	153.3	297.1	303.8	313.9	320.9	296.6	303.2	285.6	292.0
1996	453.0	452.1	251.1	250.5	270.0	269.4	289.3	288.7	312.6	311.9	264.4	263.9	213.2	212.8
1997	331.4	331.3	307.3	307.2	270.2	270.2	211.3	211.3	286.9	286.9	264.5	264.5	357.1	357.1
1998	254.2	250.5	287.8	283.6	204.9	201.9	161.4	159.0	240.9	237.4	270.2	266.2	394.8	389.0
1999	314.7	284.8	268.5	243.0	181.0	163.8	95.7	86.6	195.1	176.6	317.4	287.2	448.1	405.5
2000	433.4	355.3	258.1	211.6	154.6	126.8	46.1	37.8	368.6	302.2	265.6	217.8	445.8	365.4
2001	255.4	207.0	153.5	124.4	115.5	93.6	34.0	27.5	530.5	430.0	326.4	264.6	587.2	476.0
2002	184.8	153.4	166.4	138.1	117.8	97.7	73.2	60.7	382.0	317.0	273.8	227.1	485.0	402.4

<sup>a</sup>U.S. Department of Agriculture, Forest Service (43,49). Forest Service National Forest prices in this table are for timber sold on a Scribner Decimal C log rule basis, except in the Northeastern states where International 1/4-in. log rule is used. Prices include KV payments and exclude timber sold by land exchanges and from land utilization project lands. Data for the years 1965 to 1983 are statistical high bid prices. Data from 1984 to April 1999 are high bid prices that include specified road costs. After April 1999, it no longer included specific road costs. 1997 dollars derived by dividing the price in current dollars by the Bureau of Labor Statistics producer price index for all commodities (1997 = 100).

<sup>b</sup>Western Washington and western Oregon.

<sup>c</sup>Southern Region.

<sup>d</sup>Pacific Southwest Region (prior to January 1979 called the California Region); includes Jeffrey pine.

<sup>e</sup>Pacific Northwest Region.

<sup>f</sup>Eastern and Southern Regions.

<sup>g</sup>Eastern Region.

<sup>z</sup>Not Available.

**Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 2002<sup>a</sup>**

Species and region <sup>b</sup>	Volume <sup>c</sup> <i>Thousand board feet</i>	Value <sup>d</sup> <i>Thousand dollars</i>	Average	Species and region	Volume <i>Thousand board feet</i>	Value <i>Thousand dollars</i>	Average
			price per thousand board feet <i>Dollars</i>				price per thousand board feet <i>Dollars</i>
SOFTWOODS, WESTERN				SOFTWOODS, WESTERN— <i>Con.</i>			
Cedar				Fir— <i>Con.</i>			
Alaska cedar:				True fir:			
Pacific Northwest <sup>6</sup>	0	0.0	0.00	Rocky Mountain <sup>2</sup>	1,655	105.6	63.79
Alaska <sup>10</sup>	3,072	195.9	63.76	Southwestern <sup>3</sup>	4,474	46.0	10.27
Total	3,072	195.9	63.76	Pacific Southwest <sup>5</sup>	51,904	3,349.7	64.54
Incense cedar:				Pacific Northwest <sup>6</sup>	373	18.9	50.54
Pacific Southwest <sup>5</sup>	6,967	458.9	65.87	Total	58,406	3,520.1	60.27
Pacific Northwest <sup>6</sup>	0	0.1	252.15	Hemlock			
Total	6,968	459.0	65.88	Mountain hemlock:			
Port-Orford-cedar:				Pacific Northwest <sup>6</sup>	957	9.6	10.00
Pacific Southwest <sup>5</sup>	0	0.0	0.00	Western hemlock:			
Pacific Northwest <sup>6</sup>	96	149.6	1,557.45	Northern <sup>1</sup>	1,301	196.9	151.36
Total	96	149.6	1,557.45	Pacific Northwest <sup>6</sup>	12,719	930.9	73.19
Western redcedar:				Alaska <sup>10</sup>	12,782	18.4	1.44
Northern <sup>1</sup>	3,395	1,414.3	416.58	Total	26,802	1,146.2	42.76
Pacific Northwest <sup>6</sup>	993	239.6	241.27	Western larch			
Alaska <sup>10</sup>	641	31.0	48.43	Northern <sup>1</sup>	8,169	912.2	111.67
Total	5,029	1,684.9	335.05	Intermountain <sup>4</sup>	0	0.0	0.00
Douglas-fir				Pacific Northwest <sup>6</sup>	4,234	760.0	179.49
East side:				Total	12,403	1,672.2	291.16
Northern <sup>1</sup>	81,401	8,161.8	100.27	Pine			
Rocky Mountain <sup>2</sup>	221	19.8	89.74	Lodgepole pine:			
Southwestern <sup>3</sup>	1,211	15.8	13.09	Northern <sup>1</sup>	41,235	3,801.1	92.18
Intermountain <sup>4</sup>	14,190	1,193.2	84.09	Rocky Mountain <sup>2</sup>	15,656	1,775.1	113.38
Pacific Northwest <sup>6</sup>	95,749	17,193.8	179.57	Intermountain <sup>4</sup>	3,094	641.5	207.34
Total	192,772	26,584.5	137.91	Pacific Southwest <sup>5</sup>	784	47.9	61.19
West side:				Pacific Northwest <sup>6</sup>	30,371	3,938.8	129.69
Pacific Southwest <sup>5</sup>	6,866	787.5	114.69	Total	91,140	10,204.4	111.96
Pacific Northwest <sup>6</sup>	12,838	2,372.9	184.83	Ponderosa pine <sup>e</sup> :			
Total	19,705	3,160.4	160.39	Northern <sup>1</sup>	5,184	169.4	32.67
Fir				Rocky Mountain <sup>2</sup>	49,704	6,674.9	134.29
Grand fir:				Southwestern <sup>3</sup>	10,155	256.4	25.25
Northern <sup>1</sup>	9,743	891.4	91.50	Intermountain <sup>4</sup>	7,226	560.1	77.51
Intermountain <sup>4</sup>	2,469	72.2	29.24	Pacific Southwest <sup>5</sup>	33,918	3,994.0	117.75
Pacific Northwest <sup>6</sup>	4,200	95.0	22.63	Pacific Northwest <sup>6</sup>	20,548	1,900.3	92.48
Total	16,412	1,058.6	64.51	Total	126,733	13,554.9	106.96
Noble fir:				Sugar pine:			
Pacific Northwest <sup>6</sup>	307	3.1	10.00	Pacific Southwest <sup>5</sup>	4,274	891.8	208.64
Shasta fir:				Pacific Northwest <sup>6</sup>	0	0.0	0.00
Pacific Northwest <sup>6</sup>	0	0.0	0.00	Total	4,274	891.8	208.64
Subalpine fir:				Western white pine:			
Northern <sup>1</sup>	7,040	892.3	126.75	Northern <sup>1</sup>	982	239.5	243.94
Rocky Mountain <sup>2</sup>	1	0.2	158.83	Southwestern <sup>3</sup>	7	0.4	59.49
Southwestern <sup>3</sup>	0	0.0	0.00	Pacific Southwest <sup>5</sup>	0	0.0	0.00
Intermountain <sup>4</sup>	523	43.0	82.38	Pacific Northwest <sup>6</sup>	19	0.2	10.00
Pacific Northwest <sup>6</sup>	139	1.5	10.43	Total	1,008	240.1	238.24
Total	7,703	937.0	121.65	Pine not specified by species:			
White fir:				Northern <sup>1</sup>	0	0.0	0.00
Rocky Mountain <sup>2</sup>	5	0.2	37.02	Southwestern <sup>3</sup>	0	0.0	0.00
Intermountain <sup>4</sup>	0	0.0	0.00	Total	0	0.0	0.00
Pacific Northwest <sup>6</sup>	18,035	1,222.0	67.76	Spruce			
Total	18,040	1,222.2	67.75	Black, red, and white spruce			
				Alaska <sup>10</sup>	8	0.1	16.53

Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 2002<sup>a</sup>—con.

Species and region <sup>b</sup>	Volume <sup>c</sup> Thousand board feet	Value <sup>d</sup> Thousand dollars	Average price per thousand board feet Dollars	Species and region	Volume Thousand board feet	Value Thousand dollars	Average price per thousand board feet Dollars			
SOFTWOODS, WESTERN—Con.				SOFTWOODS, EASTERN—Con.						
Spruce—Con.				Softwoods not specified						
Engelmann spruce:				by species:						
Northern <sup>1</sup>	13,420	1,524.8	113.62	Southern <sup>8</sup>	13	0.2	14.47			
Rocky Mountain <sup>2</sup>	6,029	460.8	76.44	Eastern <sup>9</sup>	555	31.0	55.85			
Southwestern <sup>3</sup>	1,732	324.2	187.15	Total	568	31.2	54.91			
Intermountain <sup>4</sup>	1,578	282.4	178.91	Total, eastern softwoods	141,913	21,586.9	152.11			
Pacific Northwest <sup>6</sup>	136	70.9	520.48	Total, softwoods	792,083	98,026.9	123.76			
Total	22,895	2,663.0	116.31	HARDWOODS, WESTERN						
Sitka spruce:				Alder						
Pacific Northwest <sup>6</sup>	49	8.1	163.84	Pacific Northwest <sup>6</sup>	166	13.5	81.65			
Alaska <sup>10</sup>	6,123	332.6	54.32	Aspen						
Total	6,172	340.7	55.20	Rocky Mountain <sup>2</sup>	0	0.0	0.00			
Softwoods not specified				Southwestern <sup>3</sup>	6	0.0	5.05			
by species:				Intermountain <sup>4</sup>	634	14.3	22.63			
Rocky Mountain <sup>2</sup>	2,960	152.8	51.61	Total	640	14.4	22.46			
Intermountain <sup>4</sup>	4,701	527.6	112.23	Hardwoods not specified						
Pacific Southwest <sup>5</sup>	6,271	288.2	45.96	by species:						
Pacific Northwest <sup>6</sup>	15,338	5,773.2	376.40	Rocky Mountain <sup>2</sup>	0	0.0	0.00			
Alaska <sup>10</sup>	1	0.0	65.80	Pacific Southwest <sup>5</sup>	29	0.1	3.41			
Total	29,270	6,742	230	Pacific Northwest <sup>6</sup>	0	0.0	0.00			
Total, western softwoods	650,171	76,439.9	117.57	Total	29	0.1	3.41			
SOFTWOODS, EASTERN				Total, western hardwoods	835	28.0	33.55			
Cedar				HARDWOODS, EASTERN						
Southern <sup>8</sup>				Ash						
Eastern <sup>9</sup>	4	0.1	27.78	Southern <sup>8</sup>	28	3.5	128.88			
Total	29	1.9	66.59	Eastern <sup>9</sup>	279	23.3	83.67			
Cypress				Total	306	26.8	87.73			
Southern <sup>8</sup>				0	0.6	2,583.42	Aspen			
Fir				Eastern <sup>9</sup>						
True fir:				Basswood						
Eastern <sup>9</sup>				Southern <sup>8</sup>						
131	2.5	19.36	Eastern <sup>9</sup>							
Hemlock				Total						
Eastern hemlock:				779						
Southern <sup>8</sup>				16.4						
98	4.7	48.40	20.99							
Eastern <sup>9</sup>				779						
16	0.4	26.45	16.4							
Total	114	5.2	45.34	20.99						
Pine				Beech						
Eastern white pine:				Eastern <sup>9</sup>						
Southern <sup>8</sup>				673						
4,252	317.2	74.60	28.0							
Eastern <sup>9</sup>				41.50						
363	33.5	92.14	Birch							
Total	4,616	350.7	75.98	Paper birch:						
Jack pine:				Eastern <sup>9</sup>						
Eastern <sup>9</sup>				612						
1,752	163.5	93.37	57.6							
Red pine:				94.07						
Eastern <sup>9</sup>				Yellow birch:						
10,775	1,652.6	153.38	Eastern <sup>9</sup>							
Red and white eastern pine:				1,459						
Eastern <sup>9</sup>				362.2						
6,400	1,175.2	183.64	248.33							
Southern pine:				Cherry						
Southern <sup>8</sup>				Black cherry:						
103,077	17,152.2	166.40	Southern <sup>8</sup>							
Eastern <sup>9</sup>				0						
8,847	302.4	34.18	0.0							
Total	111,924	17,454.6	155.95	8,961						
Virginia pine:				19,388.4						
Southern <sup>8</sup>				2,163.64						
63	0.6	10.00	8,961							
Pine not specified				19,388.4						
by species:				2,163.64						
Eastern <sup>9</sup>				Maple						
3,595	561.4	156.16	Red maple:							
Spruce				Southern <sup>8</sup>						
Black, red, and white spruce:				13						
Eastern <sup>9</sup>				1.6						
1,948	186.8	95.92	129.84							
				Eastern <sup>9</sup>						
				4,181						
				668.4						
				159.88						
				4,193						
				670.1						
				159.79						
				Sugar maple:						
				Southern <sup>8</sup>						
				0						
				0.0						
				Eastern <sup>9</sup>						
				5,033						
				2,440.7						
				484.97						
				Total						
				5,033						
				2,440.7						
				484.97						
				Maple not specified						
				by species:						
				Southern <sup>8</sup>						
				0						
				0.0						
				Eastern <sup>9</sup>						
				0						
				0.0						
				Total						
				0						
				0.0						

**Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 2002<sup>a</sup>—con.**

Species and region <sup>b</sup>	Volume <sup>c</sup> Thousand board feet	Value <sup>d</sup> Thousand dollars	Average price per thousand board feet Dollars	Species and region	Volume Thousand board feet	Value Thousand dollars	Average price per thousand board feet Dollars
HARDWOODS, EASTERN—Con.							
Oak				Poplar			
Chestnut oak:				Yellow poplar:			
Southern <sup>8</sup>	751	81.9	108.96	Southern <sup>8</sup>	1,331	250.2	188.05
Eastern <sup>9</sup>	868	7.2	8.35	Eastern <sup>9</sup>	3,516	228.9	65.11
Total	1,619	89.1	55.04	Total	4,846	479.1	98.86
Red and black oak:				Yellow poplar, basswood and cucumber:			
Southern <sup>8</sup>	2,940	877.4	298.40	Southern <sup>8</sup>	290	47.2	163.07
Eastern <sup>9</sup>	2,342	718.9	306.99	Hardwoods not specified by species:			
Total	5,282	1,596.4	302.21	Southern <sup>8</sup>	8,986	590.8	65.75
Scarlet oak:				Eastern <sup>9</sup>	4,949	855.7	172.93
Southern <sup>8</sup>	295	47.8	161.93	Total	13,935	1,446.6	103.81
Eastern <sup>9</sup>	313	1.9	6.00	Total, eastern hardwoods	77,400	29,569.6	382.04
Total	608	49.7	81.75	Total, hardwoods	78,235	29,597.6	378.32
White oak:				Total, softwoods and hardwoods	870,318	127,624.5	146.64
Southern <sup>8</sup>	410	88.3	215.10				
Eastern <sup>9</sup>	521	16.4	31.43				
Total	932	104.7	112.32				
Oak not specified							
by species:							
Southern <sup>8</sup>	1,752	166.6	95.08				
Eastern <sup>9</sup>	22,960	2,418.5	105.34				
Total	24,712	2,585.1	104.61				

<sup>a</sup>U.S. Department of Agriculture, Forest Service (49); Data may not add to totals because of rounding; The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber, and prices received for individual tracts may vary widely because of differences in timber quality, degree of competition timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors; Excludes pulpwood and miscellaneous products and also excludes timber sold by land exchanges and from land in utilization projects.

<sup>b</sup>Administrative regions of the Forest Service. Regions 1–6, 8–10 indicated by superscript.

<sup>c</sup>Scribner Decimal C log rule except in the Northeastern states timber where international 1/4-in. log rule is used.

<sup>d</sup>High bid prices, which include specified road costs KV payments.

<sup>e</sup>Includes small amounts of Jeffrey pine.

**Table 22—Average stumpage prices for sawtimber sold from private lands in Louisiana, by selected species, 1965–2002 (dollars per thousand board feet, Doyle log scale)<sup>a</sup>**

Year	Southern pine		Ash		Gums		Oaks	
	Current dollars	1997 dollars <sup>b</sup>	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars
1965	28.40	111.94	22.60	89.08	17.50	68.97	16.20	63.85
1966	34.30	131.38	23.00	88.10	19.50	74.69	17.90	68.56
1967	36.80	140.46	23.30	88.93	19.50	74.43	17.70	67.56
1968	40.70	151.62	25.60	95.37	20.00	74.51	19.00	70.78
1969	50.10	179.28	31.80	113.79	22.60	80.87	21.50	76.93
1970	46.40	160.24	28.10	97.04	21.00	72.52	20.40	70.45
1971	56.00	187.44	26.60	89.03	21.90	73.30	20.80	69.62
1972	66.30	212.12	28.50	91.18	23.80	76.15	23.10	73.91
1973	84.20	238.53	41.50	117.56	32.30	91.50	30.20	85.55
1974	90.90	216.85	48.20	114.98	36.80	87.79	35.50	84.69
1975	81.60	178.25	45.70	99.83	35.40	77.33	34.10	74.49
1976	101.10	211.09	45.80	95.63	37.20	77.67	37.30	77.88
1977	119.90	235.43	49.70	97.59	39.70	77.95	40.60	79.72
1978	156.20	285.10	59.40	108.42	46.20	84.32	46.50	84.87
1979	211.50	342.37	74.20	120.11	51.90	84.01	53.40	86.44
1980	189.20	268.69	70.20	99.69	53.10	75.41	55.50	78.82
1981	185.00	240.73	70.20	91.35	52.00	67.66	55.60	72.35
1982	144.60	184.41	71.10	90.67	53.70	68.48	57.50	73.33
1983	160.70	202.33	103.80	130.69	67.30	84.73	71.60	90.15
1984	158.80	195.19	109.00	133.98	68.00	83.58	72.70	89.36
1985	118.20	145.95	88.30	109.03	57.30	70.75	62.50	77.17
1986	112.30	142.88	87.90	111.84	53.70	68.32	64.70	82.32
1987	147.30	182.71	z	z	59.30	73.55	79.00	97.99
1988	161.00	192.04	134.20	160.07	62.10	74.07	101.20	120.71
1989	169.10	192.22	133.80	152.09	65.30	74.23	98.30	111.74
1990	182.60	200.24	141.10	154.73	81.90	89.81	106.50	116.79
1991	194.30	212.64	123.60	135.27	67.60	73.98	89.00	97.40
1992	222.60	242.15	289.30	314.71	78.10	84.96	136.90	148.92
1993	273.30	292.91	z	z	z	z	153.00	163.98
1994	330.50	350.07	z	z	z	z	205.00	217.14
1995	389.56	398.28	z	z	z	z	252.75	258.41
1996	344.57	343.88	z	z	z	z	203.00	202.59
1997	412.39	412.32	z	z	z	z	289.75	289.70
1998	406.76	400.80	z	z	z	z	276.50	272.45
1999	368.70	333.68	z	z	z	z	285.00	257.93
2000	392.35	321.63	z	z	z	z	270.00	221.33
2001	351.12	284.62	z	z	z	z	321.00	260.20
2002	368.41	305.69	z	z	z	z	290.00	240.63

<sup>a</sup>Timber Mart South (36); Louisiana Department of Agriculture (23).

<sup>b</sup>Derived by dividing the price in current dollars by the Bureau of Labor.

Statistics producer price index for all commodities (1997 = 100).

<sup>z</sup>Not available.

**Table 23—Veneer log production, by softwoods and hardwoods, 1965–2002 (million board feet, local log rule)<sup>a</sup>**

Year	All species <sup>b</sup>	Softwoods	Hardwoods
1965	6,275	5,425	850
1966	6,315	5,610	705
1967	6,305	5,610	695
1968	6,880	6,150	730
1969	6,430	5,750	680
1970	6,642	5,863	779
1971	7,215	6,515	700
1972	7,810	7,070	740
1973	7,750	7,090	660
1974	7,560	6,945	615
1975	8,185	7,545	640
1976	8,417	7,795	623
1977	7,960	7,360	600
1978	8,150	7,560	590
1979	7,690	7,085	605
1980	7,649	7,040	609
1981	7,710	7,095	615
1982	7,504	6,885	619
1983	7,736	7,110	626
1984	7,970	7,335	635
1985	8,460	7,810	650
1986	9,062	8,398	664
1987	9,370	8,700	670
1988	9,261	8,580	681
1989	8,814	8,119	695
1990	8,662	7,942	720
1991	8,037	7,276	761
1992	7,876	7,101	775
1993	7,796	6,995	801
1994	7,735	6,881	854
1995	7,626	6,700	926
1996	7,560	6,583	977
1997	7,581	6,601	980
1998	7,671	6,707	964
1999	7,802	6,812	990
2000	7,870	6,855	1,015
2001	7,984	6,931	1,052
2002	7,518	6,521	997

<sup>a</sup>Data may not add to totals because of rounding.

<sup>b</sup>U.S. Department of Agriculture, Forest Service (51).

**Table 24—Pulpwood consumption, production, imports, exports, and the equivalent wood volumes of imports and exports of paper, board, and wood pulp, 1965–2002 (thousand cords)<sup>a</sup>**

Year	U.S. total consumption	Consumption in U.S. mills							Paper, board, and wood pulp (pulpwood equivalent)					
		Domestic productions							Net			Net		
		Total	Total	Roundwood <sup>f</sup>			Residue <sup>b</sup>	Imports	Exports	Imports	Exports	Imports	Exports	
				Total	Softwoods	Hardwoods								
1965	63,519	54,034	52,884	39,129	28,201	10,928	13,755	1150	1,305	155	9,485	13,487	4,001	
1966	67,429	57,399	56,294	41,809	29,900	11,910	14,484	1105	1,385	280	10,030	14,367	4,337	
1967	67,377	58,419	57,469	41,441	29,967	11,474	16,028	950	1,590	640	8,958	13,789	4,831	
1968	69,214	60,969	60,734	43,535	31,690	11,845	17,199	235	1,425	1,190	8,245	13,643	5,398	
1969	73,428	64,577	65,257	47,499	34,239	13,260	17,758	-680	980	1,660	8,851	14,956	6,105	
1970	73,308	66,732	67,577	49,467	37,212	12,255	18,110	-845	1,120	1,965	6,576	14,310	7,734	
1971	74,286	66,601	66,906	46,295	33,533	12,763	20,610	-305	1,225	1,530	7,685	14,375	6,690	
1972	75,685	68,068	69,023	45,311	31,784	13,527	23,712	-955	1,020	1,975	7,616	14,263	6,646	
1973	80,294	71,421	72,891	46,269	31,496	14,773	26,622	-1470	1,200	2,670	8,873	15,483	6,610	
1974	84,452	75,787	77,957	50,394	34,268	16,126	27,563	-2,170	965	3,135	8,665	17,057	8,392	
1975	69,231	63,941	65,821	41,029	29,035	11,993	24,792	-1,880	765	2,645	5,290	12,172	6,882	
1976	78,092	71,094	73,249	45,527	31,856	13,671	27,722	-2,155	1,115	3,270	6,998	14,019	7,021	
1977	80,486	72,952	74,972	44,538	31,022	13,516	30,434	-2,020	1,350	3,370	7,534	14,548	7,014	
1978	84,346	75,073	76,453	46,722	31,778	14,943	29,731	-1,380	1,675	3,055	9,272	16,205	6,933	
1979	87,651	78,680	81,065	50,699	35,389	15,310	30,366	-2,385	1,405	3,790	8,971	16,847	7,876	
1980	87,055	81,921	84,031	52,107	36,941	15,166	31,925	-2,110	1,590	3,700	5,134	16,256	11,122	
1981	86,814	81,003	82,468	51,390	35,685	15,704	31,079	-1,465	1,490	2,955	5,811	15,579	9,768	
1982	82,127	76,912	77,862	49,093	33,829	15,264	28,769	-950	1,405	2,355	5,215	14,302	9,087	
1983	91,044	84,504	84,829	51,612	33,413	18,199	33,217	-325	1,715	2,040	6,540	16,312	9,772	
1984	95,854	86,282	86,377	52,324	33,945	18,379	34,054	-95	1,825	1,920	9,572	18,697	9,125	
1985	95,325	85,380	86,600	52,698	33,097	19,602	33,901	-1,220	650	1,870	9,945	19,198	9,253	
1986	100,144	91,187	92,502	57,723	35,630	22,094	34,779	-1,315	630	1,945	8,957	19,974	11,017	
1987	102,445	93,005	94,590	58,538	37,172	21,367	36,052	-1,585	430	2,015	9,440	20,882	11,442	
1988	101,737	93,000	95,030	59,342	37,359	21,984	35,688	-2,030	735	2,765	8,737	20,779	12,042	
1989	100,276	92,615	93,831	59,924	37,755	22,169	33,907	-1,216	988	2,204	7,661	20,341	12,679	
1990	99,361	92,561	93,936	61,758	39,559	22,199	32,178	-1,376	917	2,293	6,801	19,847	13,046	
1991	95,484	91,925	93,246	62,701	40,213	22,488	30,545	-1,321	1,025	2,346	3,559	18,305	14,746	
1992	96,146	93,642	95,238	63,489	39,918	23,571	31,749	-1,596	857	2,453	2,504	18,451	15,947	
1993	96,089	90,996	92,759	62,122	37,621	24,501	30,637	-1,764	745	2,509	5,094	19,485	14,392	
1994	98,142	93,259	95,327	63,698	38,312	25,387	31,629	-2,068	544	2,612	4,883	19,965	15,082	
1995 <sup>f</sup>	97,052	93,013	94,999	69,808	41,173	28,635	25,191	-1,986	303	2,290	4,039	20,474	16,435	
1996 <sup>f</sup>	90,190	88,246	90,439	66,697	39,641	27,056	23,742	-2,193	334	2,527	1,943	17,979	16,036	
1997 <sup>f</sup>	95,247	92,312	95,038	68,354	39,943	28,411	26,684	-2,726	357	3,083	2,935	20,186	17,251	
1998 <sup>f</sup>	96,305	90,591	93,371	68,134	40,580	27,554	25,237	-2,780	231	3,011	5,713	20,653	14,939	
1999	94,265	86,969	89,908	64,048	37,157	26,890	25,861	-2,940	144	3,084	7,296	21,077	13,780	
2000	95,904	87,453	89,888	64,775	37,965	26,810	25,113	-2,435	150	2,585	8,452	22,951	14,499	
2001	92,181	83,384	85,240	62,033	36,200	25,833	23,207	-1,856	79	1,935	8,797	22,618	13,821	
2002	90,500	82,715	84,030	60,494	34,901	25,593	23,536	-1,315	66	1,381	7,785	22,222	14,437	

<sup>a</sup>American Forest and Paper Association (3); American Pulpwood Association (14).

<sup>b</sup>Chips produced from roundwood and byproducts from primary processing plants, such as slabs, edgings, and veneer cores.

<sup>f</sup>Revised.



**Table 25—Pulpwood production, by region<sup>a</sup> and softwoods and hardwoods, 1965–2002 (million cords)<sup>b</sup>**

Year <sup>c</sup>	All sections			North			South			West		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
1965	52.88	40.1	12.8	9.0	4.1	4.9	31.2	23.8	7.4	12.7	12.2	0.5
1966	56.29	42.1	14.2	10.3	4.4	5.9	33.1	25.4	7.7	12.9	12.3	0.6
1967	57.47	43.6	13.9	10.3	4.5	5.8	33.6	25.9	7.7	13.6	13.2	0.4
1968	60.73	46.6	14.1	9.8	4.3	5.5	36.5	28.3	8.2	14.4	14.0	0.4
1969	65.26	48.8	16.5	10.3	4.1	6.2	40.0	30.2	9.8	15.0	14.5	0.5
1970	67.58	50.7	16.9	11.3	4.6	6.7	41.1	31.4	9.7	15.2	14.7	0.5
1971	66.91	50.3	16.6	10.5	4.0	6.5	41.1	31.5	9.6	15.3	14.8	0.5
1972	69.02	51.0	18.0	10.7	4.0	6.7	42.3	31.7	10.6	16.0	15.3	0.7
1973	72.89	52.7	20.2	12.8	4.6	8.2	43.4	32.1	11.3	16.7	16.0	0.7
1974	77.96	55.8	22.2	13.9	5.1	8.8	46.1	33.6	12.5	18.0	17.1	0.9
1975	65.82	50.1	15.7	10.4	4.2	6.2	40.7	31.7	9.0	14.7	14.2	0.5
1976	73.25	54.1	19.1	12.2	4.8	7.4	44.3	33.2	11.1	16.7	16.1	0.6
1977	74.97	55.7	19.3	12.5	4.9	7.6	45.2	34.2	11.0	17.3	16.6	0.7
1978	76.45	55.3	21.2	13.0	5.2	7.8	47.7	35.0	12.7	15.8	15.1	0.7
1979	81.06	58.3	22.8	14.0	5.5	8.5	50.2	36.7	13.5	16.9	16.1	0.8
1980	84.03	60.6	23.4	14.3	5.7	8.6	50.7	36.9	13.8	19.0	18.0	1.0
1981	82.47	59.6	22.9	13.9	5.6	8.3	51.6	37.7	13.9	17.0	16.3	0.7
1982	77.86	56.3	21.6	13.1	5.9	7.2	50.2	36.6	13.6	14.6	13.8	0.8
1983	84.83	59.9	24.9	14.4	5.6	8.8	53.9	38.5	15.4	16.5	15.8	0.7
1984	86.38	61.1	25.3	14.7	6.0	8.7	54.4	38.7	15.7	17.3	16.4	0.9
1985	86.60	60.6	26.0	14.6	5.8	8.8	56.2	39.9	16.3	15.8	14.9	0.9
1986	92.50	64.0	28.5	15.2	5.7	9.5	59.9	42.0	17.9	17.4	16.3	1.1
1987	94.59	65.6	29.0	15.4	5.8	9.6	61.5	43.2	18.3	17.7	16.6	1.1
1988	95.03	65.7	29.3	14.8	5.4	9.4	61.8	42.9	18.9	18.4	17.4	1.0
1989	93.83	64.3	29.5	14.0	5.1	8.9	62.8	43.3	19.5	17.0	15.9	1.1
1990	93.94	63.1	30.8	14.0	5.0	9.0	65.4	44.6	20.8	14.5	13.5	1.0
1991	93.25	62.4	30.8	14.2	5.2	9.0	66.8	45.8	21.0	12.2	11.4	0.8
1992	95.24	59.8	35.4	13.9	5.0	8.9	70.9	45.0	25.9	10.4	9.8	0.6
1993	92.76	55.7	37.1	15.0	5.6	9.4	71.9	44.8	27.1	5.9	5.3	0.6
1994	95.33	56.1	39.2	15.4	5.6	9.8	74.7	45.8	28.9	5.2	4.7	0.5
1995	95.00	61.1	33.9	15.0	6.7	8.3	72.6	48.1	24.5	7.4	6.3	1.1
1996	90.44	58.7	31.8	14.5	6.6	7.9	69.6	46.7	22.9	6.4	5.4	0.9
1997	95.04	61.4	33.6	15.2	6.8	8.4	74.1	50.0	24.1	5.7	4.6	1.1
1998	93.37	60.3	33.1	14.6	6.3	8.3	72.4	48.9	23.5	6.3	5.1	1.2
1999	89.91	57.7	32.2	13.8	6.0	7.8	70.7	47.5	23.2	5.4	4.3	1.2
2000	89.89	57.8	32.1	14.1	6.1	8.1	70.1	47.2	22.9	5.7	4.6	1.1
2001	85.24	54.4	30.9	13.4	5.8	7.7	67.0	44.8	22.2	4.8	3.8	1.0
2002	84.03	53.7	30.3	13.1	5.5	7.6	66.4	44.8	21.7	4.5	3.5	1.1

<sup>a</sup>The West includes: Alaska, Arizona, California, Idaho, Montana, Oregon, and Washington.

The South includes: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

The North includes: Illinois, Indiana, Iowa, Maine, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, and Wisconsin.

<sup>b</sup>American Pulpwood Association (14); data may not add to totals because of rounding.

All numbers were revised; values include chip production.

<sup>c</sup>Data for the years 1989 to present are domestic receipts at pulp mills.

**Table 26—Pulpwood stumpage prices of Louisiana and northern New Hampshire, 1965–2002 (dollars per cord)**

Year	Louisiana <sup>a</sup>				Northern New Hampshire <sup>b</sup>			
	Southern pine		Hardwoods		Hemlock and pine <sup>c</sup>		Spruce and fir	
	<i>Current dollars</i>	<i>1997 dollars<sup>d</sup></i>	<i>Current dollars</i>	<i>1997 dollars</i>	<i>Current dollars</i>	<i>1997 dollars</i>	<i>Current dollars</i>	<i>1997 dollars</i>
1965	4.40	17.34	1.60	6.31	1.75	6.90	4.50	17.74
1966	4.55	17.43	1.70	6.51	2.60	9.96	5.25	20.11
1967	4.60	17.56	1.75	6.68	2.10	8.02	5.25	20.04
1968	4.65	17.32	1.85	6.89	2.00	7.45	5.25	19.56
1969	4.65	16.64	1.90	6.80	1.85	6.62	4.50	16.10
1970	4.70	16.23	1.95	6.73	1.75	6.04	4.50	15.54
1971	4.75	15.90	z	z	1.75	5.86	4.50	15.06
1972	4.75	15.20	2.10	6.72	2.00	6.40	4.50	14.40
1973	5.20	14.73	2.40	6.80	2.00	5.67	4.50	12.75
1974	6.05	14.43	2.70	6.44	2.65	6.32	5.50	13.12
1975	6.40	13.98	2.80	6.12	2.65	5.79	6.00	13.11
1976	6.70	13.99	2.80	5.85	2.65	5.53	6.50	13.57
1977	7.10	13.94	2.95	5.79	2.65	5.20	6.50	12.76
1978	7.80	14.24	3.15	5.75	2.90	5.29	7.00	12.78
1979	9.30	15.05	3.65	5.91	3.75	6.07	8.00	12.95
1980	10.30	14.63	4.10	5.82	5.00	7.10	8.00	11.36
1981	12.65	16.46	4.30	5.60	5.00	6.51	8.00	10.41
1982	14.30	18.24	4.50	5.74	5.00	6.38	8.00	10.20
1983	14.85	18.70	4.80	6.04	5.00	6.30	8.50	10.70
1984	17.65	21.69	4.35	5.35	5.00	6.15	8.50	10.45
1985	15.20	18.77	4.40	5.43	4.00	4.94	9.00	11.11
1986	12.05	15.33	4.30	5.47	3.75	4.77	9.00	11.45
1987	13.85	17.18	5.35	6.64	3.75	4.65	9.00	11.16
1988	15.95	19.02	5.20	6.20	3.50	4.17	10.00	11.93
1989	18.33	20.84	5.54	6.30	4.00	4.55	11.00	12.50
1990	17.88	19.61	5.45	5.98	6.00	6.58	12.50	13.71
1991	20.80	22.76	8.19	8.96	6.00	6.57	14.00	15.32
1992	23.50	25.56	7.84	8.53	5.75	6.25	11.75	12.78
1993	25.07	26.87	9.77	10.47	6.00	6.43	16.50	17.68
1994	23.51	24.90	10.12	10.72	11.50	12.18	12.00	12.04
1995	24.35	24.90	10.40	10.63	z	z	z	z
1996	23.84	23.79	12.63	12.60	z	z	z	z
1997	23.95	23.95	15.05	15.05	z	z	z	z
1998	29.24	28.81	17.06	16.81	2.95	2.91	2.27	2.24
1999	26.28	23.78	13.75	12.44	2.95	2.67	2.27	2.06
2000	23.33	19.13	10.32	8.46	2.73	2.24	2.50	2.05
2001	21.36	17.31	13.54	10.97	2.73	2.21	2.50	2.03
2002 <sup>p</sup>	19.52	16.20	14.94	12.40	2.73	2.26	2.50	2.07

<sup>a</sup>Louisiana Department of Agriculture, Office of Marketing (23);

<sup>b</sup>New Hampshire University, Cooperative Extension Service, and New Hampshire Department of Resources and Economic Development (30).

<sup>c</sup>Includes tamarack.

<sup>d</sup>Derived by dividing the price in current dollars by the Bureau of Labor Statistics producers price index for all commodities (1997 = 100).

<sup>p</sup>Preliminary.

<sup>z</sup>Not available.

**Table 27—Pulpwood prices of Louisiana and Northern New Hampshire, 1965–2002**

(dollars per standard cord, including bark)<sup>a</sup>

Year	Louisiana <sup>b</sup>				Northern New Hampshire <sup>c</sup>					
	Southern pine		Hardwoods		Hemlock and pine <sup>d</sup>		Spruce and fir		Hardwoods	
	Current dollars	1997 dollars <sup>e</sup>	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars
1965	15.70	61.88	13.65	53.80	16.85	66.41	21.00	82.77	16.50	65.03
1966	16.50	63.20	14.80	56.69	17.75	67.99	22.00	84.27	17.50	67.03
1967	16.50	62.98	14.85	56.68	20.25	77.29	22.40	85.50	17.50	66.80
1968	17.00	63.33	16.30	60.72	19.55	72.83	22.15	82.52	z	z
1969	17.75	63.52	17.40	62.26	19.45	69.60	23.20	83.02	18.90	67.63
1970	17.75	61.30	17.45	60.26	19.50	67.34	23.40	80.81	20.00	69.07
1971	z	z	z	z	19.50	65.27	23.40	78.32	20.25	67.78
1972	19.25	61.59	19.00	60.79	19.25	61.59	23.75	75.99	22.00	70.39
1973	22.50	63.74	22.00	62.32	20.40	57.79	25.50	72.24	23.50	66.57
1974	28.30	67.51	24.95	59.52	21.25	50.69	30.00	71.57	26.50	63.22
1975	29.25	63.89	26.20	57.23	25.15	54.94	30.50	66.62	28.50	62.25
1976	30.45	63.58	26.10	54.50	30.40	63.47	31.50	65.77	31.65	66.08
1977	31.65	62.15	27.20	53.41	32.50	63.82	36.50	71.67	33.00	64.80
1978	34.55	63.06	28.30	51.65	34.50	62.97	39.00	71.18	35.00	63.88
1979	38.95	63.05	32.05	51.88	36.65	59.33	44.00	71.23	37.00	59.89
1980	41.45	58.86	33.60	47.72	36.65	52.05	46.00	65.33	41.50	58.94
1981	44.20	57.51	34.20	44.50	41.50	54.00	49.00	63.76	44.00	57.25
1982	46.95	59.87	35.25	44.95	41.50	52.92	49.00	62.49	44.00	56.11
1983	47.60	59.93	35.30	44.44	41.50	52.25	49.00	61.69	46.50	58.55
1984	42.75	52.55	z	z	41.50	51.01	49.00	60.23	47.50	58.39
1985	49.20	60.75	37.50	46.30	41.50	51.24	49.00	60.50	46.50	57.42
1986	48.10	61.20	35.40	45.04	41.50	52.80	49.50	62.98	47.00	59.80
1987	50.65	62.83	45.35	56.25	41.50	51.48	49.50	61.40	47.00	58.30
1988	52.25	62.32	46.85	55.88	41.50	49.50	50.50	60.24	47.50	56.66
1989	55.19	62.73	46.49	52.85	41.50	47.17	50.50	57.40	51.00	57.97
1990	55.64	61.01	47.86	52.48	48.50	53.18	56.75	62.23	50.75	55.65
1991	61.04	66.80	52.37	57.31	50.00	54.72	66.75	73.05	50.75	55.54
1992	64.11	69.74	46.85	50.96	47.00	51.13	66.00	71.80	49.50	53.85
1993	66.15	70.90	51.54	55.24	49.00	52.52	65.00	69.66	49.50	53.05
1994	57.55	60.96	55.23	58.50	65.50	69.38	44.00	46.61	50.50	53.49
1995	67.93	69.45	73.06	74.70	z	z	z	z	z	z
1996	62.55	62.42	57.45	57.34	z	z	z	z	z	z
1997	72.30	72.29	70.19	70.18	z	z	z	z	z	z
1998	74.87	73.77	58.55	57.69	49.77	49.04	27.50	27.10	58.50	57.64
1999	64.61	58.47	53.24	48.18	49.77	45.04	27.50	24.89	58.50	52.94
2000	59.11	48.46	51.53	42.24	49.77	40.80	22.83	18.72	58.50	47.96
2001	59.64	48.34	64.97	52.66	49.77	40.35	27.50	22.29	58.50	47.42
2002 <sup>p</sup>	60.66	50.33	65.59	54.42	49.77	41.30	27.50	22.82	58.50	48.54

<sup>a</sup>All numbers reflect the delivered timber price.

<sup>b</sup>Timber Mart South (36); Louisiana Department of Agriculture, Office of Marketing (23); f.o.b. car.

<sup>c</sup>New Hampshire University, Cooperative Extension Service, and New Hampshire Department of Resources and Economic Development (30).

<sup>d</sup>Includes tamarack.

<sup>e</sup>Derived by dividing price in current dollars by the Bureau of Labor Statistics producer price index for all commodities (1997 = 100).

<sup>p</sup>Preliminary.

<sup>z</sup>Not available.

**Table 28—Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2002<sup>a</sup>**

Year	Production			Imports			Exports			Consumption			Per capita consumption		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods <sup>b</sup>	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Board feet</i>	<i>Board feet</i>	<i>Board feet</i>
1965	38.7	29.3	9.4	5.2	4.9	0.3	0.9	0.8	0.1	43.1	33.4	9.7	222	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	217	166	51
1967	37.5	28.2	9.3	5.1	4.8	0.3	1.2	1.0	0.2	41.4	32.0	9.5	208	161	48
1968	38.0	29.3	8.7	6.2	5.8	0.3	1.1	1.0	0.1	43.1	34.1	9.0	215	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	9.1	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	8.6	199	157	42
1971	38.5	30.0	8.4	7.6	7.2	0.4	1.1	0.9	0.2	45.0	36.4	8.6	217	175	41
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	226	185	42
1973	40.4	31.6	8.8	9.6	9.0	0.5	2.0	1.8	0.2	47.9	38.8	9.1	226	183	43
1974	36.2	27.7	8.4	7.3	6.8	0.4	1.8	1.6	0.2	41.6	32.9	8.7	195	154	41
1975	34.1	26.7	7.3	6.0	5.7	0.3	1.6	1.4	0.2	38.4	31.1	7.4	178	144	34
1976	37.7	29.7	8.0	8.2	8.0	0.3	1.8	1.6	0.2	44.1	36.1	8.1	202	165	37
1977	40.2	31.7	8.5	10.7	10.4	0.3	1.6	1.4	0.2	49.4	40.7	8.6	224	185	39
1978	41.0	32.1	9.0	12.2	11.9	0.4	1.8	1.4	0.4	51.4	42.5	8.9	231	191	40
1979	40.7	31.4	9.3	11.5	11.2	0.4	2.2	1.8	0.4	50.1	40.8	9.3	222	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	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	171	139	32
1982	31.8	23.8	8.0	9.4	9.1	0.2	2.0	1.6	0.4	39.1	31.3	7.8	169	135	34
1983	38.5	29.7	8.8	12.3	12.0	0.3	2.3	1.8	0.5	48.4	39.9	8.5	207	170	36
1984	41.3	31.2	10.1	13.6	13.3	0.3	2.1	1.6	0.5	52.8	42.9	9.9	223	181	42
1985	40.9	31.3	9.6	15.0	14.6	0.4	1.9	1.5	0.4	54.0	44.4	9.6	226	186	40
1986	45.8	35.3	10.5	14.6	14.2	0.3	2.4	1.9	0.5	57.9	47.6	10.3	241	198	43
1987	49.5	38.2	11.3	15.2	14.7	0.5	3.2	2.5	0.7	61.5	50.5	11.0	253	208	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	242	197	44
1989	49.6	37.5	12.1	15.3	14.9	0.3	4.2	3.4	0.9	60.6	49.1	11.5	245	198	47
1990	48.1	35.8	12.3	13.1	12.9	0.2	3.8	2.9	0.9	57.4	45.7	11.7	230	183	47
1991	44.3	33.2	11.2	11.7	11.5	0.2	4.0	3.1	0.9	52.1	41.6	10.4	206	165	41
1992	45.9	34.5	11.4	13.4	13.2	0.3	3.6	2.6	1.0	55.8	45.1	10.7	218	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	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	11.6	229	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	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	231	186	44
1997	47.3	34.7	12.7	18.5	18.0	0.5	2.9	1.6	1.2	62.9	51.0	11.9	235	190	44
1998	47.4	34.7	12.7	19.2	18.7	0.5	2.2	1.1	1.1	64.5	52.2	12.2	238	193	45
1999	49.5	36.6	12.9	19.9	19.2	0.7	2.5	1.4	1.2	66.8	54.4	12.4	245	199	45
2000	48.6	36.0	12.6	20.2	19.4	0.8	2.7	1.4	1.3	66.1	54.0	12.1	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	228	188	40
2002	48.2	36.4	11.8	21.7	21.0	0.7	2.2	1.0	1.2	67.7	56.4	11.3	236	196	39

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census (59); American Forest and Paper Association (4); Luppold and Dempsey (24); Data may not add to totals because of rounding; Data's been revised.

<sup>b</sup>Includes small volumes of mixed species (not classified as softwoods or hardwoods).

**Table 29—Lumber production, by region<sup>a</sup> and softwoods and hardwoods, 1965–2002 (billion board feet)<sup>b</sup>**

Year	All regions			North			South			West <sup>c</sup>		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
1965	38.7	29.3	9.4	4.4	1.1	3.3	12.7	6.8	5.9	21.6	21.4	0.2
1966	38.6	28.8	9.8	4.5	1.1	3.4	12.9	6.7	6.2	21.2	21.0	0.2
1967	37.5	28.2	9.3	4.5	1.1	3.4	12.4	6.6	5.8	19.7	19.6	0.1
1968	38.0	29.3	8.7	4.5	1.1	3.4	12.2	7.0	5.2	21.3	21.2	0.1
1969	37.1	28.3	8.7	4.6	1.1	3.5	12.3	7.3	5.0	20.1	19.9	0.2
1970	35.9	27.5	8.3	4.4	1.0	3.4	12.0	7.2	4.8	19.4	19.3	0.1
1971	38.5	30.0	8.4	4.4	1.1	3.3	12.9	7.9	5.0	21.1	21.0	0.1
1972	39.5	31.0	8.5	4.4	1.1	3.3	13.0	8.0	5.0	22.1	21.9	0.2
1973	40.4	31.6	8.8	4.6	1.1	3.5	13.2	8.0	5.2	22.6	22.5	0.1
1974	36.2	27.7	8.4	4.4	1.1	3.3	11.9	7.0	4.9	19.8	19.6	0.2
1975	34.1	26.7	7.3	4.1	1.1	3.0	11.1	7.0	4.1	18.8	18.6	0.2
1976	37.7	29.7	8.0	6.2	1.8	4.5	16.5	13.4	3.1	28.8	28.6	0.2
1977	40.2	31.7	8.5	6.7	1.9	4.8	17.6	14.3	3.3	30.9	30.7	0.2
1978	41.0	32.1	9.0	6.9	1.9	5.0	17.9	14.4	3.5	31.7	31.5	0.2
1979	40.7	31.4	9.3	7.1	1.9	5.2	17.8	14.1	3.6	31.5	31.3	0.2
1980	35.4	26.2	9.2	6.7	1.6	5.1	15.4	11.8	3.6	26.5	26.2	0.3
1981	32.2	24.7	7.5	5.7	1.5	4.2	14.0	11.1	2.9	12.1	11.8	0.3
1982	31.8	23.8	8.0	3.8	1.1	2.7	13.5	8.8	4.7	14.2	13.9	0.3
1983	38.5	29.7	8.8	4.3	1.3	3.0	15.7	10.3	5.4	18.3	18.1	0.2
1984	41.3	31.2	10.1	4.5	1.2	3.3	17.1	10.7	6.4	19.5	19.3	0.2
1985	40.9	31.3	9.6	4.2	1.2	3.0	15.9	10.2	5.7	20.1	19.9	0.2
1986	45.8	35.3	10.5	5.0	1.4	3.6	18.8	11.7	7.1	22.4	22.2	0.2
1987	49.5	38.2	11.3	5.3	1.5	3.8	19.9	12.3	7.6	24.8	24.5	0.3
1988	49.9	38.1	11.7	5.3	1.4	3.9	20.7	12.7	8.0	24.3	24.0	0.3
1989	49.6	37.5	12.1	4.4	1.2	3.2	21.2	12.3	8.9	24.3	24.0	0.3
1990	48.1	35.8	12.3	3.9	1.5	2.4	22.5	12.6	9.9	22.1	21.7	0.4
1991	44.3	33.2	11.2	4.8	1.5	3.3	20.0	12.1	7.9	20.0	19.6	0.4
1992	45.9	34.5	11.4	4.7	1.6	3.1	21.1	13.0	8.1	20.3	19.9	0.4
1993	45.2	32.9	12.2	7.8	1.9	5.9	21.0	15.4	5.6	16.0	15.6	0.4
1994	46.5	34.1	12.4	8.0	1.9	6.1	21.8	16.0	5.8	16.6	16.2	0.4
1995	44.9	32.2	12.6	8.1	1.9	6.1	21.1	15.3	5.8	15.4	15.0	0.4
1996	45.8	33.3	12.5	7.9	2.0	5.9	22.0	15.7	6.3	16.7	16.3	0.4
1997	47.3	34.7	12.7	9.2	2.1	7.1	20.5	15.6	4.9	17.1	16.6	0.5
1998	47.4	34.7	12.7	9.2	2.1	7.1	20.6	15.6	5.0	17.2	16.6	0.5
1999	49.5	36.6	12.9	9.4	2.2	7.2	21.5	16.5	5.0	18.1	17.6	0.5
2000	48.6	36.0	12.6	9.2	2.2	7.1	21.1	16.2	4.9	17.8	17.3	0.5
2001	46.4	34.6	11.8	8.7	2.1	6.6	20.2	15.6	4.6	17.1	16.6	0.5
2002	48.2	36.4	11.8	8.8	2.2	6.6	21.0	16.4	4.6	18.0	17.5	0.5

<sup>a</sup>The West includes: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming. The South includes: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. The North includes: the remaining 24 states.

<sup>b</sup>U.S. Department of Commerce, Bureau of the Census (59); American Forest and Paper Association (4); Data may not add to totals because of rounding.

<sup>c</sup>Western Wood Products Association (83).

**Table 30—Lumber production in the United States, 1965–2002 (million board feet)**

Year	Softwood										Hardwood					
	Howard <sup>a</sup>	89 RPA <sup>b</sup>	USDC <sup>cf</sup>	AF&Pa <sup>dr</sup>	WWPA <sup>e</sup>	Adams <sup>f</sup>	Final <sup>g</sup>	Howard <sup>a</sup>	89 RPA <sup>b</sup>	USDC <sup>cf</sup>		AF&PA <sup>d</sup>	WWPA <sup>e</sup>	Adams <sup>f</sup>	Luppold and Dempsey <sup>h,r</sup>	Final <sup>h</sup>
										Total	West					
1965	29,295	29,295	29,295	29,240	28,230	28,149	29,295	9,440	9,431	7,467	161	7,655	7,467	9,447	9,279	9,440
1966	28,847	28,847	28,847	z	27,973	27,879	28,847	9,771	9,771	7,737	204	z	7,737	9,782	9,567	9,771
1967	28,172	28,172	28,172	z	27,069	26,978	28,172	9,311	9,311	7,430	197	z	7,430	9,320	9,114	9,311
1968	29,285	30,224	29,285	z	28,936	28,832	29,285	8,430	8,432	7,188	156	z	7,188	8,795	8,579	8,735
1969	28,342	28,342	28,342	z	27,900	28,193	28,342	7,844	7,849	7,482	157	z	7,482	8,739	8,570	8,727
1970	27,530	27,297	27,530	z	27,107	27,001	27,530	7,715	7,701	7,138	127	z	7,138	8,340	8,203	8,330
1971	30,039	30,040	30,039	z	29,432	29,327	30,039	8,107	8,106	6,949	142	z	6,949	8,454	8,305	8,447
1972	30,975	30,975	30,975	z	30,873	30,763	30,975	8,245	8,230	6,770	139	z	6,770	8,502	8,355	8,494
1973	31,586	31,586	31,586	z	31,289	31,149	31,586	8,792	8,792	7,009	151	z	7,008	8,802	8,641	8,792
1974	27,704	28,357	27,704	z	27,193	27,059	27,704	8,448	8,448	6,904	189	z	6,904	8,459	8,259	8,448
1975	26,747	26,148	26,747	z	25,711	25,602	26,747	7,304	7,304	5,872	146	z	5,872	7,309	7,158	7,304
1976	30,600	30,274	30,571	29,693	29,693	29,510	29,693	7,977	7,978	6,427	177	7,801	6,417	7,983	7,800	7,977
1977	32,700	32,159	32,661	31,737	31,737	31,496	31,737	8,500	8,500	6,701	184	8,317	6,680	8,506	8,316	8,500
1978	33,500	32,585	33,467	32,057	31,698	32,057	31,698	8,960	8,959	7,031	232	8,728	7,031	8,963	8,728	8,960
1979	33,300	31,942	33,255	31,432	31,432	31,044	31,432	9,308	9,305	7,314	238	9,069	9,069	9,313	9,070	9,308
1980	25,400	26,966	28,239	26,246	26,246	25,632	26,246	9,147	9,087	7,115	297	8,860	8,860	9,160	8,860	9,157
1981	28,200	24,956	25,432	24,676	24,676	24,518	24,676	8,046	8,018	6,252	334	7,147	7,147	7,378	7,146	7,480
1982	23,787	24,098	24,949	23,787	23,787	23,631	23,787	7,946	7,854	5,061	329	7,668	7,668	7,995	7,667	7,996
1983	29,726	29,991	28,926	29,726	29,726	29,547	29,726	8,767	8,822	5,627	211	8,556	8,556	8,768	8,556	8,767
1984	31,174	31,192	30,801	31,174	31,174	30,945	31,174	9,844	9,826	6,264	211	9,865	9,865	10,082	9,879	10,090
1985	31,321	30,853	30,479	31,321	31,321	31,092	31,321	9,537	9,474	5,966	204	8,866	8,866	9,597	9,394	9,597
1986	35,273	34,700	34,815	35,273	35,273	35,003	35,273	10,347	10,311	7,184	249	10,877	10,877	10,819	10,228	10,477
1987	38,325	z	37,410	38,235	38,235	38,039	38,235	11,263	z	7,476	253	11,695	11,695	11,465	11,010	11,263
1988	38,130	z	36,845	38,130	38,130	37,826	38,130	11,741	z	7,731	275	12,170	12,170	12,151	11,466	11,741
1989	37,545	z	36,040	37,545	37,225	37,225	37,545	11,944	z	7,536	313	12,415	12,415	12,236	11,743	12,056
1990	35,791	z	36,224	35,791	35,459	35,459	35,791	12,021	z	7,242	374	12,660	12,660	12,369	11,947	12,321
1991	33,161	z	33,064	33,161	32,800	32,800	33,161	11,046	z	6,766	363	11,633	11,633	11,383	10,805	11,168
1992	34,526	z	33,704	34,526	34,151	34,151	34,526	11,423	z	7,050	416	11,639	11,639	11,630	11,007	11,423
1993	32,947	z	34,725	32,947	32,517	32,517	32,947	11,732	z	10,631	438	11,914	11,914	12,170	11,781	12,219
1994	34,107	z	35,556	34,107	33,657	33,657	34,107	11,108	z	10,910	445	12,311	12,311	12,311	11,940	12,385
1995	32,233	z	33,043	32,233	31,782	31,782	32,233	11,307	z	10,928	441	z	z	12,434	12,203	12,644
1996	33,266	z	34,065	33,266	32,859	32,859	33,266	12,725	z	10,690	449	z	z	12,705	12,039	12,488
1997	34,667	z	35,457	34,667	34,663	34,662	34,667	12,921	z	11,103	468	z	z	z	12,205	12,673
1998	34,677	z	35,896	34,677	34,678	z	34,677	12,729	z	11,367	407	z	z	z	12,322	12,729
1999	36,605	z	38,033	36,605	36,816	z	36,605	12,927	z	12,523	508	z	z	z	12,419	12,927
2000	35,967	z	37,147	35,967	35,965	z	35,967	12,598	z	12,298	518	z	z	z	12,080	12,598
2001	34,577	z	35,479	34,577	34,579	z	34,577	11,834	z	11,109	475	z	z	z	11,359	11,834
2002	36,420	z	36,329	36,420	36,418	z	36,420	11,750	z	11,030	470	z	z	z	11,280	11,750

<sup>a</sup>Data derived from Table 28.

<sup>b</sup>U.S. Department of Agriculture, Forest Service (51).

<sup>c</sup>U.S. Department of Commerce, Bureau of the Census (59).

<sup>d</sup>1950-1965: National Forest Products Association. 1966: Forest Industry facts 1966. Washington, DC: National Forest Products Association. 31 p.

<sup>e</sup>1986-Present: American Forest and Paper Association (4).

<sup>f</sup>Western Wood Products Association (84).

<sup>g</sup>Adams (1).

<sup>h</sup>Final estimated Forest Service softwood lumber production series: 1950-1975: USDC Bureau of the Census. 1976-present AF&PA 1998 (7).

<sup>i</sup>Luppold and Dempsey (24). Estimated Eastern hardwood lumber production.

<sup>r</sup>Final estimated Forest Service hardwood lumber production series: 1965-1998: Luppold and Dempsey (24) and USDC Bureau of the Census 1998 - West (59).

<sup>s</sup>1996-1999 numbers revised.

<sup>t</sup>Not available.

**Table 31—United States lumber imports, by softwoods and hardwoods and country of origin, 1965–2002**  
(million board feet)<sup>a</sup>

Year	All species				Softwoods				Hardwoods			
	Total	Canada	Mexico	Other <sup>b</sup>	Total <sup>c</sup>	Canada	Mexico	Other <sup>b</sup>	Total	Canada	Mexico	Other <sup>b</sup>
1965	5,232.4	5,016.6	10.1	205.7	4,898.1	4,855.7	8.1	34.3	334.3	160.9	2.0	171.4
1966	5,200.0	4,920.9	5.2	273.9	4,779.2	4,730.4	3.7	45.1	420.8	190.5	1.5	228.8
1967	5,140.8	4,902.5	5.6	232.7	4,798.1	4,747.1	3.1	47.9	342.7	155.4	2.5	184.8
1968	6,154.2	5,899.2	4.0	251.0	5,809.1	5,750.0	3.2	55.9	345.1	149.2	0.8	195.1
1969	6,300.6	5,963.4	6.6	330.6	5,854.0	5,784.4	5.8	63.8	446.6	179.0	0.8	266.8
1970	6,114.4	5,867.6	7.5	239.3	5,777.7	5,722.5	5.5	49.7	336.7	145.1	2.0	189.6
1971	7,589.4	7,314.5	6.5	268.4	7,231.7	7,172.0	4.9	54.8	357.7	142.5	1.6	213.6
1972	9,433.6	9,029.2	20.5	383.9	8,984.8	8,877.8	18.6	88.4	448.8	151.4	1.9	295.5
1973	9,568.6	8,999.3	20.4	548.9	9,019.9	8,843.9	17.5	158.5	548.7	155.4	2.9	390.4
1974	7,270.8	6,847.3	6.1	417.4	6,821.1	6,732.2	2.4	86.5	449.7	115.1	3.7	330.9
1975	5,975.8	5,738.8	28.5	208.5	5,723.8	5,677.0	0.4	46.4	252.0	61.8	28.1	162.1
1976	8,246.8	7,995.3	1.0	250.5	7,958.5	7,912.6	0.8	45.1	288.3	82.7	0.2	205.4
1977	10,713.3	10,408.0	7.0	298.3	10,369.6	10,327.0	1.2	41.4	343.7	81.0	5.8	256.9
1978	12,214.6	11,879.4	11.9	323.3	11,853.2	11,776.7	11.3	65.2	361.4	102.7	0.6	258.1
1979	11,529.5	11,187.6	4.7	337.2	11,153.3	11,100.9	3.1	49.3	376.2	86.7	1.6	287.9
1980	9,866.1	9,618.7	2.9	244.5	9,572.9	9,546.3	2.5	24.1	293.2	72.4	0.4	220.4
1981	9,523.2	9,285.4	1.8	236.0	9,232.1	9,208.1	1.5	22.5	291.1	77.3	0.3	213.5
1982	9,360.5	9,191.8	6.5	162.2	9,149.5	9,114.9	1.1	33.5	211.0	76.9	5.4	128.7
1983	12,253.5	12,039.6	13.6	200.3	11,993.0	11,962.7	12.0	18.3	260.5	76.9	1.6	182.0
1984	13,632.1	13,342.8	14.6	274.7	13,304.4	13,252.3	11.8	40.3	327.7	90.5	2.8	234.4
1985	14,995.6	14,636.1	12.2	347.3	14,632.0	14,531.7	11.8	88.5	363.6	104.4	0.4	258.8
1986	14,585.1	14,250.0	32.8	302.3	14,238.2	14,142.3	31.9	64.0	346.9	107.7	0.9	238.3
1987	15,191.5	14,763.3	55.1	373.1	14,680.4	14,600.8	54.1	25.5	511.1	162.5	1.0	347.6
1988	13,777.8	12,999.2	72.9	705.7	13,473.0	12,855.2	72.5	545.2	304.8	144.0	0.3	160.5
1989	15,258.4	13,964.2	193.4	1,100.8	14,909.0	13,761.2	193.0	954.8	349.4	202.9	0.4	146.0
1990	13,106.7	11,918.4	360.4	827.8	12,875.0	11,804.7	360.3	710.0	231.7	113.6	0.2	117.8
1991	11,725.2	11,517.6	48.0	159.6	11,515.0	11,410.8	47.8	56.4	210.2	106.8	0.2	103.2
1992	13,449.9	13,207.9	53.3	188.7	13,190.0	13,055.1	53.1	81.9	259.9	152.8	0.2	106.8
1993	15,399.5	15,059.7	51.7	288.1	15,086.0	14,856.2	51.6	178.3	313.5	203.5	0.2	109.8
1994	16,593.3	16,103.5	51.6	438.1	16,224.0	15,871.6	51.4	301.0	369.3	231.9	0.2	137.1
1995	17,556.3	16,989.5	108.8	458.0	17,202.0	16,780.5	106.2	315.3	354.3	209.0	2.7	142.7
1996	18,397.8	17,823.6	120.9	453.3	18,021.0	17,593.2	117.6	310.2	376.8	230.4	3.3	143.1
1997	18,451.2	17,535.7	124.4	791.1	18,000.0	17,235.5	120.0	644.5	451.2	300.2	4.4	146.6
1998	19,234.5	18,227.8	70.1	936.7	18,685.7	17,838.0	66.5	781.2	548.8	389.8	3.5	155.5
1999	19,854.2	18,486.5	58.3	1,309.4	19,178.0	18,021.2	56.9	1,099.9	676.2	465.4	1.4	209.5
2000	20,243.3	18,615.6	31.3	1,596.4	19,448.6	18,104.8	30.5	1,313.4	794.7	510.8	0.8	283.0
2001	20,720.1	18,930.3	27.7	1,762.1	20,074.5	18,503.0	27.2	1,544.3	645.6	427.3	0.5	217.8
2002	21,724.1	19,397.3	19.6	2,307.2	20,985.6	18,922.8	19.2	2,043.7	738.5	474.5	0.4	263.6

<sup>a</sup>U.S. Department of Agriculture, Foreign Agricultural Service (41); U.S. International Trade Commission (81); U.S. Department of Commerce, Bureau of the Census (59)

Data may not add to totals because of rounding.

<sup>b</sup>For the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

<sup>c</sup>Includes small volumes of hardwoods.

Table 32—United States lumber exports, by softwoods and hardwoods and country or region of destination, 1965–2002 (million board feet)<sup>a</sup>

Year	All species																	
	Softwoods						Hardwoods											
	Central and South America <sup>b</sup>			European Union <sup>b</sup>			Total	Central and South America			European Union							
1965	919.1	285.1	249.4	1.1	105.7	277.8	778.9	184.0	229.3	1.0	103.1	261.5	140.2	101.1	20.1	0.1	2.6	16.3
1966	1,022.6	309.0	250.2	1.3	174.4	287.7	867.9	186.5	230.3	1.2	171.3	278.6	154.7	122.5	19.9	0.1	3.1	9.1
1967	1,129.5	338.0	261.0	1.1	265.8	263.6	965.2	207.6	241.0	1.1	260.7	254.8	164.3	130.4	20.0	0.0	5.1	8.8
1968	1,161.7	295.4	304.3	1.2	288.6	272.2	1,048.1	210.4	288.9	1.1	284.8	262.9	113.6	85.0	15.4	0.1	3.8	9.3
1969	1,142.2	285.0	278.3	1.1	317.3	260.5	1,023.8	198.3	264.6	1.0	309.6	250.3	118.4	86.7	13.7	0.1	7.7	10.2
1970	1,243.4	269.9	299.3	1.3	383.5	289.4	1,115.5	202.6	281.8	1.1	359.6	270.4	127.9	67.3	17.5	0.2	23.9	19.0
1971	1,093.6	289.3	239.0	1.0	323.1	241.2	933.3	206.3	213.8	0.9	287.4	224.9	160.3	83.0	25.2	0.1	35.7	16.3
1972	1,428.3	419.5	286.0	1.0	478.7	243.1	1,191.1	290.1	267.9	0.9	407.2	225.0	237.2	129.4	18.1	0.1	71.5	18.1
1973	1,965.9	548.4	517.0	1.2	569.1	330.2	1,752.7	388.5	488.3	1.0	564.4	310.5	213.2	159.9	28.7	0.2	4.7	19.7
1974	1,765.4	522.3	347.4	1.1	573.9	320.7	1,566.5	382.2	311.3	1.0	570.5	301.5	198.9	140.1	36.1	0.1	3.4	19.2
1975	1,618.1	549.4	244.9	1.3	516.8	305.7	1,405.4	397.5	218.7	1.1	515.3	272.8	212.7	151.9	26.2	0.2	1.5	32.9
1976	1,846.0	619.7	354.5	1.4	478.0	392.4	1,605.5	437.9	316.3	1.3	475.1	374.9	240.5	181.8	38.2	0.1	2.9	17.5
1977	1,665.6	537.4	336.6	1.5	439.6	350.5	1,427.7	365.5	288.6	1.4	436.7	335.5	237.9	171.9	48.0	0.1	2.9	15.0
1978	1,740.9	648.4	347.4	1.3	411.3	332.5	1,353.9	374.4	257.6	1.3	407.6	313.0	387.0	274.0	89.8	0.0	3.7	19.5
1979	2,186.5	651.5	456.1	2.0	647.6	429.3	1,781.3	427.6	345.6	1.9	640.5	365.7	361.1	223.9	110.5	0.1	7.1	19.5
1980	2,506.8	631.3	594.7	3.6	648.9	628.3	2,006.5	388.3	429.2	3.2	633.9	551.9	487.5	243.0	165.5	0.4	15.0	63.6
1981	2,379.0	729.1	398.3	4.0	524.3	723.3	1,927.8	509.1	234.4	3.6	506.5	674.2	478.5	220.0	163.9	0.4	17.8	76.4
1982	2,050.3	418.9	410.6	3.1	627.9	589.8	1,634.9	261.9	248.2	2.9	610.7	511.2	385.9	157.0	162.4	0.2	17.2	49.1
1983	2,319.1	664.1	458.8	2.3	631.6	562.3	1,755.6	433.2	290.6	2.0	595.3	434.5	514.3	230.9	168.2	0.3	36.3	78.6
1984	2,121.0	555.7	345.0	2.7	602.4	615.2	1,623.6	347.7	212.0	2.1	545.0	516.8	526.8	208.0	133.0	0.6	57.4	127.8
1985	1,840.9	431.3	277.0	5.3	617.6	509.7	1,420.1	300.7	177.3	4.7	574.2	363.2	372.7	130.6	99.7	0.6	43.4	98.4
1986	2,422.0	510.1	395.3	10.6	888.3	617.7	1,888.4	361.2	253.3	10.0	827.0	436.9	499.3	148.9	142.0	0.6	61.3	146.5
1987	3,241.0	648.0	528.1	9.0	1,200.5	855.4	2,447.0	445.8	309.5	8.1	1,077.2	606.4	725.8	202.2	218.6	0.9	123.3	180.8
1988	4,347.8	753.7	891.0	5.0	1,532.4	1,165.7	3,227.5	493.9	490.5	3.5	1,280.0	959.6	1,163.2	259.8	400.5	1.5	252.4	249.0
1989	4,136.9	642.7	673.1	7.7	1,614.2	1,199.1	3,339.6	457.1	397.0	6.7	1,457.8	1,021.0	825.3	185.6	276.1	1.0	156.4	206.1
1990	4,614.4	657.6	685.8	6.7	1,270.3	1,994.0	3,752.9	422.7	412.0	6.0	1,145.1	1,767.1	812.8	234.9	273.8	0.7	125.2	178.1
1991	3,890.1	564.8	753.7	10.7	1,215.7	1,335.2	2,999.5	365.4	429.2	10.2	1,086.1	1,108.6	880.9	199.4	324.5	0.5	129.6	226.9
1992	3,512.5	571.7	735.1	9.3	1,112.9	1,083.5	2,567.3	313.8	399.2	8.3	1,003.6	842.5	930.8	258.0	335.9	1.0	109.3	226.6
1993	3,280.3	566.0	548.1	4.7	1,180.5	980.9	2,291.5	267.0	242.8	3.7	1,063.2	714.8	963.7	299.0	305.3	1.0	117.4	241.0
1994	3,115.3	610.7	543.8	7.2	1,056.6	897.0	2,078.0	285.5	230.5	6.4	958.4	597.2	1,003.5	325.1	313.3	0.8	98.2	266.1
1995	2,957.8	650.3	513.4	5.9	978.2	810.0	1,872.1	312.5	201.5	4.7	871.6	481.8	1,057.3	337.8	311.9	1.2	106.6	299.8
1996	2,897.9	664.3	485.3	7.2	961.3	779.8	1,788.7	312.3	178.2	5.3	860.7	432.2	1,089.8	352.0	307.1	1.9	100.6	328.2
1997	2,933.4	713.3	592.3	15.9	796.6	815.3	1,709.4	329.3	206.2	14.0	692.2	467.7	1,224.0	384.0	386.1	1.9	104.4	347.6
1998	2,189.4	576.3	560.8	15.3	355.4	681.5	1,129.2	230.6	207.0	10.8	297.5	383.3	1,060.2	345.7	353.8	4.5	57.9	298.2
1999	2,548.6	659.3	555.8	11.1	353.2	969.1	1,366.5	255.4	214.2	7.3	288.7	600.9	1,182.1	404.0	341.6	3.9	64.5	368.1
2000	2,700.0	700.7	506.5	12.7	325.4	1,154.7	1,400.0	265.2	151.8	10.6	274.8	697.6	1,300.0	435.6	354.7	2.1	50.6	457.1
2001	2,190.3	571.3	391.3	5.1	226.6	996.0	968.8	186.4	86.3	2.4	180.2	513.4	1,221.5	384.9	304.9	2.7	46.4	482.6
2002	2,185.7	583.8	357.8	3.8	154.8	1,085.5	966.4	173.2	73.2	2.0	115.1	602.8	1,219.3	410.6	284.6	1.8	39.6	482.6

<sup>a</sup>U.S. Department of Agriculture, Foreign Agricultural Service (41). Data may not add to totals because of rounding.

<sup>b</sup>Includes Belgium–Luxembourg, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Trieste, and the United Kingdom.

<sup>c</sup>Includes Mexico.



**Table 33—Lumber<sup>a</sup> production in Canada, by softwoods and hardwoods and region, 1965–2002 (billion board feet)<sup>b</sup>**

Year	All species	Softwoods					Hardwoods		
		Total	British Columbia <sup>c</sup>			Other Canada	Total	British Columbia	
			Total	Coast	Interior			Columbia	Other Canada
1965	10.8	10.3	7.4	3.6	3.8	2.9	0.5	z	0.5
1966	10.6	10.0	7.3	3.7	3.6	2.7	0.6	z	0.6
1967	10.3	9.7	7.1	3.9	3.2	2.6	0.6	z	0.6
1968	11.4	10.8	7.8	4.1	3.7	3.0	0.6	d	0.6
1969	11.5	11.0	7.7	3.8	3.9	3.3	0.5	d	0.5
1970	11.3	10.8	7.7	3.8	3.9	3.1	0.5	d	0.5
1971	12.8	12.3	9.0	4.2	4.8	3.3	0.5	d	0.5
1972	13.9	13.4	9.5	4.0	5.5	3.9	0.5	d	0.5
1973	15.5	14.9	10.4	4.4	6.0	4.5	0.6	d	0.6
1974	13.6	13.0	8.7	3.4	5.3	4.3	0.6	d	0.6
1975	11.5	11.1	7.4	2.5	4.9	3.7	0.4	d	0.4
1976	15.6	15.1	10.6	4.0	6.6	4.5	0.5	d	0.5
1977	17.6	17.2	12.0	4.5	7.5	5.2	0.4	d	0.4
1978	19.0	18.4	12.5	4.8	7.7	5.9	0.6	d	0.6
1979	19.8	19.3	12.9	4.7	8.2	6.4	0.5	d	0.5
1980	19.0	18.4	11.9	4.2	7.7	6.5	0.6	d	0.6
1981	17.0	16.6	10.4	3.5	6.9	6.2	0.4	d	0.4
1982	15.6	15.2	9.9	3.0	6.9	5.3	0.4	d	0.4
1983	20.5	20.1	13.0	4.1	8.9	7.1	0.4	d	0.4
1984	20.7	20.2	13.1	3.9	9.2	7.1	0.5	d	0.5
1985	22.0	21.6	13.6	3.6	10.0	8.0	0.4	d	0.4
1986	22.4	21.9	13.1	3.7	9.4	8.8	0.5	d	0.5
1987	26.2	25.6	15.9	4.7	11.2	9.7	0.6	d	0.6
1988	25.7	25.1	15.6	4.6	11.0	9.5	0.6	d	0.6
1989	25.0	24.5	15.2	4.1	11.1	9.3	0.5	d	0.5
1990	23.1	22.7	14.2	3.8	10.4	8.5	0.4	d	0.4
1991	21.9	21.5	13.3	3.5	9.8	8.2	0.4	d	0.4
1992	23.6	23.1	14.1	3.5	10.6	9.0	0.5	d	0.5
1993	25.3	24.8	14.4	3.6	10.8	10.4	0.5	d	0.5
1994	26.1	25.6	14.3	3.7	10.6	11.3	0.5	d	0.5
1995	26.0	25.5	13.8	3.5	10.4	11.7	0.5	d	0.5
1996	27.0	26.6	13.8	3.5	10.4	12.7	0.4	d	0.4
1997	27.4	27.1	13.4	3.3	10.0	13.7	0.4	d	0.4
1998	27.5	27.2	12.8	2.7	10.1	14.4	0.4	d	0.4
1999	29.5	29.2	13.5	2.8	10.7	15.7	0.4	d	0.4
2000	29.8	29.4	13.6	2.9	10.8	15.8	0.4	d	0.4
2001	28.2	27.8	12.8	2.2	10.5	15.0	0.4	d	0.4
2002	30.9	29.5	13.7	2.2	11.5	15.8	1.4	d	1.4

<sup>a</sup>Does not include sawn ties.

<sup>b</sup>Natural Resources Canada (28); Statistics Canada (33,34,35); Wood Markets (85)

Data may not add to totals because of rounding.

<sup>c</sup>Includes small volumes of hardwoods.

<sup>d</sup>Fewer than 50 million board feet.

<sup>z</sup>Not available.

**Table 34—Lumber and competing engineered wood products, by type of product, 1970-2002**

Year				Structural panels <sup>a</sup>		Lumber <sup>b</sup>	
	Wood laminated veneer lumber <sup>a</sup>	Wood glulam <sup>a</sup>	Wood I-Joists <sup>a</sup>	Oriented strandboard	Softwood plywood	Hardwood	Softwood
	<i>Million cubic feet</i>	<i>Million board feet</i>	<i>Million linear feet</i>	<i>Million square feet (3/8-in. basis)</i>	<i>Million square feet (3/8-in. basis)</i>	<i>Billion board feet</i>	<i>Billion board feet</i>
1970	z	z	z	z	14,340	8.3	27.5
1971	z	z	z	z	16,635	8.4	30.0
1972	z	z	z	z	18,324	8.5	31.0
1973	z	z	z	z	18,305	8.8	31.6
1974	z	z	z	z	15,878	8.4	27.7
1975	z	z	z	z	16,050	7.3	26.7
1976	z	z	z	z	18,440	8.0	29.7
1977	z	z	z	z	19,376	8.5	31.7
1978	z	z	z	z	19,964	9.0	32.1
1979	z	z	z	z	19,653	9.3	31.4
1980	3	204	45	135	16,333	9.2	26.2
1981	4	190	45	271	16,752	7.5	24.7
1982	4	164	54	557	15,846	8.0	23.8
1983	5	192	63	1,341	19,480	8.8	29.7
1984	5	229	72	2,042	19,926	10.1	31.2
1985	7	246	90	2,669	20,169	9.6	31.3
1986	8	330	99	3,513	22,118	10.5	35.3
1987	9	279	108	4,076	22,899	11.3	38.2
1988	11	298	108	4,604	22,599	11.7	38.1
1989	12	322	117	5,105	21,385	12.1	37.5
1990	16	324	122	5,418	20,919	12.3	35.8
1991	16	265	158	5,613	18,652	11.2	33.2
1992	17	258	252	6,653	19,332	11.4	34.5
1993	21	239	358	7,002	19,315	12.2	32.9
1994	23	264	380	7,486	19,638	12.4	34.1
1995	28	282	358	7,903	19,367	12.6	32.2
1996	32	309	444	9,314	19,181	12.5	33.3
1997	38	300	547	10,534	17,963	12.7	34.7
1998	41	287	619	11,227	17,776	12.7	34.7
1999	48	316	733	11,612	17,816	12.9	36.6
2000	48	356	693	11,906	17,475	12.6	36.0
2001	53	335	746	12,532	15,121	11.8	34.6
2002	56	321	756	13,426	15,200	11.8	36.4

<sup>a</sup>APA—The Engineered Wood Association (10,12).

<sup>b</sup>U.S. Department of Commerce, Bureau of the Census (59); American Forest and Paper Association (4); Luppold and Dempsey (24).

<sup>z</sup>Not available.

**Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–2002**  
(1997 = 100)<sup>a</sup>

Year	All com- modities	Lumber and wood products		All lumber		Softwood lumber						All hardwood lumber	
		Actual	Relative <sup>b</sup>	Actual	Relative	All		Douglas-fir		Southern pine		Actual	Relative
						Actual	Relative	Actual	Relative	Actual	Relative		
1965	25.4	18.3	72.3	15.5	61.2	14.0	55.2	15.7	61.9	17.1	67.4	21.3	84.0
1966	26.1	19.1	73.3	16.6	63.5	14.7	56.4	16.5	63.1	18.8	72.0	23.8	91.2
1967	26.2	19.1	72.8	16.6	63.2	15.1	57.6	17.0	64.9	18.8	71.7	21.9	83.5
1968	26.8	21.6	80.5	19.4	72.2	18.2	67.7	20.5	76.2	21.4	79.7	22.8	85.1
1969	27.9	23.9	85.6	21.8	77.9	20.3	72.5	22.5	80.3	23.7	84.8	26.3	94.2
1970	29.0	21.7	74.9	18.8	64.9	17.0	58.8	18.5	63.8	21.5	74.4	25.1	86.7
1971	29.9	24.3	81.4	22.5	75.3	21.3	71.2	23.8	79.8	25.2	84.3	24.8	82.9
1972	31.3	27.6	88.3	26.4	84.4	25.2	80.7	27.4	87.8	28.5	91.1	27.6	88.3
1973	35.3	33.8	95.8	33.9	96.0	32.3	91.4	35.6	101.0	35.3	99.9	37.0	104.7
1974	41.9	35.1	83.7	34.2	81.7	31.8	75.9	36.4	86.8	34.6	82.6	41.5	99.0
1975	45.8	33.8	73.9	31.8	69.5	30.2	65.9	36.0	78.7	33.0	72.0	35.1	76.7
1976	47.9	39.2	81.9	38.6	80.5	37.4	78.0	42.7	89.1	40.8	85.2	38.6	80.6
1977	50.9	45.1	88.6	45.7	89.7	44.8	87.9	49.6	97.4	49.3	96.8	43.8	86.1
1978	54.8	52.7	96.2	53.3	97.2	52.1	95.1	57.8	105.5	57.2	104.4	51.7	94.3
1979	61.8	57.4	93.0	58.5	94.8	57.2	92.6	65.3	105.7	60.9	98.7	56.9	92.1
1980	70.4	55.2	78.4	53.9	76.5	52.0	73.8	60.1	85.3	55.9	79.4	55.1	78.3
1981	76.9	55.9	72.8	53.7	69.9	51.6	67.1	53.0	69.0	54.8	71.4	55.9	72.8
1982	78.4	54.4	69.4	51.4	65.6	48.4	61.8	45.3	57.8	53.7	68.5	57.5	73.3
1983	79.4	58.7	73.9	58.3	73.4	55.7	70.1	61.5	77.5	60.1	75.7	62.1	78.2
1984	81.4	58.8	72.3	57.8	71.0	53.2	65.5	55.8	68.6	60.1	73.9	70.0	86.0
1985	81.0	58.0	71.6	56.3	69.5	52.0	64.2	57.3	70.8	56.5	69.8	67.2	83.0
1986	78.6	58.3	74.2	56.8	72.2	52.5	66.7	56.4	71.8	56.4	71.7	67.9	86.4
1987	80.6	61.3	76.1	60.7	75.3	56.2	69.7	56.6	70.2	61.3	76.0	72.8	90.3
1988	83.8	64.7	77.2	62.7	74.8	58.1	69.3	61.5	73.3	60.4	72.0	75.2	89.7
1989	88.0	68.9	78.3	64.6	73.4	61.5	69.9	68.7	78.1	58.1	66.0	73.6	83.7
1990	91.2	70.6	77.4	64.0	70.2	59.9	65.7	62.7	68.7	59.8	65.5	75.2	82.5
1991	91.4	71.9	78.7	64.2	70.2	60.9	66.6	63.2	69.2	59.7	68.6	73.9	80.8
1992	91.9	79.8	86.8	74.3	80.8	71.9	78.2	76.6	83.4	70.1	76.3	80.7	87.8
1993	93.3	94.7	101.5	94.2	101.0	93.5	100.2	107.6	115.3	90.7	97.2	93.8	100.5
1994	94.4	98.0	103.8	97.0	102.7	95.9	101.6	107.1	113.4	98.0	103.8	96.7	102.4
1995	97.8	96.9	99.1	89.1	91.1	86.5	88.4	90.0	92.1	89.7	91.7	96.0	98.1
1996	100.2	95.9	95.7	92.4	92.2	91.9	91.7	103.8	103.6	95.4	95.3	94.2	94.0
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	101.5	97.4	96.0	90.9	89.6	88.4	87.1	84.2	83.0	95.1	93.7	102.7	101.2
1999	110.5	99.9	90.4	95.4	86.3	94.9	85.9	96.1	86.9	99.8	90.3	101.9	92.2
2000	122.0	97.0	79.5	90.6	74.3	86.5	70.9	83.9	68.8	86.5	70.9	106.8	87.6
2001	123.4	94.9	76.9	87.0	70.5	82.4	66.8	80.7	65.4	82.0	66.4	104.2	84.4
2002	120.5	94.2	78.2	86.5	71.7	82.7	68.6	80.8	67.1	78.1	64.8	102.4	84.9

**Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–2002**  
**(1997 = 100)<sup>a</sup>—Con.**

Year	Metals and metal products		Metal doors, sash, and trim		Flat glass		Concrete products		Ready mixed concrete	
	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	24.3	95.7	20.4	80.3	z	z	23.8	93.6	23.3	91.9
1966	24.9	95.3	20.9	79.9	z	z	24.1	92.4	23.6	90.4
1967	25.2	96.2	21.4	81.5	41.7	159.3	24.7	94.3	24.1	92.1
1968	25.8	96.1	22.2	82.8	43.5	162.0	25.4	94.5	24.8	92.3
1969	27.3	97.7	23.2	82.9	45.7	163.6	26.3	94.2	25.9	92.6
1970	29.4	101.4	24.2	83.4	48.2	166.5	27.7	95.7	27.4	94.5
1971	29.9	100.1	25.1	84.2	51.3	171.8	29.8	99.7	29.6	99.0
1972	31.0	99.3	25.8	82.4	51.1	163.4	31.0	99.3	30.8	98.6
1973	33.4	94.6	26.6	75.5	50.6	143.4	32.5	92.1	32.2	91.1
1974	43.3	103.2	31.5	75.1	53.7	128.2	37.4	89.3	37.0	88.2
1975	46.7	101.9	34.7	75.8	58.0	126.7	42.1	92.0	41.5	90.5
1976	49.3	103.0	36.6	76.5	62.5	130.5	44.5	92.9	44.4	92.7
1977	52.6	103.3	40.3	79.1	67.0	131.6	47.4	93.0	47.4	93.1
1978	57.1	104.3	44.4	81.0	72.0	131.5	52.9	96.5	52.8	96.4
1979	65.3	105.6	49.1	79.4	76.6	124.1	60.3	97.6	60.2	97.4
1980	72.1	102.4	54.5	77.4	81.9	116.3	67.6	96.1	67.9	96.4
1981	75.6	98.3	59.6	77.6	88.6	115.3	71.9	93.6	72.4	94.2
1982	75.9	96.8	62.1	79.2	92.3	117.8	73.5	93.8	73.8	94.1
1983	77.2	97.3	63.8	80.4	95.8	120.6	74.6	93.9	74.7	94.1
1984	79.5	97.7	66.2	81.4	93.6	115.1	764.0	939.1	76.9	94.6
1985	79.2	97.8	66.6	82.3	93.9	116.0	79.0	97.6	79.0	97.5
1986	78.3	99.6	67.6	86.0	96.5	122.8	80.3	102.2	79.4	101.1
1987	81.3	100.8	69.5	86.3	99.0	122.8	80.4	99.8	79.1	98.2
1988	90.1	107.4	76.0	90.7	101.3	120.8	80.9	96.5	79.6	94.9
1989	94.2	107.0	80.7	91.8	101.3	115.1	81.8	92.9	80.6	91.6
1990	93.3	102.3	81.6	89.5	99.3	108.9	83.5	91.5	82.5	90.5
1991	91.2	99.8	83.6	91.5	97.8	107.0	85.7	93.8	84.6	92.6
1992	90.4	98.4	83.8	91.1	98.4	107.1	86.2	93.7	85.0	92.4
1993	90.4	96.9	84.8	90.9	99.1	106.2	88.4	94.7	87.6	93.9
1994	94.7	100.3	88.2	93.4	101.9	108.0	91.5	97.0	91.2	96.6
1995	102.1	104.3	97.2	99.3	104.5	106.9	95.1	97.3	95.1	97.3
1996	99.4	99.2	98.9	98.7	101.6	101.4	97.9	97.7	98.2	98.0
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	97.0	95.6	100.3	98.8	99.0	97.5	103.0	101.5	103.1	101.6
1999	94.5	85.6	100.7	91.1	98.2	88.9	105.6	95.6	105.7	95.6
2000	97.2	79.7	102.5	84.0	101.3	83.0	108.6	89.1	108.5	89.0
2001	95.2	77.1	103.7	84.1	103.4	83.8	111.5	90.4	110.9	89.9
2002	95.5	79.3	104.3	86.5	102.8	85.3	112.2	93.1	110.8	92.0

**Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–2002**  
**(1997 = 100)<sup>a</sup>—Con.**

Year	Ceramic tile <sup>c</sup>		Prepared asphalt roofing <sup>d</sup>		Gypsum products		Soft surface floor covering		Hard surface floor covering	
	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	33.7	133.0	28.7	113.2	23.1	91.2	53.7	211.8	26.9	106.0
1966	34.2	130.9	30.1	115.1	22.8	87.2	53.5	204.9	26.7	102.3
1967	34.9	133.2	29.3	112.0	22.9	87.4	51.0	194.6	26.5	101.2
1968	35.9	133.8	30.5	113.5	23.7	88.3	51.3	191.2	27.2	101.4
1969	37.1	132.6	30.4	108.7	23.7	84.9	51.3	183.6	26.5	94.9
1970	38.1	131.5	29.8	103.1	22.8	78.7	50.4	174.1	26.6	91.8
1971	39.8	133.3	37.1	124.2	25.0	83.7	49.3	165.0	27.6	92.2
1972	40.0	127.8	39.2	125.3	26.2	83.9	49.0	156.7	27.7	88.6
1973	41.5	117.7	40.6	115.1	27.6	78.3	51.5	145.8	27.9	79.0
1974	45.4	108.2	55.8	133.0	31.4	75.0	56.5	134.8	33.3	79.5
1975	50.7	110.8	63.9	139.7	32.9	71.9	58.4	127.5	39.3	86.0
1976	54.5	113.8	67.9	141.7	35.3	73.7	60.1	125.4	43.2	90.3
1977	55.4	108.8	72.3	142.1	42.0	82.4	62.2	122.1	45.6	89.5
1978	55.1	100.6	84.7	154.6	52.4	95.6	64.4	117.5	47.8	87.3
1979	59.8	96.7	92.4	149.7	57.7	93.4	66.2	107.2	52.8	85.4
1980	63.2	89.8	109.3	155.3	58.6	83.2	72.1	102.5	60.5	85.9
1981	68.6	89.3	105.3	137.0	58.6	76.3	80.1	104.2	63.7	82.8
1982	72.3	92.1	103.6	132.2	58.6	74.7	81.1	103.4	64.8	82.7
1983	75.0	94.4	97.5	122.8	65.4	82.3	82.8	104.3	66.6	83.9
1984	77.8	95.7	101.3	124.5	79.3	97.4	85.4	104.9	68.7	84.5
1985	81.9	101.1	104.2	128.6	77.5	95.7	84.5	104.4	71.6	88.4
1986	86.0	109.4	100.3	127.6	80.2	102.1	86.7	110.4	73.5	93.5
1987	88.9	110.3	95.2	118.1	73.3	90.9	88.6	109.9	75.3	93.4
1988	91.9	109.6	97.8	116.7	66.1	78.9	91.5	109.2	79.4	94.7
1989	94.1	106.9	99.1	112.6	64.4	73.2	93.6	106.4	84.2	95.7
1990	95.7	105.0	99.3	108.9	61.6	67.5	94.8	104.0	86.2	94.5
1991	94.7	103.7	99.7	109.1	58.1	63.6	95.4	104.4	90.2	98.8
1992	95.8	104.2	97.7	106.3	58.7	63.9	94.9	103.3	92.1	100.1
1993	96.5	103.4	98.4	105.4	63.4	68.0	94.6	101.4	94.1	100.9
1994	98.0	103.8	96.3	102.0	79.6	84.3	95.6	101.2	95.5	101.1
1995	99.7	101.9	101.4	103.6	90.5	92.5	97.1	99.3	99.3	101.5
1996	99.9	99.7	100.9	100.7	90.2	90.0	99.1	98.9	99.7	99.5
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	97.0	95.6	100.1	98.7	104.0	102.5	100.5	99.0	99.8	98.3
1999	97.5	88.2	99.6	90.2	121.8	110.2	99.3	89.8	99.1	89.7
2000	95.0	77.9	104.6	85.8	118.0	96.7	101.4	83.1	99.6	81.7
2001	87.9	71.3	108.1	87.6	91.6	74.3	102.3	83.0	98.2	79.6
2002	76.7	63.7	111.7	92.6	98.7	81.9	102.6	85.1	99.0	82.1

<sup>a</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).

<sup>b</sup>Derived by dividing the actual price index by the all commodities price index.

<sup>c</sup>Ceramic floor and wall tile.

<sup>d</sup>Prepared asphalt and tar roofing and siding products.

<sup>z</sup>Not available.

**Table 36—Relative<sup>a</sup> producer price index for lumber, 1800–2002 (1997 = 100)<sup>b</sup>**

Year	All lumber	Year	All lumber	Year	All lumber	Year	All lumber	Year	All lumber
1800	5.0	1840	12.6	1881	20.7	1922	40.3	1963	75.1
1801	5.2	1841	13.0	1882	21.1	1923	43.7	1964	76.7
1802	6.2	1842	12.9	1883	20.9	1924	39.8	1965	61.2
1803	5.3	1843	12.6	1884	22.4	1925	38.3	1966	63.5
1804	5.3	1844	13.3	1885	22.9	1926	38.2	1967	63.2
1805	5.4	1845	14.7	1886	23.7	1927	37.4	1968	72.2
1806	5.5	1846	13.9	1887	23.7	1928	35.4	1969	77.9
1807	5.9	1847	13.4	1888	23.1	1929	37.5	1970	64.9
1808	5.8	1848	13.9	1889	23.1	1930	37.5	1971	75.3
1809	5.4	1849	14.1	1890	23.6	1931	36.0	1972	84.4
1810	5.1	1850	14.8	1891	23.2	1932	34.8	1973	96.0
1811	5.1	1851	14.3	1892	24.1	1933	40.5	1974	81.7
1812	4.8	1852	15.7	1893	23.8	1934	42.7	1975	69.5
1813	4.3	1853	15.2	1894	26.3	1935	38.7	1976	80.5
1814	3.6	1854	14.8	1895	24.6	1936	40.8	1977	89.7
1815	6.4	1855	15.6	1896	25.9	1937	44.1	1978	97.2
1816	7.1	1856	16.0	1897	25.1	1938	42.6	1979	94.8
1817	6.2	1857	16.5	1898	25.4	1939	45.7	1980	76.5
1818	5.8	1858	16.4	1899	26.0	1940	49.8	1981	69.9
1819	6.7	1859	16.0	1900	26.8	1941	53.2	1982	65.6
1820	7.5	1860	16.0	1901	27.3	1942	51.0	1983	73.4
1821	7.5	1861	15.6	1902	26.7	1943	51.9	1984	71.0
1822	7.1	1862	14.2	1903	28.4	1944	56.2	1985	69.5
1823	7.5	1863	13.6	1904	26.5	1945	55.7	1986	72.2
1824	7.6	1864	13.6	1905	28.1	1946	56.1	1987	75.3
1825	7.9	1865	12.6	1906	33.2	1947	72.8	1988	74.8
1826	8.5	1866	15.9	1907	31.7	1948	76.3	1989	73.4
1827	8.6	1867	16.9	1908	30.4	1949	73.7	1990	70.2
1828	9.0	1868	17.4	1909	28.3	1950	82.8	1991	70.2
1829	8.9	1869	17.0	1910	26.8	1951	80.5	1992	80.8
1830	8.8	1870	17.4	1911	28.8	1952	80.5	1993	101.0
1831	8.8	1871	18.4	1912	29.1	1953	80.8	1994	102.7
1832	8.7	1872	18.7	1913	30.4	1954	79.1	1995	91.1
1833	9.1	1873	19.0	1914	28.8	1955	84.1	1996	92.2
1834	10.0	1874	18.8	1915	27.6	1956	83.1	1997	100.0
1835	8.8	1875	18.0	1916	25.3	1957	75.9	1998	89.6
1836	8.0	1876	18.4	1917	24.1	1958	73.8	1999	86.3
1837	11.5	1877	18.6	1918	25.0	1959	79.3	2000	74.3
1838	12.0	1878	18.6	1919	32.0	1960	75.7	2001	70.5
1839	11.4	1879	19.9	1920	42.0	1961	72.0	2002	71.7
1840	12.6	1880	19.4	1921	35.9	1962	73.1		

<sup>a</sup>Derived by dividing the actual price index by the all commodities price index.

<sup>b</sup>1800 to 1914, Cornell University Agricultural Experiment Station (18); 1915 to present, U.S. Department of Labor, Bureau of Labor Statistics (75); 1800-1964 (1992=100) 1965-present (1997=100).

**Table 37—Plywood production, imports, exports, and consumption, by softwoods and hardwoods, 1965–2002 (3/8-in. basis)<sup>a</sup>**

Year	Production			Imports			Exports			Consumption			Per capita consumption		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods <sup>b</sup>	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Million square feet	Square feet	Square feet	Square feet
1965	14,496	12,447	2,049	1,052	5	1,047	36	30	6	15,512	12,422	3,090	80	64	16
1966	15,132	13,056	2,076	1,257	3	1,254	56	48	8	16,333	13,011	3,322	83	66	17
1967	14,874	12,958	1,916	1,247	3	1,244	93	85	8	16,028	12,876	3,152	81	65	16
1968	16,704	14,695	2,009	1,896	10	1,886	78	64	14	18,522	14,641	3,881	92	73	19
1969	15,563	13,694	1,869	2,122	15	2,107	215	199	16	17,470	13,510	3,960	86	67	20
1970	16,136	14,340	1,796	2,049	2	2,047	172	114	58	18,013	14,228	3,785	88	69	18
1971	18,559	16,635	1,924	2,545	3	2,542	114	99	15	20,990	16,539	4,451	101	80	21
1972	20,354	18,324	2,030	3,162	6	3,156	247	221	26	23,269	18,109	5,160	111	86	25
1973	20,112	18,305	1,807	2,536	9	2,527	451	411	40	22,197	17,903	4,294	105	84	20
1974	17,279	15,878	1,401	1,648	4	1,644	610	542	68	18,317	15,340	2,977	86	72	14
1975	17,102	16,050	1,052	1,925	7	1,918	859	791	68	18,168	15,266	2,902	84	71	13
1976	19,523	18,440	1,083	2,368	12	2,356	795	716	79	21,096	17,736	3,360	97	81	15
1977	20,563	19,376	1,187	2,272	18	2,254	357	287	70	22,478	19,107	3,371	102	87	15
1978	21,149	19,964	1,185	2,555	63	2,492	329	298	31	23,375	19,729	3,646	105	89	16
1979	20,803	19,653	1,150	2,097	27	2,070	431	402	29	22,469	19,278	3,191	100	86	14
1980	17,371	16,333	1,038	1,235	37	1,198	413	373	40	18,193	15,997	2,196	80	70	10
1981	17,728	16,752	976	1,512	30	1,482	733	686	47	18,507	16,096	2,411	80	70	10
1982	17,231	15,846	1,385	1,878	9	1,869	493	452	41	18,616	15,403	3,213	80	66	14
1983	20,960	19,480	1,480	2,747	18	2,729	615	574	41	23,092	18,924	4,168	99	81	18
1984	21,431	19,926	1,505	2,527	48	2,480	408	371	37	23,550	19,603	3,948	100	83	17
1985	21,511	20,169	1,342	3,112	54	3,058	365	321	44	24,259	19,903	4,356	102	83	18
1986	23,508	22,118	1,390	3,234	63	3,171	676	614	61	26,067	21,567	4,500	108	90	19
1987	24,423	22,899	1,524	3,932	129	3,803	855	796	60	27,500	22,232	5,268	113	92	22
1988	24,151	22,599	1,552	3,358	96	3,262	1,108	1,004	104	26,401	21,691	4,711	108	89	19
1989	22,926	21,385	1,541	1,983	49	1,935	1,562	1,442	119	23,348	19,991	3,356	94	81	14
1990	22,456	20,919	1,537	1,687	38	1,649	1,766	1,613	153	22,377	19,344	3,033	90	77	12
1991	20,148	18,652	1,496	1,457	28	1,429	1,553	1,322	231	20,052	17,358	2,695	79	69	11
1992	20,755	19,332	1,423	1,776	47	1,729	1,760	1,442	318	20,771	17,937	2,834	81	70	11
1993	20,826	19,315	1,511	1,786	41	1,745	1,677	1,409	268	20,935	17,946	2,989	81	70	12
1994	21,439	19,638	1,801	1,693	47	1,646	1,455	1,211	244	21,677	18,474	3,203	83	71	12
1995	21,209	19,367	1,842	1,951	60	1,892	1,517	1,267	250	21,643	18,160	3,483	82	69	13
1996	20,965	19,181	1,784	1,780	85	1,695	1,499	1,248	251	21,246	18,018	3,228	80	68	12
1997	19,835	17,963	1,872	2,111	104	2,007	1,802	1,548	254	20,143	16,519	3,625	75	62	14
1998	19,738	17,776	1,962	2,429	179	2,250	969	764	205	21,198	17,191	4,007	78	64	15
1999 <sup>r</sup>	19,832	17,816	2,016	2,827	309	2,518	984	781	203	21,675	17,344	4,331	79	63	16
2000	19,741	17,475	2,266	2,902	408	2,494	916	735	181	21,727	17,148	4,579	77	61	16
2001	17,225	15,121	2,104	3,220	665	2,555	676	514	162	19,768	15,272	4,496	69	54	16
2002 <sup>p</sup>	17,296	15,200	2,096	3,851	907	2,944	619	439	180	20,528	15,668	4,860	71	55	17

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census (55,66); APA - The Engineered Wood Association (12);

U.S. Department of Agriculture, Foreign Agricultural Service (41); Data may not add to totals because of rounding.

<sup>b</sup>Includes mixed species (not classified as hardwoods or softwoods).

<sup>p</sup>Preliminary.

<sup>r</sup>Revised.

**Table 38—Production, imports, exports, and consumption of structural panel products, by type, 1980–2002**  
(million square feet, 3/8-in. basis)<sup>a</sup>

Year	Production			Imports			Exports			Consumption		
	Total	Softwood plywood	Other structural panels <sup>b</sup>	Total	Softwood plywood	Other structural panels <sup>b,c</sup>	Total	Softwood plywood	Other structural panels <sup>b</sup>	Total	Softwood plywood	Other structural panels <sup>b</sup>
1980	16,468	16,333	135	360	37	323	373	373	<sup>z</sup>	16,455	15,997	458
1981	17,023	16,752	271	349	30	319	686	686	<sup>z</sup>	16,686	16,096	590
1982	16,403	15,846	557	268	9	259	452	452	<sup>z</sup>	16,219	15,403	816
1983	20,821	19,480	1,341	423	18	405	574	574	<sup>z</sup>	20,670	18,924	1,746
1984	21,968	19,926	2,042	727	48	679	371	371	<sup>z</sup>	22,324	19,603	2,721
1985	22,838	20,169	2,669	848	54	794	321	321	<sup>z</sup>	23,366	19,903	3,463
1986	25,631	22,118	3,513	723	63	660	614	614	<sup>z</sup>	25,740	21,567	4,173
1987	26,975	22,899	4,076	889	129	760	796	796	<sup>z</sup>	27,068	22,232	4,836
1988	27,203	22,599	4,604	911	96	815	1,004	1,004	<sup>z</sup>	27,110	21,691	5,419
1989	26,490	21,385	5,105	1,160	49	1,111	1,442	1,442	<sup>z</sup>	26,207	19,991	6,216
1990	26,337	20,919	5,418	1,351	38	1,313	1,613	1,613	<sup>z</sup>	26,075	19,344	6,731
1991	24,265	18,652	5,613	1,016	28	988	1,379	1,322	57	23,901	17,358	6,544
1992	25,985	19,332	6,653	1,619	47	1,572	1,491	1,442	49	26,113	17,937	8,176
1993	26,317	19,315	7,002	2,203	41	2,163	1,470	1,409	60	27,051	17,946	9,105
1994	27,124	19,638	7,486	2,635	47	2,588	1,289	1,211	78	28,469	18,474	9,995
1995	27,270	19,367	7,903	3,274	60	3,214	1,348	1,267	82	29,196	18,160	11,036
1996	28,495	19,181	9,314	4,500	85	4,414	1,405	1,248	157	31,590	18,018	13,572
1997	28,497	17,963	10,534	5,376	104	5,272	1,715	1,548	167	32,158	16,519	15,639
1998	29,003	17,776	11,227	6,671	179	6,492	864	764	100	34,810	17,191	17,619
1999 <sup>f</sup>	29,428	17,816	11,612	7,659	309	7,350	960	781	179	36,127	17,344	18,783
2000	29,381	17,475	11,906	8,030	408	7,622	914	735	179	36,498	17,148	19,350
2001	27,653	15,121	12,532	8,755	665	8,090	681	514	167	35,727	15,272	20,455
2002	28,626	15,200	13,426	9,368	907	8,461	634	439	195	37,360	15,668	21,692

<sup>a</sup>American Plywood Association (10,12); U.S. Department of Agriculture, Foreign Agricultural Service (41);

Data may not add to totals because of rounding.

<sup>b</sup>Oriented strandboard and waferboard.

<sup>c</sup>Based on Canadian export data. Industry sources estimate that about 95% of Canadian exports are to U.S. markets.

<sup>f</sup>Revised.

<sup>z</sup>Not available.



Table 39—Hardwood plywood imports, by country or region of origin, 1965–2002 (million square feet, surface measured)<sup>a</sup>

Year <sup>b</sup>	Asia										Europe									
	Total	Canada	Total	Mexico	West Indies	Brazil	South America	Other <sup>c</sup>	Philippines	China <sup>d</sup>	Taiwan	Korea	Indonesia	Malaysia	Other Asia	Total	Russian Federation	Other	Africa	Other <sup>e</sup>
1965	2,032.8	64.5	10.8	f	z	10.8	1,832.4	768.0	307.8	368.2	z	336.7	z	z	51.7	118.3	z	z	6.8	z
1966	2,553.7	64.1	8.7	z	z	8.7	2,328.9	783.4	397.9	528.8	z	573.6	z	z	45.2	145.1	z	z	6.6	0.3
1967	2,532.7	48.0	8.1	f	z	8.1	2,356.0	632.3	471.5	485.4	z	702.0	z	z	64.8	118.2	z	z	2.4	f
1968	3,841.3	53.0	12.2	z	1.0	11.2	3,619.1	921.3	602.2	829.6	z	1,167.2	z	z	98.8	156.0	z	z	1.0	f
1969	4,290.2	40.6	11.7	0.1	4.0	7.6	4,043.8	802.3	572.1	936.0	z	1,589.8	z	z	143.6	192.3	z	z	1.8	f
1970	4,168.1	24.9	10.2	f	1.9	8.3	3,996.3	623.5	570.9	939.6	z	1,787.3	z	z	75.0	136.1	z	z	0.5	0.1
1971	5,176.7	45.8	13.8	z	1.3	12.5	4,989.7	598.3	592.2	1,395.5	z	2,251.3	0.1	z	152.3	127.3	z	z	f	0.1
1972	6,427.5	69.5	20.5	z	8.7	11.8	6,216.0	519.1	644.2	2,021.9	z	2,865.6	z	z	165.2	121.3	z	z	0.1	0.1
1973	5,146.7	74.4	18.0	z	4.5	13.5	4,959.6	341.0	695.3	1,367.2	z	2,443.0	z	z	113.1	94.0	z	z	0.5	0.2
1974	3,349.1	46.8	18.8	z	1.0	17.8	3,229.0	244.3	279.3	937.2	z	1,694.7	z	z	73.5	48.2	z	z	z	6.3
1975	3,906.4	50.4	15.8	z	7.5	8.3	3,805.1	240.5	224.1	1,011.8	z	2,290.0	z	z	38.7	30.8	z	z	z	4.3
1976	4,797.8	53.6	18.3	z	6.8	11.5	4,668.7	312.5	352.9	1,189.4	z	2,785.7	z	z	28.2	47.6	z	z	0.5	9.1
1977	4,590.7	69.3	24.8	z	5.1	19.7	4,445.3	356.1	231.0	1,149.1	z	2,676.9	z	z	32.2	44.2	z	z	z	7.1
1978	5,076.0	75.3	29.6	0.1	5.9	23.6	4,922.2	255.6	312.4	1,752.8	z	2,493.0	64.3	z	44.1	48.1	z	z	0.7	0.1
1979	4,216.3	82.2	53.7	f	2.4	51.3	4,039.6	192.7	367.3	1,523.1	z	1,836.7	95.5	z	24.3	40.8	z	z	f	f
1980	2,440.5	72.8	46.1	z	3.7	42.4	2,290.5	150.4	246.7	859.8	z	902.1	120.8	z	10.7	30.6	z	z	f	0.5
1981	3,017.5	64.7	30.4	z	4.4	26.0	2,884.4	139.8	436.7	1,080.9	z	943.7	271.7	z	11.6	37.9	z	z	0.1	z
1982	2,249.4	54.5	24.3	z	2.5	21.8	2,146.4	95.8	161.3	850.6	z	559.6	473.9	z	5.2	24.1	z	z	z	0.1
1983	3,346.6	57.5	44.1	0.3	1.3	42.5	3,205.6	119.9	182.4	1,124.6	z	414.8	1,352.2	z	11.7	39.4	z	z	f	f
1984	2,982.3	73.4	90.0	0.1	1.4	88.5	2,767.9	109.7	94.9	904.8	z	78.1	1,568.8	z	11.6	50.9	z	z	f	0.1
1985	3,522.1	69.4	75.1	f	2.9	72.2	3,294.6	106.7	212.6	780.3	z	28.2	2,147.2	z	19.6	82.3	z	z	0.4	0.3
1986	3,809.2	55.8	120.8	0.2	1.8	118.8	3,556.4	74.0	110.9	723.5	z	61.8	2,551.1	z	35.1	71.5	z	z	4.7	f
1987	3,950.2	87.4	105.9	0.2	0.9	104.8	3,670.7	41.6	126.1	665.6	z	48.7	2,721.4	z	67.3	85.1	z	z	0.5	0.6
1988	3,262.3	81.7	118.5	f	0.5	118.0	3,022.0	198	51.8	523.8	z	6.7	2,345.4	z	74.5	39.6	z	z	z	0.5
1989	3,938.9	249.1	232.1	0.6	2.2	186.9	42.3	3,271.2	11.5	59.5	0.4	770.2	9.5	2,341.2	40.3	158.7	0.0	158.7	0.2	27.5
1990	3,356.4	211.1	306.3	0.0	4.2	248.9	53.3	2,700.6	3.9	35.7	0.4	255.9	7.9	2,209.4	159.1	90.6	0.0	90.6	0.0	47.9
1991	2,910.3	215.8	297.2	0.1	1.3	237.6	58.2	2,268.6	3.2	16.5	1.4	141.9	0.6	1,798.0	289.0	82.0	0.0	82.0	0.0	46.7
1992	3,520.5	268.4	455.6	1.8	1.4	397.6	54.7	2,706.1	1.8	23.2	2.1	109.5	0.0	2,084.1	471.3	13.9	87.7	25.6	62.1	0.1
1993	3,553.3	310.0	686.5	0.2	3.8	594.8	87.8	2,430.9	0.6	8.6	14.5	90.5	0.4	1,858.5	443.7	14.2	122.8	60.0	62.8	0.6
1994	3,851.4	422.6	832.6	10.1	8.7	554.0	259.8	2,282.7	0.2	0.2	12.4	29.3	0.0	1,456.4	379.1	18.1	205.6	141.9	63.6	0.9
1995	3,451.0	339.4	826.7	21.0	9.8	496.5	299.4	1,931.6	1.2	0.4	14.3	38.4	0.0	1,575.1	300.4	8.3	311.9	252.1	59.8	0.0
1996	4,086.1	606.1	856.4	16.4	6.2	569.1	264.7	2,200.7	2.0	0.0	47.3	33.4	0.0	1,786.2	326.8	5.0	422.3	306.8	115.6	0.3
1997	4,581.7	654.6	490.1	7.2	6.2	271.3	205.4	2,948.5	1.2	0.0	104.1	36.7	1.2	2,074.2	723.3	7.8	480.8	388.1	92.8	2.0
1998	5,126.8	713.9	720.4	16.3	2.4	463.3	238.5	3,010.1	0.8	0.0	149.3	45.2	1.3	1,839.3	962.7	11.5	637.8	535.3	102.5	3.8
2000	5,078.0	819.6	874.4	18.0	2.5	602.7	251.2	2,558.8	2.2	0.0	162.0	49.2	0.1	1,510.6	813.0	21.8	784.6	668.4	116.2	28.7
2001	5,201.6	813.6	858.9	18.4	3.1	642.3	195.1	2,486.0	0.2	0.0	276.4	39.0	1.2	1,368.2	762.4	38.7	978.6	794.8	183.8	38.6
2002	5,993.9	763.9	967.4	0.1	6.2	772.1	189.0	3,124.9	0.5	0.0	547.1	38.9	0.0	1,508.1	1,024.6	5.8	1,091.3	972.2	119.2	42.5

<sup>a</sup>U.S. International Trade Commission (81); U.S. Department of Agriculture, Foreign Agricultural Service (41). Data may not add to totals because of rounding.

Conversion of 2,036 used from square feet 3/8 inch basis.

<sup>b</sup>For the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

<sup>c</sup>Includes Brazil from 1965-1988.

<sup>d</sup>Includes Taiwan from 1965-1988.

<sup>e</sup>Includes mixed species (not classified as hardwoods or softwoods).

<sup>f</sup>Fewer than 100 ft<sup>3</sup>.

<sup>g</sup>Revised.

<sup>h</sup>Not available.

**Table 40—Veneer imports and exports, by species, 1965–2002 (million square feet, surface measured)<sup>a</sup>**

Year	Imports					Exports					
	Total	Hardwoods			Soft-woods	Total	Hardwoods			Soft-woods	
		Total	Birch and maple	Other			Total	Walnut	Red and white oak		Other
1965	1,958.2	1,871.2	817.4	1,053.8	87.0	169.8	143.7	80.6	<sup>b</sup>	63.1	26.1
1966	2,043.0	1,843.7	766.4	1,077.3	199.3	153.9	110.5	54.2	<sup>b</sup>	56.3	43.4
1967	1,990.9	1,796.7	754.9	1,041.8	194.2	192.8	105.8	44.8	<sup>b</sup>	61.0	87.0
1968	2,340.1	2,178.7	820.8	1,357.9	161.4	306.3	173.6	71.9	<sup>b</sup>	101.7	132.7
1969	2,054.6	1,855.7	698.2	1,157.5	198.9	360.6	194.2	92.4	<sup>b</sup>	101.8	166.4
1970	1,876.6	1,605.8	650.0	955.8	270.8	327.1	183.8	111.3	<sup>b</sup>	72.5	143.3
1971	2,302.1	2,035.2	812.0	1,223.2	266.9	571.5	172.7	97.7	<sup>b</sup>	75.0	398.8
1972	3,151.4	2,786.0	997.9	1,788.1	365.4	491.7	204.3	84.9	<sup>b</sup>	119.4	287.4
1973	2,967.7	2,582.9	890.5	1,692.4	384.8	660.5	346.0	90.9	<sup>b</sup>	255.1	314.5
1974	2,281.6	1,965.9	679.6	1,286.3	315.7	599.4	380.8	77.4	<sup>b</sup>	303.4	218.6
1975	1,497.7	1,145.6	552.2	593.4	352.1	736.8	390.3	63.6	<sup>b</sup>	326.7	346.5
1976	1,993.5	1,595.6	760.3	835.3	397.9	768.2	505.8	91.8	<sup>b</sup>	414.0	262.4
1977	2,261.0	1,718.5	721.3	997.2	542.5	687.0	516.5	93.1	<sup>b</sup>	423.4	170.5
1978	2,143.3	1,632.5	722.8	909.7	510.8	1,541.6	1,353.3	128.9	476.1	748.3	188.3
1979	2,076.6	1,560.1	713.4	846.7	516.5	1,072.5	886.0	80.6	522.0	283.4	186.5
1980	1,666.8	1,213.2	584.2	629.0	453.6	1,333.1	1,077.3	117.8	631.2	328.3	255.8
1981	1,729.3	1,406.3	605.1	801.2	323.0	1,378.1	919.6	107.9	509.2	302.5	458.5
1982	1,665.9	1,231.9	506.8	725.1	434.0	1,140.3	803.6	78.6	512.9	212.1	336.7
1983	2,072.5	1,607.2	637.8	969.4	465.3	1,438.8	1,023.8	106.0	624.4	293.4	415.0
1984	1,886.8	1,502.9	537.2	965.7	383.9	1,370.5	1,002.7	84.4	636.0	282.3	367.8
1985	1,753.4	1,398.0	501.5	896.5	355.4	1,100.2	792.6	85.6	481.5	225.5	307.6
1986	1,997.4	1,603.9	557.3	1,046.6	393.5	1,466.1	995.8	72.6	639.3	283.9	470.3
1987	2,106.6	1,682.2	563.4	1,118.8	424.4	1,775.9	1,384.7	90.7	857.4	436.6	391.2
1988	2,226.7	1,713.8	588.0	1,125.8	512.9	1,830.1	1,574.2	69.9	1,058.7	445.6	255.9
1989	1,163.9	719.7	239.9	479.8	444.1	1,712.2	1,599.6	35.8	431.0	1,132.7	112.6
1990	2,109.3	1,600.7	559.2	1,041.5	508.6	1,820.2	1,681.4	103.4	1,135.5	442.5	138.9
1991	1,917.4	1,383.7	523.5	860.2	533.7	1,896.1	1,725.5	85.9	1,084.3	555.4	170.6
1992	2,422.3	1,674.4	599.1	1,075.3	747.9	2,072.2	1,884.8	69.7	1,094.0	721.2	187.4
1993	2,870.0	1,904.1	619.2	1,284.9	965.9	2,209.9	1,977.4	60.7	958.1	958.6	232.5
1994	3,036.6	1,946.6	713.0	1,233.7	1,090.0	2,459.3	2,310.0	68.4	1,086.1	1,155.5	149.3
1995	3,223.2	2,283.2	739.4	1,543.8	940.0	2,800.0	2,613.3	73.6	1,109.9	1,429.8	186.7
1996	3,011.4	2,093.4	718.2	1,375.1	918.0	2,792.7	2,613.3	49.1	1,080.1	1,484.1	179.4
1997	2,926.9	1,994.9	767.9	1,227.0	932.0	3,068.6	2,875.4	60.2	1,070.3	1,744.8	193.2
1998	3,435.1	2,210.7	789.2	1,421.6	1,224.3	2,946.1	2,722.2	58.6	1,041.5	1,622.0	223.9
1999	3,933.3	2,350.6	947.9	1,402.7	1,582.7	3,293.3	2,986.8	78.6	1,008.7	1,899.4	306.5
2000	4,339.0	2,479.8	1,085.4	1,394.4	1,859.1	3,527.8	3,200.2	83.7	1,022.0	2,094.5	327.6
2001	4,263.7	2,166.5	897.0	1,269.5	2,097.2	3,372.2	3,148.8	102.6	936.9	2,109.3	223.4
2002	4,714.0	2,328.7	950.8	1,377.9	2,385.3	3,720.7	3,460.4	92.8	836.8	2,530.9	260.3

<sup>a</sup>American Forest and Paper Association (4); U.S. International Trade Commission (81).

Data may not add to totals because of rounding.

<sup>b</sup>Red and white oak are included in Other for 1965 to 1977.

**Table 41—Hardwood veneer imports, by country or region of origin, 1965–2002**

(million square feet, surface measured)<sup>a</sup>

Year	Total	Latin America					Asia						
		Canada	Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia	Africa	Europe	Other <sup>b</sup>
1965	1,871.2	852.0	67.1	0.1	19.2	47.8	687.0	4.8	527.0	155.2	219.8	44.3	0.9
1966	1,843.7	792.8	96.4	0.3	21.2	74.9	714.1	3.8	522.7	187.6	209.7	29.6	1.0
1967	1,796.7	775.8	140.9	0.1	8.0	132.8	580.9	3.8	451.8	125.3	271.2	27.7	0.2
1968	2,178.7	837.7	200.5	1.5	16.8	182.2	837.7	4.3	609.8	223.6	276.5	26.3	0.1
1969	1,855.7	713.9	152.7	0.6	13.1	139.0	838.6	5.3	671.4	161.9	128.1	22.2	0.3
1970	1,605.8	672.4	191.0	0.6	5.0	185.4	569.1	3.3	460.0	105.8	147.0	26.1	0.2
1971	2,035.2	842.4	216.1	0.5	15.1	200.5	809.4	4.5	590.9	214.0	143.1	24.0	0.2
1972	2,786.0	1,051.8	303.8	<sup>c</sup>	28.8	275.0	1226.5	0.9	822.5	403.1	153.9	30.2	19.7
1973	2,582.9	944.4	288.4	<sup>c</sup>	43.2	245.2	1126.1	2.3	850.8	273.0	167.2	27.8	29.0
1974	1,965.9	709.2	243.8	<sup>z</sup>	43.9	199.9	874.0	0.9	660.8	212.3	78.6	39.4	20.8
1975	1,145.6	570.7	132.5	<sup>z</sup>	22.2	110.3	331.5	3.8	294.3	33.4	74.3	23.1	13.5
1976	1,595.6	804.6	210.8	<sup>z</sup>	8.3	202.5	520.6	4.5	452.4	63.7	15.0	30.1	14.5
1977	1,718.5	801.4	159.1	0.9	13.0	145.2	689.3	5.5	580.5	103.3	19.6	30.5	18.7
1978	1,632.5	817.4	213.1	3.6	21.8	187.7	536.8	7.1	442.6	87.1	19.1	44.7	1.5
1979	1,560.1	834.0	149.4	2.0	28.2	119.2	482.5	1.3	448.2	33.0	35.4	56.4	2.4
1980	1,213.2	700.4	156.0	<sup>z</sup>	27.3	130.7	301.6	2.0	261.5	38.1	21.9	31.4	1.5
1981	1,406.3	753.6	165.0	0.2	27.3	137.5	398.2	0.9	330.7	66.6	36.3	41.6	11.4
1982	1,231.9	705.9	161.2	0.8	24.4	136.0	149.9	0.7	120.0	29.2	19.2	193.2	2.6
1983	1,607.2	908.3	192.2	3.0	23.1	166.1	366.0	2.8	318.3	44.9	27.1	100.9	12.8
1984	1,502.9	828.1	227.5	0.8	31.6	195.1	287.2	8.5	180.7	98.0	13.7	127.6	19.0
1985	1,398.0	728.7	233.1	0.2	26.5	206.4	240.5	6.5	110.7	123.3	26.1	150.8	18.8
1986	1,603.9	831.8	233.9	0.2	20.8	212.9	310.4	5.1	112.7	192.6	57.4	139.0	31.3
1987	1,682.2	910.8	245.0	<sup>z</sup>	18.0	227.0	331.3	6.3	122.8	202.2	40.9	127.0	27.2
1988	1,713.8	944.3	312.8	0.8	33.2	278.8	279.5	2.0	182.4	95.1	41.6	92.8	42.8
1989	719.7	366.9	143.1	0.0	6.4	136.7	116.4	2.5	72.5	41.4	23.9	53.9	15.6
1990	1,600.7	904.2	320.6	0.0	28.4	292.2	221.2	5.8	111.6	103.8	31.8	93.6	29.4
1991	1,383.7	832.1	254.4	0.0	25.5	228.9	167.3	4.8	73.3	89.1	26.7	75.0	28.2
1992	1,674.4	997.9	364.5	1.0	109.0	254.5	182.9	2.9	64.2	115.8	21.8	80.9	26.4
1993	1,904.1	1,158.4	452.8	2.9	7.8	442.0	120.5	2.5	11.6	106.3	39.2	95.7	37.5
1994	1,946.6	1,220.8	414.5	1.4	6.5	406.5	71.7	3.0	5.7	63.1	41.5	151.5	46.6
1995	2,283.2	1,186.4	575.4	9.1	14.8	551.5	213.0	3.5	47.9	161.6	114.4	137.8	56.1
1996	2,093.4	1,190.2	508.8	13.6	6.1	489.1	58.1	4.3	0.1	53.7	171.4	112.0	52.9
1997	1,994.9	1,247.4	374.4	17.0	1.6	355.7	61.9	6.1	0.0	55.8	137.2	139.8	34.2
1998	2,210.7	1,316.2	351.8	22.3	1.9	327.6	99.2	3.2	0.0	96.0	218.4	176.1	49.0
1999	2,350.6	1,440.5	340.8	22.6	0.7	317.5	94.0	5.6	0.0	88.4	282.7	167.5	25.2
2000	2,479.8	1,503.9	309.4	41.6	0.8	267.0	96.4	6.9	0.0	89.6	269.3	279.6	21.2
2001	2,166.5	1,277.2	295.3	35.7	2.0	257.7	96.1	2.9	0.0	93.2	262.4	210.6	24.9
2002	2,328.7	1,322.6	314.7	24.4	0.2	290.0	99.4	3.3	0.0	96.1	314.9	254.0	23.1

<sup>a</sup>U.S. International Trade Commission (81). Data may not add to totals because of rounding.

<sup>b</sup>For the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

<sup>c</sup>Fewer than 50,000 ft<sup>2</sup>.

<sup>z</sup>Not available.

**Table 42—Producer price indexes for plywood, 1965–2002 (1997 = 100)<sup>a</sup>**

Year	Softwood plywood									
	All plywood		All softwood plywood				All hardwood plywood <sup>b</sup>			
	Actual	Relative <sup>c</sup>	Actual	Relative	Western		Southern		Actual	Relative
1965	28.0	110.4	21.4	84.3	z	z	z	z	43.7	172.1
1966	28.2	107.9	21.5	82.2	z	z	z	z	44.1	168.8
1967	27.1	103.4	20.2	77.1	z	z	z	z	43.4	165.7
1968	31.3	116.5	26.2	97.5	z	z	z	z	43.7	162.6
1969	33.2	118.8	28.1	100.5	26.9	96.2	32.1	115.0	45.3	161.9
1970	29.4	101.4	23.0	79.4	21.9	75.5	27.2	93.8	44.5	153.7
1971	31.0	103.8	25.7	85.9	24.4	81.6	31.0	103.9	43.7	146.4
1972	35.4	113.2	31.3	100.1	29.8	95.3	37.1	118.6	45.3	145.1
1973	42.1	119.2	39.2	111.2	37.7	106.9	42.9	121.5	49.0	138.9
1974	43.6	103.9	37.7	90.0	36.5	87.0	40.6	96.9	56.6	135.0
1975	43.6	95.2	40.6	88.7	39.2	85.7	42.6	93.0	51.9	113.4
1976	50.7	105.8	50.1	104.5	47.3	98.8	55.9	116.8	53.2	111.2
1977	57.4	112.8	59.9	117.6	56.2	110.3	68.1	133.7	55.4	108.8
1978	63.8	116.5	66.0	120.5	62.7	114.4	72.9	133.1	60.9	111.2
1979	67.8	109.8	65.2	105.5	63.5	102.8	66.7	107.9	73.5	119.0
1980	66.7	94.8	62.5	88.7	60.1	85.3	66.4	94.3	76.7	108.9
1981	66.6	86.6	62.0	80.6	60.7	79.0	63.1	82.1	78.1	101.7
1982	62.8	80.1	57.0	72.7	54.6	69.6	61.3	78.2	78.6	100.3
1983	66.1	83.2	62.7	79.0	59.4	74.8	69.1	87.0	78.1	98.4
1984	65.4	80.4	61.4	75.5	58.8	72.3	65.3	80.3	78.4	96.4
1985	62.6	77.2	61.3	75.7	58.8	72.7	64.9	80.1	70.7	87.3
1986	63.7	81.1	62.4	79.4	60.0	76.4	66.0	84.0	71.6	91.1
1987	64.5	80.0	62.6	77.7	60.8	75.4	65.1	80.7	73.1	90.7
1988	65.0	77.5	62.2	74.2	61.7	73.6	62.4	74.5	74.1	88.4
1989	72.8	82.8	70.9	80.5	70.6	80.3	70.1	79.6	78.6	89.3
1990	71.7	78.7	68.3	74.9	68.4	75.1	66.7	73.1	80.8	88.6
1991	71.8	78.6	68.9	75.4	69.2	75.7	67.1	73.4	80.9	88.6
1992	83.6	91.0	83.9	91.2	83.5	90.8	84.6	92.0	84.1	91.5
1993	96.0	102.9	96.8	103.7	97.3	104.3	95.6	102.5	90.8	97.4
1994	99.7	105.6	100.9	106.9	101.0	107.0	102.6	108.7	96.2	101.9
1995	103.9	106.2	107.3	109.7	105.0	107.4	112.4	115.0	96.1	98.3
1996	98.4	98.2	99.2	99.0	98.3	98.1	96.6	96.4	98.3	98.1
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	99.0	97.5	99.9	98.4	98.0	96.6	106.2	104.7	99.9	98.4
1999	110.8	100.2	118.1	106.9	116.7	105.7	125.4	113.5	101.2	91.6
2000	99.0	81.2	98.9	81.0	97.9	80.3	101.7	83.4	102.4	84.0
2001	96.9	78.6	95.7	77.6	94.3	76.4	100.2	81.2	102.6	83.2
2002	95.3	79.1	93.6	77.7	93.0	77.2	94.9	78.7	103.5	85.9

<sup>a</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).

<sup>b</sup>Hardwood plywood and related products.

<sup>c</sup>Derived by dividing the actual price index by the all commodities index.

<sup>z</sup>Not available.

**Table 43—Paper and board<sup>a</sup> production, imports, exports, and consumption, 1965–2002<sup>b</sup>**

Year	Production	Imports <sup>c</sup>		Exports <sup>c</sup>		Consumption	
		Thousand tons	Percent of consumption	Thousand tons	Percent of production	Total	Per capita
						Thousand tons	Pounds
1965	40,489	6,536	14.4	1,530	3.8	45,495	468
1966	43,904	7,178	14.5	1,696	3.9	49,386	502
1967	43,745	6,818	14.0	1,835	4.2	48,728	490
1968	47,085	6,643	12.9	2,125	4.5	51,602	514
1969	49,824	7,051	12.9	2,377	4.8	54,498	538
1970	48,719	6,845	12.9	2,433	5.0	53,131	518
1971	49,741	6,932	12.8	2,665	5.4	54,008	520
1972	53,842	7,245	12.4	2,790	5.2	58,297	555
1973	56,346	7,865	12.8	2,616	4.6	61,595	581
1974	55,756	8,128	13.4	3,058	5.5	60,827	569
1975	47,997	5,961	11.6	2,400	5.0	51,557	477
1976	54,993	6,879	11.6	2,637	4.8	59,235	543
1977	56,656	7,190	11.7	2,546	4.5	61,301	557
1978	58,571	8,311	12.9	2,583	4.4	64,299	578
1979	61,070	8,462	12.7	2,864	4.7	66,668	592
1980	61,042	8,013	12.4	4,241	6.9	64,814	569
1981	62,109	7,779	11.7	3,630	5.8	66,258	576
1982	59,290	7,321	11.6	3,494	5.9	63,117	544
1983	64,947	8,357	12.0	3,786	5.8	69,519	593
1984	68,449	10,148	13.5	3,542	5.2	75,055	635
1985	66,983	10,444	14.1	3,290	4.9	74,137	622
1986	70,905	10,922	14.0	3,972	5.6	77,855	647
1987	74,361	11,855	14.4	4,111	5.5	82,105	676
1988	76,587	12,184	14.4	4,239	5.5	84,532	690
1989	76,786	12,027	14.3	4,713	6.1	84,100	680
1990	78,679	12,195	14.2	5,163	6.6	85,711	686
1991	79,427	11,086	13.2	6,435	8.1	84,078	665
1992	82,868	11,731	13.4	7,021	8.5	87,578	686
1993	84,857	12,990	14.3	6,835	8.1	91,013	705
1994	89,080	13,651	14.3	7,536	8.5	95,195	730
1995	89,509	14,238	14.8	7,621	8.5	96,126	731
1996	90,381	13,023	13.8	9,118	10.1	94,287	710
1997	95,029	14,513	14.6	10,367	10.9	99,175	740
1998	94,510	15,571	15.4	9,103	9.6	100,978	747
1999	97,020	16,678	15.9	8,824	9.1	104,873	768
2000	94,491	17,356	16.8	8,701	9.2	103,147	731
2001	88,913	16,449	16.9	8,059	9.1	97,303	683
2002	89,636	16,567	17.0	8,976	10.0	97,227	676

<sup>a</sup>Excludes hardboard, wet machine board, and construction grades.

<sup>b</sup>Numbers are the sum of Table 44 & Table 45.

<sup>c</sup>Excludes converted products.

**Table 44—Paper shipments, imports, exports, and consumption, 1965–2002<sup>a</sup>**

Year	Shipments <sup>b,c</sup> <i>Thousand tons</i>	Imports <sup>b,c,d</sup>		Exports <sup>b,c</sup>		Consumption	
		<i>Thousand tons</i>	<i>Percent of consumption</i>	<i>Thousand tons</i>	<i>Percent of production</i>	Total <sup>e</sup>	Per capita <sup>f</sup>
						<i>Thousand tons</i>	<i>Pounds</i>
1965	19,157	6,528	25.9	491	2.6	25,194	259
1966	20,725	7,128	26.1	530	2.6	27,323	278
1967	20,926	6,805	25.0	501	2.4	27,230	274
1968	22,181	6,625	23.4	529	2.4	28,277	282
1969	23,449	7,040	23.5	517	2.2	29,972	296
1970	23,351	6,835	23.1	534	2.3	29,652	289
1971	23,722	6,915	23.0	550	2.3	30,087	290
1972	25,359	7,237	22.6	559	2.2	32,037	305
1973	26,797	7,832	23.0	601	2.2	34,028	321
1974	26,863	8,094	23.8	909	3.4	34,049	318
1975	23,260	5,953	21.1	947	4.1	28,266	262
1976	26,577	6,866	21.1	928	3.5	32,515	298
1977	27,722	7,162	21.0	716	2.6	34,168	310
1978	28,320	8,211	22.8	543	1.9	35,988	323
1979	29,666	8,380	22.4	601	2.0	37,445	333
1980	30,116	7,915	21.3	907	3.0	37,124	326
1981	30,901	7,649	20.4	1,008	3.3	37,542	326
1982	30,245	7,206	19.7	840	2.8	36,611	315
1983	32,802	8,189	20.4	774	2.4	40,217	343
1984	34,446	9,905	22.7	811	2.4	43,540	369
1985	34,061	10,260	23.6	779	2.3	43,542	365
1986	35,550	10,641	23.5	884	2.5	45,307	376
1987	36,919	11,494	24.2	921	2.5	47,492	391
1988	38,353	11,843	24.1	1,102	2.9	49,094	401
1989	38,266	11,494	23.8	1,466	3.8	48,295	391
1990	39,361	11,569	23.4	1,519	3.9	49,411	395
1991	39,084	10,313	21.8	2,072	5.3	47,325	375
1992	40,973	10,787	22.0	2,635	6.4	49,125	385
1993	41,745	11,905	23.3	2,587	6.2	51,063	396
1994	43,356	12,384	23.5	2,980	6.9	52,760	405
1995	42,868	12,820	24.3	3,011	7.0	52,677	401
1996	42,481	11,694	23.1	3,500	8.2	50,676	382
1997	44,697	13,016	24.1	3,599	8.1	54,114	404
1998	44,761	13,905	25.1	3,288	7.3	55,378	410
1999 <sup>g</sup>	45,979	14,707	25.7	3,405	7.4	57,281	419
2000	45,519	15,373	26.9	3,767	8.3	57,125	405
2001	42,104	14,502	27.3	3,389	8.0	53,217	374
2002	41,510	14,502	27.4	3,111	7.5	52,901	368

<sup>a</sup>Excludes building paper and converted products.

<sup>b</sup>American Forest & Paper Association (5).

<sup>c</sup>American Forest & Paper Association (3).

<sup>d</sup>This import series incorporates data on Canadian exports of newsprint & uncoated groundwood to the U.S. rather than US Dept. of Commerce import data for these commodities. Such data for 1998 obtained from the Canadian Pulp & Paper Association (CPPA), in Ottawa, Canada, by fax communication.

<sup>e</sup>Consumption = Production + Imports - Exports.

<sup>f</sup>Based upon population data given in Table 1.

<sup>g</sup>Revised.

**Table 45—Paperboard<sup>a</sup> production,<sup>b</sup> imports, exports, and consumption, 1965–2002**

Year	Production <sup>c,d</sup> <i>Thousand tons</i>	Imports <sup>c,d</sup>		Exports <sup>c,d,e</sup>		Consumption	
		<i>Thousand tons</i>	<i>Percent of consumption</i>	<i>Thousand tons</i>	<i>Percent of production</i>	<i>Thousand tons</i>	<i>Per capita<sup>g</sup> Pounds</i>
1965	21,332	8	0.0	1,039	4.9	20,301	209
1966	23,179	50	0.2	1,166	5.0	22,063	224
1967	22,819	13	0.1	1,334	5.8	21,498	216
1968	24,904	18	0.1	1,596	6.4	23,326	232
1969	26,376	11	0.0	1,860	7.1	24,527	242
1970	25,368	10	0.0	1,899	7.5	23,479	229
1971	26,019	17	0.1	2,115	8.1	23,921	230
1972	28,483	8	0.0	2,231	7.8	26,260	250
1973	29,549	33	0.1	2,015	6.8	27,567	260
1974	28,894	34	0.1	2,149	7.4	26,779	250
1975	24,736	8	0.0	1,453	5.9	23,291	216
1976	28,416	13	0.0	1,709	6.0	26,720	245
1977	28,935	28	0.1	1,830	6.3	27,133	246
1978	30,251	100	0.4	2,040	6.7	28,311	254
1979	31,404	82	0.3	2,263	7.2	29,223	260
1980	30,926	98	0.4	3,334	10.8	27,690	243
1981	31,208	130	0.5	2,622	8.4	28,716	250
1982	29,045	115	0.4	2,654	9.1	26,506	228
1983	32,146	168	0.6	3,012	9.4	29,302	250
1984	34,002	243	0.8	2,731	8.0	31,514	267
1985	32,922	184	0.6	2,511	7.6	30,595	257
1986	35,355	281	0.9	3,088	8.7	32,548	270
1987	37,442	361	1.0	3,190	8.5	34,613	285
1988	38,234	341	1.0	3,137	8.2	35,438	289
1989	38,519	533	1.5	3,247	8.4	35,805	290
1990	39,318	626	1.7	3,644	9.3	36,300	291
1991	40,343	773	2.1	4,363	10.8	36,753	291
1992	41,895	944	2.5	4,386	10.5	38,453	301
1993	43,113	1,085	2.7	4,248	9.9	39,950	310
1994	45,724	1,267	3.0	4,556	10.0	42,435	326
1995	46,641	1,418	3.3	4,610	9.9	43,449	330
1996	47,900	1,329	3.0	5,618	11.7	43,611	329
1997	50,332	1,497	3.3	6,768	13.4	45,061	336
1998	49,749	1,666	3.7	5,815	11.7	45,600	337
1999 <sup>f</sup>	51,041	1,971	4.1	5,419	10.6	47,593	348
2000	48,972	1,983	4.3	4,934	10.1	46,021	326
2001	46,809	1,948	4.4	4,670	10.0	44,087	310
2002	48,126	2,065	4.7	5,865	12.2	44,326	308

<sup>a</sup>Does not include wet machine board, hard pressed board nor insulation board. Does not include converted products.

<sup>b</sup>By end use.

<sup>c</sup>American Forest & Paper Association (5).

<sup>d</sup>American Forest & Paper Association (3).

<sup>e</sup>This export series represents production for export; numbers may differ from exports reported by U.S. Dept. of Commerce.

<sup>f</sup>Consumption = Production + Imports – Exports.

<sup>g</sup>Based upon population data given in Table 1.

<sup>r</sup>Revised.

**Table 46—Paper and board production and fibrous materials consumed in the manufacture of paper and board, 1965–2002**

Year	Paper and board <sup>a</sup> production <sup>b,c</sup> <i>Thousand tons</i>	Consumption of fibrous materials				Consumption of fibrous materials per ton of paper and board produced				Recovered paper utilization rate <i>Percent</i> <sup>g</sup>
		Total	Wood pulp <sup>d</sup>	Recovered paper <sup>e</sup>	Other <sup>c</sup>	Total	Wood pulp	Recovered paper <sup>f</sup>	Other	
		<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	
1965	40,489	46,838	35,728	10,231	879	1.157	0.882	0.253	0.022	25.3
1966	43,904	49,958	38,414	10,564	980	1.138	0.875	0.241	0.022	24.1
1967	43,745	48,846	38,122	9,888	836	1.117	0.871	0.226	0.019	22.6
1968	47,085	53,635	42,508	10,222	905	1.139	0.903	0.217	0.019	21.7
1969	49,824	57,597	44,750	11,969	878	1.156	0.898	0.240	0.018	24.0
1970	48,719	56,595	43,964	11,803	828	1.162	0.902	0.242	0.017	24.2
1971	49,741	58,224	45,243	12,106	875	1.171	0.910	0.243	0.018	24.3
1972	53,842	62,059	48,242	12,925	892	1.153	0.896	0.240	0.017	24.0
1973	56,346	64,953	49,976	14,094	883	1.153	0.887	0.250	0.016	25.0
1974	55,756	64,490	49,670	13,982	838	1.157	0.891	0.251	0.015	25.1
1975	47,997	55,970	43,597	11,748	625	1.166	0.908	0.245	0.013	24.5
1976	54,993	63,294	48,930	13,622	742	1.151	0.890	0.248	0.013	24.8
1977	56,656	65,240	50,356	14,058	826	1.152	0.889	0.248	0.015	24.8
1978	58,571	67,059	51,445	14,760	854	1.145	0.878	0.252	0.015	25.2
1979	61,070	68,648	52,560	15,361	727	1.124	0.861	0.252	0.012	25.2
1980	61,042	68,727	53,203	14,922	602	1.126	0.872	0.244	0.010	24.4
1981	62,109	68,828	53,199	15,037	592	1.108	0.857	0.242	0.010	24.2
1982	59,290	66,611	51,729	14,433	449	1.123	0.872	0.243	0.008	24.3
1983	64,947	70,573	54,504	15,638	431	1.087	0.839	0.241	0.007	24.1
1984	68,449	75,732	58,643	16,724	365	1.106	0.857	0.244	0.005	24.4
1985	66,983	71,482	54,816	16,371	295	1.067	0.818	0.244	0.004	24.4
1986	70,905	75,368	57,121	17,934	313	1.063	0.806	0.253	0.004	25.3
1987	74,361	78,522	59,508	18,694	320	1.056	0.800	0.251	0.004	25.1
1988	76,587	80,730	60,668	19,685	377	1.054	0.792	0.257	0.005	25.7
1989	76,786	81,772	61,234	20,220	318	1.065	0.797	0.263	0.004	26.3
1990	78,679	84,040	62,036	21,736	268	1.068	0.788	0.276	0.003	27.6
1991	79,427	86,143	62,294	23,662	187	1.085	0.784	0.298	0.002	29.8
1992	82,868	89,507	63,145	26,185	177	1.080	0.762	0.316	0.002	31.6
1993	84,857	91,471	63,227	28,011	233	1.078	0.745	0.330	0.003	33.0
1994	89,080	95,771	64,842	30,670	259	1.075	0.728	0.344	0.003	34.4
1995	89,509	96,529	64,811	31,389	329	1.078	0.724	0.351	0.004	35.1
1996	90,381	98,410	64,025	33,979	406	1.089	0.708	0.376	0.004	37.6
1997	95,029	101,591	66,057	35,209	298	1.069	0.695	0.371	0.003	37.1
1998 <sup>f</sup>	94,510	101,218	65,122	35,771	249	1.071	0.689	0.378	0.003	37.8
1999 <sup>f</sup>	97,020	100,690	63,638	36,727	255	1.038	0.656	0.379	0.003	37.9
2000	94,491	99,348	63,576	35,447	254	1.051	0.673	0.375	0.003	37.5
2001	88,913	94,232	59,380	34,527	268	1.060	0.668	0.388	0.003	38.8
2002 <sup>p</sup>	89,636	93,967	59,063	34,579	261	1.048	0.659	0.386	0.003	38.6

<sup>a</sup>Excludes wet machine board and construction grades.

<sup>b</sup>Production numbers equal totals in Table 43. Source: see footnote e.

<sup>c</sup>American Forest & Paper Association (5).

<sup>d</sup>Wood pulp consumption numbers from Table 49.

<sup>e</sup>Wastepaper consumption numbers from Table 47 (1985-1999 numbers were revised on Table 47).

<sup>f</sup>When given in percentages, referred to as "recovered paper utilization rate."

<sup>g</sup>Recovery rate is the ratio of paper and board production to recovered paper consumption.

<sup>p</sup>Preliminary.

<sup>r</sup>Revised.



**Table 47—Paper and board new supply and recyclable paper consumption, exports, imports, and total recovered, 1965–2002<sup>a,b,c</sup>**

Year	Recyclable paper						
	Paper and board— new supply <sup>d</sup>	Consumed at paper and board mills	For molded pulp, insulation, and other uses	Exports	Imports	Total recovered <sup>e</sup>	Recovery rate <sup>f</sup>
	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Percent</i>
1965	48,270	10,231	<sup>z</sup>	292	108	<sup>z</sup>	<sup>z</sup>
1966	52,118	10,564	<sup>z</sup>	246	113	<sup>z</sup>	<sup>z</sup>
1967	51,435	9,888	<sup>z</sup>	262	86	<sup>z</sup>	<sup>z</sup>
1968	54,351	10,222	<sup>z</sup>	253	93	<sup>z</sup>	<sup>z</sup>
1969	57,423	11,969	<sup>z</sup>	289	75	<sup>z</sup>	<sup>z</sup>
1970	55,969	11,803	418	408	67	12,562	22.4
1971	57,450	12,106	442	419	68	12,899	22.4
1972	62,040	12,925	447	415	88	13,699	22.1
1973	65,004	14,094	499	683	87	15,189	23.4
1974	63,308	13,982	489	1,307	89	15,689	24.8
1975	54,113	11,748	535	861	72	13,072	24.2
1976	62,014	13,622	630	1,273	106	15,419	24.9
1977	64,243	14,058	870	1,512	92	16,348	25.4
1978	67,787	14,760	502	1,613	70	16,805	24.8
1979	69,796	15,361	509	2,127	78	17,919	25.7
1980	67,166	14,922	472	2,636	87	17,943	26.7
1981	67,957	15,037	480	2,282	79	17,720	26.1
1982	64,730	14,433	487	2,233	74	17,078	26.4
1983	71,166	15,638	474	2,705	100	18,727	26.3
1984	76,937	16,724	459	3,456	110	20,530	26.7
1985 <sup>f</sup>	76,133	16,371	529	3,556	88	20,369	26.8
1986 <sup>f</sup>	79,752	17,934	594	4,093	99	22,521	28.2
1987 <sup>f</sup>	83,484	18,694	657	4,809	127	24,033	28.8
1988 <sup>f</sup>	85,720	19,685	703	5,953	161	26,179	30.5
1989 <sup>f</sup>	85,370	20,220	722	6,307	173	27,077	31.7
1990 <sup>f</sup>	86,901	21,736	994	6,505	123	29,112	33.5
1991 <sup>f</sup>	85,145	23,662	1,063	6,598	122	31,201	36.6
1992 <sup>f</sup>	88,369	26,185	1,137	6,782	150	33,955	38.4
1993 <sup>f</sup>	91,639	28,011	1,216	6,371	138	35,460	38.7
1994 <sup>f</sup>	95,717	30,670	1,300	7,974	253	39,691	41.5
1995 <sup>f</sup>	95,971	31,389	1,390	9,908	498	42,189	44.0
1996 <sup>f</sup>	94,529	33,979	1,487	8,084	474	43,077	45.6
1997 <sup>f</sup>	99,556	35,209	1,590	7,882	693	43,989	44.2
1998 <sup>f</sup>	101,183	35,771	1,700	8,117	511	45,077	44.6
1999 <sup>f</sup>	105,316	36,727	2,000	8,517	426	46,818	44.5
2000	102,811	35,447	2,200	10,272	608	47,311	46.0
2001	97,394	34,527	2,200	10,597	328	46,996	48.3
2002	98,976	34,579	2,200	11,267	411	47,635	48.1

<sup>a</sup>Includes paper, paperboard, wet machine board and construction paper and board.

<sup>b</sup>American Forest and Paper Association (7).

<sup>c</sup>Data may not add to totals because of rounding.

<sup>d</sup>Production plus imports less exports. Includes imports and exports of products.

<sup>e</sup>Total recovered paper = total recyclable paper consumption plus exports less imports.

<sup>f</sup>Recovery rate is the ratio of total recovered paper collected to new supply of paper and paperboard.

<sup>g</sup>Revised.

<sup>h</sup>Not available.

**Table 48—Recovered paper consumption, by major grade, in paper and paperboard manufacture,<sup>a</sup> 1970–2002 (thousand short tons)<sup>b</sup>**

Year	Recovered paper consumption						Total recovery rate (%) <sup>d,r</sup>
	Mixed grades	Old newspapers	Old corrugated	Pulp substitutes <sup>c</sup>	High grade deinking	Total all grades	
1970	2,639.0	2,235.0	4,080.0	3,067.0	<sup>z</sup>	12,021.0	22.4
1971	2,776.0	2,174.0	4,277.0	3,096.0	<sup>z</sup>	12,323.0	22.4
1972	3,054.0	2,317.0	4,722.0	3,039.0	<sup>z</sup>	13,132.0	22.1
1973	3,371.0	2,456.0	5,292.0	3,199.0	<sup>z</sup>	14,318.0	23.4
1974	3,118.0	2,408.0	5,716.0	2,954.0	<sup>z</sup>	14,196.0	24.8
1975	2,606.0	2,040.0	4,743.0	2,594.0	<sup>z</sup>	11,983.0	24.2
1976	2,798.0	2,278.0	5,696.0	2,117.0	933.0	13,822.0	24.9
1977	2,773.0	2,287.0	6,205.0	2,079.0	944.0	14,288.0	25.4
1978	2,729.0	2,212.0	6,721.0	2,242.0	1,068.0	14,972.0	24.8
1979	2,648.0	2,480.0	6,967.0	2,308.0	1,117.0	15,520.0	25.7
1980	2,268.0	2,564.0	6,866.0	2,254.0	1,142.0	15,094.0	26.7
1981	2,233.0	2,552.0	6,910.0	2,307.0	1,215.0	15,217.0	26.1
1982	1,707.0	2,673.0	6,770.0	2,247.0	1,223.0	14,620.0	26.4
1983	1,908.0	2,692.0	7,443.0	2,456.0	1,323.0	15,822.0	26.3
1984	1,974.5	2,894.8	7,971.7	2,673.4	1,368.6	16,883.0	26.7
1985	1,901.5	2,875.0	7,899.5	2,493.7	1,380.4	16,550.1	26.8
1986	2,044.5	3,117.8	8,633.6	2,761.5	1,570.3	18,127.7	28.2
1987	2,116.0	3,142.6	9,176.7	2,902.2	1,563.5	18,901.0	28.8
1988	2,182.2	3,215.6	9,909.1	2,889.5	1,691.1	19,887.5	30.5
1989	2,355.8	3,638.1	9,993.5	2,642.4	1,812.4	20,442.2	31.7
1990	2,504.9	4,084.5	10,686.5	2,731.8	1,999.8	22,007.5	33.5
1991	2,890.6	4,572.4	11,247.0	2,988.5	2,239.5	23,938.0	36.6
1992	3,463.8	4,816.9	12,532.3	2,997.7	2,669.1	26,479.8	38.4
1993	4,110.1	5,000.3	13,566.8	2,802.1	2,856.8	28,336.1	38.7
1994	4,786.0	5,368.0	15,009.6	2,696.0	3,090.0	30,949.6	41.5
1995	4,529.4	5,157.3	16,513.5	2,459.1	3,004.0	31,663.3	44.0
1996	4,801.7	5,238.4	18,733.3	2,428.8	3,039.9	34,242.1	45.6
1997	4,698.6	5,561.5	19,640.8	2,640.3	2,954.6	35,495.8	44.2
1998	5,440.8	5,611.3	19,530.1	2,341.8	3,147.8	36,071.8	44.6
1999 <sup>f</sup>	5,592.1	5,539.9	20,457.8	2,431.7	3,003.2	37,024.7	44.5
2000	4,948.0	5,809.0	19,968.0	1,890.0	3,129.0	35,744.0	46.0
2001	4,800.0	6,077.0	19,348.0	1,845.0	2,750.0	34,820.0	48.3
2002	4,877.0	5,957.0	19,627.0	1,705.0	2,695.0	34,861.0	48.1

<sup>a</sup>Includes paper, paperboard, construction grades and molded pulp grades.

<sup>b</sup>American Forest and Paper Association (7).

<sup>c</sup>For years 1972-1975, high grade deinking is included with pulp substitutes.

<sup>d</sup>Recovery rate is the ratio of total recovered paper collected to new supply of paper and paperboard.

<sup>f</sup>Revised (1985-1999 Total recovery on Table 47).

<sup>z</sup>Not available separately; included with pulp substitutes.

**Table 49—Wood pulp production, imports, exports, and consumption, 1965–2002<sup>a</sup>**

Year	Production <sup>b,c</sup>		Imports <sup>c</sup>		Exports <sup>c</sup>		Consumption <sup>d</sup>	
	Thousand tons	Thousand tons	Percent of consumption	Thousand tons	Percent of production	Total	Per capita <sup>c</sup>	
						Thousand tons	Pounds	
1965	33,993	3,137	8.8	1,402	4.1	35,728	368	
1966	36,603	3,358	8.7	1,547	4.2	38,414	391	
1967	36,677	3,166	8.3	1,721	4.7	38,122	384	
1968	40,892	3,532	8.3	1,916	4.7	42,508	424	
1969	42,813	4,040	9.0	2,103	4.9	44,750	442	
1970	43,546	3,513	8.0	3,095	7.1	43,964	429	
1971	43,903	3,515	7.8	2,175	5.0	45,243	436	
1972	46,767	3,728	7.7	2,253	4.8	48,242	460	
1973	48,327	3,993	8.0	2,344	4.9	49,976	472	
1974	48,349	4,123	8.3	2,802	5.8	49,670	464	
1975	43,084	3,078	7.1	2,565	6.0	43,597	404	
1976	47,721	3,727	7.6	2,518	5.3	48,930	449	
1977	49,132	3,864	7.7	2,640	5.4	50,356	457	
1978	50,020	4,024	7.8	2,599	5.2	51,445	462	
1979	51,177	4,318	8.2	2,935	5.7	52,560	467	
1980	52,958	4,051	7.6	3,806	7.2	53,203	467	
1981	52,790	4,087	7.7	3,678	7.0	53,199	463	
1982	51,468	3,656	7.1	3,395	6.6	51,729	446	
1983	54,055	4,093	7.5	3,644	6.7	54,504	465	
1984	57,747	4,490	7.7	3,594	6.2	58,643	496	
1985	54,145	4,466	8.1	3,795	7.0	54,816	460	
1986	56,997	4,582	8.0	4,458	7.8	57,121	475	
1987	59,547	4,850	8.2	4,889	8.2	59,508	490	
1988	61,158	5,038	8.3	5,528	9.0	60,668	495	
1989	61,996	5,004	8.2	5,766	9.3	61,234	495	
1990	63,048	4,893	7.9	5,905	9.4	62,036	496	
1991	63,635	4,997	8.0	6,338	10.0	62,294	493	
1992	65,338	5,029	8.0	7,222	11.1	63,145	494	
1993	64,313	5,413	8.6	6,499	10.1	63,227	490	
1994	65,920	5,650	8.7	6,728	10.2	64,842	497	
1995	67,103	5,969	9.2	8,261	12.3	64,811	493	
1996	65,503	5,692	8.9	7,170	10.9	64,025	482	
1997	66,650	6,398	9.7	6,990	10.5	66,057	493	
1998	65,163	5,984	9.2	6,025	9.2	65,122	482	
1999 <sup>f</sup>	62,914	6,660	10.5	5,936	9.4	63,638	466	
2000	62,758	7,227	11.4	6,409	10.2	63,576	451	
2001	58,198	7,348	12.4	6,167	10.6	59,380	417	
2002	58,069	7,247	12.3	6,254	10.8	59,063	411	

<sup>a</sup>Includes dissolving and special alpha pulps, excludes defibrated/exploded pulps and screenings.

<sup>b</sup>U.S. Department of Commerce, Bureau of the Census (64,68,69); United Nations, Food and Agriculture Organization (38); American Forest and Paper Association (2,4).

<sup>c</sup>Based on U.S. population data given in Table 1.

<sup>d</sup>Consumption = Production + Imports – Exports.

<sup>f</sup>Revised.

**Table 50—Pulpwood consumed in the manufacture of wood pulp, 1965–2002<sup>a</sup>**

Year	Pulpwood consumption <sup>b</sup>		Wood pulp production <i>Thousand tons</i>
	Total <i>Thousand cords</i>	Per ton of pulp produced <i>Cords</i>	
1965	54,034	1.59	33,993
1966	57,399	1.57	36,603
1967	58,419	1.59	36,677
1968	60,969	1.49	40,892
1969	64,577	1.51	42,813
1970	66,732	1.53	43,546
1971	66,601	1.52	43,903
1972	68,068	1.46	46,767
1973	71,421	1.48	48,327
1974	75,787	1.57	48,349
1975	63,941	1.48	43,084
1976	71,094	1.49	47,721
1977	72,952	1.48	49,132
1978	75,073	1.50	50,020
1979	78,680	1.54	51,177
1980	81,921	1.55	52,958
1981	81,003	1.53	52,790
1982	76,912	1.49	51,468
1983	84,504	1.56	54,055
1984	86,282	1.49	57,747
1985	85,380	1.58	54,145
1986	91,187	1.60	56,997
1987	93,005	1.56	59,547
1988	93,000	1.52	61,158
1989	92,615	1.49	61,996
1990	92,561	1.47	63,048
1991	91,925	1.44	63,635
1992	93,642	1.43	65,338
1993	90,996	1.41	64,313
1994	93,259	1.41	65,920
1995	93,013	1.39	67,103
1996	88,246	1.35	65,503
1997	92,312	1.39	66,650
1998	90,591	1.39	65,163
1999	86,969	1.38	62,914
2000	87,453	1.39	62,758
2001	83,384	1.43	58,198
2002	82,715	1.42	58,069

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census (65); American Forest and Paper Association (3,5,6); American Pulpwood Association (14). Data may not add to totals because of rounding.

<sup>b</sup>Includes changes in inventories.

**Table 51—Producer price indexes for paper, board, and wood pulp, 1965–2002 (1997 = 100)<sup>a</sup>**

Year	Pulp, paper, and allied products		Paper		Paperboard		Building paper and board		Wood pulp	
	Actual	Relative <sup>b</sup>	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	19.8	78.1	22.9	90.4	27.5	108.3	32.3	127.4	20.5	80.9
1966	20.4	78.2	23.7	90.8	27.7	106.0	32.3	123.8	20.5	78.6
1967	20.6	78.6	24.3	92.8	27.1	103.5	32.1	122.4	20.5	78.3
1968	20.9	77.7	24.7	92.2	26.0	96.9	32.3	120.5	20.5	76.5
1969	21.5	76.8	25.6	91.6	26.9	96.4	33.9	121.3	20.5	73.4
1970	22.3	77.1	27.0	93.1	27.4	94.6	32.4	112.0	22.5	77.6
1971	22.7	75.9	27.7	92.9	27.8	92.9	33.0	110.4	23.0	77.1
1972	23.5	75.0	28.3	90.4	28.6	91.5	34.1	109.0	22.9	73.1
1973	25.2	71.3	29.5	83.4	31.2	88.4	36.2	102.5	26.3	74.5
1974	31.3	74.7	36.1	86.2	41.2	98.4	39.6	94.4	44.8	106.8
1975	35.1	76.7	42.0	91.8	46.1	100.8	40.8	89.1	58.2	127.2
1976	37.0	77.3	44.3	92.4	47.7	99.7	44.5	92.8	58.8	122.7
1977	38.5	75.6	47.2	92.6	47.7	93.7	50.3	98.8	57.7	113.4
1978	40.3	73.6	50.1	91.4	48.7	89.0	60.1	109.6	54.8	99.9
1979	45.3	73.3	55.8	90.4	54.8	88.7	58.5	94.7	64.6	104.5
1980	51.4	73.0	62.4	88.6	63.6	90.3	66.1	93.9	78.1	110.9
1981	56.5	73.5	68.0	88.5	69.9	91.0	74.3	96.7	81.6	106.2
1982	59.6	76.0	69.5	88.7	69.1	88.1	76.8	97.9	77.9	99.3
1983	61.5	77.5	68.5	86.2	68.0	85.6	80.2	101.0	71.3	89.7
1984	65.8	80.8	73.6	90.4	76.2	93.7	83.1	102.2	81.6	100.3
1985	67.5	83.3	73.7	91.0	74.4	91.8	82.5	101.8	71.2	87.9
1986	69.2	88.1	74.4	94.7	73.6	93.7	83.6	106.3	73.7	93.8
1987	72.6	90.1	77.6	96.2	81.6	101.2	85.4	106.0	86.8	107.7
1988	77.7	92.7	85.7	102.2	92.0	109.8	87.0	103.8	106.4	127.0
1989	82.1	93.3	90.2	102.5	96.8	110.0	88.8	101.0	122.6	139.3
1990	84.1	92.2	89.6	98.2	93.8	102.8	86.2	94.5	117.8	129.2
1991	85.1	93.2	88.3	96.6	90.0	98.5	85.9	94.0	92.8	101.6
1992	86.5	94.1	85.6	93.1	92.9	101.0	91.9	99.9	93.3	101.5
1993	87.7	94.0	86.1	92.3	89.8	96.2	102.0	109.3	81.2	87.0
1994	90.9	96.2	87.5	92.7	96.8	102.6	110.8	117.3	90.7	96.0
1995	102.6	104.9	110.6	113.1	126.5	129.3	111.3	113.8	142.6	145.8
1996	100.6	100.4	104.0	103.7	107.8	107.6	105.3	105.1	104.2	104.0
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	101.8	100.3	101.6	100.1	104.9	103.3	101.9	100.4	95.5	94.1
1999	103.8	93.9	98.6	89.2	105.8	95.8	108.7	98.4	93.2	84.4
2000	109.5	89.8	104.2	85.4	122.1	100.1	106.6	87.4	113.1	92.7
2001	110.2	89.3	104.8	84.9	118.9	96.4	99.3	80.5	98.0	79.4
2002	110.9	92.0	100.8	83.6	113.7	94.3	94.6	78.5	90.6	75.1

<sup>a</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).<sup>b</sup>Derived by dividing the actual price index by the all commodities price index.

**Table 52—Producer price indexes for wastepaper, by grade, 1965–2002 (1997 = 100)<sup>a</sup>**

Year	Wastepaper		Newspaper		Mixed papers		Corrugated		High grades <sup>b</sup>		Exports (all grades)	
	Actual	Relative <sup>c</sup>	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	63.5	250.2	z	z	z	z	z	z	z	z	z	z
1966	67.0	256.8	z	z	z	z	z	z	z	z	z	z
1967	49.9	190.4	126.6	483.1	67.7	258.5	42.5	162.1	z	z	z	z
1968	64.8	241.5	173.6	646.8	103.3	384.8	54.6	203.5	z	z	z	z
1969	69.1	247.4	155.7	557.0	114.0	407.8	59.7	213.5	z	z	z	z
1970	62.4	215.4	136.8	472.5	88.2	304.5	57.6	198.9	z	z	z	z
1971	55.9	187.0	130.6	437.1	83.1	278.0	47.4	158.8	z	z	z	z
1972	66.6	213.1	151.0	483.0	105.1	336.3	55.9	178.8	z	z	z	z
1973	98.4	278.7	173.7	492.1	156.2	442.6	95.0	269.0	z	z	z	z
1974	132.5	316.0	255.3	609.0	224.0	534.3	106.9	255.1	z	z	z	z
1975	54.9	120.0	141.5	309.1	70.1	153.1	38.2	83.5	z	z	z	z
1976	92.1	192.4	252.7	527.5	105.9	221.0	83.2	173.6	z	z	z	z
1977	93.4	183.4	265.3	520.9	118.0	231.7	79.2	155.6	z	z	z	z
1978	95.4	174.0	253.8	463.2	151.7	276.8	85.9	156.8	z	z	z	z
1979	103.0	166.8	192.2	311.1	138.3	223.9	118.4	191.6	z	z	z	z
1980	104.1	147.8	212.0	301.1	150.1	213.1	81.6	115.9	z	z	z	z
1981	87.7	114.1	z	z	z	z	z	z	z	z	z	z
1982	60.4	77.1	91.3	116.4	51.3	65.5	40.2	51.2	z	z	z	z
1983	z	z	z	z	z	z	z	z	z	z	z	z
1984	119.8	147.2	244.4	300.5	165.7	203.7	127.7	157.0	z	z	z	z
1985	74.3	91.7	189.9	234.4	140.9	174.0	62.3	76.9	z	z	z	z
1986	86.1	109.6	174.6	222.2	123.5	157.2	95.6	121.7	z	z	z	z
1987	109.6	135.9	222.7	276.2	146.5	181.8	125.9	156.2	112.1	139.1	112.4	139.4
1988	110.9	132.3	219.0	261.2	161.6	192.7	100.7	120.1	134.8	160.8	115.1	137.3
1989	94.9	107.9	113.5	129.1	110.4	125.5	72.5	82.4	139.3	158.3	101.7	115.6
1990	83.9	92.0	95.1	104.3	83.2	91.2	66.5	72.9	122.6	134.5	90.4	99.1
1991	73.4	80.3	93.1	101.9	61.3	67.1	66.3	72.6	99.0	108.3	80.6	88.2
1992	70.2	76.3	83.6	90.9	51.3	55.8	58.6	63.8	101.7	110.6	79.8	86.9
1993	70.9	76.0	92.1	98.7	86.4	92.6	57.2	61.3	97.6	104.6	74.4	79.8
1994	126.8	134.3	185.9	196.9	202.8	214.8	129.6	137.2	114.1	120.9	111.0	117.6
1995	224.2	229.2	388.9	397.6	496.9	508.0	206.9	211.6	164.2	167.9	199.3	203.7
1996	84.5	84.4	100.3	100.1	106.5	106.3	85.5	85.3	83.5	83.4	80.6	80.5
1997	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1998	88.1	86.8	110.1	108.5	164.6	162.2	72.5	71.4	94.1	92.7	76.2	75.1
1999	110.9	100.4	151.5	137.1	381.5	345.2	81.9	74.1	102.3	92.6	104.0	94.1
2000	170.7	139.9	227.5	186.5	790.6	648.1	98.2	80.5	165.1	135.4	140.5	115.2
2001	89.8	72.8	140.8	114.2	195.7	158.6	53.4	43.3	103.5	83.9	78.8	63.9
2002	104.5	86.7	172.2	142.9	396.6	329.1	79.0	65.5	106.2	88.1	106.6	88.4

<sup>a</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).<sup>b</sup>Pulp substitutes and deinking; December 1986 = 100.<sup>c</sup>Derived by dividing the actual price index by the all commodities price index.<sup>z</sup>Not available.

**Table 53—Particleboard and medium-density fiberboard production, imports, exports, and consumption, 1965–2002 (3/4-in. basis)<sup>a</sup>**

Year	Production			Imports <sup>b</sup>	Exports	Consumption	
	Total	Particleboard	Medium-density fiberboard			Total	Per capita
	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>			<i>Million square feet</i>	<i>Square feet</i>
1965	828	753	75	4	<sup>c</sup>	832	4
1966	1,031	948	83	1	<sup>c</sup>	1,032	5
1967	1,167	1,074	93	1	2	1,166	6
1968	1,494	1,391	103	1	6	1,489	7
1969	1,796	1,682	114	12	14	1,794	9
1970	1,858	1,731	127	3	10	1,851	9
1971	2,500	2,359	141	8	20	2,488	12
1972	3,236	3,079	157	14	45	3,205	15
1973	3,634	3,460	174	17	77	3,574	17
1974	3,269	3,075	194	7	113	3,163	15
1975	2,718	2,503	215	16	84	2,650	12
1976	3,469	3,189	280	60	80	3,449	16
1977	4,010	3,569	441	158	63	4,105	19
1978	4,228	3,720	508	193	61	4,360	20
1979	3,883	3,376	507	221	84	4,020	18
1980	3,443	2,950	493	264	106	3,601	16
1981	3,385	2,869	516	254	117	3,522	15
1982	2,839	2,393	446	766	41	3,564	15
1983	3,613	3,009	604	994	47	4,560	19
1984	3,830	3,196	634	1,331	54	5,107	22
1985	4,016	3,331	685	1,335	59	5,292	22
1986	4,384	3,603	781	1,395	86	5,693	24
1987	4,605	3,706	899	1,550	113	6,042	25
1988	4,768	3,829	939	1,634	163	6,239	25
1989	4,828	3,858	970	425	333	4,920	20
1990	4,756	3,806	950	363	373	4,746	19
1991	4,730	3,772	958	293	369	4,654	18
1992	5,046	3,980	1,066	405	394	5,057	20
1993	5,402	4,241	1,161	572	318	5,656	22
1994	5,793	4,542	1,251	775	297	6,271	24
1995	5,307	4,200	1,107	840	319	5,828	22
1996	5,705	4,459	1,246	814	154	6,365	24
1997	5,916	4,531	1,385	963	188	6,691	25
1998	5,994	4,593	1,401	2,461	135	8,320	31
1999 <sup>f</sup>	6,229	4,816	1,413	2,526	135	8,619	32
2000	6,292	4,804	1,488	2,968	162	9,098	32
2001	5,480	4,096	1,384	3,743	192	9,030	32
2002	6,035	4,414	1,621	4,104	212	9,927	35

<sup>a</sup>Composite Panel Association (16); U.S. International Trade Commission (81); U.S. Department of Agriculture (41). Data may not add to totals because of rounding.

<sup>b</sup>May contain significant volumes of waferboard and oriented strandboard products prior to 1989.

<sup>c</sup>Fewer than 500,000 ft<sup>2</sup>.

<sup>f</sup>Revised.

**Table 54—Insulating board<sup>a</sup> production, imports, exports, and consumption, 1965–2002 (1/2-in. basis)<sup>b</sup>**

Year	Production	Imports <sup>c</sup>	Exports	Consumption	
				Total	Per capita
				<i>Million square feet</i>	<i>Square feet</i>
1965	3,362	75	42	3,395	17
1966	3,079	67	48	3,098	16
1967	3,209	69	45	3,233	16
1968	3,476	94	45	3,525	18
1969	3,623	98	65	3,656	18
1970	3,194	103	51	3,246	16
1971	3,839	115	65	3,889	19
1972	3,918	121	66	3,973	19
1973	3,914	140	79	3,975	19
1974	3,282	72	102	3,252	15
1975	2,960	36	77	2,919	14
1976	3,407	45	77	3,375	15
1977	3,462	107	84	3,485	16
1978	3,437	139	106	3,470	16
1979	3,310	138	49	3,399	15
1980	2,780	100	62	2,818	12
1981	2,124	104	110	2,118	9
1982	1,790	118	67	1,841	8
1983	2,277	204	83	2,398	10
1984	2,545	286	89	2,742	12
1985	2,461	343	80	2,724	11
1986	2,194	338	117	2,415	10
1987	2,242	273	127	2,388	10
1988	2,340	320	203	2,457	10
1989	2,455	346	180	2,621	11
1990	2,365	290	175	2,480	10
1991	2,323	200	191	2,332	9
1992	2,363	310	215	2,458	10
1993	2,358	285	208	2,435	9
1994	2,335	305	170	2,470	9
1995	2,335	305	170	2,470	9
1996	2,335	305	170	2,470	9
1997	2,335	305	170	2,470	9
1998	2,335	305	170	2,470	9
1999	2,335	305	170	2,470	9
2000	2,335	305	170	2,470	9
2001	2,335	305	170	2,470	9
2002	2,335	305	170	2,470	9

<sup>a</sup>Density equal to or less than 31 lb/ft<sup>3</sup>.

<sup>b</sup>American Forest and Paper Association (3,5); U.S. Department of Commerce, Bureau of the Census (64,68,69); Data may not add to totals because of rounding.

<sup>c</sup>Includes other building board.



**Table 55—Insulating board<sup>a</sup> production, imports, exports, and consumption, 1965–2002<sup>b</sup>**

Year	Production <i>Thousand tons</i>	Imports <sup>c</sup> <i>Thousand tons</i>	Exports <i>Thousand tons</i>	Consumption	
				Total <i>Thousand tons</i>	Per capita <i>pounds</i>
1965	1,234	28	15	1,246	6
1966	1,130	25	18	1,137	6
1967	1,178	25	17	1,187	6
1968	1,276	34	17	1,294	6
1969	1,330	36	24	1,342	7
1970	1,172	38	19	1,191	6
1971	1,409	42	24	1,427	7
1972	1,438	44	24	1,458	7
1973	1,436	51	29	1,459	7
1974	1,204	26	37	1,193	6
1975	1,086	13	28	1,071	5
1976	1,250	17	28	1,239	6
1977	1,271	39	31	1,279	6
1978	1,261	51	39	1,273	6
1979	1,215	51	18	1,247	6
1980	1,020	37	23	1,034	5
1981	780	38	40	777	3
1982	657	43	25	676	3
1983	836	75	30	880	4
1984	934	105	33	1,006	4
1985	903	126	29	1,000	4
1986	805	124	43	886	4
1987	823	100	47	876	4
1988	859	117	75	902	4
1989	901	127	66	962	4
1990	868	106	64	910	4
1991	853	73	70	856	3
1992	867	114	79	902	4
1993	865	105	76	894	3
1994	857	112	62	906	3
1995	857	112	62	906	3
1996	857	112	62	906	3
1997	857	112	62	906	3
1998	857	112	62	906	3
1999	857	112	62	906	3
2000	857	112	62	906	3
2001	857	112	62	906	3
2002	857	112	62	906	3

<sup>a</sup>Density equal to or less than 31 lb/ft<sup>3</sup>.

<sup>b</sup>Product of table 54 using a conversion of .367.

<sup>c</sup>Includes other building board.

**Table 56—Hardboard<sup>a</sup> production, imports, exports, and consumption, 1965–2002 (1/8-in. basis)<sup>b</sup>**

Year	Production <sup>c</sup>	Imports	Exports	Consumption	
				Total	Per capita
				<i>Million square feet</i>	<i>Square feet</i>
1965	2,921	574	22	3,473	18
1966	3,083	459	32	3,510	18
1967	3,038	455	30	3,463	17
1968	3,710	623	40	4,293	21
1969	4,247	694	48	4,893	24
1970	4,384	452	77	4,759	23
1971	5,225	631	83	5,773	28
1972	5,798	1,060	103	6,755	32
1973	6,050	1,047	131	6,966	33
1974	5,654	739	175	6,218	29
1975	5,681	264	158	5,787	27
1976	6,785	486	187	7,084	32
1977	7,714	625	174	8,165	37
1978	7,825	903	78	8,650	39
1979	7,688	831	101	8,418	37
1980	6,140	515	87	6,568	29
1981	6,105	568	171	6,502	28
1982	5,587	458	47	5,998	26
1983	7,303	717	60	7,960	34
1984	6,837	807	64	7,580	32
1985	6,300	782	192	6,890	29
1986	5,822	855	182	6,495	27
1987	5,458	832	269	6,021	25
1988	5,118	633	322	5,429	22
1989	5,196	718	427	5,487	22
1990	5,025	689	552	5,162	21
1991	4,895	571	606	4,860	19
1992	5,273	571	836	5,008	20
1993	5,248	639	917	4,970	19
1994	5,206	1,119	1,190	5,135	20
1995	4,930	1,152	1,377	4,705	18
1996	5,280	1,183	1,426	5,037	19
1997	4,501	1,306	1,259	4,548	17
1998	4,300	1,273	871	4,703	17
1999	4,386	1,782	916	5,253	19
2000	3,781	1,764	942	4,602	16
2001	3,322	2,299	788	4,833	17
2002	2,919	2,676	669	4,926	17

<sup>a</sup>Density greater than 31 lb/ft<sup>3</sup>.

<sup>b</sup>U.S. Department of Commerce, Bureau of the Census (64,68,69); American Forest and Paper Association (3,4,5); U.S. International Trade Commission (81); American Hardboard Association (8); data may not add to totals because of rounding.

<sup>c</sup>Data for the years 1982 to present are for shipments.

**Table 57—Producer price indexes for hardboard and particleboard, 1965–2002 (1997 = 100)<sup>a</sup>**

Year	Hardboard and particleboard <sup>b</sup>		Hardboard		Particleboard <sup>c</sup>	
	Actual	Relative <sup>d</sup>	Actual	Relative <sup>d</sup>	Actual	Relative <sup>d</sup>
1965	38.1	150.2	36.6	144.1	z	z
1966	37.9	145.3	36.5	139.7	z	z
1967	36.6	139.8	35.8	136.7	z	z
1968	36.3	135.1	35.0	130.6	z	z
1969	37.7	134.7	35.8	128.1	z	z
1970	34.1	117.9	36.6	126.3	z	z
1971	34.2	114.6	36.1	121.0	z	z
1972	35.3	113.1	36.6	117.0	z	z
1973	38.7	109.6	37.6	106.4	z	z
1974	42.2	100.6	42.1	100.5	z	z
1975	41.6	90.9	42.0	91.8	z	z
1976	45.3	94.7	47.1	98.3	z	z
1977	51.6	101.4	51.2	100.5	z	z
1978	62.5	114.0	56.1	102.5	z	z
1979	60.7	98.3	58.9	95.4	z	z
1980	69.9	99.3	67.1	95.2	z	z
1981	77.9	101.4	78.0	101.5	z	z
1982	80.5	102.7	81.8	104.3	z	z
1983	83.9	105.7	82.1	103.4	74.6	93.9
1984	87.2	107.1	83.5	102.7	81.8	100.5
1985	85.4	105.4	84.3	104.1	77.4	95.5
1986	86.2	109.7	84.9	108.0	78.9	100.4
1987	88.1	109.3	83.2	103.2	84.9	105.3
1988	89.5	106.7	84.7	101.1	88.0	105.0
1989	90.3	102.6	84.8	96.4	90.2	102.5
1990	86.5	94.9	82.9	90.9	82.3	90.2
1991	85.7	93.8	81.3	88.9	82.1	89.9
1992	92.5	100.6	84.0	91.4	85.1	92.6
1993	103.1	110.5	89.5	95.9	97.7	104.7
1994	111.9	118.5	91.7	97.1	109.4	115.8
1995	112.3	114.8	95.1	97.3	109.3	111.7
1996	105.8	105.5	97.3	97.1	104.9	104.7
1997	100.0	100.0	100.0	100.0	100.0	100.0
1998	102.3	100.8	97.9	96.5	97.6	96.2
1999	109.4	99.0	100.1	90.6	100.7	91.1
2000	106.8	87.6	101.8	83.5	104.0	85.3
2001	98.6	79.9	95.5	77.4	97.5	79.1
2002	98.6	81.8	93.8	77.8	94.8	78.6

<sup>a</sup>U.S. Department of Labor, Bureau of Labor Statistics (75).

<sup>b</sup>Hardboard, particleboard, and fiberboard products.

<sup>c</sup>Platen-type (mat formed)

<sup>d</sup>Derived by dividing the actual price index by the all commodities index.

<sup>z</sup>Not available.

**Table 58—Production of treated wood products by type of treatment, treatment plant, and product, 1984–2002 (thousands of board feet)<sup>a</sup>**

Year	Total	Volume treated with				Plants treating with <sup>b</sup>			
		Creosote solutions	Oilborne <sup>c</sup> pressure	Waterborne pressure	Fire retardants	Creosote	Oilborne	Waterborne	Fire retardants
1984	5,989,488	1,651,128	643,320	3,620,364	74,676	120	95	445	75
1985	6,231,780	1,542,852	630,420	3,944,124	114,384	123	97	449	77
1986	6,649,236	1,424,988	593,808	4,505,496	124,944	117	81	475	79
1987	6,911,796	1,173,888	582,684	5,027,808	127,416	109	71	479	81
1988	7,189,740	1,085,772	574,428	5,406,780	122,760	97	65	484	80
1989	6,683,316	1,078,440	592,632	4,883,292	128,952	90	60	473	71
1990	7,027,620	1,118,304	559,104	5,252,100	98,112	85	65	458	66
1991	6,781,128	1,051,320	521,880	5,092,440	115,488	83	63	445	60
1992	7,025,796	1,078,452	477,876	5,369,244	100,224	81	44	432	57
1993	7,270,452	1,105,584	433,860	5,646,048	84,960	76	49	404	48
1994	7,609,020	1,134,780	495,348	5,962,596	16,296	85	33	461	44
1995	6,946,488	1,101,012	393,168	5,407,152	45,156	71	28	384	39
1996	7,099,307	1,038,136	401,934	5,614,264	44,974	68	27	368	29
1997	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35
1998	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35
1999	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35
2000	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35
2001	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35
2002	8,772,963	1,168,768	468,270	6,977,434	158,491	70	46	381	35

Year	Total <sup>d</sup>	Volume by product								
		Lumber	Timbers	Poles	Pilings	Fence posts	Crossties	Switch and bridge ties	Plywood (thousand sq.ft.)	Other <sup>e</sup>
1984	3,980,729	948,965	324,492	931,896	142,068	235,800	1,064,640	98,376	179,936	234,492
1985	4,032,820	1,025,956	350,496	921,972	126,348	149,232	1,030,728	97,608	267,072	330,480
1986	4,136,740	1,173,628	387,348	880,092	125,784	208,092	965,316	70,884	297,664	325,596
1987	4,118,679	1,290,567	542,376	903,288	97,440	135,024	715,128	111,672	408,064	323,184
1988	4,136,768	1,417,868	540,204	854,292	116,388	148,848	693,240	75,780	406,560	290,148
1989	4,054,037	1,207,913	527,412	887,700	116,136	172,524	696,264	75,612	422,048	370,476
1990	4,240,101	1,290,657	576,012	882,012	86,232	178,488	755,856	85,980	392,736	384,864
1991	4,129,285	1,220,053	630,372	860,808	81,240	166,020	731,664	74,760	415,936	364,368
1992	4,236,767	1,284,479	622,284	812,592	93,012	165,504	747,348	77,052	430,368	434,496
1993	4,344,226	1,348,906	614,196	764,376	104,772	164,988	763,032	79,332	444,800	504,624
1994	5,146,279	1,084,470	970,867	903,974	121,390	246,946	756,648	120,036	651,267	941,949
1995	4,698,187	990,043	886,332	825,264	110,820	225,444	690,768	109,584	594,560	859,932
1996	4,470,363	1,160,247	667,572	762,792	101,028	281,208	669,948	68,880	681,088	758,688
1997	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
1998	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
1999	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
2000	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
2001	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
2002	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053

<sup>a</sup>Wood Preservers Institute (86); American Plywood Association, The Engineered Wood Association (10,12).

<sup>b</sup>1984 was estimated.

<sup>c</sup>Pentachlorophenol, copper naphthenate, zinc naphthenate, copper-8-quinolinolate, and TBTO (mostly pentachlorophenol).

<sup>d</sup>Excludes plywood.

<sup>e</sup>Crossarms, landscape timbers, highway posts and guardrails, mine ties and timbers, crossing planks, and other misc. products not listed above.

Lumber taken from U.S. Department of Agriculture, Forest Service (51), table 11 Hardwood Recovery Factor.

Plywood taken from U.S. Department of Agriculture, Forest Service (51), Hardwood Plywood Lumber Conversion table B-7.

All Other taken from U.S. Department of Agriculture, Forest Service (51), table B-10.

Table 59—Forest chemical products production in gallons and short tons, 1965–2002<sup>a</sup>

Year	Tall oil fatty acids			Turpentine <sup>b</sup>				Rosin <sup>c</sup>			
	Total	Over 2% rosin	Under 2% rosin	Total	Sulphate turpentine <sup>d</sup>	Gum turpentine	Steam distilled	Total	Tall oil rosin	Gum rosin	Steam distilled rosin
	1000 short tons	1000 short tons	1000 short tons	1000 U.S. gallons	1000 U.S. gallons	1000 U.S. gallons	1000 U.S. gallons	1000 short tons	1000 short tons	1000 short tons	1000 short tons
1965	164.0	z	z	35,033	21,033	5,569	8,432	591.2	179.2	103.3	308.8
1966	185.5	z	z	33,275	21,338	4,211	7,727	559.9	200.0	78.1	281.9
1967	183.2	z	z	31,397	20,987	3,387	7,024	534.5	194.6	63.9	275.9
1968	186.3	z	z	32,609	23,658	2,521	6,430	527.8	204.3	48.9	274.6
1969	203.9	z	z	30,869	23,975	1,750	5,144	498.1	226.8	34.0	237.4
1970	220.2	z	z	28,790	22,768	1,292	4,731	473.6	228.7	25.1	219.8
1971	223.9	z	z	28,433	22,745	1,418	4,270	466.3	230.3	26.3	209.8
1972	235.9	z	z	28,295	23,206	1,328	3,761	465.7	240.1	25.5	200.1
1973	226.8	z	z	27,308	22,629	1,143	3,536	418.4	222.2	20.2	176.0
1974	199.8	z	z	25,583	21,379	797	3,407	369.3	198.0	14.5	156.8
1975	161.3	z	z	21,471	18,575	1,006	1,890	264.0	160.7	17.8	85.5
1976	205.7	z	z	24,183	20,265	920	2,998	350.2	201.7	16.8	131.7
1977	197.6	98.0	99.6	23,646	20,297	731	2,618	341.1	202.4	13.4	125.3
1978	193.8	102.1	91.7	24,949	22,066	517	2,366	340.8	211.5	9.4	119.9
1979	210.8	107.1	103.6	26,257	23,449	369	2,439	354.4	231.7	7.0	115.7
1980	209.0	114.8	94.2	27,685	24,979	314	2,392	343.6	223.3	5.9	114.4
1981	210.7	102.1	108.6	25,765	23,310	270	2,185	331.3	221.8	5.1	104.5
1982	187.7	91.1	96.6	23,353	21,283	230	1,840	286.4	194.0	4.4	88.0
1983	214.0	103.4	110.6	23,808	22,193	235	1,380	303.9	211.6	4.3	88.0
1984	235.8	118.4	117.5	23,233	21,628	225	1,380	295.8	225.6	4.2	66.0
1985	204.6	106.8	97.8	22,191	21,096	175	920	261.9	214.5	3.4	44.0
1986	215.1	112.5	102.5	21,956	21,956	z	z	216.8	216.8	z	z
1987	231.0	114.1	116.9	23,196	23,196	z	z	252.1	252.1	z	z
1988	239.4	118.9	120.5	28,000	28,000	z	z	256.5	256.5	z	z
1989	241.2	114.7	126.5	29,749	29,749	z	z	262.1	262.1	z	z
1990	236.8	112.8	124.1	31,077	31,077	z	z	274.6	274.6	z	z
1991	264.8	125.7	139.0	25,767	25,767	z	z	262.9	262.9	z	z
1992	251.9	115.0	137.0	24,498	24,498	z	z	266.1	266.1	z	z
1993	255.2	107.4	147.8	27,114	27,114	z	z	285.6	285.6	z	z
1994	279.1	124.6	154.4	26,424	26,424	z	z	281.8	281.8	z	z
1995	249.8	109.0	140.8	25,328	25,328	z	z	272.6	272.6	z	z
1996	254.7	109.0	145.6	22,412	22,412	z	z	290.6	290.6	z	z
1997	273.7	112.8	160.9	25,564	25,564	z	z	308.4	308.4	z	z
1998	281.9	130.8	151.1	24,146	24,146	z	z	271.7	271.7	z	z
1999	290.2	133.7	156.5	20,733	20,733	z	z	231.1	231.1	z	z
2000	263.0	102.1	160.9	23,080	23,080	z	z	245.0	245.0	z	z
2001	232.2	95.4	136.8	22,454	22,454	z	z	206.7	206.7	z	z
2002	241.4	102.1	139.3	24,162	24,162	z	z	229.8	229.8	z	z

<sup>a</sup>Naval Stores Review (29); Pine Chemicals Association (31).

<sup>b</sup>1965-1972 numbers are converted from 50 gallon barrels to 1000 gallons.

<sup>c</sup>1965-1972 numbers are converted from 520-lb drums to 1000 short tons.

<sup>d</sup>1988-present represents crude turpentine production.

<sup>z</sup>Not available.

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