

Harvest Trends 2014

September 2015

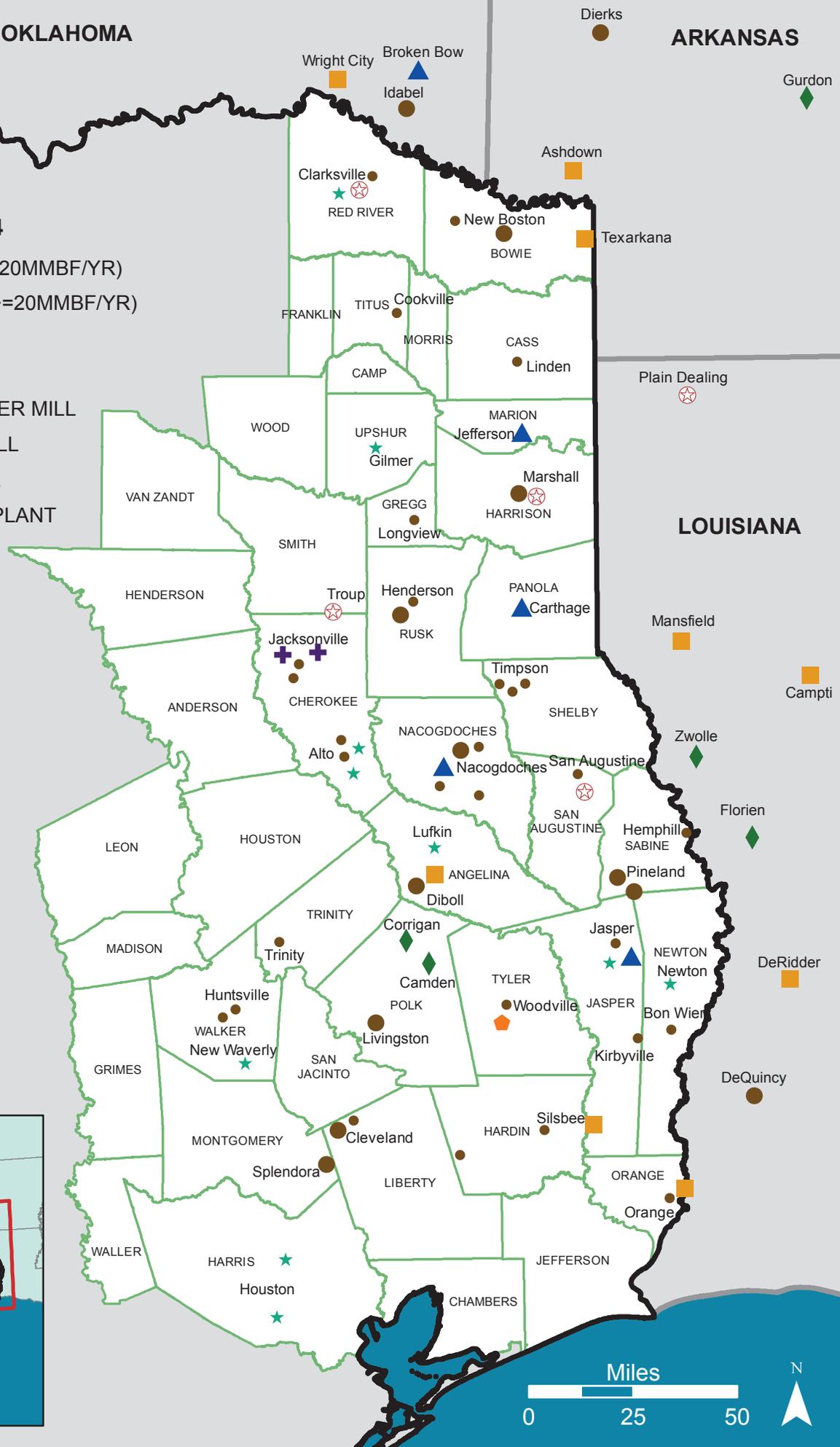


OKLAHOMA

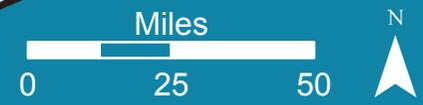
ARKANSAS

MILLS SURVEYED FOR HARVEST TRENDS 2014

- SMALL SAWMILL (<20MMBF/YR)
- LARGE SAWMILL (>=20MMBF/YR)
- ◆ PLYWOOD MILL
- ▲ OSB MILL
- ⊕ HARDWOOD VENEER MILL
- ⊗ CHIP / SHAVING MILL
- PULP / PAPER MILL
- ★ WOOD TREATING PLANT
- ◆ PELLET MILL



NOTE:
Mills in East LA,
East AR, and Central
TX are not shown



Harvest Trends 2014

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HIGHLIGHTS

Harvest Trends 2014

TIMBER REMOVAL

- ◆ Total growing stock timber removal was 513.7 million cubic feet, an increase of 1.8 percent from last year.
 - Pine removal was 422.3 million cubic feet, up 5.0 percent from last year.
 - Hardwood removal was down 10.8 percent to 91.4 million cubic feet.
- ◆ Harvest of timber for industrial use in the production of wood products was 531.3 million cubic feet.
 - 439.8 million cubic feet of pine were harvested for industrial consumption.
 - 91.5 million cubic feet of hardwood were harvested for industrial consumption.
- ◆ Stumpage value increased 24.3 percent to \$289.1 million, and delivered value was up 12.5 percent to \$646.6 million.
- ◆ Harvest of sawlogs was up 2.1 percent from last year to 1.1 billion board feet.
- ◆ Harvest of wood for veneer and structural panel production increased 16.0 percent from last year to 130.3 million cubic feet.
- ◆ Pulpwood and pellet roundwood harvest was 2.6 million cords, a decrease of 5.4 percent from last year.
- ◆ Total timber volume imported from other states was 96.3 million cubic feet while the total volume exported was 55.3 million cubic feet. The net import was 41.0 million cubic feet.

PRIMARY FOREST PRODUCTS

- ◆ Production of primary wood products included:
 - 1.5 billion board feet of lumber, an increase of 1.5 percent from last year.
 - 2.3 billion square feet (3/8-inch basis) of structural panel products, an increase of 16.4 percent.
 - 2.2 million tons of pulp and paperboard, up 2.1 percent from last year.

MILL AND LOGGING RESIDUES

- ◆ Total production of mill residue was 5.9 million green tons.
- ◆ Total production of logging residue was 2.7 million green tons.

Harvest Trends 2014

INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The wood-based industry employed more than 60,900 people in 2013.¹ The wood-based sector ranked eighth among manufacturing sector employers in the state in 2013.² In 33 of 43 East Texas counties, the wood-based sector was among the top five manufacturing employers in 2012.¹ The value of harvested timber ranked tenth in 2013 among Texas' top agricultural commodities, behind cattle and calves, broilers, milk, greenhouse and nursery, cotton lint, corn, sorghum grain, eggs, and wheat.³

To gather the most current information on the status of this valuable resource, Texas A&M Forest Service conducts an annual survey of the state's primary forest products industry. This 49th annual report provides information on the volume and value of timber harvested in East Texas during 2014, and reports the production of primary wood products, logging residue, and mill residue. Data on forest management activities are also presented. Information for this report comes from a survey of 74 mills in Texas and 20 mills in surrounding states. Texas A&M Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

2014 ECONOMIC CONDITIONS

The United States (U.S.) economy showed steady signs of recovery in 2014. The real Gross Domestic Product (GDP) increased 2.4 percent, which was higher than the 2013 annual increase of 2.2 percent.⁴ GDP growth was primarily attributed to expenditures in nonresidential fixed investments, personal consumptions, and exports. U.S. corporate profits from current production were down by \$17.1 billion in 2014, in contrast to an increase of \$84.1 billion observed in 2013. The economy was on a path of recovery with a drop in the rate of unemployment to 6.2 percent in 2014.⁵

In September, the Federal Reserve announced that it will buy \$5 billion per month of mortgage-backed securities and \$10 billion each month of longer-term securities, placing downward pressure on longer-term interest rates and support for the mortgage market. Meanwhile, the target range of federal funds rate has remained constant at 0 to 1/4 percent

since 2008.⁶

The Consumer Price Index (CPI), the most closely watched indicator for U.S. inflation, increased 0.8 percent in 2014. This was the second smallest increase noticed in last 50 years. Gasoline index declined 21.0 percent in 2014, following a much smaller 1.7 percent decline in 2013.⁷

The U.S. housing market showed signs of recovery in 2014. Nationwide, housing starts rose 8.5 percent to 1,003,300 units.⁸ Single-family housing starts increased 4.9 percent to 647,900 units. The share of single-family starts was 65 percent, slightly lower than the 67 percent the previous year. Multi-family housing starts rose 15.7 percent. National residential housing permits, the best indicator of future housing starts activity, rose 5.6 percent to 1,046,400 units in 2014. A large share of this gain (60.6 percent) was contributed by single-family permits. Multi-family building permits also increased by 11.3 percent to 411,800 units in 2014.⁸

Housing affordability fell to 166 in 2014 from 176 in 2013, meaning that a family earning the median family income has 166% of the income necessary to qualify for a conventional loan covering 80% of a median priced, existing single-family house. The median sale price of existing homes averaged \$208,300 in 2014, up 5.7 percent from 2013.⁹ Existing home sales declined in 2014 after a strong run in 2013. Total home sales in 2014 were 4.9 million, down 2.9 percent over 2013.⁹

Average annual 30-year fixed mortgage rate increased to 4.17 percent, which was slightly higher than the 2013 annual average of 3.98 percent. The national monthly average 30-year fixed mortgage rate started at 4.43 percent in January and mostly declined thereafter. The year ended with the mortgage rate at 3.86 percent in December.¹⁰

The Texas economy continued to outperform the economy of the rest of the U.S. Real Gross Domestic Product by State (GDP-State) grew 5.2 percent in 2014.¹¹ Texas gained 343,300 jobs in 2014 with additions in major sectors, including mining and logging, construction, professional and business, leisure and hospitality, trade, transportation and utilities, education and health services, financial activities, information, and government.¹² The unemployment rate in Texas dropped to 5.1 percent in 2014.⁵

The total number of residential building permits in Texas increased 13.5 percent in 2014 to 170,364 units. Single-family housing building permits increased 10.2 percent to 103,045. Multi-family building permits increased 18.8 percent to 67,319 units in 2014.¹³

Million Cubic Feet

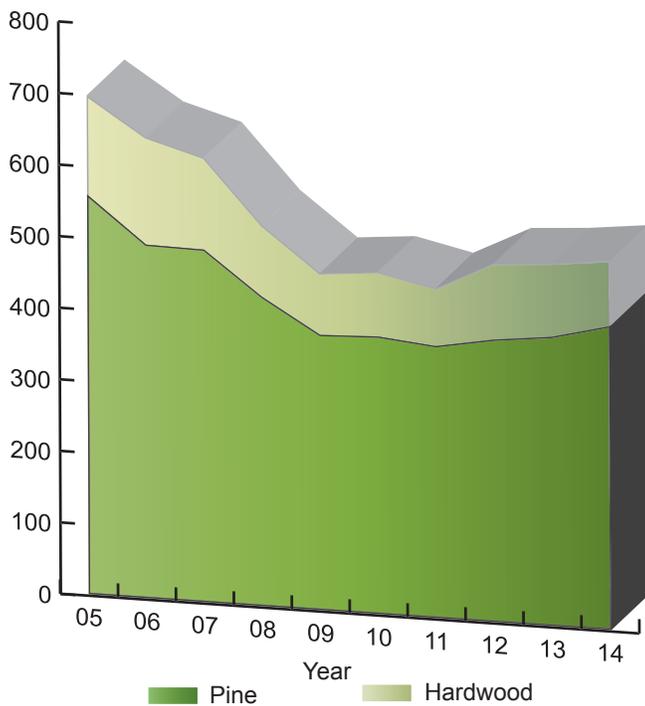


Figure 1. Total Timber Removal, 2005-2014

Million Dollars

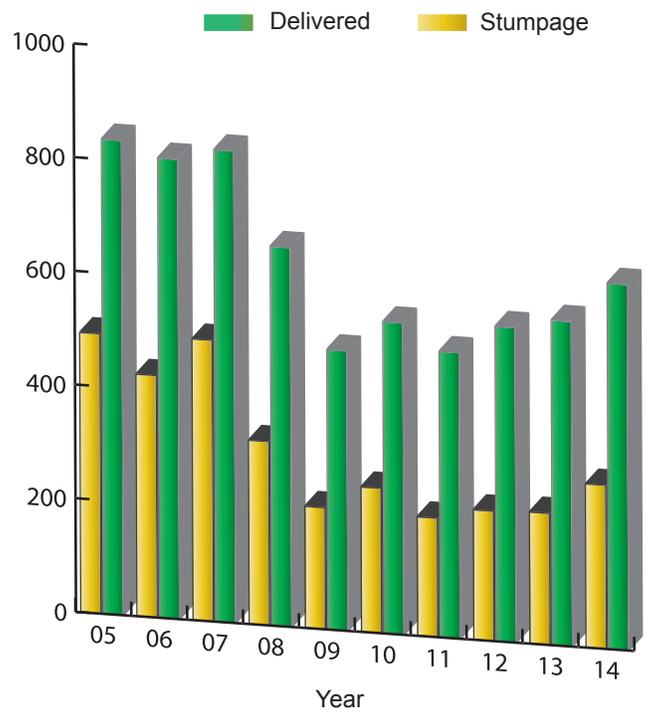


Figure 2. Value of Timber Harvest, 2005-2014

U.S. softwood lumber production posted a fifth consecutive annual gain in 2014, up 5.6 percent to 31.6 billion board feet (bbf), but still 21.5 percent below the recent high of 40.3 bbf in 2005. Lumber production in the South accounted for 50.9 percent, or 16.1 bbf, of the U.S. total, a 7 percent increase from 2013.¹⁴

Structural panel production in the U.S. rebounded 0.7 percent from 2013 to 22.0 billion square feet (bsf) (3/8-inch basis),¹⁴ including 9.0 bsf of plywood and 13.0 bsf of oriented strand board (OSB). Southern OSB production increased 4.3 percent to 10.5 billion square feet in 2014. Southern plywood production dropped 3.6 percent to 5.3 billion square feet.¹⁴

U.S. lumber prices remained nearly unchanged this year after a strong rebound in 2013 and were still among the highest levels since 2006. Housing starts, however, improved less than expected in 2014. Adverse weather conditions, mill closures, and forest fires impacted some segments of the timber markets in the U.S. Low demand in Asia and strong returns in the domestic market slowed the U.S. softwood lumber export to these regions in late 2014. The political unrest in the Middle East and North Africa continued to impact the U.S. timber product market.

The average annual Random Lengths Framing Lumber Composite Price decreased 0.3 percent, from \$384 per thousand board feet (mbf) in 2013 to \$383 per mbf in 2014.¹⁴ The average annual Random Lengths Structural Panel Composite Price decreased 9.6 percent to \$385 per thousand square feet (msf) in 2014.¹⁴

U.S. paper and paperboard production posted a slight decline in 2014, dropping 1.5 percent to 79.5 million short tons. It was 1.3 percent higher than a recent low in 2009. A lower level of paper production was considered the primary reason behind this decline.¹⁵

STUMPAGE PRICES

According to the Texas Timber Price Trends bimonthly timber market report, the average annual pine sawtimber price increased 22.1 percent to \$217.10 per mbf, Doyle scale, in 2014, from last year's average annual price of \$177.84 per mbf. The average annual mixed hardwood sawtimber price increased 19.9 percent from a year earlier to \$319.55 per mbf. Pine pulpwood price increased 29.3 percent to \$24.42 per cord. Mixed hardwood pulpwood price increased 14.2 percent to \$27.27 per cord. Table 6 provides historic data on stumpage prices.

TIMBER REMOVALS

Growing Stock Removals

Total removals of growing stock in East Texas, including pine and hardwood, increased 1.8 percent from the previous year (Figure 1). The total volume of growing stock removed was 513.7 million cubic feet, compared to 504.4 million cubic feet a year earlier. Included in the total growing stock removals are timber harvested for industrial use and an estimate of logging residue. Growing stock removals are based on the latest East Texas Harvest and Utilization Study by the USDA Forest Service.

By species group, growing stock removals were comprised of 422.3 million cubic feet of pine and 91.4 million cubic feet of hardwood. Pine removals were up 5.0 percent and hardwood removals were down 10.8 percent from a year earlier. Figure 3 and Table 14 illustrate the harvest volume by species group by year.

Industrial Roundwood Harvest

Industrial roundwood harvest in Texas, the portion of the total removals that was subsequently utilized in the manufacture of wood products, totaled 439.8 and 91.5 million cubic feet for pine and hardwood, respectively. Pine industrial roundwood harvest was up 4.8 percent, and hardwood roundwood harvest was down 10.3 percent from a year earlier. The combined harvest increased 1.9 percent to 531.3 million cubic feet. Ninety-three percent of the industrial roundwood was from growing stock and 7 percent of the industrial roundwood was from non-growing stock (Table 13).

Table 1 lists the harvest of pine and hardwood by county. The top five timber producing counties were Polk, Jasper, Cass, Hardin, and Tyler.

Figure 4 on the next page illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. Polk, Cass, Hardin, Cherokee, and Camp counties had the five highest relative timber harvesting intensities.

Value of Timber Harvest

Stumpage value of East Texas timber harvest increased 24.3 percent to \$289.1 million (Figure 2). Higher stumpage prices and more harvesting produced the significant increase in stumpage value. The delivered value was up 12.5 percent to \$646.6 million. Pine timber accounted for 83 percent of the total stumpage value. Figure 3 depicts the value of harvest by product. Table 7 lists stumpage and delivered value by product category.

Sawlogs

Harvest of sawlogs for lumber production increased

2.1 percent to 1.1 billion board feet, which accounted for 34.6 percent of the total timber harvest. The pine sawlog cut totaled 1.0 billion board feet, up 5.6 percent. Hardwood sawlog harvest was down 23.7 percent to 100.7 million board feet. Polk, Jasper, Tyler, Cherokee, and Hardin counties were the top five producers of sawlogs. Table 2 lists sawlog harvest by county.

Veneer and Panel Roundwood

Harvest of timber for the production of structural panels, including plywood, OSB and hardwood veneer, was 130.3 million cubic feet, a 16.0 percent increase from a year earlier. The timber harvest for structural panels was 24.5 percent of the total timber harvest. Almost all of the veneer and panel roundwood was pine. Polk, Nacogdoches, Cherokee, Tyler, and Panola counties were the top five producers of veneer and panel roundwood. Table 3 lists the harvest of veneer and panel roundwood by county.

Pulpwood and Pellet Roundwood

Harvest of timber for pulp and paper products and pellets was 2.6 million cords, a decline of 5.4% from a year earlier. Pulpwood and pellet roundwood harvest accounted for 40.2 percent of the total timber harvest. Pine made up 64.8 percent of the total production. Hardin, Cass, Jasper, Newton, and Bowie counties were the top five producers. Table 4 lists the pulpwood and pellet roundwood harvest by county.

Other Roundwood

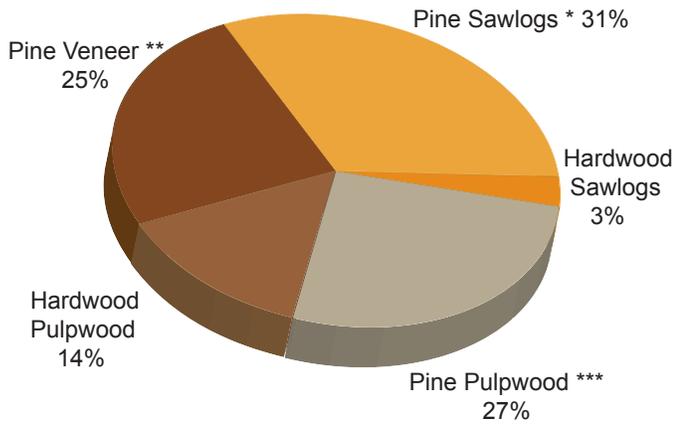
Other roundwood harvest included posts, poles and pilings that totaled 3.6 million cubic feet. Table 5 lists harvest of these products by county.

Import-Export Trends

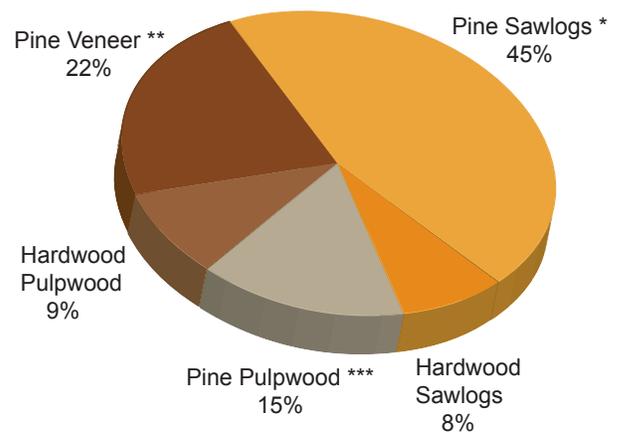
Texas imported more timber from surrounding states than exported to surrounding states. Exports of roundwood from Texas were 55.3 million cubic feet, while imports totaled 96.3 million cubic feet. The net import of roundwood was 41.0 million cubic feet. Table 8 details the interstate movement of roundwood.

Texas mills utilized 89.6 percent of the timber harvested in the state. The remainder was processed mainly by mills in Arkansas, Louisiana, and Oklahoma. Details are listed in Table 8.

**Harvest Volume
(531.3 Million Cubic Feet)**



Stumpage Value **
(\$289.1 Million)**



- * Includes chip-n-saw
- ** Includes panel roundwood (pulpwood sized material chipped for panel production)
- *** Includes pellet roundwood, posts, poles and pilings
- **** Products with stumpage value less than 1% of total are not included

Figure 3. Volume and Value of Timber Harvest, 2014

Cubic Feet Harvested Per Acre of Timberland

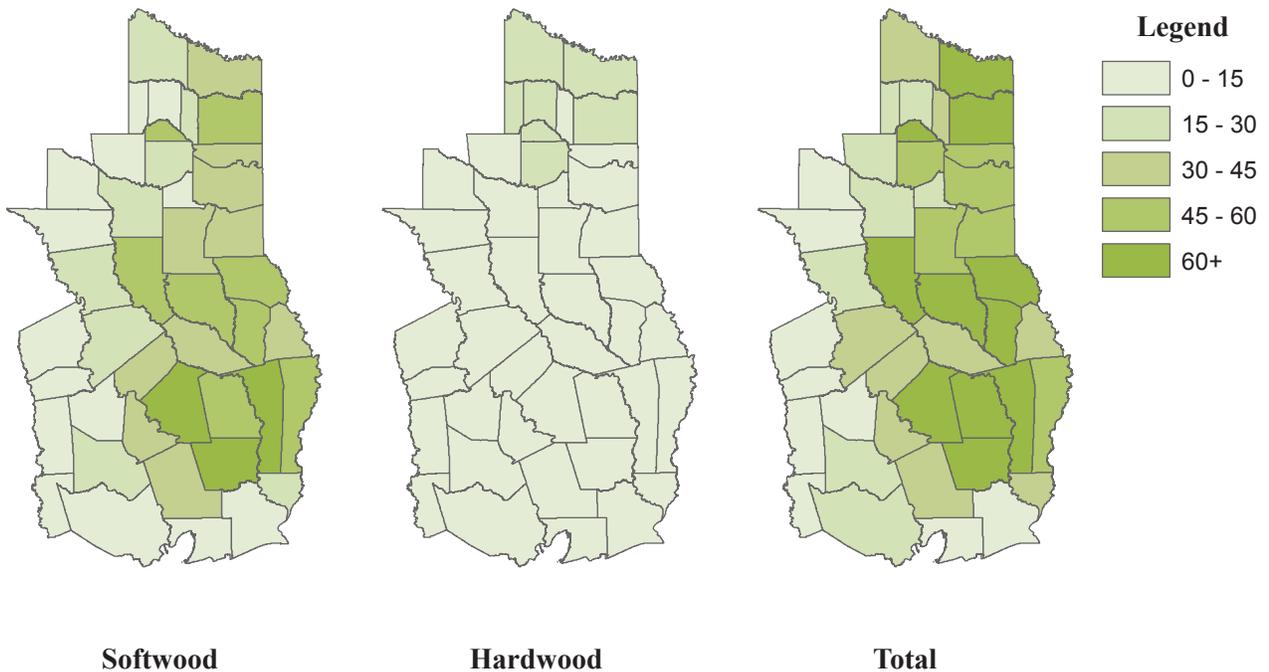


Figure 4. Intensity of Timber Harvest by County, 2014

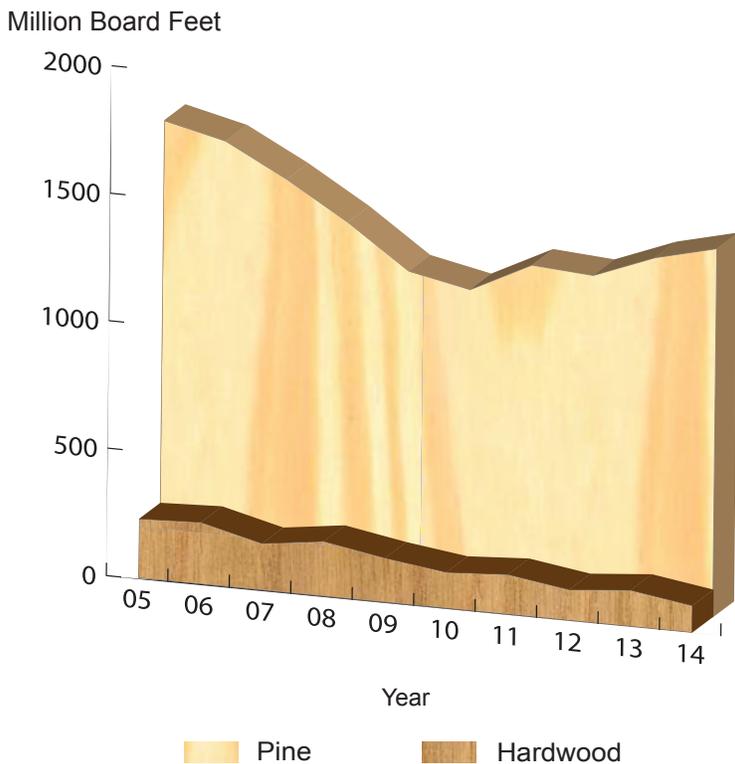


Figure 5. Texas Lumber Production, 2005-2014

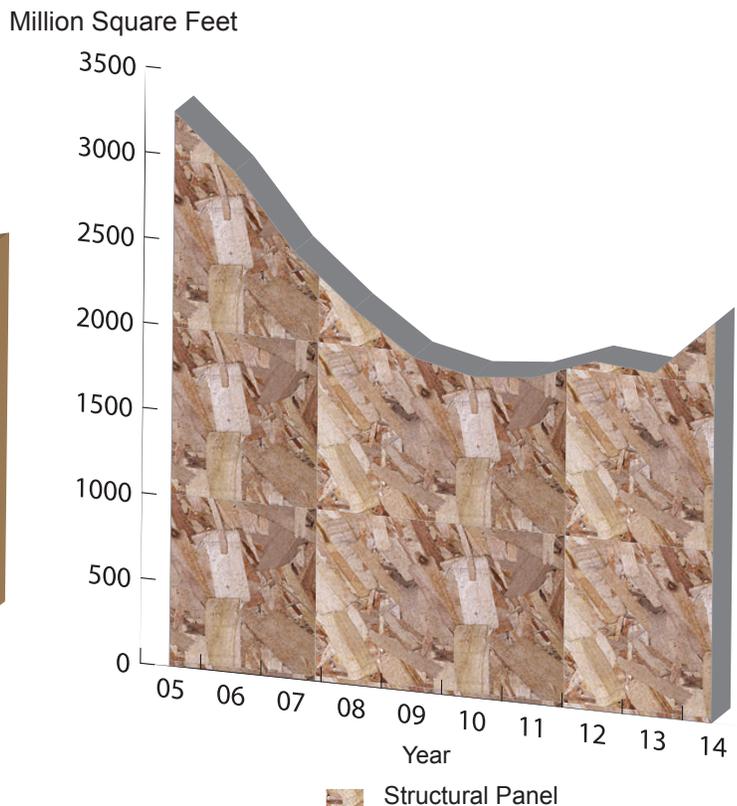


Figure 6. Texas Structural Panel Production, 2005-2014

PRODUCTION OF FOREST PRODUCTS

Lumber

Texas sawmills produced 1.5 billion board feet of lumber, an increase of 1.5 percent from a year earlier. Production of pine lumber increased 4.3 percent to 1.4 billion board feet and hardwood lumber production decreased 25.9 percent to 104.1 million board feet. Table 9 and Figure 5 present a 10-year trend in lumber production.

Structural Panel Products

Production of structural panels, including plywood and OSB, was up 16.4 percent to 2.3 billion square feet (3/8-inch basis). Table 9 and Figure 6 show the recent trend in structural panel output.

Paper Products

Production of paperboard, fiberboard, and market pulp totaled 2.2 million tons, up 2.1 percent from a year earlier. There has not been any major paper production in Texas since 2003. Table 10 and Figure 7 summarize recent trends in paper product output.

Treated Wood Products

The total volume of wood treated by Texas wood treat-

ers was 37.6 million cubic feet, a decrease of 6.3 percent from a year earlier. Among major treated products, lumber accounted for 65.7 percent of the total volume, ties 18.3 percent, and poles and pilings 10.2 percent. Table 11 contains treated volume by product for the past two years.

Primary Mill Residue

Total mill residue, including chips, sawdust, shavings, and bark in primary mills such as sawmills, panel mills and chip mills was 5.9 million tons, based on updated residue product ratios (Table 12). Eighty-six percent of the mill residue was from pine species and 14 percent was from hardwood species. Chips accounted for 48.8 percent of mill residue, followed by bark (32.7 percent), sawdust (12.5 percent), and shavings (5.9 percent) (Figure 8).

Logging Residue

Types of logging residue include stumps, tops, limbs and unutilized cull trees. Total logging residue produced was 2.7 million green tons. Logging residue comes from both growing stock and non-growing stock. For this year, 24.4 percent of the logging residue was from growing stock, and 75.6 percent was from non-growing stock. Seventy percent of the residue was from pine and 30 percent was from hardwood (Table 13, Figure 9).

Thousand Tons

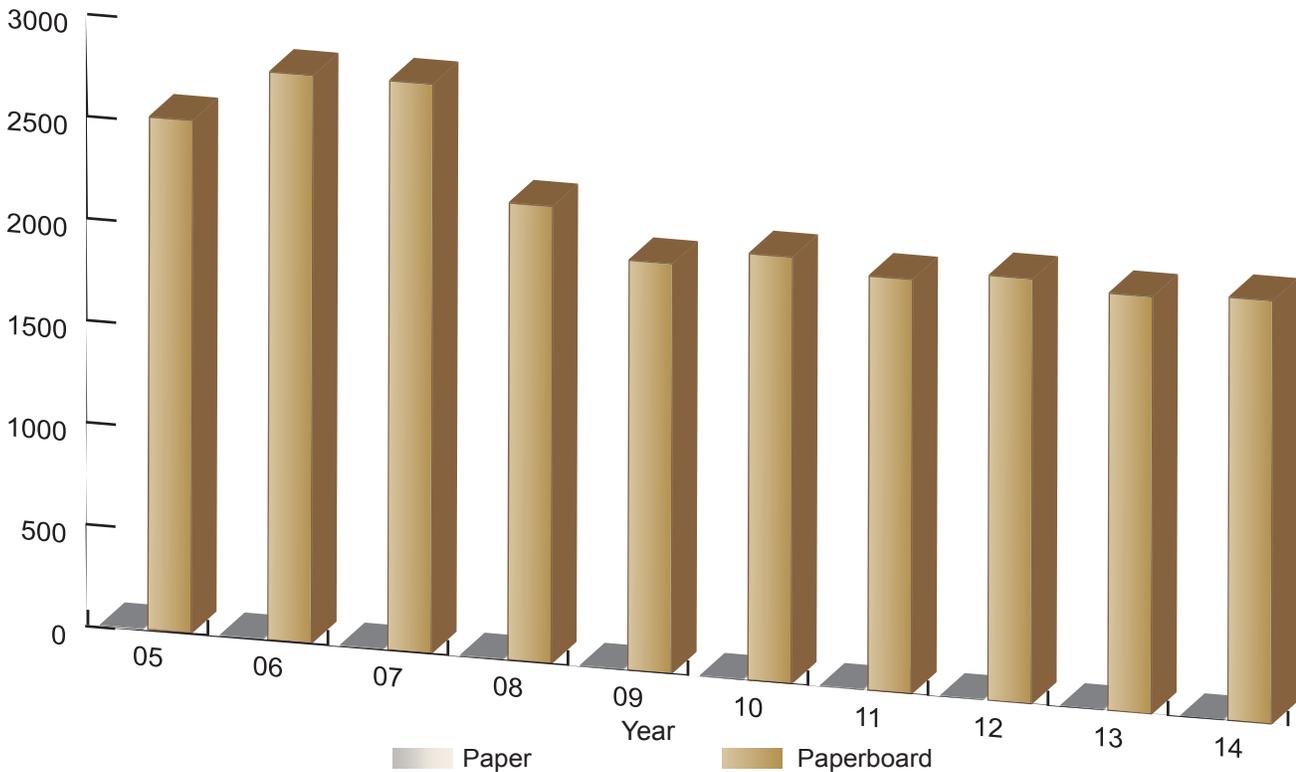


Figure 7. Texas Paper and Paperboard Production, 2005-2014

Thousand Tons

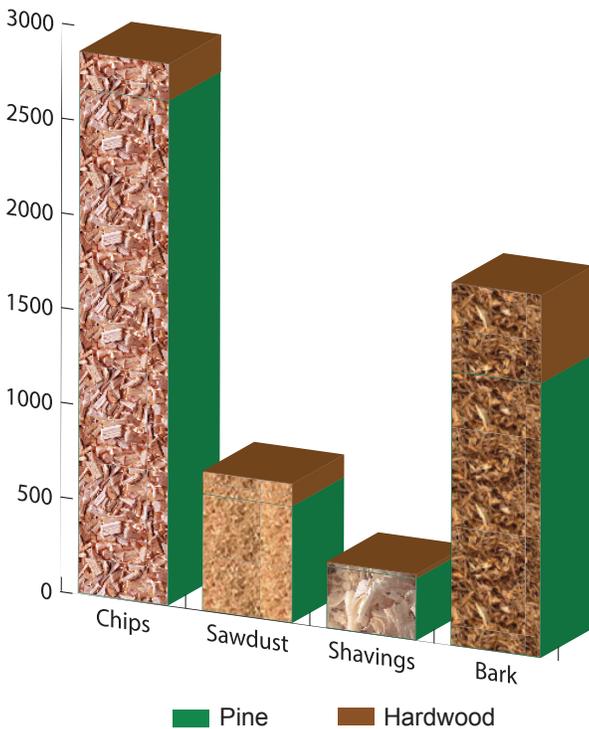


Figure 8. Texas Primary Mill Residue, 2014

Thousand Tons

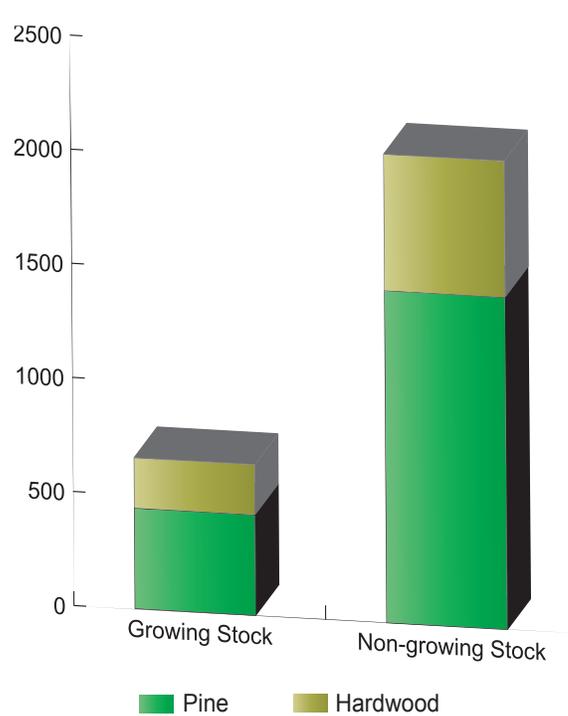


Figure 9. Texas Logging Residue, 2014

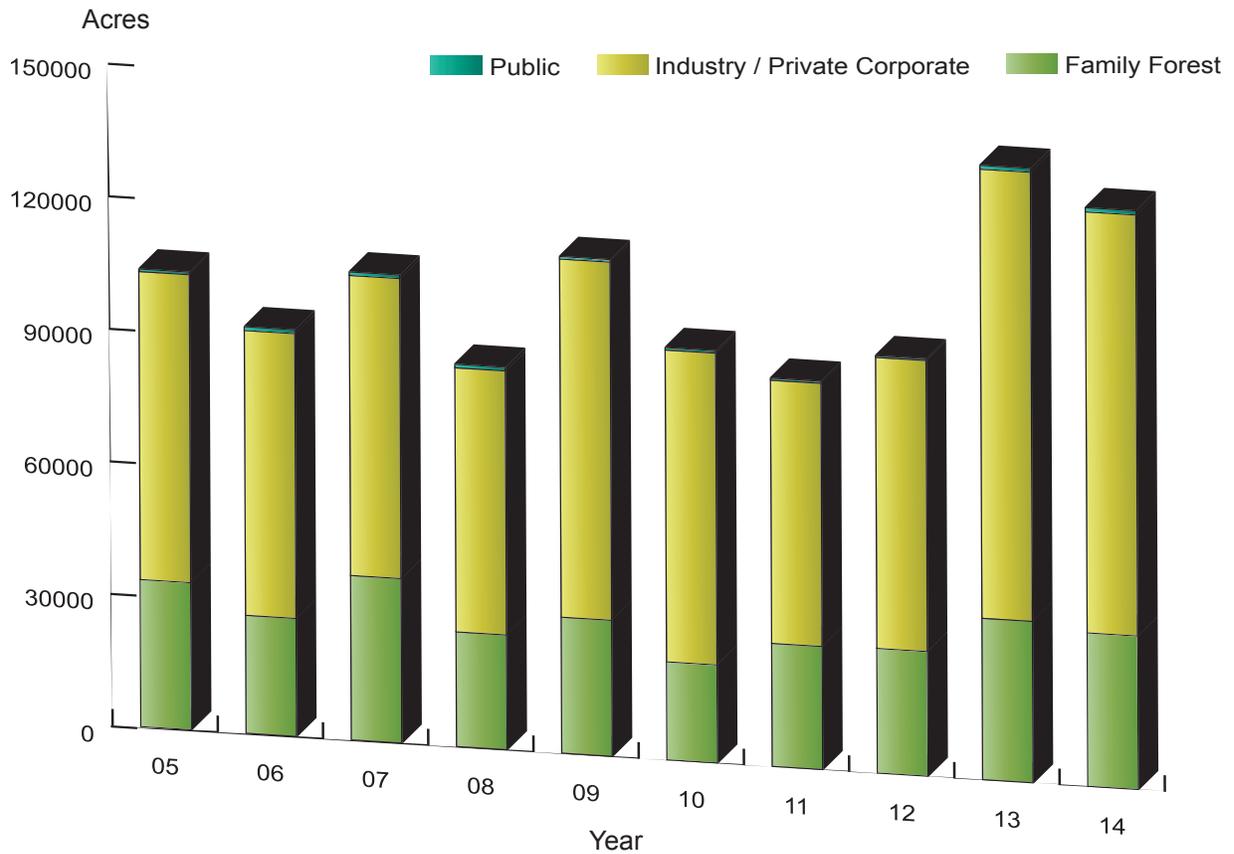


Figure 10. Reforestation Acreage by Ownership in Texas, 2005-2014

REFORESTATION

Accomplishments in reforestation by funding source and ownership are presented in Table 15. A total of 130,971 acres was planted during the winter 2013/spring 2014 planting season. Industrial landowners planted 95,306 acres, 6.3 percent less than the previous year. Family forest owners planted 34,724 acres. Public landowners planted 941 acres. Family forest owners received \$2.8 million in cost share assistance for reforestation through federal cost share programs.

REFERENCES

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- ⁵<http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm>
- ⁶http://www.bls.gov/news.release/archives/cpi_01162015.pdf
- ⁷<http://www.census.gov/>
- ⁸<http://www.realtor.org/research/research/housinginx>
- ⁹<http://www.freddiemac.com/pmms/pmms30.htm>
- ¹⁰U.S. Bureau of Economic Analysis. 2014. Real GDP by state (chained dollars). <http://www.bls.gov/sae/>
- ¹¹<http://recenter.tamu.edu/data>
- ¹²Random Lengths, Year Book, 2014.
- ¹³<http://www.statmill.org/>
- ¹⁴
- ¹⁵

Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2014

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	----- cubic feet -----			----- thousand dollars -----	
Anderson	8,746,833	726,833	9,473,666	4,973	11,257
Angelina	13,552,617	2,302,195	15,854,812	9,204	19,764
Bowie	10,773,830	7,526,950	18,300,780	9,413	22,343
Camp	1,742,858	735,892	2,478,750	1,229	2,949
Cass	22,924,968	9,174,068	32,099,036	16,282	38,446
Chambers	24,473	66,334	90,807	65	134
Cherokee	22,990,417	3,435,429	26,425,846	15,859	33,374
Franklin	95,426	1,761,915	1,857,341	803	2,265
Gregg	561,316	1,029,469	1,590,785	1,130	2,303
Grimes	2,211,147	13,239	2,224,386	1,564	2,963
Hardin	28,834,461	3,166,456	32,000,917	15,759	37,192
Harris	2,963,154	549,334	3,512,488	2,447	4,745
Harrison	14,709,056	4,423,088	19,132,144	10,147	23,172
Henderson	546,156	290,560	836,716	346	937
Houston	11,755,677	884,864	12,640,541	7,939	16,133
Jasper	32,200,267	974,808	33,175,075	16,035	37,932
Jefferson	328,933	234,304	563,237	303	708
Leon	294,384	1,496,831	1,791,215	778	2,144
Liberty	12,545,657	5,224,836	17,770,493	11,153	23,332
Madison	9,118	0	9,118	9	14
Marion	7,801,181	2,193,619	9,994,800	5,358	12,144
Montgomery	6,239,769	737,503	6,977,272	4,317	8,905
Morris	1,749,931	892,719	2,642,650	1,344	3,198
Nacogdoches	24,656,835	3,821,405	28,478,240	15,972	34,963
Newton	28,534,317	468,876	29,003,193	12,484	31,739
Orange	2,823,918	266,551	3,090,469	1,321	3,403
Panola	14,400,636	3,189,588	17,590,224	9,376	21,241
Polk	38,240,565	2,729,425	40,969,990	25,810	52,338
Red River	6,166,137	6,198,543	12,364,680	5,968	14,983
Rusk	12,536,271	2,129,460	14,665,731	9,109	18,832
Sabine	9,473,079	1,430,320	10,903,399	5,200	12,528
San Augustine	13,770,151	2,931,349	16,701,500	8,545	19,799
San Jacinto	7,903,224	552,604	8,455,828	5,431	10,896
Shelby	16,406,461	3,373,419	19,779,880	10,857	24,092
Smith	3,799,887	1,345,814	5,145,701	2,884	6,396
Titus	744,133	1,858,583	2,602,716	1,238	3,202
Trinity	11,590,682	1,769,254	13,359,936	8,123	16,907
Tyler	29,729,065	1,544,752	31,273,817	16,628	37,253
Upshur	5,487,280	3,794,905	9,282,185	4,785	11,363
Van Zandt	212,286	422,240	634,526	273	744
Walker	4,777,560	183,884	4,961,444	3,729	6,853
Waller	37,391	2,222	39,613	15	42
Wood	3,225,448	3,750,641	6,976,089	3,034	8,130
Other Counties	1,661,494	1,902,425	3,563,919	1,898	4,522
Total Production	439,778,449	91,507,506	531,285,955	289,135	646,583

Table 2. Sawlog Harvest by County in Texas, 2014

County	Pine	Hardwood	Total
	-----thousand board feet ¹ -----		
Anderson	17,930	1,386	19,316
Angelina	36,803	3,599	40,402
Bowie	29,065	4,310	33,375
Camp	3,704	495	4,199
Cass	54,549	4,964	59,513
Chambers	102	168	270
Cherokee	62,925	6,616	69,541
Franklin	101	924	1,025
Gregg	2,118	2,258	4,376
Grimes	10,070	5	10,075
Hardin	53,065	6,656	59,721
Harris	12,340	890	13,230
Harrison	39,343	2,728	42,071
Henderson	867	0	867
Houston	28,218	1,255	29,473
Jasper	68,983	2,276	71,259
Jefferson	354	507	861
Leon	628	4	632
Liberty	37,238	10,175	47,413
Madison	17	0	17
Marion	18,385	1,540	19,925
Montgomery	20,309	1,930	22,239
Morris	3,445	1,018	4,463
Nacogdoches	53,598	5,543	59,141
Newton	48,732	1,267	49,999
Orange	4,303	217	4,520
Panola	27,727	2,149	29,876
Polk	91,815	6,283	98,098
Red River	7,185	7,353	14,538
Rusk	39,486	4,002	43,488
Sabine	19,020	0	19,020
San Augustine	30,222	144	30,366
San Jacinto	24,458	951	25,409
Shelby	41,556	766	42,322
Smith	9,436	1,046	10,482
Titus	1,281	1,447	2,728
Trinity	30,964	1,586	32,550
Tyler	64,963	6,258	71,221
Upshur	12,827	3,234	16,061
Van Zandt	681	0	681
Walker	15,781	390	16,171
Waller	0	8	8
Wood	5,545	1,413	6,958
Other Counties	377	2,898	3,275
Total Production	1,030,516	100,659	1,131,175

¹International ¼-inch rule.

Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2014

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	5,235,956	*	5,235,956
Angelina	5,129,001	*	5,129,001
Bowie	271,182	*	271,182
Camp	255,672	*	255,672
Cass	5,073,375	*	5,073,375
Chambers	0	*	0
Cherokee	9,329,603	*	9,329,603
Franklin	12,798	*	12,798
Gregg	188,010	*	188,010
Grimes	52,709	*	52,709
Hardin	3,141,966	*	3,141,966
Harris	52,171	*	52,171
Harrison	6,654,056	*	6,654,056
Henderson	352,663	*	352,663
Houston	6,822,297	*	6,822,297
Jasper	4,331,191	*	4,331,191
Jefferson	1,824	*	1,824
Leon	180,465	*	180,465
Liberty	1,951,563	*	1,951,563
Madison	5,837	*	5,837
Marion	2,737,772	*	2,737,772
Montgomery	176,155	*	176,155
Morris	619,730	*	619,730
Nacogdoches	10,193,760	*	10,193,760
Newton	5,676,284	*	5,676,284
Orange	851	*	851
Panola	7,141,357	*	7,141,357
Polk	13,893,912	*	13,893,912
Red River	1,358,756	*	1,358,756
Rusk	5,674,336	*	5,674,336
Sabine	3,203,456	*	3,203,456
San Augustine	4,118,796	*	4,118,796
San Jacinto	1,330,358	*	1,330,358
Shelby	5,603,878	*	5,603,878
Smith	1,688,286	*	1,688,286
Titus	81,355	*	81,355
Trinity	4,840,235	*	4,840,235
Tyler	8,395,734	*	8,395,734
Upshur	2,005,292	*	2,005,292
Van Zandt	63,178	*	63,178
Walker	1,555,446	*	1,555,446
Waller	4,749	*	4,749
Wood	682,099	*	682,099
Other Counties	211,491	*	211,491
Total Production	130,299,605	*	130,299,605

*Data suppressed to avoid disclosure of individual company information.

Table 4. Pulpwood and Pellet Roundwood Harvest by County in Texas, 2014

County	Pine	Hardwood	Total
	----- cords -----		
Anderson	6,547	6,180	12,727
Angelina	28,430	21,233	49,663
Bowie	71,498	85,052	156,550
Camp	10,948	8,161	19,109
Cass	111,227	104,270	215,497
Chambers	98	477	575
Cherokee	39,161	29,074	68,235
Franklin	818	20,087	20,905
Gregg	340	8,135	8,475
Grimes	6,495	155	6,650
Hardin	210,397	25,628	236,025
Harris	11,243	5,001	16,244
Harrison	20,710	49,570	70,280
Henderson	649	3,632	4,281
Houston	3,629	8,430	12,059
Jasper	202,789	7,414	210,203
Jefferson	3,330	1,866	5,196
Leon	0	18,702	18,702
Liberty	56,048	43,981	100,029
Madison	0	0	0
Marion	25,719	24,192	49,911
Montgomery	34,151	5,173	39,324
Morris	7,059	9,025	16,084
Nacogdoches	66,199	36,148	102,347
Newton	182,059	3,205	185,264
Orange	26,242	2,877	29,119
Panola	33,483	35,365	68,848
Polk	115,891	20,947	136,838
Red River	44,915	62,068	106,983
Rusk	5,114	18,229	23,343
Sabine	38,645	17,879	56,524
San Augustine	52,787	36,340	89,127
San Jacinto	31,788	4,914	36,702
Shelby	44,340	40,562	84,902
Smith	7,039	14,630	21,669
Titus	5,619	20,199	25,818
Trinity	20,932	18,791	39,723
Tyler	131,400	6,191	137,591
Upshur	17,318	40,657	57,975
Van Zandt	478	5,278	5,756
Walker	7,736	1,481	9,217
Waller	403	11	414
Wood	20,303	43,921	64,224
Other Counties	10,048	16,280	26,328
Total Production	1,714,025	931,411	2,645,436

Table 5. Other Roundwood Harvest by County in Texas, 2014¹

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	74,117	0	74,117
Angelina	155,047	0	155,047
Bowie	0	0	0
Camp	0	0	0
Cass	0	0	0
Chambers	0	0	0
Cherokee	288,660	0	288,660
Franklin	0	0	0
Gregg	2,438	0	2,438
Grimes	0	0	0
Hardin	48,900	0	48,900
Harris	0	0	0
Harrison	0	0	0
Henderson	382	0	382
Houston	65,277	0	65,277
Jasper	261,390	0	261,390
Jefferson	0	0	0
Leon	12,119	0	12,119
Liberty	18,013	0	18,013
Madison	525	0	525
Marion	0	0	0
Montgomery	5,348	0	5,348
Morris	0	0	0
Nacogdoches	412,817	0	412,817
Newton	212,140	0	212,140
Orange	0	0	0
Panola	52,654	0	52,654
Polk	76,437	0	76,437
Red River	4,666	0	4,666
Rusk	46,999	0	46,999
Sabine	56,304	0	56,304
San Augustine	476,707	0	476,707
San Jacinto	33,443	0	33,443
Shelby	474,874	0	474,874
Smith	11,873	0	11,873
Titus	0	0	0
Trinity	35,709	0	35,709
Tyler	159,650	0	159,650
Upshur	0	0	0
Van Zandt	0	0	0
Walker	37,401	0	37,401
Waller	0	0	0
Wood	0	0	0
Other Counties	575,024	0	575,024
Total Production	3,598,914	0	3,598,914

¹Including posts, poles and pilings.

Table 6. Timber Stumpage Price in East Texas by Product, 2005-2014

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	--- \$/MBF-Doyle ---		--- \$/cord ---			
2005	305.58	164.16	17.44	19.69	47.99	77.38
2006	294.82	144.98	17.22	13.22	43.72	76.50
2007	321.40	162.69	32.79	30.09	46.78	59.16
2008	241.71	217.87	25.90	22.31	41.80	54.28
2009	180.62	177.34	17.27	18.42	32.66	57.75
2010	200.60	270.49	21.99	31.75	38.66	55.06
2011	186.44	234.94	15.70	16.93	25.55	52.00
2012	185.87	237.93	17.45	23.32	30.00	52.50
2013	177.84	266.43	18.88	23.88	29.01	52.13
2014	217.10	319.55	24.42	27.27	34.68	51.50

SOURCE: *Texas Timber Price Trends* bi-monthly market report, with pine pole price from *Timber Mart-South*.

Table 7. Value of East Texas Timber Harvest, 2014

Product	Unit	Stumpage		Delivered	
		Price ¹ (\$/unit)	Value (million \$)	Price ² (\$/unit)	Value (million \$)
PINE					
Sawlogs/Chip-n-Saw	MBF ³	–	130.8	–	234.0
Sawlogs	MBF ³	144.71	114.0	243.03	191.5
Chip-n-Saw	MBF ³	69.36	16.8	175.13	42.5
Veneer/Panel Roundwood	MCF	–	64.6	–	149.8
Veneer Logs	MCF	892.75	38.2	1,499.30	64.1
Panel Roundwood	MCF	301.48	26.4	978.77	85.7
Pulpwood	cords	24.42	41.9	79.28	135.9
Others	MCF	–	2.6	–	5.1
All pine products			239.9		524.7
HARDWOOD					
Sawlogs	MBF ³	234.98	23.7	368.81	37.1
Veneer	MCF	1,742.04	0.2	3,333.01	0.3
Pulpwood	cords	27.27	25.4	90.71	84.5
All hardwood products			49.2		121.9
ALL PRODUCTS			289.1		646.6

¹Average annual statewide prices as published in *Texas Timber Price Trends*, Texas A&M Forest Service.

²Average annual statewide prices, obtained by adding the difference between the standing timber prices and the delivered prices published in *Timber Mart-South* to the stumpage prices published in *Texas Timber Price Trends*, Texas A&M Forest Service.

³International 1/4-inch rule.

Table 8. Interstate Movement of Roundwood by Species Group and Product in Texas, 2014

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
PINE						
Sawlogs	MBF ¹	154,562	1,007,253	23,263	1,161,815	1,030,516
Veneer/Panel Roundwood	MCF	4,398	123,883	6,416	128,282	130,300
Pulpwood	ords	512,633	1,268,797	445,228	1,781,430	1,714,025
Others	MCF	1,609	3,599	0	5,208	3,599
All Pine Products	MCF	72,584	393,529	46,250	466,113	439,778
HARDWOOD						
Sawlogs	MBF ¹	4,373	100,659	0	105,032	100,659
Veneer	MCF	342	114	0	456	114
Pulpwood	ords	283,033	818,145	113,266	1,101,178	931,411
All Hardwood Products	MCF	23,718	82,446	9,061	106,164	91,508
TOTAL						
Sawlogs	MBF ¹	158,935	1,107,912	23,263	1,266,847	1,131,175
Veneer/Panel Roundwood	MCF	4,740	123,997	6,416	128,738	130,414
Pulpwood	ords	795,666	2,086,942	558,494	2,882,608	2,645,436
Posts, Poles, Pilings	MCF	1,609	3,599	0	5,208	3,599
ALL PRODUCTS	MCF	96,303	475,975	55,311	572,278	531,286

¹International ¼-inch rule.

Table 9. Texas Industrial Roundwood Products, 2005-2014

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	----- m. bd. ft ¹ -----			m. sq. ft.
2005	1,733,314	230,090	1,963,403	3,249,558
2006	1,676,461	240,214	1,916,676	2,935,637
2007	1,550,716	180,713	1,731,429	2,503,941
2008	1,406,103	213,191	1,619,293	2,204,544
2009	1,237,801	171,514	1,409,315	1,958,794
2010	1,188,294	139,389	1,327,683	1,881,763
2011	1,308,427	154,593	1,463,020	1,915,605
2012	1,291,578	118,823	1,410,401	2,049,084
2013	1,385,043	140,427	1,525,470	2,017,406
2014	1,444,203	104,089	1,548,292	2,348,023

¹Lumber tally.

Table 10. Texas Pulp and Paperboard Production, 2005-2014

Year	Pulp and Paperboard Products ¹
	tons
2005	2,512,262
2006	2,781,865
2007	2,788,308
2008	2,239,347
2009	2,050,681
2010	2,089,521
2011	2,071,405
2012	2,081,521
2013	2,168,403
2014	2,213,026

¹Includes fiberboard, paperboard, market pulp, and miscellaneous products.

Table 11. Products Treated by Texas Wood Preserving Plants, 2013-2014

Product	Unit of Measure	Volume by Specific Unit		Volume by Cubic Feet	
		2013	2014	2013	2014
Poles and pilings ¹	CF	4,171,839	3,820,370	4,171,839	3,820,370
Fence posts	number	2,190,840	1,960,602	1,928,710	1,726,020
Ties ²	CF	6,566,887	6,888,919	6,566,887	6,888,919
Lumber	MBF	323,878	296,221	26,989,803	24,685,075
Plywood/OSB	MSF	13,228	13,874	413,364	433,552
Other	CF	0	2,364	0	2,364
Total	CF	—	—	40,070,603	37,556,300

¹Includes utility poles, construction poles, and pilings.

²Includes cross ties, switch ties, and cross arms.

Table 12. Texas Primary Mill Residue, 2014¹

Residue Type	Pine	Hardwood	Total
	----- tons -----		
Chips ²	2,662,458	196,149	2,858,606
Sawdust	613,375	119,418	732,793
Shavings	324,633	23,038	347,670
Bark ³	1,446,516	466,917	1,913,433
Total	5,046,981	805,522	5,852,503

¹Primary mills include sawmills, structural panel mills, and chip mills.

²Does not include chips produced in chip mills.

³Includes bark from sawmills, panel mills, and chip mills.

Table 13. Industrial Roundwood Removal and Logging Residue by Product in East Texas, 2014

Product	Industrial Roundwood			Logging Residue			Total Volume		
	Pine	Hardwood	Total	Pine	Hardwood	Total	Pine	Hardwood	Total
	----- thousand tons -----			----- thousand tons -----			----- thousand tons -----		
Growing Stock									
Sawtimber	6,809.9	658.6	7,468.5	405.4	95.1	500.5	7,215.3	753.7	7,969.0
Poletimber	6,229.2	2,244.9	8,474.1	35.4	126.0	161.4	6,264.6	2,370.9	8,635.5
Sub-total	13,039.1	2,903.5	15,942.6	440.7	221.1	661.9	13,479.9	3,124.6	16,604.5
Non-growing Stock									
Sawtimber	129.7	12.1	141.8	802.8	156.2	959.0	932.5	168.2	1,100.8
Poletimber	833.5	200.1	1,033.6	652.9	442.5	1,095.4	1,486.4	642.6	2,129.0
Sub-total	963.3	212.2	1,175.4	1,455.7	598.7	2,054.4	2,418.9	810.9	3,229.8
All									
Sawtimber	6,939.7	670.7	7,610.3	1,208.2	251.3	1,459.5	8,147.8	922.0	9,069.8
Poletimber	7,062.7	2,445.0	9,507.7	688.2	568.6	1,256.8	7,751.0	3,013.5	10,764.5
Total	14,002.4	3,115.6	17,118.0	1,896.4	819.9	2,716.3	15,898.8	3,935.5	19,834.3

Note: Sawtimber includes sawlogs, chip-n-saw, veneer logs, and poles; poletimber includes pulpwood, panel roundwood, post, and piling. See documents from the Forest Inventory and Analysis (FIA) Program for definition of growing stock. The separation of industrial roundwood harvest by source was based upon wood utilization rates from the *East Texas Harvest and Utilization Study, 2008*.

Table 14. Removals of Industrial Roundwood and Growing Stock in East Texas, 1995-2014

Year	Pine		Hardwood		All	
	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock
	----- MMCF -----					
1995	523.5	515.2	143.1	144.8	666.6	660.1
1996	543.5	534.9	116.5	117.9	660.0	652.8
1997	557.5	548.7	118.4	119.8	675.9	668.5
1998	542.4	533.9	127.9	129.5	670.3	663.3
1999	541.4	532.9	157.9	159.8	699.3	692.7
2000	508.9	500.9	116.7	118.1	625.6	619.0
2001	488.5	480.8	111.6	113.0	600.1	593.8
2002	537.0	528.5	130.6	132.2	667.6	660.7
2003	542.1	533.6	126.1	127.6	668.2	661.2
2004	517.7	509.5	133.5	135.1	651.2	644.7
2005	564.3	555.4	137.2	138.9	701.5	694.3
2006	500.0	492.1	148.3	150.1	648.3	642.2
2007	501.2	490.7	127.6	128.6	628.8	619.3
2008	440.3	430.2	97.7	100.1	538.0	530.2
2009	396.4	382.6	83.4	86.3	479.8	468.8
2010	401.2	385.9	89.4	90.3	490.6	476.1
2011	392.7	378.0	78.6	80.5	471.3	458.5
2012	408.9	392.6	106.1	106.1	515.0	498.7
2013	419.6	402.0	102.0	102.4	521.5	504.4
2014	439.8	422.3	91.5	91.4	531.3	513.7

Note: Total industrial roundwood harvest includes harvest from both growing stock and non-growing stock. The growing stock removal was calculated using wood utilization rates from the *East Texas Harvest and Utilization Study, 2008*.

Table 15. Tree Planting by Ownership and Funding Source in Texas, 2005-2014

Year ¹	Family Forest										Industry ⁴	Public	Total
	Federal Cost Share Programs ²		Texas Reforestation Foundation (TRe)		All Cost Share Programs		Non-Cost Share ³	Total Acres					
	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Acres	Acres				
2005	11,713	1,267,815	1,061	117,997	12,774	1,385,811	20,522	33,296	69,712	593	103,601		
2006	10,034	1,317,024	398	41,896	10,432	1,358,920	16,278	26,710	64,457	863	92,030		
2007	12,497	2,073,855	2,912	187,917	15,409	2,261,772	21,820	37,229	67,910	797	105,936		
2008	15,585	1,004,163	1,040	78,174	16,625	1,082,337	9,335	25,960	59,764	822	86,546		
2009	17,152	746,763	0	0	17,152	746,763	13,639	30,791	81,067	564	112,422		
2010	16,255	1,569,178	0	0	16,255	1,569,178	5,919	22,174	70,577	555	93,306		
2011	22,338	2,060,568	0	0	22,338	2,060,568	5,522	27,860	59,554	473	87,887		
2012	23,299	2,172,624	0	0	23,299	2,172,624	4,913	28,212	65,867	402	94,481		
2013	29,818	3,130,118	0	0	29,818	3,130,118	6,709	36,527	101,671	872	139,070		
2014	27,008	2,750,446	0	0	27,008	2,750,446	7,716	34,724	95,306	941	130,971		

¹Federal fiscal year. For example, fiscal year 2005 begins on October 1, 2004 and ends on September 30, 2005.

²Includes Forestry Incentives Program (FIP), Stewardship Incentives Program (SIP), Environmental Quality Incentives Program (EQIP), Conservation Reserve Program (CRP), Forest Land Enhancement Program (FLEP), Emergency Forestry Conservation Reserve Program (EFCRP), Wetlands Reserve Program (WRP), Landowner Incentive Program (LIP), United States Fish and Wildlife Service (USFWS) Partners Program, and Wildlife Habitat Incentive Program (WHIP) accomplishments.

³Non-cost share acres include only family forest acres planted with TFS assistance.

⁴Acres for industry tree planting includes acres planted by Timber Investment Management Organizations (TIMOs) and timberland Real Estate Investment Trusts (REITs).

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