



Economic Contribution of Hardwood Products: State of Alabama

Sales of hardwood products added \$8.1 billion in value to the Alabama economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Alabama hardwood product output was valued at \$4.9 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$8.1 billion in economic output,
 - \$3.3 billion in gross state product (GSP), and
 - 46,478 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.7 jobs and \$0.40 million of GSP are supported within Alabama.

State of Alabama 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	16,081	\$1,018.5	\$2,710.5
Wood Preservation	2,746	\$279.1	\$798.6
Rail Ties	269	\$27.6	\$78.8
Hardwood Veneer and Plywood Manufacturing	4,066	\$282.8	\$765.2
Engineered wood member (except truss) manufacturing	323	\$21.0	\$57.8
Truss manufacturing	1,061	\$69.1	\$190.0
Wood Window and Door Manufacturing	1,444	\$112.2	\$270.4
Cut Stock, Re-sawing Lumber, and Planing	1,428	\$102.4	\$256.9
Millwork	2,073	\$147.6	\$367.5
Flooring	398	\$27.7	\$69.0
Wood Container and Pallet Manufacturing	2,508	\$166.6	\$389.6
All other Miscellaneous Wood Product Manufacturing	882	\$67.6	\$148.0
Wood Kitchen Cabinet and Countertop Manufacturing	8,537	\$557.3	\$1,228.3
Upholstered Household Furniture Manufacturing	294	\$22.7	\$57.9
Non-upholstered Wood Household Furniture Manufacturing	1,332	\$90.8	\$184.7
Institutional Furniture Manufacturing	547	\$40.8	\$96.1
Wood Office Furniture Manufacturing	371	\$36.4	\$75.2
Custom Architectural Woodwork and Millwork Manufacturing	353	\$27.6	\$56.5
Showcase, Partition, Shelving, and Locker Manufacturing	2,317	\$205.0	\$462.8
Blind and Shade Manufacturing	68	\$5.0	\$11.9
Total	46,478	\$3,252.6	\$8,127.9

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Alabama (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	21,753	\$1,148.8	\$1,581.4	\$4,963.9
Indirect Effect	14,168	\$636.5	\$920.4	\$1,814.1
Induced Effect	10,555	\$401.5	\$750.8	\$1,349.9
Total Effect	46,478	\$2,186.8	\$3,252.6	\$8,127.9

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees buying groceries. For example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Alabama state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of Arkansas

Sales of hardwood products added \$5.3 billion in value to the Arkansas economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Arkansas hardwood product output was valued at \$3.2 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$5.3 billion in economic output,
 - \$2.2 billion in gross state product (GSP), and
 - 28,563 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.4 jobs and \$0.41 million of GSP are supported within Arkansas.

State of Arkansas 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	12,511	\$912.2	\$2,286.5
Wood Preservation	1,245	\$148.9	\$393.2
Rail Ties	233	\$27.9	\$73.6
Hardwood Veneer and Plywood Manufacturing	2,600	\$212.7	\$529.3
Engineered wood member (except truss) manufacturing	195	\$11.7	\$34.5
Truss manufacturing	642	\$38.4	\$113.3
Wood Window and Door Manufacturing	451	\$34.9	\$85.6
Cut Stock, Re-sawing Lumber, and Planing	1,070	\$98.7	\$217.5
Millwork	2,182	\$195.2	\$423.8
Flooring	222	\$19.9	\$43.1
Wood Container and Pallet Manufacturing	1,370	\$88.4	\$212.5
All other Miscellaneous Wood Product Manufacturing	381	\$25.6	\$61.8
Wood Kitchen Cabinet and Countertop Manufacturing	1,436	\$77.4	\$191.9
Upholstered Household Furniture Manufacturing	997	\$71.6	\$191.6
Non-upholstered Wood Household Furniture Manufacturing	288	\$13.9	\$34.5
Institutional Furniture Manufacturing	1,802	\$128.4	\$310.0
Wood Office Furniture Manufacturing	97	\$7.7	\$17.9
Custom Architectural Woodwork and Millwork Manufacturing	321	\$23.0	\$49.4
Showcase, Partition, Shelving, and Locker Manufacturing	733	\$62.1	\$142.7
Blind and Shade Manufacturing	18	\$1.2	\$3.1
Total	28,563	\$2,172.0	\$5,342.3

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers¹, IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Arkansas (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	13,102	\$602.5	\$985.5	\$3,210.6
Indirect Effect	9,076	\$483.8	\$731.6	\$1,323.0
Induced Effect	6,385	\$237.5	\$454.9	\$808.7
Total Effect	28,563	\$1,323.8	\$2,172.0	\$5,342.3

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Arkansas state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of Indiana

Sales of hardwood products added \$10.9 billion in value to the Indiana economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Indiana hardwood product output was valued at \$6.8 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$10.9 billion in economic output,
 - \$4.5 billion in gross state product (GSP), and
 - 64,235 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.9 jobs and \$0.41 million of GSP are supported within Indiana.

State of Indiana 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	4,414	\$283.5	\$816.6
Wood Preservation	398	\$34.9	\$113.4
Rail Ties	352	\$30.9	\$100.5
Hardwood Veneer and Plywood Manufacturing	3,538	\$250.7	\$718.4
Engineered wood member (except truss) manufacturing	733	\$49.8	\$134.1
Truss manufacturing	2,408	\$163.5	\$440.4
Wood Window and Door Manufacturing	2,566	\$174.1	\$463.5
Cut Stock, Re-sawing Lumber, and Planing	1,009	\$69.9	\$185.0
Millwork	1,695	\$119.3	\$301.4
Flooring	1,049	\$72.3	\$182.5
Wood Container and Pallet Manufacturing	5,176	\$318.9	\$788.5
All other Miscellaneous Wood Product Manufacturing	2,540	\$166.4	\$405.9
Wood Kitchen Cabinet and Countertop Manufacturing	17,911	\$1,226.1	\$2,627.2
Upholstered Household Furniture Manufacturing	4,262	\$334.1	\$837.7
Non-upholstered Wood Household Furniture Manufacturing	2,488	\$171.3	\$346.3
Institutional Furniture Manufacturing	1,306	\$93.2	\$225.9
Wood Office Furniture Manufacturing	6,670	\$558.7	\$1,256.8
Custom Architectural Woodwork and Millwork Manufacturing	720	\$50.0	\$109.7
Showcase, Partition, Shelving, and Locker Manufacturing	4,442	\$335.6	\$838.5
Blind and Shade Manufacturing	910	\$58.0	\$145.7
Total	64,235	\$4,530.3	\$10,937.4

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Indiana (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	36,008	\$1,819.3	\$2,265.9	\$6,819.8
Indirect Effect	12,403	\$709.2	\$1,056.9	\$2,025.1
Induced Effect	15,825	\$683.2	\$1,207.5	\$2,092.5
Total Effect	64,235	\$3,211.7	\$4,530.30	\$10,937.4

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Indiana state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of Kentucky

Sales of hardwood products added \$5.0 billion in value to the Kentucky economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Kentucky hardwood product output was valued at \$3.0 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$5.0 billion in economic output,
 - \$1.9 billion in gross state product (GSP), and
 - 29,297 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.9 jobs and \$0.38 million of GSP are supported within Kentucky.

State of Kentucky 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	8,176	\$528.7	\$1,438.6
Wood Preservation	703	\$57.8	\$195.3
Rail Ties	390	\$32.5	\$109.4
Hardwood Veneer and Plywood Manufacturing	1,469	\$101.4	\$284.3
Engineered wood member (except truss) manufacturing	198	\$12.5	\$35.3
Truss manufacturing	651	\$41.2	\$116.1
Wood Window and Door Manufacturing	341	\$23.1	\$60.9
Cut Stock, Re-sawing Lumber, and Planing	1,795	\$123.4	\$324.7
Millwork	2,954	\$193.6	\$501.1
Flooring	1,827	\$118.2	\$309.9
Wood Container and Pallet Manufacturing	4,754	\$310.5	\$730.4
All other Miscellaneous Wood Product Manufacturing	740	\$48.0	\$116.5
Wood Kitchen Cabinet and Countertop Manufacturing	2,485	\$141.8	\$337.5
Upholstered Household Furniture Manufacturing	57	\$3.1	\$10.1
Non-upholstered Wood Household Furniture Manufacturing	366	\$18.5	\$44.5
Institutional Furniture Manufacturing	366	\$33.2	\$68.2
Wood Office Furniture Manufacturing	694	\$53.9	\$126.1
Custom Architectural Woodwork and Millwork Manufacturing	46	\$2.4	\$6.3
Showcase, Partition, Shelving, and Locker Manufacturing	1,626	\$109.7	\$290.7
Blind and Shade Manufacturing	47	\$2.8	\$7.6
Total	29,297	\$1,923.8	\$5,004.2

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Kentucky (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	14,862	\$639.1	\$748.4	\$3,003.4
Indirect Effect	7,051	\$384.3	\$553.5	\$1,005.3
Induced Effect	7,384	\$242.3	\$621.9	\$965.5
Total Effect	29,297	\$1,265.7	\$1,923.8	\$5,004.2

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Kentucky state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of Missouri

Sales of hardwood products added \$5.6 billion in value to the Missouri economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Missouri hardwood product output was valued at \$3.1 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$5.6 billion in economic output,
 - \$2.4 billion in gross state product (GSP), and
 - 33,162 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.9 jobs and \$0.42 million of GSP are supported within Missouri.

State of Missouri 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	8,802	\$611.7	\$1,566.7
Wood Preservation	506	\$46.4	\$138.0
Rail Ties	346	\$31.8	\$94.6
Hardwood Veneer and Plywood Manufacturing	11	\$0.9	\$2.2
Engineered wood member (except truss) manufacturing	281	\$20.0	\$51.1
Truss manufacturing	923	\$65.8	\$167.7
Wood Window and Door Manufacturing	328	\$25.6	\$60.5
Cut Stock, Re-sawing Lumber, and Planing	1,280	\$90.4	\$229.3
Millwork	1,612	\$125.2	\$288.7
Flooring	997	\$77.5	\$178.5
Wood Container and Pallet Manufacturing	5,014	\$356.3	\$794.0
All other Miscellaneous Wood Product Manufacturing	630	\$42.5	\$100.5
Wood Kitchen Cabinet and Countertop Manufacturing	5,701	\$361.9	\$805.6
Upholstered Household Furniture Manufacturing	1,661	\$121.2	\$313.2
Non-upholstered Wood Household Furniture Manufacturing	547	\$39.9	\$78.1
Institutional Furniture Manufacturing	752	\$55.7	\$128.8
Wood Office Furniture Manufacturing	545	\$41.6	\$97.1
Custom Architectural Woodwork and Millwork Manufacturing	679	\$45.8	\$101.3
Showcase, Partition, Shelving, and Locker Manufacturing	2,876	\$224.6	\$529.0
Blind and Shade Manufacturing	18	\$0.9	\$2.7
Total	33,162	\$2,354.0	\$5,633.2

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Missouri (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	16,346	\$752.7	\$948.6	\$3,149.9
Indirect Effect	8,278	\$516.2	\$749.6	\$1,320.9
Induced Effect	8,538	\$361.7	\$655.8	\$1,161.4
Total Effect	33,162	\$1,630.6	\$2,354.0	\$5,633.2

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Missouri state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of South Carolina

Sales of hardwood products added \$4.1 billion in value to the South Carolina economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, South Carolina hardwood product output was valued at \$2.5 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$4.1 billion in economic output,
 - \$1.6 billion in gross state product (GSP), and
 - 22,281 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.5 jobs and \$0.40 million of GSP are supported within South Carolina.

State of South Carolina 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	6,830	\$461.2	\$1,165.5
Wood Preservation	1,844	\$196.5	\$544.2
Rail Ties	210	\$22.3	\$61.9
Hardwood Veneer and Plywood Manufacturing	3,883	\$281.0	\$734.6
Engineered wood member (except truss) manufacturing	192	\$12.6	\$34.2
Truss manufacturing	630	\$41.4	\$112.3
Wood Window and Door Manufacturing	938	\$75.0	\$177.1
Cut Stock, Re-sawing Lumber, and Planing	332	\$21.7	\$58.1
Millwork	692	\$51.0	\$122.3
Flooring	428	\$31.5	\$75.6
Wood Container and Pallet Manufacturing	1,751	\$103.3	\$260.1
All other Miscellaneous Wood Product Manufacturing	941	\$69.6	\$155.6
Wood Kitchen Cabinet and Countertop Manufacturing	2,329	\$156.0	\$339.4
Upholstered Household Furniture Manufacturing	99	\$7.6	\$19.7
Non-upholstered Wood Household Furniture Manufacturing	231	\$19.2	\$35.5
Institutional Furniture Manufacturing	91	\$6.6	\$15.9
Wood Office Furniture Manufacturing	47	\$5.4	\$10.3
Custom Architectural Woodwork and Millwork Manufacturing	157	\$12.6	\$25.6
Showcase, Partition, Shelving, and Locker Manufacturing	781	\$84.9	\$170.1
Blind and Shade Manufacturing	85	\$5.7	\$14.5
Total	22,281	\$1,642.6	\$4,070.4

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of South Carolina (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	10,007	\$487.6	\$779.2	\$2,475.0
Indirect Effect	7,228	\$344.4	\$502.5	\$954.8
Induced Effect	5,044	\$192.9	\$361.0	\$640.6
Total Effect	22,281	\$1,024.9	\$1,642.6	\$4,070.4

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the South Carolina state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: State of Tennessee

Sales of hardwood products added \$6.6 billion in value to the Tennessee economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, Tennessee hardwood product output was valued at \$3.9 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$6.6 billion in economic output,
 - \$2.7 billion in gross state product (GSP), and
 - 38,435 jobs in the state economy.

For every \$1 million in output of hardwood products, 5.8 jobs and \$0.40 million of GSP are supported within Tennessee.

State of Tennessee 2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	Gross State Product (\$ millions)	Output (\$ millions)
Sawmills	8,894	\$566.0	\$1,543.0
Wood Preservation	360	\$35.0	\$102.2
Rail Ties	242	\$23.5	\$68.7
Hardwood Veneer and Plywood Manufacturing	229	\$14.8	\$43.0
Engineered wood member (except truss) manufacturing	336	\$24.5	\$61.7
Truss manufacturing	1,102	\$80.3	\$202.8
Wood Window and Door Manufacturing	1,809	\$152.2	\$347.4
Cut Stock, Re-sawing Lumber, and Planing	984	\$76.5	\$184.0
Millwork	2,068	\$156.2	\$371.0
Flooring	1,041	\$78.7	\$186.8
Wood Container and Pallet Manufacturing	4,161	\$286.7	\$655.6
All other Miscellaneous Wood Product Manufacturing	1,378	\$93.5	\$221.6
Wood Kitchen Cabinet and Countertop Manufacturing	3,494	\$218.8	\$491.9
Upholstered Household Furniture Manufacturing	7,249	\$505.6	\$1,351.6
Non-upholstered Wood Household Furniture Manufacturing	1,022	\$63.0	\$135.0
Institutional Furniture Manufacturing	1,027	\$70.4	\$171.8
Wood Office Furniture Manufacturing	213	\$13.6	\$35.8
Custom Architectural Woodwork and Millwork Manufacturing	666	\$47.1	\$101.2
Showcase, Partition, Shelving, and Locker Manufacturing	2,298	\$167.8	\$415.2
Blind and Shade Manufacturing	105	\$6.2	\$17.0
Total	38,435	\$2,657.0	\$6,638.7

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.
Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: State of Tennessee (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GSP (\$ millions)	Output (\$ millions)
Direct Effect	19,433	\$906.8	\$1,129.3	\$3,877.0
Indirect Effect	9,778	\$515.4	\$796.8	\$1,501.7
Induced Effect	9,224	\$441.9	\$730.9	\$1,260.1
Total Effect	38,435	\$1,864.0	\$2,657.0	\$6,638.7

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the Tennessee state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.



Economic Contribution of Hardwood Products: United States

Sales of hardwood products added \$394.0 billion in value to the United States economy in 2016, according to an Agribusiness Consulting study commissioned by the U.S. Hardwood Federation.

Economic Contribution Results

- In 2016, United States hardwood product output was valued at \$152.6 billion
- The economic “ripple effects” of these hardwood products supported:
 - \$394.0 billion in economic output,
 - \$177.5 billion in gross domestic product (GDP), and
 - 2,086,062 jobs in the national economy.

For every \$1 million in output of hardwood products, 5.3 jobs and \$0.45 million of GDP are supported within United States.

United States			
2016 Economic Contribution ¹ Provided by Select Hardwood Products			
Sector	Jobs (#)	GDP (\$ millions)	Output (\$ millions)
Sawmills	387,035	\$31,340.4	\$70,211.7
Wood Preservation	48,425	\$5,520.3	\$13,520.7
Rail Ties	19,302	\$2,200.4	\$5,389.4
Hardwood Veneer and Plywood Manufacturing	116,480	\$10,390.0	\$23,857.1
Engineered wood member (except truss) manufacturing	22,790	\$1,896.3	\$4,405.8
Truss manufacturing	74,843	\$6,227.5	\$14,468.5
Wood Window and Door Manufacturing	151,854	\$14,051.3	\$30,723.5
Cut Stock, Re-sawing Lumber, and Planing	46,079	\$4,085.1	\$8,972.5
Millwork	74,185	\$6,510.1	\$14,055.9
Flooring	44,913	\$3,941.4	\$8,509.8
Wood Container and Pallet Manufacturing	155,435	\$12,549.4	\$27,285.3
All other Miscellaneous Wood Product Manufacturing	74,532	\$6,226.8	\$13,291.4
Wood Kitchen Cabinet and Countertop Manufacturing	298,934	\$23,120.1	\$49,309.0
Upholstered Household Furniture Manufacturing	170,110	\$14,599.3	\$34,964.4
Non-upholstered Wood Household Furniture Manufacturing	74,547	\$5,711.1	\$11,805.1
Institutional Furniture Manufacturing	69,116	\$6,185.5	\$13,591.3
Wood Office Furniture Manufacturing	52,066	\$4,930.4	\$10,423.9
Custom Architectural Woodwork and Millwork Manufacturing	54,543	\$4,760.0	\$9,683.9
Showcase, Partition, Shelving, and Locker Manufacturing	135,945	\$12,453.6	\$28,127.7
Blind and Shade Manufacturing	34,229	\$2,960.3	\$6,759.8
Total	2,086,062	\$177,458.9	\$393,967.3
Exports	206,020	\$17,821.0	\$39,842.7

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.

Source: U.S. Economic Census, Annual Survey of Manufacturers', IMPLAN and Agribusiness Consulting

Economic Contribution of Hardwood Products: United States (Continued)

About the Study

This study investigated the economic contribution from the output of hardwood industries, including sawmills wood preservation, veneer and plywood manufacturing, engineered wood member manufacturing, truss manufacturing, wood window and door manufacturing, cut stock, re-sawing lumber and planing, other millwork (including flooring), wood container and pallet manufacturing, miscellaneous wood product manufacturing, wood kitchen cabinet and countertop manufacturing, upholstered household furniture manufacturing, non-upholstered wood household furniture manufacturing, institutional furniture manufacturing, wood office furniture manufacturing, custom architectural woodwork and millwork manufacturing, showcase, partition, shelving, and locker manufacturing, and blind and shade manufacturing.

IMPLAN Summary Results Table

Impact Type	Jobs (#)	Labor Income (\$ millions)	GDP (\$ millions)	Output (\$ millions)
Direct Effect	748,412	\$38,113.1	\$49,041.7	\$152,593.5
Indirect Effect	612,340	\$40,748.7	\$62,718.4	\$123,891.2
Induced Effect	725,310	\$36,942.4	\$65,698.9	\$117,482.6
Total Effect	2,086,062	\$115,804.2	\$177,458.9	\$393,967.3

Economic Impacts

This study analyzed the economic contribution of the hardwood industry by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits producers directly received in the form of additional sales. Indirect impacts are realized by businesses supporting the hardwood industry, like industrial loggers and transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, sawmill employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how the hardwood industry supports the United States economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Labor Income is the total value of all employment income, including employee compensation and proprietor income.
- Gross Domestic Product (GDP) is the total value added by each step in the supply chain. The GDP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the production of hardwood products.