2023 U.S. Forestry Economic Contribution by State

Arkansas Center for Forest Business College of Forestry, Agriculture, and Natural Resources University of Arkansas at Monticello

December 2023

Arkansas Center for Forest Business College of Forestry, Agriculture, and Natural Resources University of Arkansas at Monticello 346 University Dr. Monticello, AR 71656 www.uamont.edu/academics/CFANR/acfb.html 2023 U.S. Forestry Economic Contribution by State



You may request additional copies of this publication by e-mail at forestbusiness@uamont.edu.

December 2023

Greetings from the University of Arkansas at Monticello!

Forests are an essential part of the "American Experience" and people depend on forests and forest products to sustain and enrich their lives. Here, in the "Natural State" of Arkansas, and on the "Most Natural College Campus in Arkansas", we share that reliance and love for forests.

This report documents the economic contributions of the forest industry to each state in the United States. Each state has a one-page (front and back) summary of the forest products industry and some general information on the forests of the state.

It is our hope that this report stimulates interest and discussion about the forest products industry in your state, and that you might be surprised with the amount of forestry that exists in your state.

This report was developed by the Arkansas Center for Forest Business and we hope you find it useful in understanding the importance the forest industry plays in your state.

Sincerely,

Dr. Peggy Doss, Chancellor University of Arkansas at Monticello

Dr. Michel Blazier, Dean College of Forestry, Agriculture, and Natural Resources

Latthew Gelkhi

Dr. Matthew Pelkki, Director Arkansas Center for Forest Business

Acknowledgements

The Arkansas Center for Forest Business works with many agencies and private organizations, and many of them have been helpful in producing and reviewing this report. We would like to mention Ken Bragg of Sheridan, Arkansas, who spearheaded the effort to fund the Center in the Arkansas State Assembly. The support and friendship of the Timber Caucus in the State Assembly, notably Senator Ben Gilmore, Representative Howard Beaty, Jeff Wardlaw, and Matt Stone is invaluable for the success of the Center. We also thank Congressman Bruce Westerman of the Arkansas Fourth Congressional District for his consistent and exemplary service to the science and practice of forestry.

Dr. Philip Tappe, dean emeritus of the College of Agriculture, Forestry, and Natural Resources developed the concept of the Arkansas Center for Forest Business, and Chancellor Peggy Doss and Vice Chancellor Jeff Weaver were instrumental in communicating with the Arkansas State Assembly and Governor regarding the establishment of the Arkansas Center for Forest Business.

Special thanks to Governor Asa Hutchinson, who provided funds to start up the Center as well as signed the legislation that provided continued funding for the Center. And thanks to Governor Sarah Huckabee-Sanders for her continued support of the forest industry and the forest landowners of Arkansas.

And lastly, proper credit must go to Ana Gutierrez, a Research Specialist in the Arkansas Center for Forest Business. Much of the data organization and presentation of the data is Ms. Gutierrez original work; she went above and beyond all expectations in her work on this project.

Fast Facts

U.S. Forests

- Forests cover 663.7 million acres of land (29.3%) of the 50 states and the District of Columbia.
- The area of forest land has been relatively constant over the last century.
- Trees in the forests of the United States are getting larger.
- Each year, U.S. forests grow 58% more wood than is harvested.
- U.S. forests currently store 68 billion tons of CO₂e- more than 14 years of all CO₂ emissions in the U.S.
- Every year, U.S. forests accumulate 277 million tons of CO₂e– enough to sequester the emissions of 20% of all automobiles in the U.S.
- Annually, U.S. industrial roundwood (log) production can fill more than 16 million log trucks which could form a line long enough to reach to the moon and back more than 8 times.
- The United States produces 19% of the industrial wood used worldwide and consumes 18% of industrial wood material.

Forest Industry's Economic Contribution to the U.S.

- 3.4 million people employed
- \$254 billion in labor income
- \$427.3 billion in GDP

U.S. States

- Within every state is a forest industry.
- All 50 states have forest land and the District of Columbia has urban forest.
- California has 31,607,053 acres of forest land (49,386 square miles), the most of any state.
- California employs 84,246 people, the most of any state.
- Massachusetts has the highest annual per capita labor income in forestry at \$122,165.

Table of Contents

Acknowledgements	
Fast Facts	
How to Read a Report	
United States	
Alabama	
Alaska	
Arizona	
Arkansas	
California	
Colorado	
Connecticut	
Delaware	
District of Columbia	
Florida	
Georgia	
Hawaii	
Idaho	
Illinois	
Indiana	
lowa	
Kansas	
Kentucky	
Louisiana	
Maine	
Maryland	
Massachusetts	
Michigan	
Minnesota	
Mississippi	
Missouri	

Montana	 113
Nebraska	 117
Nevada	 121
New Hampshire	 125
New Jersey	 129
New Mexico	 133
New York	 137
North Carolina	 141
North Dakota	 145
Ohio	 149
Oklahoma	 153
Oregon	 157
Pennsylvania	 161
Rhode Island	 165
South Carolina	 169
South Dakota	 173
Tennessee	 177
Texas	 181
Utah	 185
Vermont	 189
Virginia	 193
Washington	 197
West Virginia	 201
Wisconsin	 205
Wyoming	 209
Methods	 213
Glossary	 217
References	 223
Arkansas Center for	 225
Forest Business Arkansas Center for Forest Business Staff	 225

How to Read a Report

In each report, you will find on the **front of the report** a summary of the economic contributions of forestry within that state. Detailed information on data sources and specific data calculations can be found in the Methods section that follows the state reports.

Direct Contributions are data for those industries that are directly in forestry sectors, such as sawmills, paper mills, and furniture manufacturing. The statistics provided are:

- **1. Employment:** The total number of employees (including owners) of forestry businesses.
- 2. Labor income: The total wages paid to hourly and salaried employees and profits to owners.
- Value-added/GDP: Value-added is the sum of all economic activity that includes labor income, property income, and taxes on production and imports (net of subsidies). Value-added is analogous to GDP but calculated differently.

Below direct contributions are the additional economic contributions or "multiplier effects" in each state [4, 5, and 6]. These are the economic effects of associated industries that directly interact with forestry sectors, known as indirect effects, and household spending from forestry and associated industries in the economy, known as induced effects. Adding the direct effects and the economic multipliers results in the total contribution of forestry to the state's economy [7, 8, and 9].

Finally, on the front page is the ranking of the state based on its economic dependence on the forest industry. "Economic dependence" is the percentage of all forestry contributions relative to the entire economic activity of the state [10]. Each state and the District of Columbia is ranked from #1 to #51.

On the **back of the report**, you will find a summary of forests located in the state:

- **11. Total forest area:** the acres and percent of all forestland as defined by the USDA Forest Service within that state and the ranking of that area among all 50 states and the District of Columbia.
- **12. Forest ownership:** The breakdown of ownership of forests by federal, state/local government, and private corporations, groups, and individuals.
- **13. Forest area by general forest type:** the percentage of total forest area by general forest types.

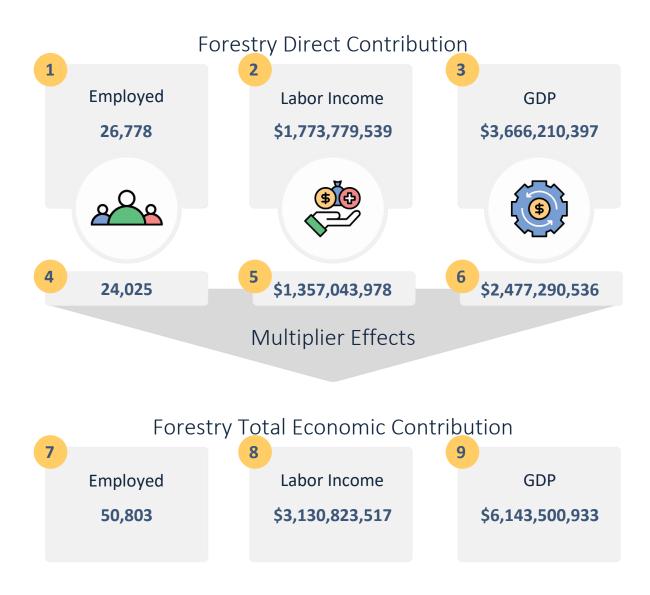
Lastly, the report provides direct effects by major forestry sectors in the state [14]:

- Forestry
- Logging
- Wood Energy (Electrical Energy Generation from Biomass)
- Solid Wood Products
- Pulp and Paper
- Furniture

On the next page is the state of Arkansas and below is an example of how to interpret this report.

- **1.** In Arkansas, 26,778 people are directly employed in forestry, logging, sawmills, paper mills, and furniture manufacturing.
- 2. The total income paid to hourly and salaried workers, as well as income paid to proprietors of forest industry businesses is \$1,773,779,539 annually.
- **3.** The total gross domestic product (GDP) or value-added of forestry businesses in the state is \$3,666,210,397.
- **4.** The forest industry supports an additional 24,025 jobs in the state in associated industries and from household spending on goods and services in the economy of the state.
- **5.** The forest industry supports an additional \$1,357,043,978 of labor income in associated industries and from household spending by forestry and association industries.
- **6.** Similarly, the forest industry supports an additional \$2,477,290,536 of GDP from associated industries and household spending in the state.
- 7. The total economic contribution in terms of jobs is 26,778 + 24,025 = 50,803.
- **8.** The total labor income contribution of is \$1,773,779,539 + \$1,357,043,978 = \$3,130,823,517 in the state annually.
- **9.** The total economic contribution in terms of GDP is \$3,666,210,397 + \$2,477,290,536 = \$6,143,500,933.
- **10.** Arkansas has the 2nd highest dependence on forest industries of all states.
- **11.** Arkansas has 18,866,902 acres of forest land, corresponding to 56.6% of the state's total area, and ranks 14th in forest area among all 50 states and the District of Columbia.
- **12.** Eighty percent of the forests in Arkansas are privately owned, with federal land making up most of the remaining 20%. State and local governments own only 3% of the forest land.
- **13.** The forests in Arkansas are largely upland hardwoods like oaks and hickory (39%), pine, (33%), and smaller amounts of bottomland hardwoods like elm, ash, gum, and cottonwood (16%).
- **14.** This is the breakdown of the forest industry by major categories. Solid wood products and pulp and paper are the major employers and economic drivers in the forestry sector in the Arkansas.

Arkansas

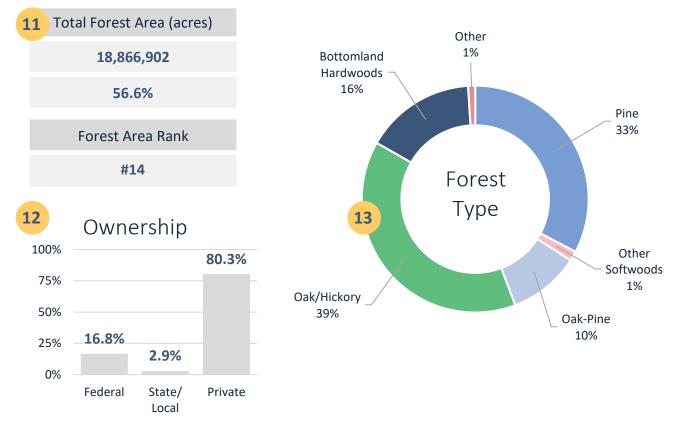


Economic Dependence on Forestry



Arkansas

Forest Resources



Industry Details

14	Employment	Labor Income	GDP
Forestry	565	\$33,554,842	\$35,498,475
Logging	3,591	\$186,839,054	\$193,313,467
Wood Energy	0	\$0	\$0
Solid Wood Products	10,507	\$656,947,997	\$1,860,242,679
Pulp and Paper	8,618	\$737,658,965	\$1,387,079,735
Furniture	3,498	\$158,778,680	\$190,076,041
Totals	26,778	\$1,773,779,539	\$3,666,210,397

UNITED STATES

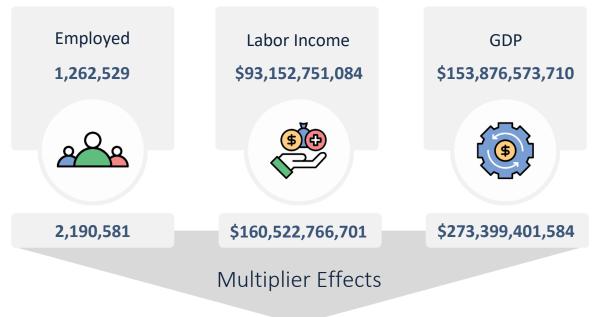
Forestry Economic Contributions



Arkansas Center for Forest Business

United States

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
3,453,111	\$253,675,517,785	\$427,275,975,293



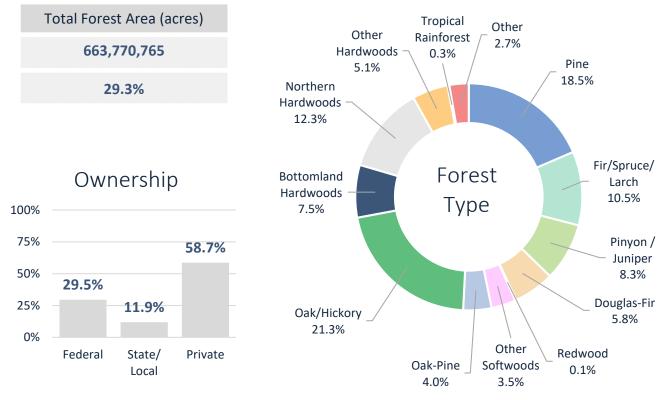
Economic Dependence on Forestry

In 2021, the GDP of the United States was **\$23.3 trillion**. The forestry contributions during the same year were **\$427.3 billion**, or **1.8%** of the total GDP of the United States.



United States





Industry Details

	Employment	Labor Income	GDP
Forestry	21,356	\$1,600,080,061	\$1,728,479,111
Logging	109,332	\$6,629,224,742	\$6,763,262,519
Wood Energy	2,269	\$401,789,882	\$1,329,525,066
Solid Wood Products	445,944	\$30,290,344,779	\$59,588,214,627
Pulp and Paper	354,854	\$35,326,934,195	\$61,572,450,193
Furniture	328,775	\$18,904,377,425	\$22,894,642,193
Totals	1,262,529	\$93,152,751,084	\$153,876,573,710





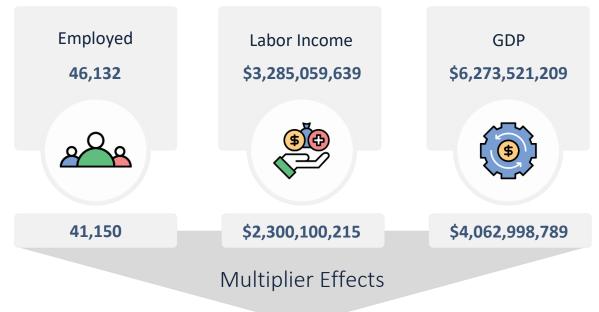
Forestry Economic Contributions



Arkansas Center for Forest Business

Alabama

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
87,282	\$5,585,159,854	\$10,336,519,998

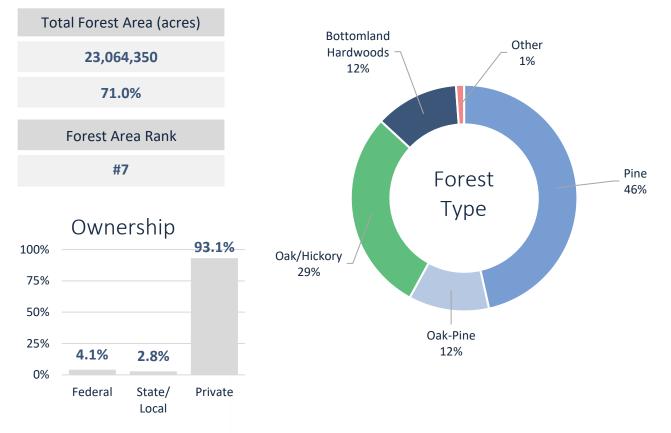
Economic Dependence on Forestry





Alabama

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	710	\$39,546,393	\$40,593,395
Logging	5,876	\$297,172,265	\$292,203,432
Wood Energy	34	\$5,099,946	\$16,440,938
Solid Wood Products	19,399	\$1,289,161,811	\$2,715,569,175
Pulp and Paper	11,256	\$1,185,415,707	\$2,447,951,665
Furniture	8,858	\$468,663,516	\$760,762,604
Totals	46,132	\$3,285,059,639	\$6,273,521,209

✓ forestbusiness@uamont.edu
 ⊕ www.uamont.edu/academics/CFANR/acfb.html
 12





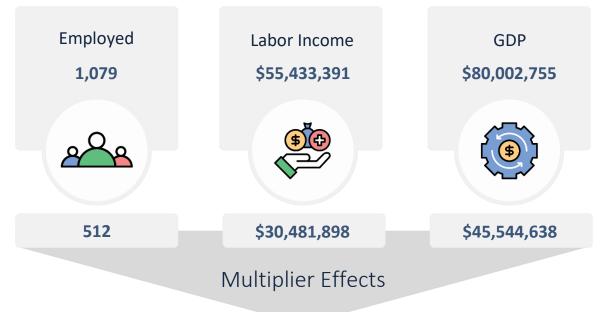
Forestry Economic Contributions



Arkansas Center for Forest Business

Alaska

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
1,591	\$85,915,289	\$125,547,394

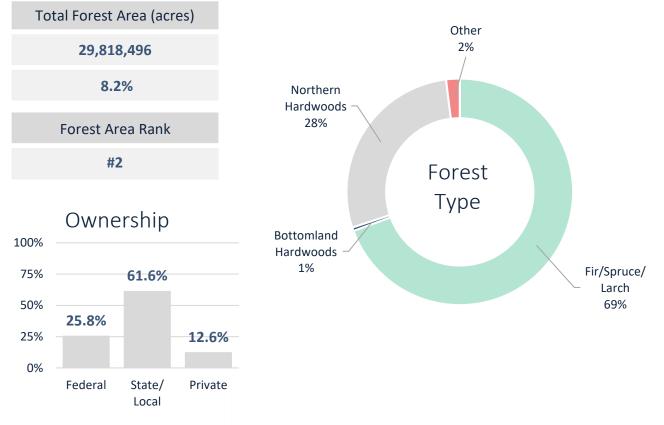
Economic Dependence on Forestry





Alaska

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	67	\$6,821,445	\$5,650,567
Logging	409	\$31,228,868	\$15,756,957
Wood Energy	9	\$1,196,174	\$2,971,255
Solid Wood Products	460	\$12,567,910	\$45,307,312
Pulp and Paper	14	\$1,096,811	\$617,814
Furniture	120	\$2,522,183	\$9,698,851
Totals	1,079	\$55,433,391	\$80,002,755

16





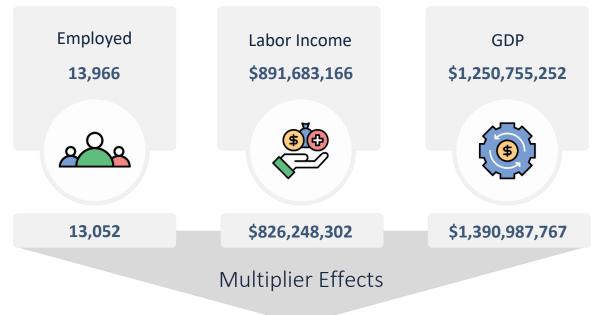
Forestry Economic Contributions



Arkansas Center for Forest Business

Arizona

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
27,018	\$1,717,931,468	\$2,641,743,019

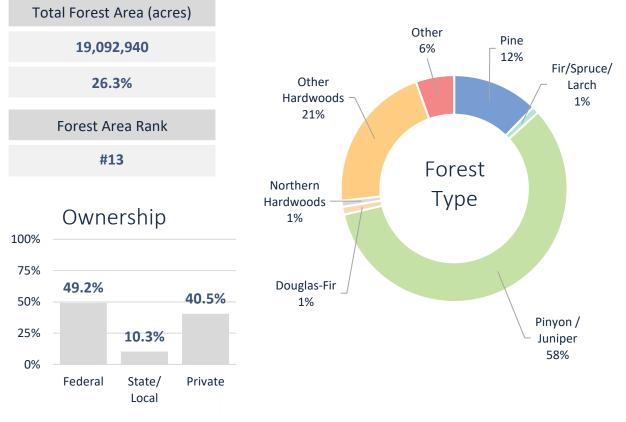
Economic Dependence on Forestry





Arizona

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	320	\$21,989,309	\$24,994,531
Logging	478	\$28,360,941	\$32,646,139
Wood Energy	44	\$5,598,469	\$21,537,355
Solid Wood Products	5,303	\$378,268,274	\$539,742,736
Pulp and Paper	2,536	\$197,460,912	\$305,667,600
Furniture	5,285	\$260,005,260	\$326,166,890
Totals	13,966	\$891,683,166	\$1,250,755,252





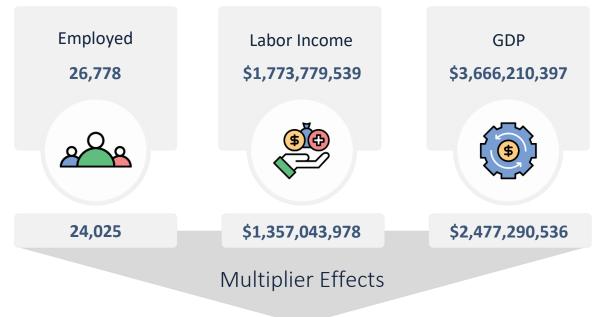
Forestry Economic Contributions



Arkansas Center for Forest Business

Arkansas

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
50,803	\$3,130,823,517	\$6,143,500,933

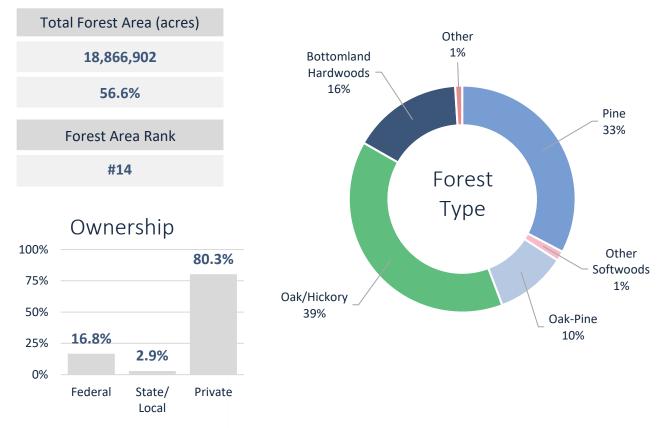
Economic Dependence on Forestry





Arkansas

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	565	\$33,554,842	\$35,498,475
Logging	3,591	\$186,839,054	\$193,313,467
Wood Energy	0	\$0	\$ 0
Solid Wood Products	10,507	\$656,947,997	\$1,860,242,679
Pulp and Paper	8,618	\$737,658,965	\$1,387,079,735
Furniture	3,498	\$158,778,680	\$190,076,041
Totals	26,778	\$1,773,779,539	\$3,666,210,397

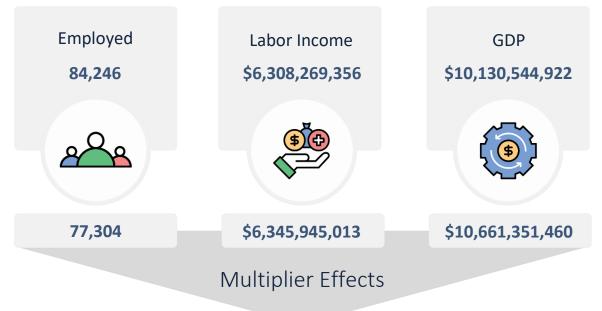






California

Forestry Direct Contribution



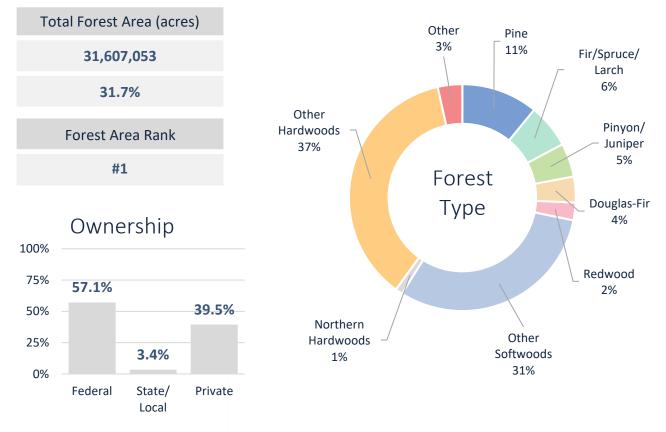
Forestry Total Economic Contribution

Employed	Labor Income	GDP
161,550	\$12,654,214,368	\$20,791,896,381



California

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	1,698	\$187,049,397	\$204,545,182
Logging	5,220	\$461,488,517	\$491,701,393
Wood Energy	388	\$105,374,584	\$279,796,319
Solid Wood Products	29,713	\$1,869,274,646	\$3,793,615,402
Pulp and Paper	20,342	\$1,960,983,945	\$3,265,042,853
Furniture	26,885	\$1,724,098,266	\$2,095,843,772
Totals	84,246	\$6,308,269,356	\$10,130,544,922

forestbusiness@uamont.edu
 www.uamont.edu/academics/CFANR/acfb.html



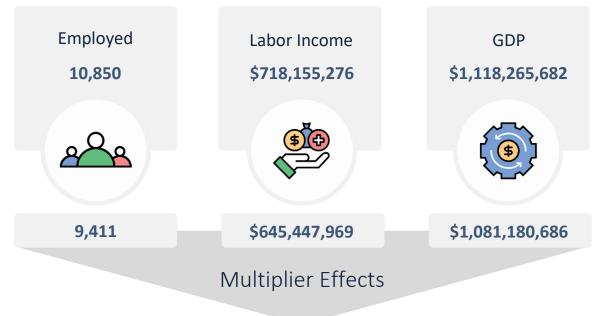
28





Colorado

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
20,261	\$1,363,603,245	\$2,199,446,368

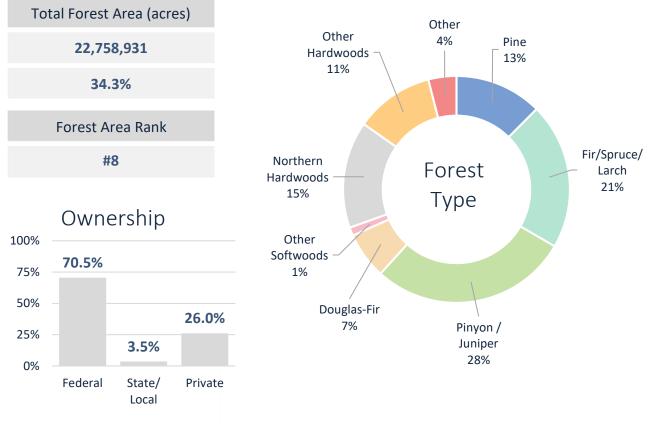
Economic Dependence on Forestry





Colorado

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	284	\$18,866,866	\$21,655,067
Logging	790	\$28,900,869	\$33,625,460
Wood Energy	12	\$2,261,610	\$6,561,646
Solid Wood Products	4,412	\$253,210,730	\$531,413,661
Pulp and Paper	1,271	\$182,534,308	\$204,103,315
Furniture	4,081	\$232,380,893	\$320,906,533
Totals	10,850	\$718,155,276	\$1,118,265,682

✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html



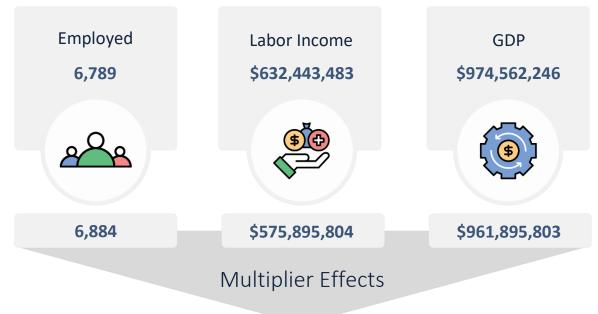
CONNECTICUT

Forestry Economic Contributions



Connecticut

Forestry Direct Contribution



Forestry Total Economic Contribution

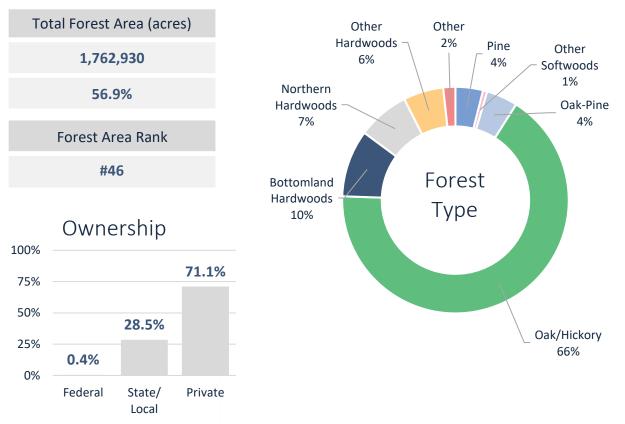
Employed	Labor Income	GDP
13,673	\$1,208,339,287	\$1,936,458,049

Economic Dependence on Forestry





Connecticut



Forest Resources

Industry Details

	Employment	Labor Income	GDP
Forestry	106	\$11,235,598	\$12,342,494
Logging	323	\$11,546,143	\$12,899,156
Wood Energy	106	\$25,850,007	\$85,881,568
Solid Wood Products	1,357	\$75,130,883	\$116,806,177
Pulp and Paper	2,997	\$375,358,033	\$603,648,228
Furniture	1,899	\$133,322,820	\$142,984,622
Totals	6,789	\$632,443,483	\$974,562,246

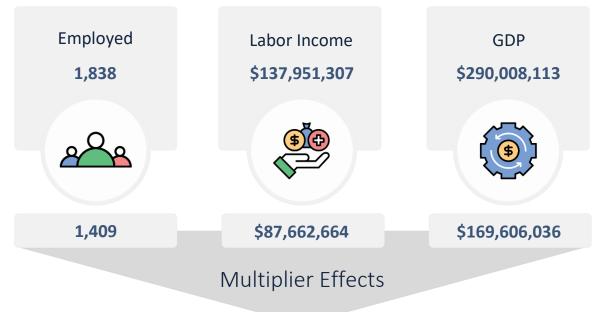






Delaware

Forestry Direct Contribution



Forestry Total Economic Contribution

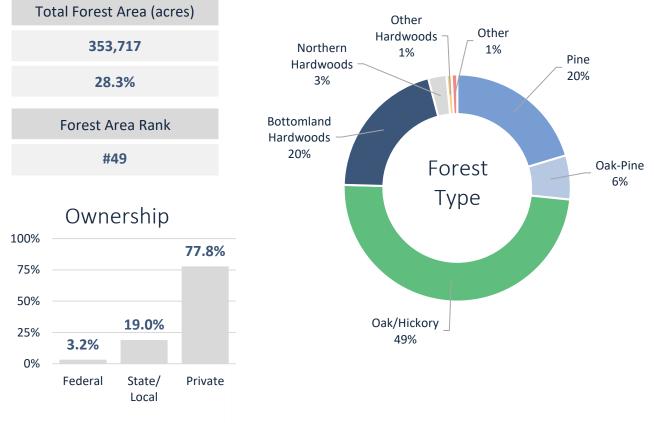
Employed	Labor Income	GDP
3,247	\$225,613,971	\$459,614,150





Delaware

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	30	\$2,339,520	\$2,857,458
Logging	47	\$5,169,297	\$5,828,257
Wood Energy	0	\$0	\$ O
Solid Wood Products	365	\$26,201,496	\$38,217,109
Pulp and Paper	736	\$64,970,209	\$200,055,123
Furniture	662	\$39,270,785	\$43,050,166
Totals	1,838	\$137,951,307	\$290,008,113



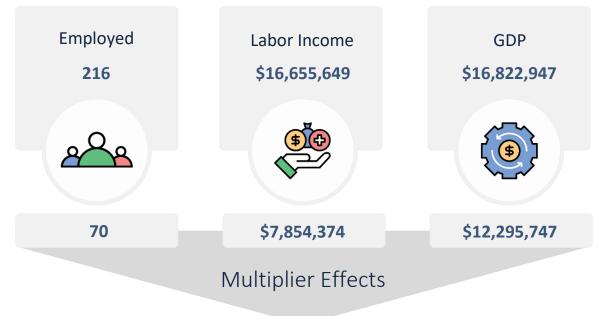
DISTRICT OF COLUMBIA

Forestry Economic Contributions



District of Columbia

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
286	\$24,510,023	\$29,118,694

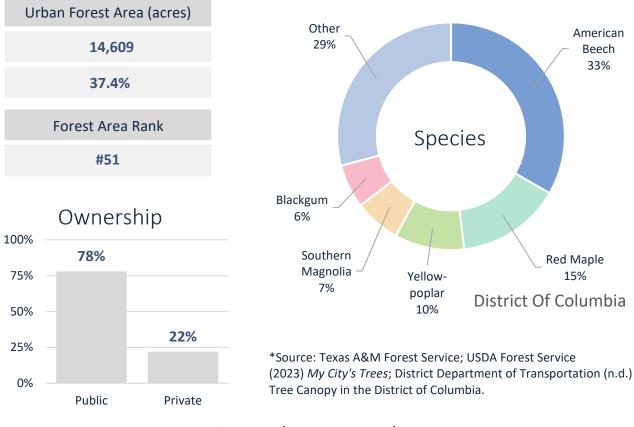
Economic Dependence on Forestry

#51 The District of Columbia ranks 51st out of the 50 U.S. states and the District of Columbia, with forestry contributing 0.02% to its total GDP.



District of Columbia

Urban Forest Resources*



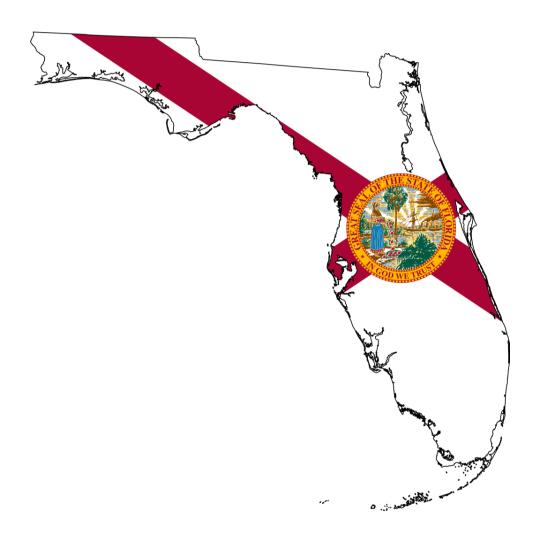
Industry Details

	Employment	Labor Income	GDP
Forestry	1	\$84,853	\$102,388
Logging	15	\$5,220,472	\$5,327,979
Wood Energy	0	\$0	\$0
Solid Wood Products	37	\$1,098,490	\$1,056,900
Pulp and Paper	33	\$6,368,361	\$833,949
Furniture	131	\$3,883,474	\$9,501,730
Totals	216	\$16,655,649	\$16,822,947

✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html

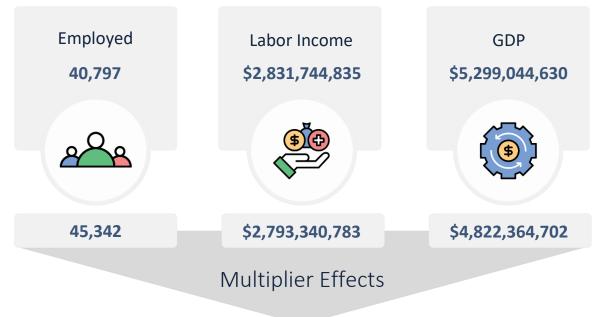






Florida

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
86,139	\$5,625,085,618	\$10,121,409,332

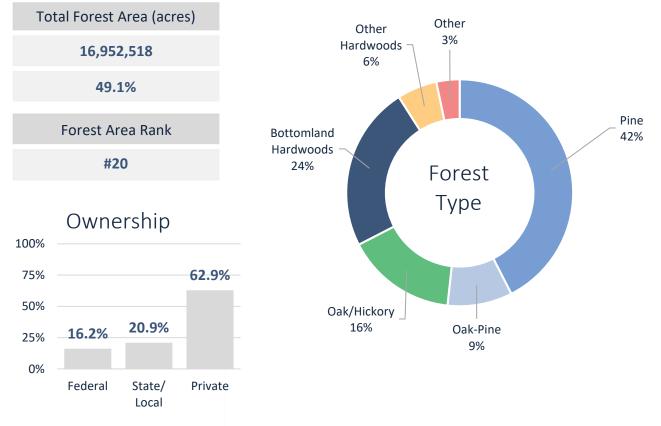
Economic Dependence on Forestry





Florida

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	1,384	\$86,063,500	\$95,701,602
Logging	3,670	\$204,906,702	\$217,221,743
Wood Energy	170	\$28,367,070	\$121,890,451
Solid Wood Products	15,552	\$1,048,907,468	\$2,580,842,808
Pulp and Paper	8,594	\$823,657,046	\$1,613,408,066
Furniture	11,427	\$639,843,049	\$669,979,960
Totals	40,797	\$2,831,744,835	\$5,299,044,630

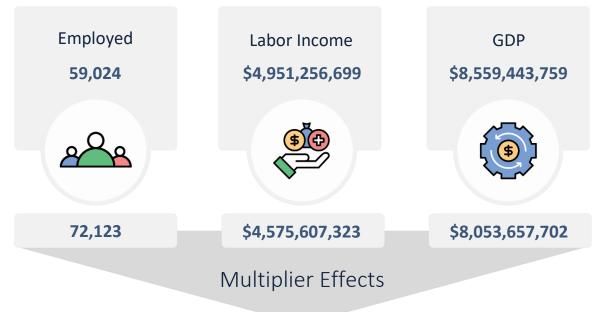






Georgia

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
131,148	\$9,526,864,022	\$16,613,101,461

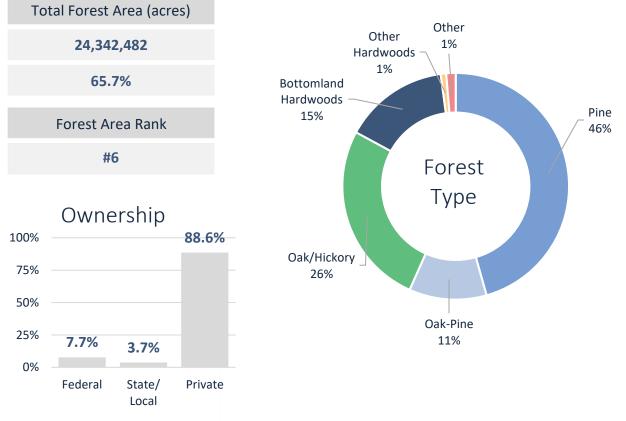
Economic Dependence on Forestry





Georgia

Forest Resources

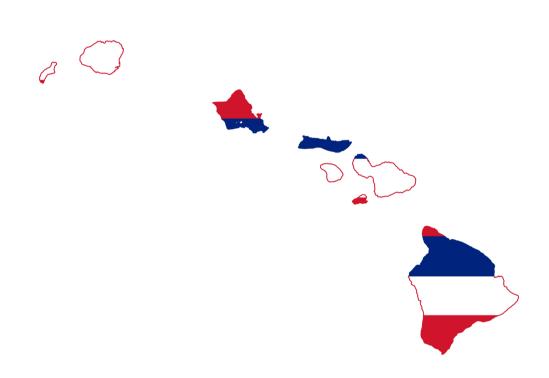


Industry Details

	Employment	Labor Income	GDP
Forestry	1,047	\$68,812,095	\$70,859,466
Logging	6,737	\$429,481,295	\$416,696,225
Wood Energy	42	\$7,618,616	\$26,363,485
Solid Wood Products	21,997	\$1,618,329,116	\$3,079,050,559
Pulp and Paper	19,624	\$2,301,782,554	\$4,291,867,808
Furniture	9,577	\$525,233,023	\$674,606,216
Totals	59,024	\$4,951,256,699	\$8,559,443,759

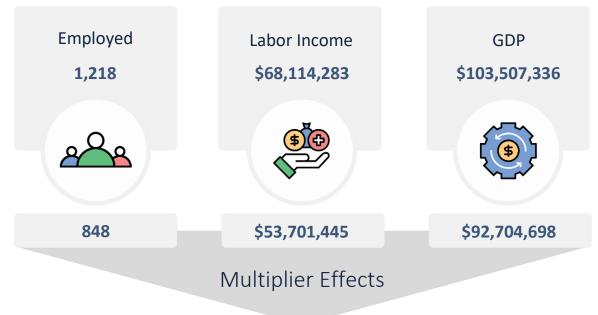






Hawaii

Forestry Direct Contribution



Forestry Total Economic Contribution

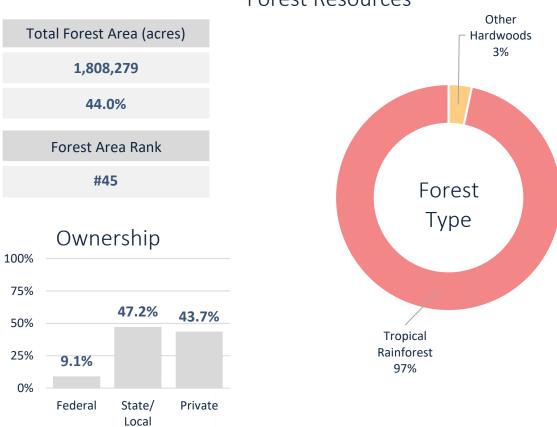
Labor Income	GDP	
\$121,815,728	\$196, 212,03 4	

Economic Dependence on Forestry





Hawaii



Forest Resources

Industry Details

	Employment	Labor Income	GDP
Forestry	104	\$6,655,641	\$7,450,740
Logging	68	\$5,686,367	\$6,689,648
Wood Energy	77	\$10,244,025	\$35,245,295
Solid Wood Products	491	\$20,498,087	\$22,425,879
Pulp and Paper	67	\$6,943,624	\$6,998,501
Furniture	411	\$18,086,538	\$24,697,273
Totals	1,218	\$68,114,283	\$103,507,336

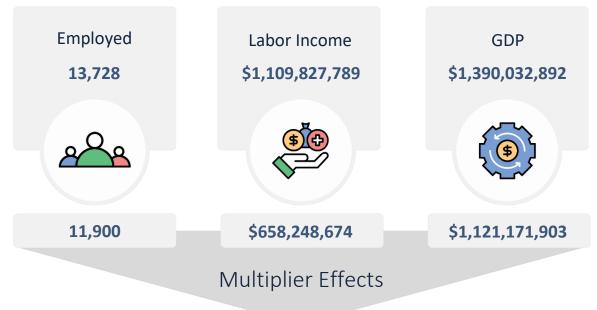






Idaho

Forestry Direct Contribution



Forestry Total Economic Contribution

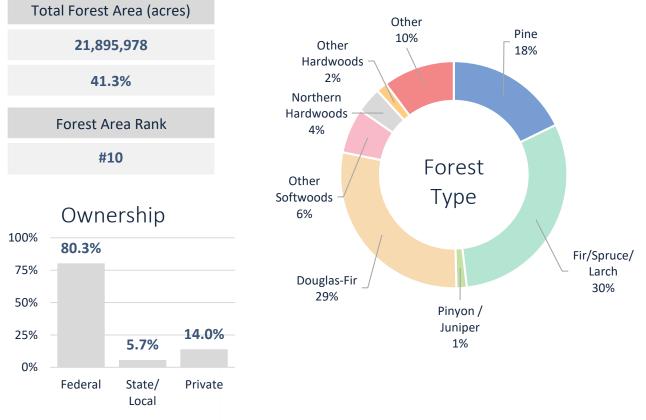
Employed	Labor Income	GDP
25,629	\$1,768,076,463	\$2,511,204,795





Idaho

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	305	\$22,395,743	\$23,635,109
Logging	1,962	\$135,274,720	\$140,791,498
Wood Energy	13	\$1,147,167	\$4,489,373
Solid Wood Products	7,370	\$660,722,811	\$840,628,200
Pulp and Paper	1,859	\$191,761,935	\$254,117,805
Furniture	2,218	\$98,525,413	\$126,370,907
Totals	13,728	\$1,109,827,789	\$1,390,032,892

✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html

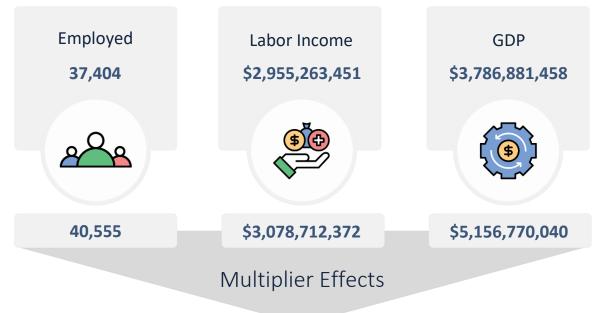






Illinois

Forestry Direct Contribution



Forestry Total Economic Contribution

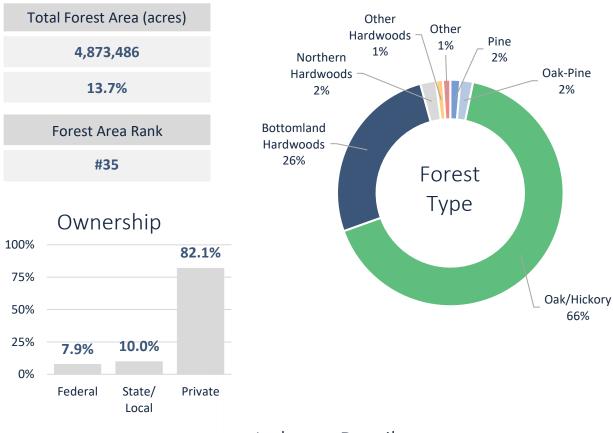
Employed	Labor Income	GDP
77,959	\$6,033,975,824	\$8,943,651,498

Economic Dependence on Forestry



✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html

Illinois



Forest Resources

Industry Details

	Employment	Labor Income	GDP
Forestry	651	\$33,023,465	\$38,448,982
Logging	874	\$36,522,439	\$43,660,144
Wood Energy	3	\$351,499	\$1,452,194
Solid Wood Products	7,647	\$550,019,206	\$742,000,627
Pulp and Paper	17,418	\$1,642,462,098	\$2,024,420,897
Furniture	10,811	\$692,884,744	\$936,898,614
Totals	37,404	\$2,955,263,451	\$3,786,881,458

forestbusiness@uamont.edu
 www.uamont.edu/academics/CFANR/acfb.html

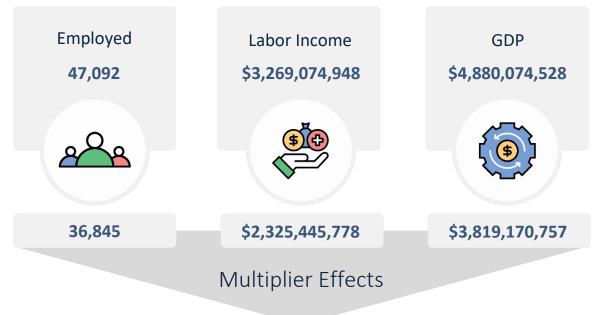






Indiana

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
83,937	\$5,594,520,725	\$8,699,245,285

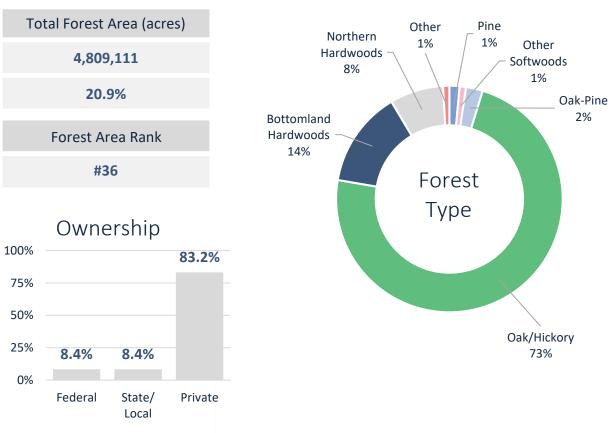
Economic Dependence on Forestry



Indiana ranks **13th** out of the 50 U.S. states and the District of Columbia, with forestry contributing **2.1%** to its total GDP.



Indiana

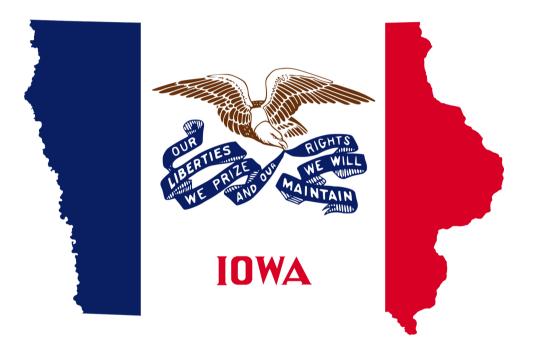


Forest Resources

	Employment	Labor Income	GDP
Forestry	349	\$24,601,343	\$28,821,843
Logging	1,362	\$103,385,847	\$112,310,955
Wood Energy	1	\$207,295	\$706,425
Solid Wood Products	15,756	\$1,136,652,386	\$1,755,199,598
Pulp and Paper	10,052	\$840,648,258	\$1,308,745,217
Furniture	19,572	\$1,163,579,819	\$1,674,290,490
Totals	47,093	\$3,269,074,948	\$4,880,074,528

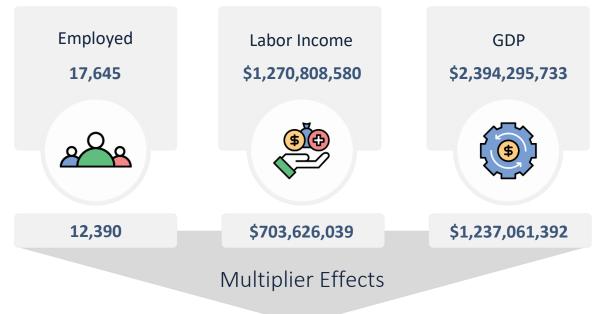






lowa

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
30,035	\$1,974,434,619	\$3,631,357,125

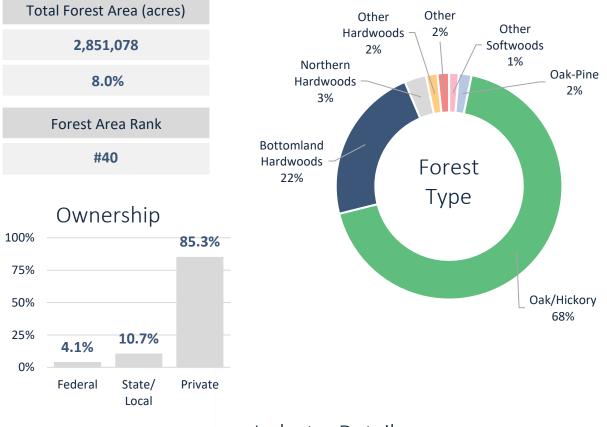
Economic Dependence on Forestry





lowa

Forest Resources



	Employment	Labor Income	GDP
Forestry	136	\$10,634,032	\$12,384,186
Logging	618	\$32,243,814	\$36,192,858
Wood Energy	13	\$1,137,042	\$5,135,126
Solid Wood Products	10,088	\$740,134,723	\$1,363,414,569
Pulp and Paper	3,325	\$290,335,957	\$655,293,761
Furniture	3,465	\$196,323,013	\$321,875,233
Totals	17,645	\$1,270,808,580	\$2,394,295,733

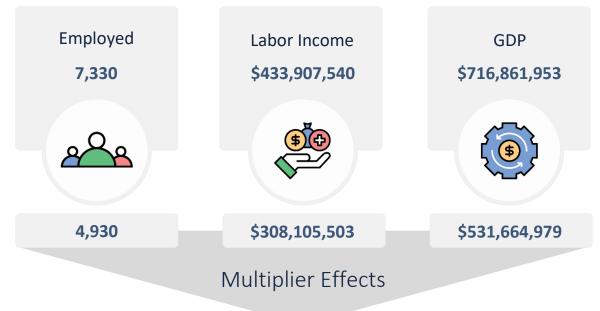






Kansas

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
12,259	\$742,013,043	\$1,248,526,932

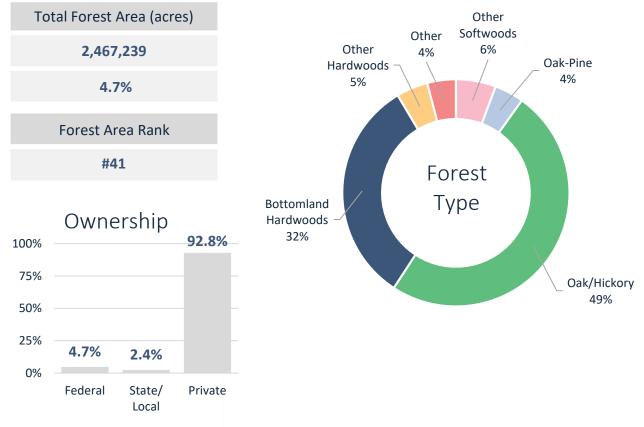
Economic Dependence on Forestry





Kansas

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	135	\$7,664,214	\$9,362,982
Logging	310	\$10,068,831	\$12,639,044
Wood Energy	39	\$5,140,729	\$15,995,428
Solid Wood Products	1,999	\$106,041,837	\$230,563,228
Pulp and Paper	1,676	\$155,194,892	\$275,668,769
Furniture	3,170	\$149,797,037	\$172,632,502
Totals	7,330	\$433,907,540	\$716,861,953

☑ forestbusiness@uamont.eduⓓ www.uamont.edu/academics/CFANR/acfb.html

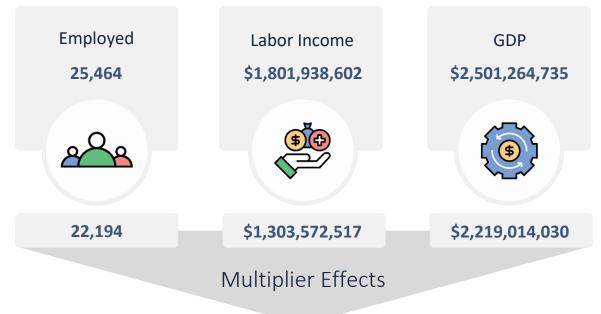




STRUME ALTH OF ASH

Kentucky

Forestry Direct Contribution



Forestry Total Economic Contribution

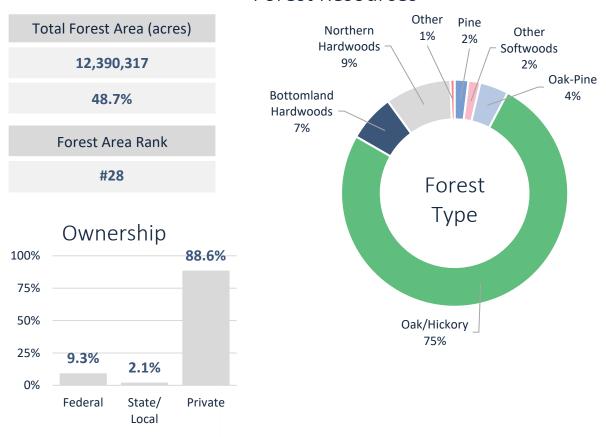
Employed	Labor Income	GDP
47,658	\$3,105,511,119	\$4,720,278,765

Economic Dependence on Forestry

#15 Kentucky ranks 15th out of the 50 U.S. states and the District of Columbia, with forestry contributing 2.0% to its total GDP.



Kentucky



Forest Resources

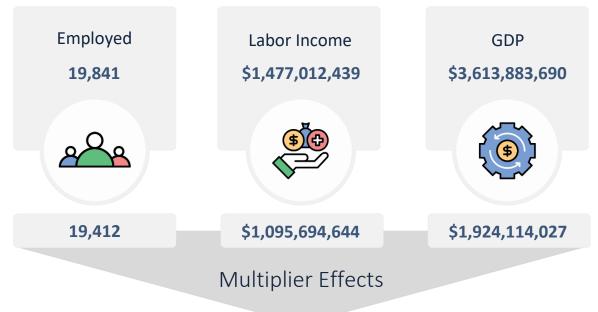
	Employment	Labor Income	GDP
Forestry	170	\$11,113,700	\$12,908,709
Logging	1,934	\$139,412,873	\$141,739,228
Wood Energy	0	\$0	\$ O
Solid Wood Products	11,057	\$650,594,260	\$807,756,576
Pulp and Paper	8,919	\$815,495,799	\$1,312,194,921
Furniture	3,383	\$185,321,970	\$226,665,300
Totals	25,464	\$1,801,938,602	\$2,501,264,734





Louisiana

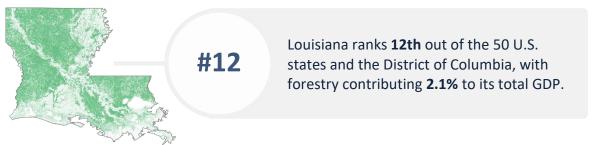
Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
39,254	\$2,572,707,083	\$5,537,997,717

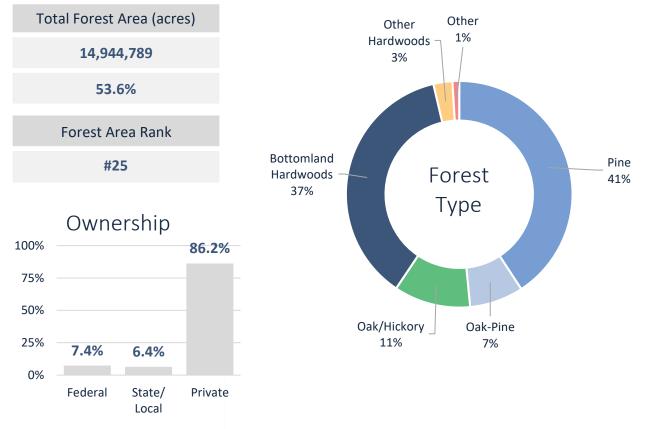
Economic Dependence on Forestry





Louisiana

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	498	\$27,350,056	\$27,979,146
Logging	3,785	\$167,922,971	\$160,372,103
Wood Energy	14	\$1,814,550	\$9,760,351
Solid Wood Products	7,802	\$549,189,487	\$1,478,509,481
Pulp and Paper	6,327	\$674,678,219	\$1,874,544,068
Furniture	1,415	\$56,057,156	\$62,718,542
Totals	19,841	\$1,477,012,439	\$3,613,883,690

✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html

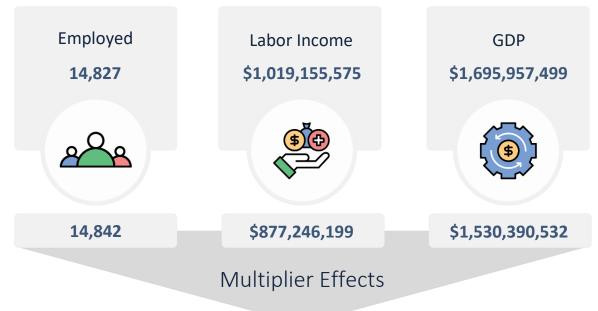






Maine

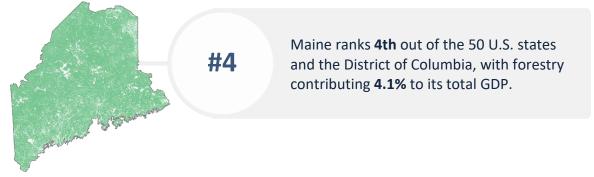
Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
29,670	\$1,896,401,774	\$3,226,348,032

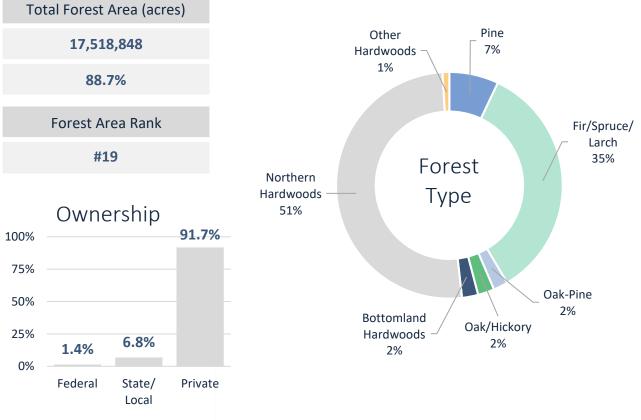
Economic Dependence on Forestry





Maine

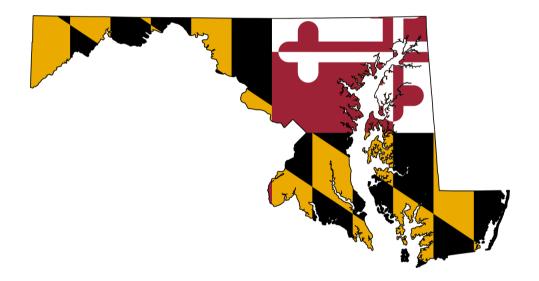
Forest Resources



	Employment	Labor Income	GDP
Forestry	246	\$11,336,848	\$10,871,625
Logging	3,684	\$148,853,224	\$137,608,770
Wood Energy	99	\$11,110,106	\$52,027,330
Solid Wood Products	5,110	\$318,722,343	\$592,679,824
Pulp and Paper	4,214	\$443,078,420	\$818,881,922
Furniture	1,474	\$86,054,635	\$83,888,028
Totals	14,827	\$1,019,155,575	\$1,695,957,499

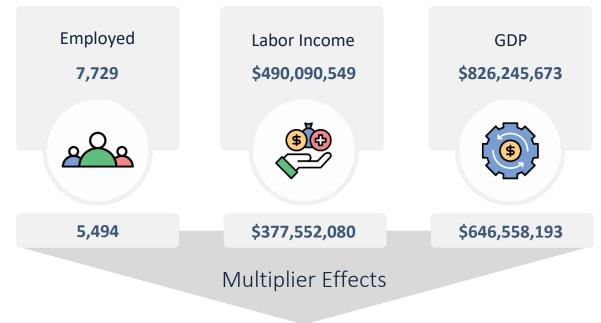






Maryland

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
13,223	\$867,642,629	\$1,472,803,866

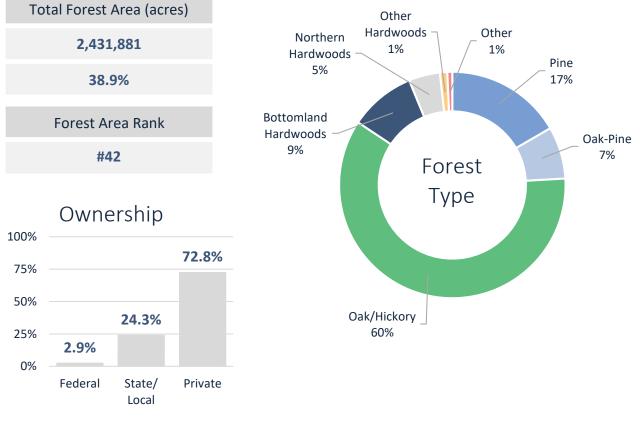
Economic Dependence on Forestry





Maryland

Forest Resources

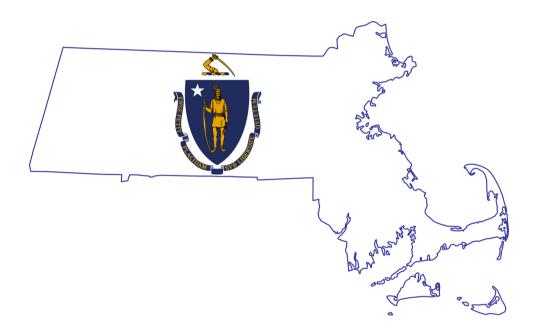


	Employment	Labor Income	GDP
Forestry	321	\$25,166,911	\$27,355,739
Logging	639	\$40,247,796	\$42,657,277
Wood Energy	2	\$504,445	\$1,319,161
Solid Wood Products	3,121	\$167,714,622	\$427,518,359
Pulp and Paper	1,861	\$145,179,196	\$185,058,933
Furniture	1,785	\$111,277,579	\$142,336,204
Totals	7,729	\$490,090,549	\$826,245,673



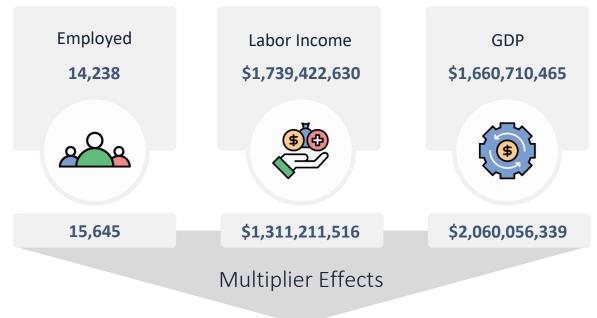
MASSACHUSETTS

Forestry Economic Contributions



Massachusetts

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
29,884	\$3,050,634,146	\$3,720,766,803

Economic Dependence on Forestry

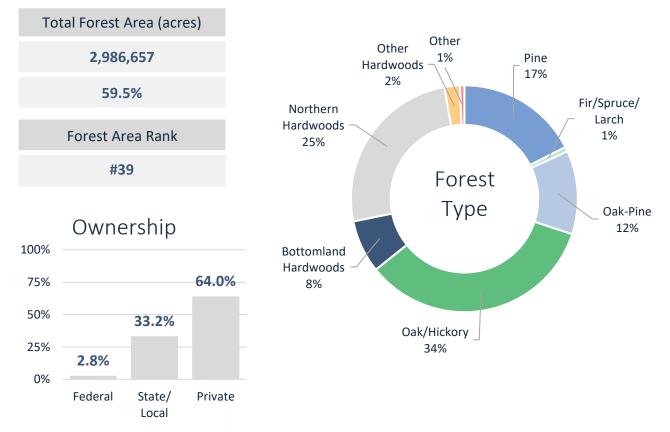




95

Massachusetts

Forest Resources



	Employment	Labor Income	GDP
Forestry	507	\$39,600,707	\$31,384,473
Logging	760	\$55,107,413	\$43,673,861
Wood Energy	0	\$0	\$ 0
Solid Wood Products	3,044	\$239,902,584	\$320,356,090
Pulp and Paper	6,871	\$1,194,195,284	\$1,037,316,394
Furniture	3,057	\$210,616,642	\$227,979,647
Totals	14,238	\$1,739,422,630	\$1,660,710,465

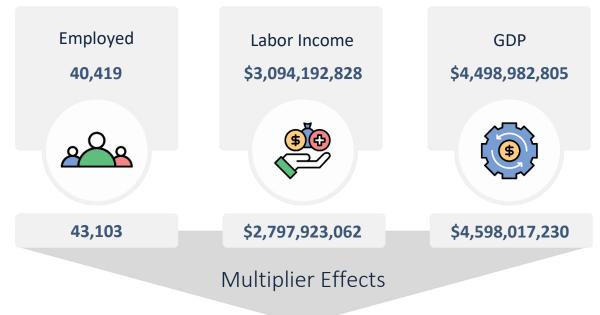






Michigan

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
83,523	\$5,892,115,890	\$9,097,000,035

Economic Dependence on Forestry

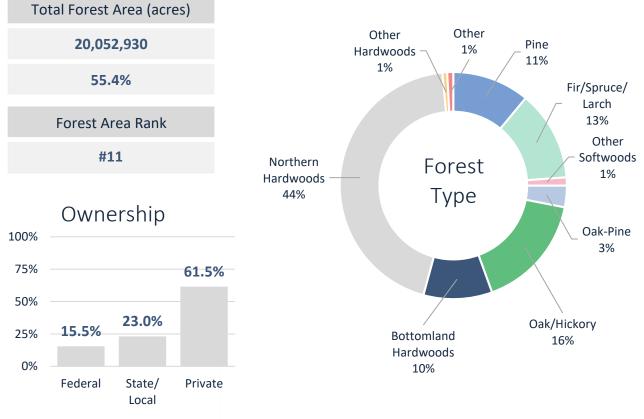
#21

Michigan ranks **21st** out of the 50 U.S. states and the District of Columbia, with forestry contributing **1.6%** to its total GDP.



Michigan

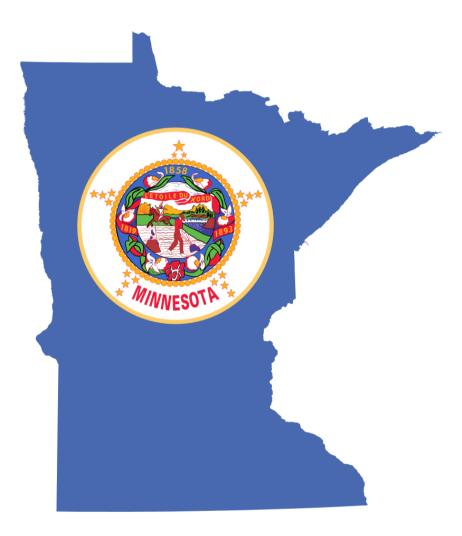
Forest Resources



	Employment	Labor Income	GDP
Forestry	758	\$38,644,065	\$44,496,856
Logging	3,766	\$141,245,934	\$156,115,157
Wood Energy	117	\$16,054,633	\$46,541,331
Solid Wood Products	11,443	\$804,862,523	\$1,415,864,976
Pulp and Paper	12,366	\$1,178,255,293	\$1,786,431,460
Furniture	11,969	\$915,130,380	\$1,049,533,025
Totals	40,419	\$3,094,192,828	\$4,498,982,805

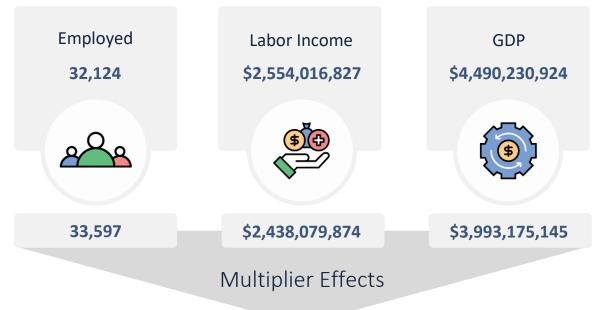






Minnesota

Forestry Direct Contribution



Forestry Total Economic Contribution

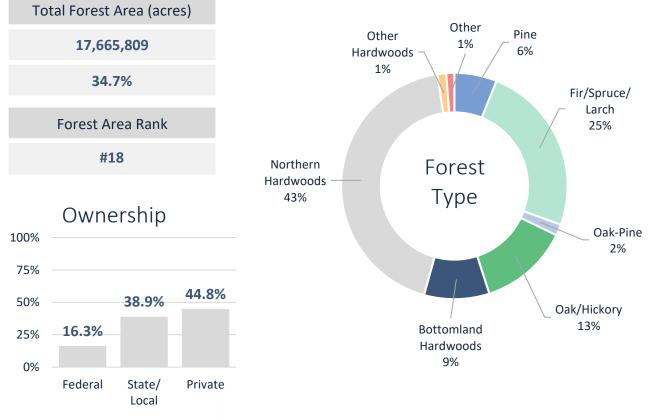
Employed	Labor Income	GDP
65,720	\$4,992,096,700	\$8,483,406,069





Minnesota

Forest Resources



	Employment	Labor Income	GDP
Forestry	382	\$22,554,025	\$25,557,918
Logging	2,065	\$76,184,111	\$79,090,363
Wood Energy	257	\$35,747,719	\$106,006,648
Solid Wood Products	12,946	\$1,067,963,405	\$2,042,313,115
Pulp and Paper	8,165	\$816,525,276	\$1,613,446,014
Furniture	8,308	\$535,042,290	\$623,816,866
Totals	32,124	\$2,554,016,827	\$4,490,230,924

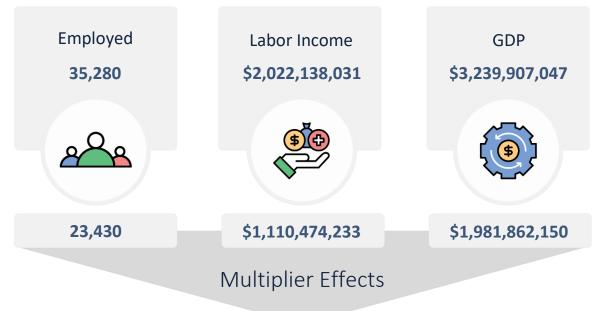






Mississippi

Forestry Direct Contribution



Forestry Total Economic Contribution

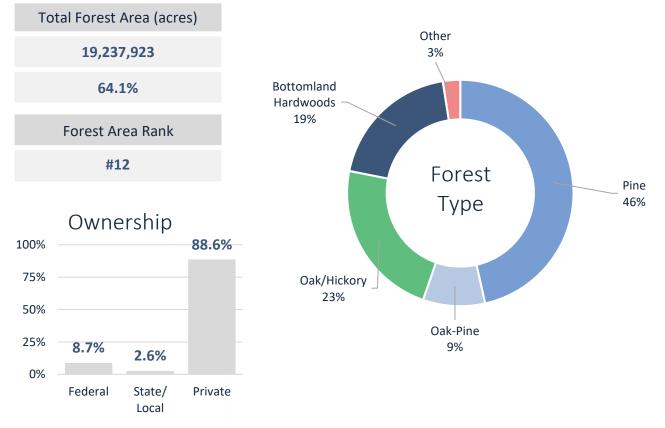
Employed	Labor Income	GDP
58,711	\$3,132,612,264	\$5,221,769,197

#3 Mississippi ranks 3rd out of the 50 U.S. states and the District of Columbia, with forestry contributing 4.1% to its total GDP.



Mississippi

Forest Resources



	Employment	Labor Income	GDP
Forestry	383	\$21,690,601	\$22,164,038
Logging	5,280	\$281,881,597	\$273,855,066
Wood Energy	0	\$0	\$ O
Solid Wood Products	9,226	\$562,219,362	\$1,380,474,287
Pulp and Paper	3,999	\$368,068,775	\$690,419,911
Furniture	16,393	\$788,277,696	\$872,993,745
Totals	35,280	\$2,022,138,031	\$3,239,907,047

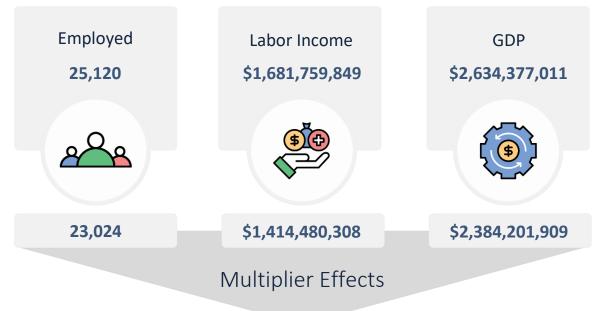






Missouri

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
48,144	\$3,096,240,158	\$5,018,578,919

Economic Dependence on Forestry





Missouri

Total Forest Area (acres) Pine Other Other 1% 1% Softwoods Northern 15,425,911 2% Hardwoods Oak-Pine 1% 35.0% 7% Bottomland Hardwoods Forest Area Rank 9% #24 Forest Туре Ownership 100% 81.7% 75% 50% Oak/Hickory 25% 12.2% 79% 6.1% 0% Federal State/ Private Local

Forest Resources

	Employment	Labor Income	GDP
Forestry	622	\$37,793,716	\$39,717,871
Logging	1,705	\$104,346,564	\$106,198,907
Wood Energy	55	\$9,183,906	\$28,444,327
Solid Wood Products	8,044	\$493,406,896	\$920,349,124
Pulp and Paper	6,994	\$606,022,687	\$1,059,123,175
Furniture	7,701	\$431,006,081	\$480,543,607
Totals	25,120	\$1,681,759,849	\$2,634,377,011

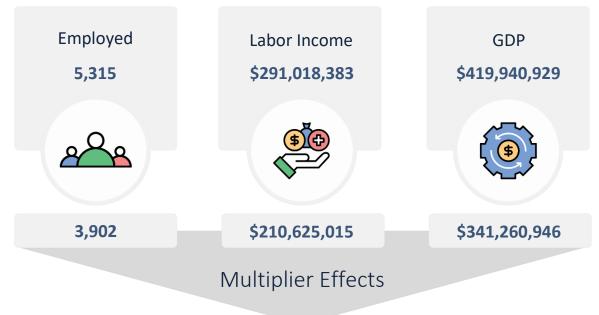






Montana

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
9,217	\$501,643,398	\$761,201,876

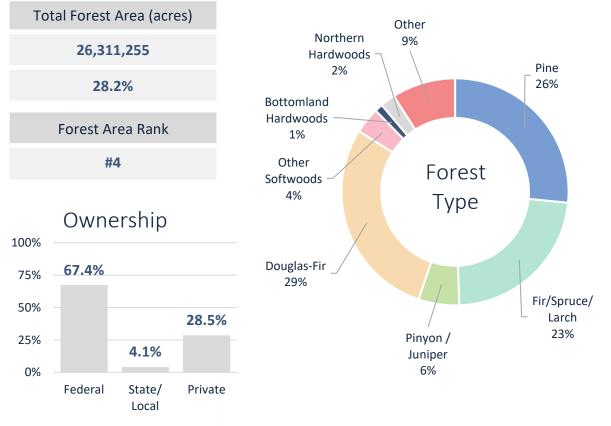
Economic Dependence on Forestry





Montana

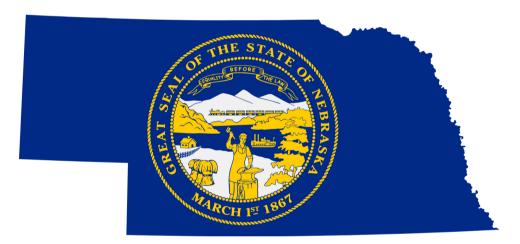
Forest Resources



	Employment	Labor Income	GDP
Forestry	205	\$11,390,513	\$12,104,232
Logging	1,031	\$55,896,939	\$57,275,660
Wood Energy	0	\$0	\$ 0
Solid Wood Products	3,108	\$184,782,410	\$310,211,544
Pulp and Paper	30	\$2,214,660	\$3,774,199
Furniture	941	\$36,733,860	\$36,575,294
Totals	5,315	\$291,018,383	\$419,940,929

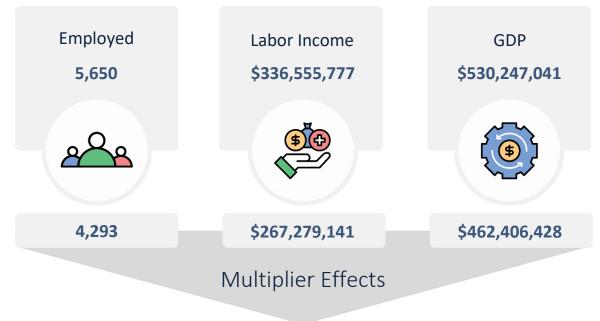






Nebraska

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
9,942	\$603,834,918	\$992,653,468

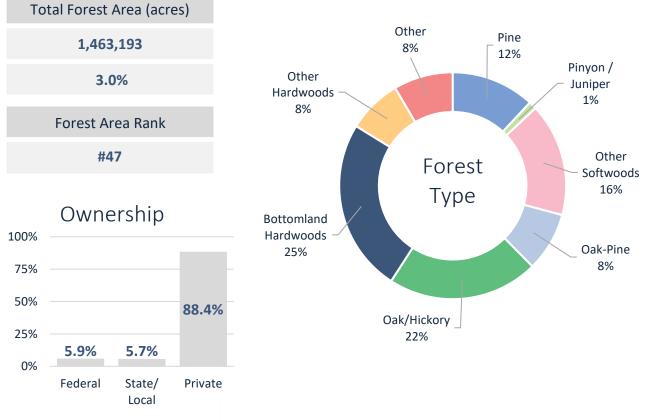
Economic Dependence on Forestry





Nebraska

Forest Resources



	Employment	Labor Income	GDP
Forestry	65	\$4,469,251	\$5,399,654
Logging	229	\$7,736,286	\$9,505,541
Wood Energy	0	\$0	\$ O
Solid Wood Products	2,479	\$139,090,295	\$269,885,084
Pulp and Paper	1,429	\$105,294,006	\$161,404,930
Furniture	1,447	\$79,965,939	\$84,051,832
Totals	5,650	\$336,555,777	\$530,247,041

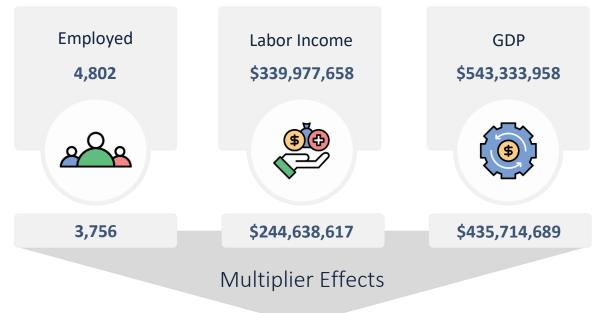






Nevada

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
8,558	\$584,616,275	\$979,048,648

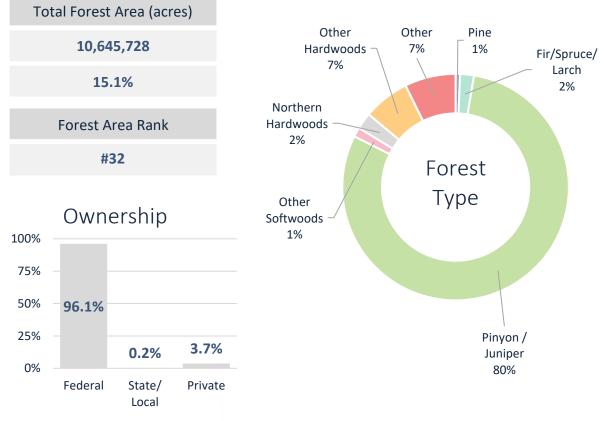
Economic Dependence on Forestry





Nevada

Forest Resources



	Employment	Labor Income	GDP
Forestry	77	\$8,358,078	\$9,793,991
Logging	83	\$8,778,163	\$10,590,607
Wood Energy	0	\$0	\$ O
Solid Wood Products	1,853	\$129,682,310	\$227,389,496
Pulp and Paper	1,001	\$85,401,897	\$165,120,991
Furniture	1,789	\$107,757,210	\$130,438,873
Totals	4,802	\$339,977,658	\$543,333,958



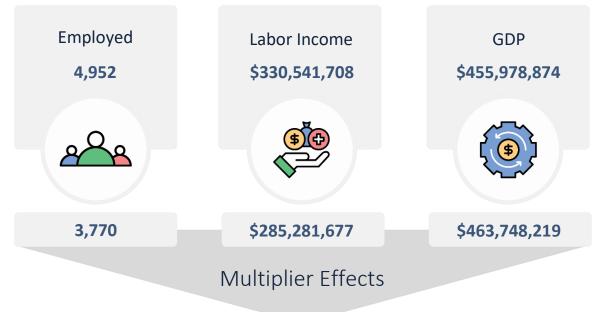
NEW HAMPSHIRE

Forestry Economic Contributions



New Hampshire

Forestry Direct Contribution



Forestry Total Economic Contribution

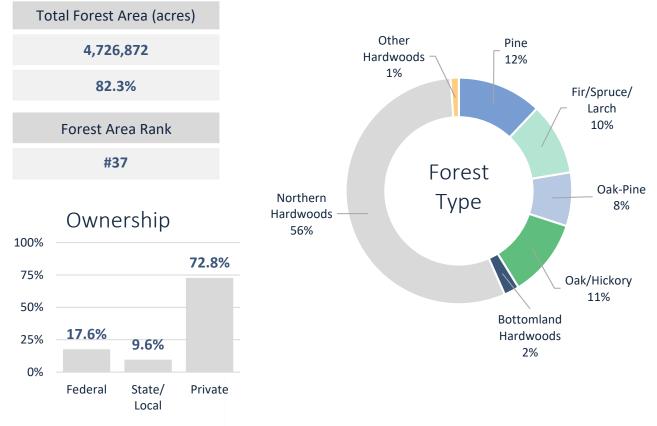
Employed	Labor Income	GDP
8,722	\$615,823,385	\$919,7 <mark>27,093</mark>





New Hampshire

Forest Resources



	Employment	Labor Income	GDP
Forestry	60	\$4,199,500	\$4,699,258
Logging	1,244	\$53,783,621	\$53,238,131
Wood Energy	94	\$13,131,524	\$51,338,095
Solid Wood Products	1,872	\$127,055,418	\$220,630,305
Pulp and Paper	656	\$74,082,705	\$73,130,523
Furniture	1,026	\$58,288,940	\$52,942,561
Totals	4,952	\$330,541,708	\$455,978,874

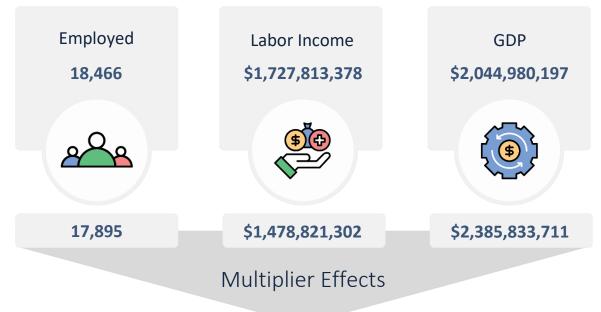






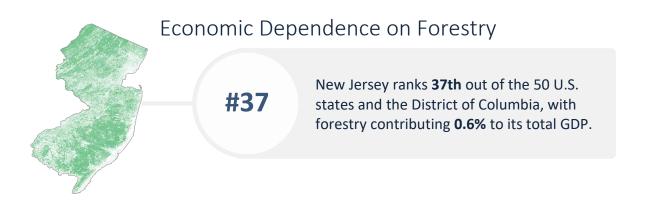
New Jersey

Forestry Direct Contribution



Forestry Total Economic Contribution

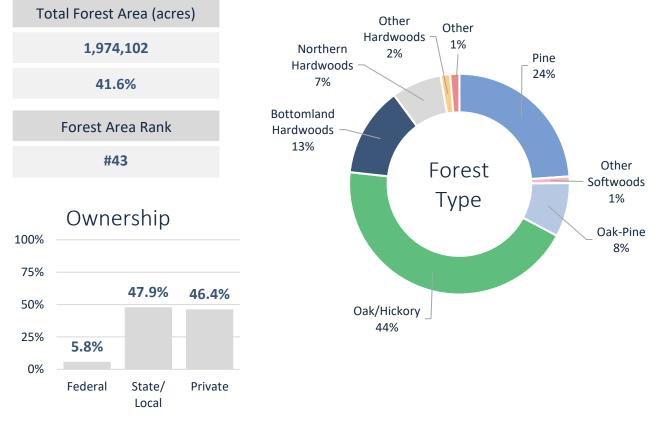
Employed	Labor Income	GDP
36,361	\$3,206,634,681	\$4,430,813,908





New Jersey

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	540	\$63,508,246	\$67,782,189
Logging	409	\$46,797,011	\$52,073,010
Wood Energy	9	\$1,467,458	\$6,010,501
Solid Wood Products	3,277	\$251,855,425	\$315,970,659
Pulp and Paper	8,661	\$973,937,345	\$1,200,564,351
Furniture	5,570	\$390,247,893	\$402,579,487
Totals	18,466	\$1,727,813,378	\$2,044,980,197

✓ forestbusiness@uamont.edu
 ● www.uamont.edu/academics/CFANR/acfb.html
 132



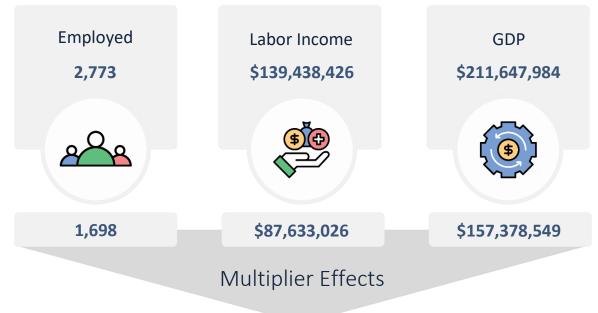


Forestry Economic Contributions



New Mexico

Forestry Direct Contribution



Forestry Total Economic Contribution

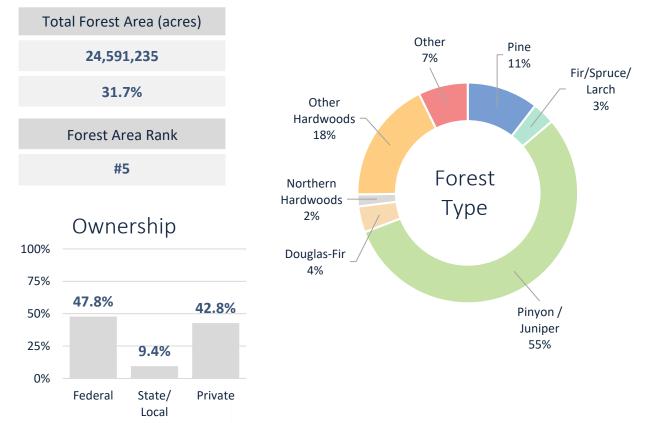
Employed	Labor Income	GDP
4,471	\$227,071,452	\$369,026,533





New Mexico

Forest Resources



	Employment	Labor Income	GDP
Forestry	149	\$9,688,079	\$10,894,490
Logging	263	\$14,407,394	\$16,074,620
Wood Energy	4	\$502,161	\$1,647,370
Solid Wood Products	1,274	\$53,548,078	\$68,954,546
Pulp and Paper	547	\$42,062,646	\$93,929,120
Furniture	536	\$19,230,069	\$20,147,838
Totals	2,773	\$139,438,426	\$211,647,984



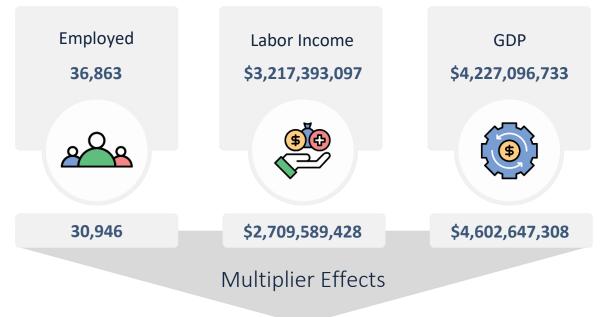


Forestry Economic Contributions



New York

Forestry Direct Contribution



Forestry Total Economic Contribution

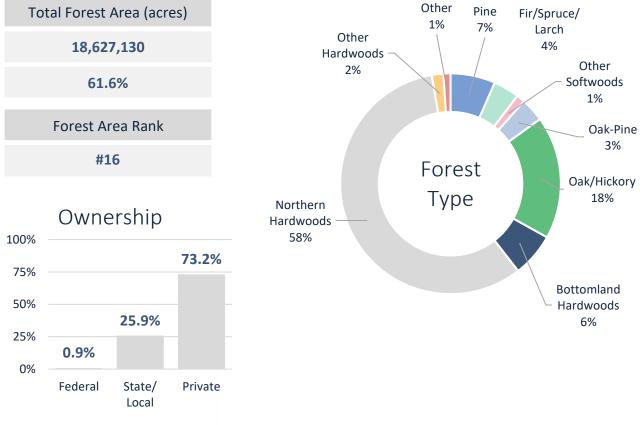
Employed	Labor Income	GDP
67,809	\$5,926,982,526	\$8,829,744,042





New York

Forest Resources

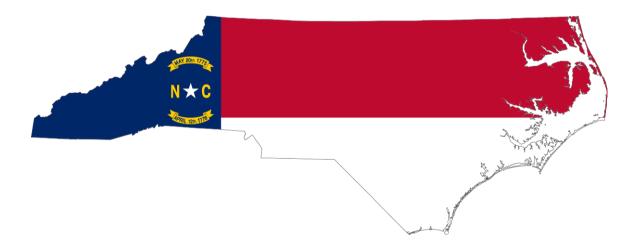


	Employment	Labor Income	GDP
Forestry	806	\$97,150,169	\$109,142,659
Logging	3,622	\$144,773,286	\$164,155,222
Wood Energy	101	\$25,015,657	\$69,795,513
Solid Wood Products	8,971	\$571,413,082	\$774,583,400
Pulp and Paper	13,972	\$1,807,964,988	\$2,495,184,808
Furniture	9,392	\$571,075,914	\$614,235,132
Totals	36,863	\$3,217,393,097	\$4,227,096,733



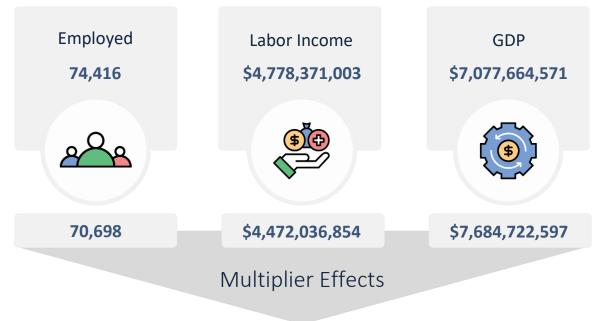
NORTH CAROLINA

Forestry Economic Contributions



North Carolina

Forestry Direct Contribution



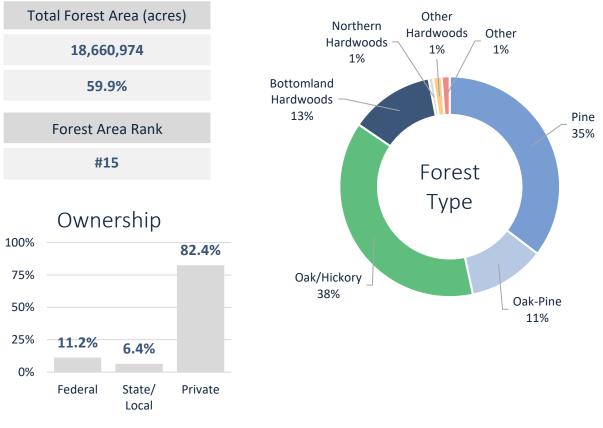
Forestry Total Economic Contribution

Employed	Labor Income	GDP
145,114	\$9,250,407,858	\$14,762,387,169





North Carolina



Forest Resources

	Employment	Labor Income	GDP
Forestry	614	\$38,359,805	\$43,138,475
Logging	5,091	\$222,140,856	\$235,204,329
Wood Energy	52	\$8,816,068	\$31,473,313
Solid Wood Products	19,351	\$1,337,319,795	\$2,547,094,697
Pulp and Paper	17,641	\$1,531,856,906	\$2,399,523,431
Furniture	31,668	\$1,639,877,573	\$1,821,230,327
Totals	74,416	\$4,778,371,003	\$7,077,664,572



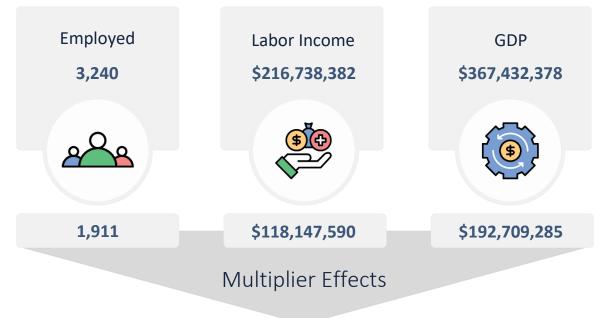
NORTH DAKOTA

Forestry Economic Contributions



North Dakota

Forestry Direct Contribution



Forestry Total Economic Contribution

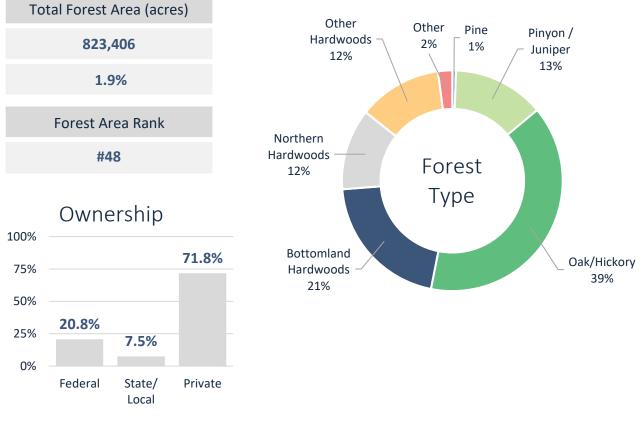
Employed	Labor Income	GDP
5,151	\$334,885,972	\$560,141,663





North Dakota

Forest Resources



	Employment	Labor Income	GDP
Forestry	60	\$5,235,730	\$5,677,813
Logging	63	\$5,723,382	\$6,286,413
Wood Energy	0	\$0	\$0
Solid Wood Products	2,211	\$151,330,949	\$292,947,711
Pulp and Paper	96	\$7,118,089	\$16,080,369
Furniture	810	\$47,330,233	\$46,440,071
Totals	3,240	\$216,738,382	\$367,432,377

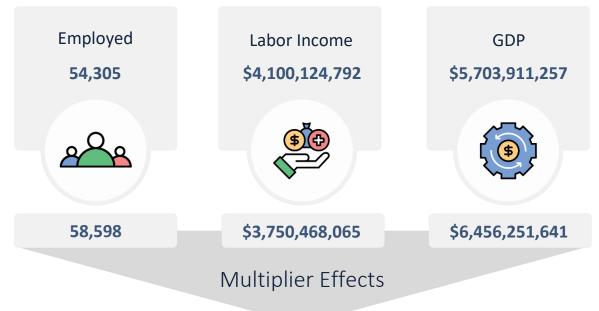






Ohio

Forestry Direct Contribution



Forestry Total Economic Contribution

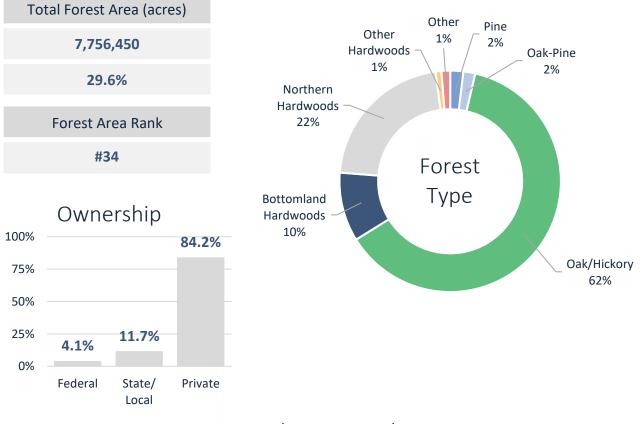
Employed	Labor Income	GDP
112,903	\$7,850,592,857	\$12,160,162,898





Ohio

Forest Resources



	Employment	Labor Income	GDP
Forestry	480	\$43,177,922	\$47,554,165
Logging	2,687	\$322,473,855	\$329,619,612
Wood Energy	9	\$1,268,247	\$4,716,257
Solid Wood Products	15,562	\$1,031,387,552	\$1,796,844,018
Pulp and Paper	20,960	\$1,806,340,282	\$2,527,797,885
Furniture	14,607	\$895,476,935	\$997,379,320
Totals	54,305	\$4,100,124,792	\$5,703,911,257



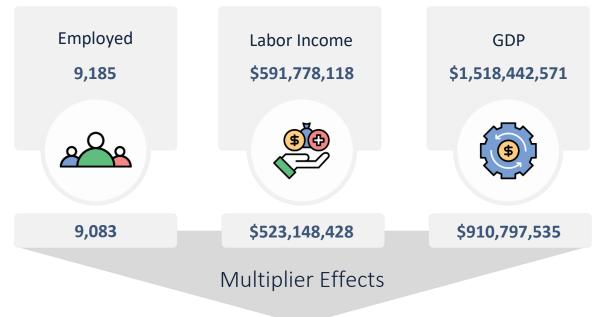


Forestry Economic Contributions



Oklahoma

Forestry Direct Contribution



Forestry Total Economic Contribution

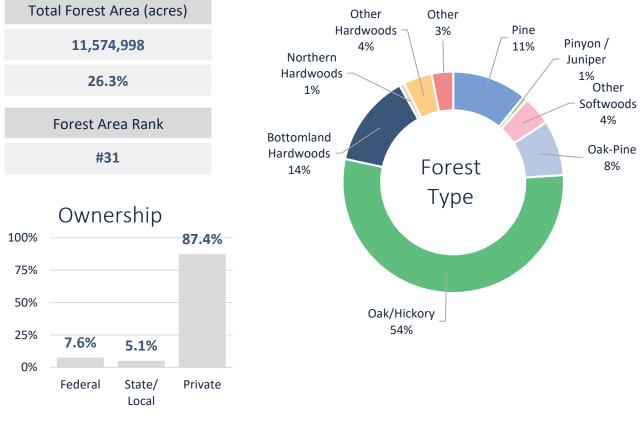
Employed	Labor Income	GDP
18,269	\$1,114,926,546	\$2,429,240,106





Oklahoma

Forest Resources



	Employment	Labor Income	GDP
Forestry	261	\$12,079,870	\$14,303,343
Logging	821	\$19,864,263	\$22,292,535
Wood Energy	0	\$0	\$0
Solid Wood Products	2,467	\$150,585,677	\$279,807,649
Pulp and Paper	3,486	\$311,856,784	\$1,093,944,166
Furniture	2,151	\$97,391,525	\$108,094,878
Totals	9,185	\$591,778,118	\$1,518,442,571



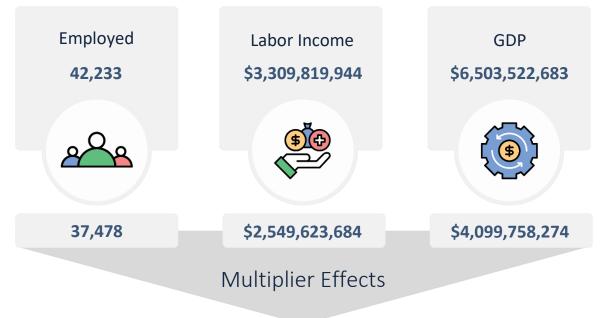


Forestry Economic Contributions



Oregon

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
79,711	\$5,859,443,628	\$10,603,280,958

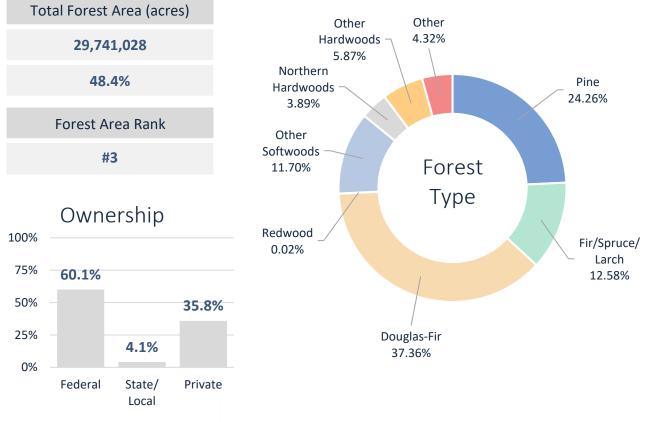
Economic Dependence on Forestry



ARKANSAS CENTER FOR FOREST BUSINESS UNIVERSITY OF ARKANSAS AT MONTICELLO

Oregon

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	972	\$106,422,454	\$109,576,062
Logging	6,898	\$580,037,069	\$597,082,210
Wood Energy	127	\$22,081,809	\$79,438,838
Solid Wood Products	23,681	\$1,842,176,726	\$4,473,917,381
Pulp and Paper	4,121	\$417,661,265	\$846,701,553
Furniture	6,433	\$341,440,621	\$396,806,639
Totals	42,233	\$3,309,819,944	\$6,503,522,683

✓ forestbusiness@uamont.edu
 ✓ www.uamont.edu/academics/CFANR/acfb.html
 160



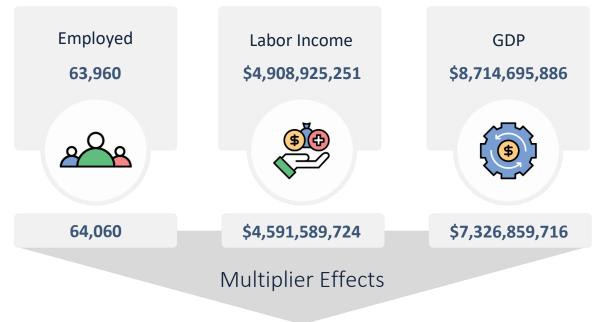
PENNSYLVANIA

Forestry Economic Contributions



Pennsylvania

Forestry Direct Contribution



Forestry Total Economic Contribution

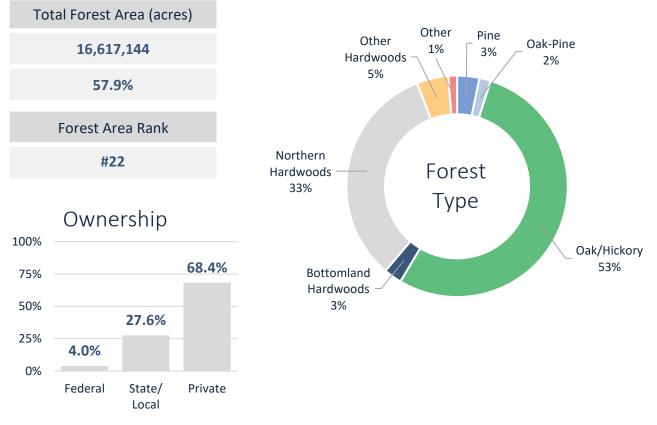
Employed	Labor Income	GDP
128,020	\$9,500,514,975	\$16,041,555,602





Pennsylvania

Forest Resources



	Employment	Labor Income	GDP
Forestry	928	\$80,323,856	\$84,363,741
Logging	3,785	\$338,693,026	\$343,496,707
Wood Energy	43	\$11,862,360	\$37,390,666
Solid Wood Products	24,856	\$1,678,794,669	\$2,924,743,987
Pulp and Paper	20,962	\$1,994,925,427	\$4,345,660,694
Furniture	13,385	\$804,325,913	\$979,040,092
Totals	63,960	\$4,908,925,251	\$8,714,695,886



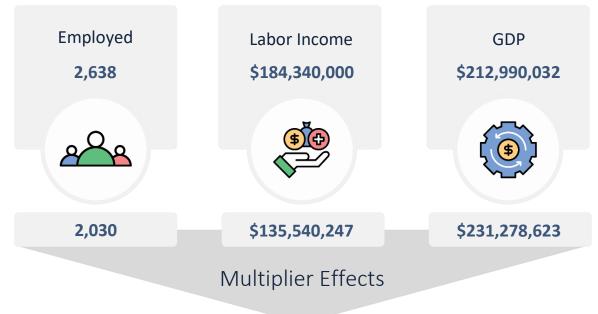
RHODE ISLAND

Forestry Economic Contributions



Rhode Island

Forestry Direct Contribution



Forestry Total Economic Contribution

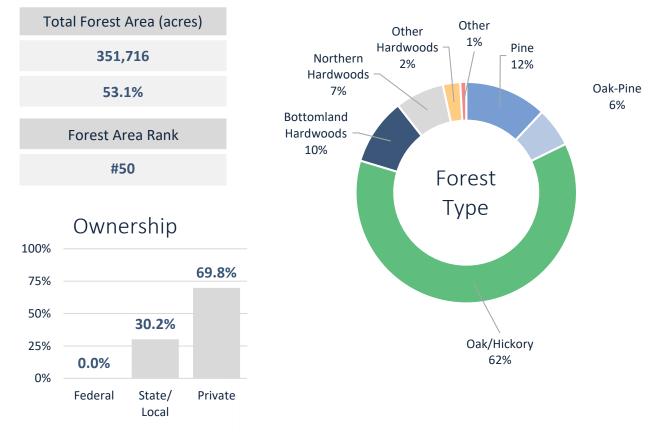
Employed	Labor Income	GDP
4,668	\$319,880,247	\$444,268,655





Rhode Island

Forest Resources



	Employment	Labor Income	GDP
Forestry	34	\$3,149,613	\$3,675,164
Logging	43	\$3,935,025	\$4,576,320
Wood Energy	0	\$0	\$0
Solid Wood Products	456	\$27,773,653	\$34,532,518
Pulp and Paper	1,084	\$79,514,338	\$103,390,848
Furniture	1,021	\$69,967,371	\$66,815,182
Totals	2,638	\$184,340,000	\$212,990,032



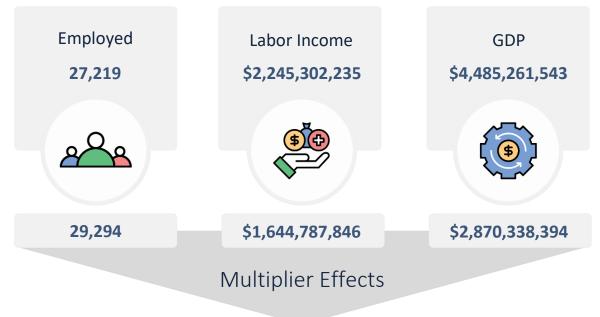
SOUTH Carolina

Forestry Economic Contributions



South Carolina

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
56,514	\$3,890,090,081	\$7,355,599,937

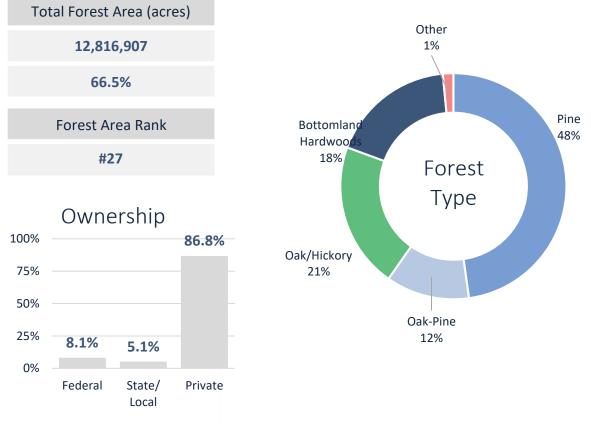
Economic Dependence on Forestry

#7 South Carolina ranks **7th** out of the 50 U.S. states and the District of Columbia, with forestry contributing **2.7%** to its total GDP.



South Carolina

Forest Resources



	Employment	Labor Income	GDP
Forestry	775	\$45,367,280	\$45,928,155
Logging	3,768	\$201,286,290	\$195,707,581
Wood Energy	38	\$5,033,706	\$21,300,061
Solid Wood Products	8,610	\$621,417,460	\$1,489,498,964
Pulp and Paper	11,553	\$1,251,940,963	\$2,446,057,016
Furniture	2,477	\$120,256,535	\$286,769,767
Totals	27,219	\$2,245,302,235	\$4,485,261,543



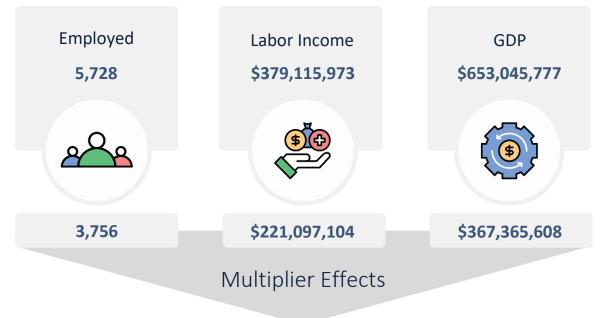
SOUTH DAKOTA

Forestry Economic Contributions



South Dakota

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
9,485	\$600,213,077	\$1,020,411,386

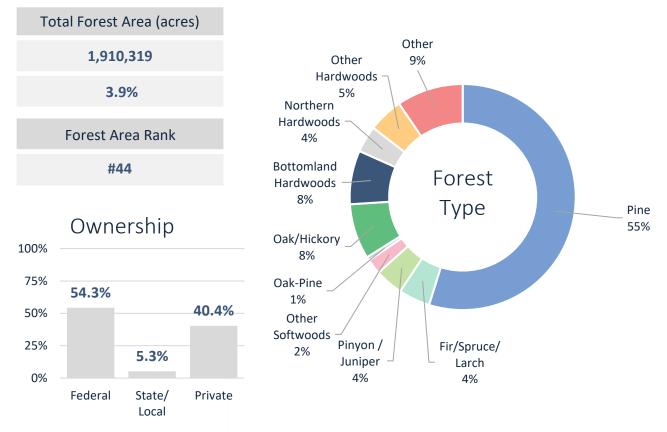
Economic Dependence on Forestry





South Dakota

Forest Resources



	Employment	Labor Income	GDP
Forestry	67	\$3,962,797	\$4,652,063
Logging	320	\$23,697,403	\$25,930,937
Wood Energy	0	\$0	\$ O
Solid Wood Products	2,296	\$159,786,090	\$375,587,800
Pulp and Paper	717	\$54,911,891	\$75,631,988
Furniture	2,328	\$136,757,793	\$171,242,990
Totals	5,728	\$379,115,973	\$653,045,777



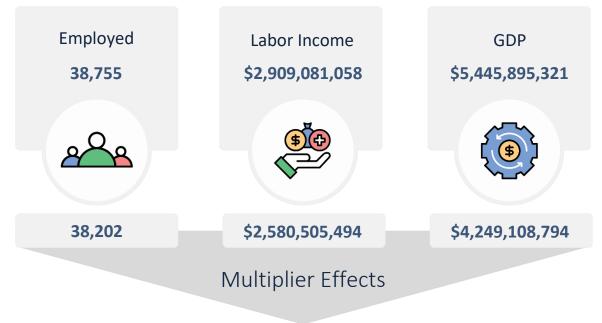


Forestry Economic Contributions

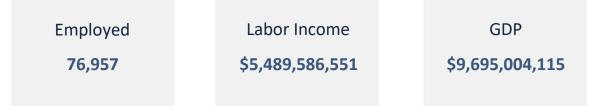


Tennessee

Forestry Direct Contribution



Forestry Total Economic Contribution

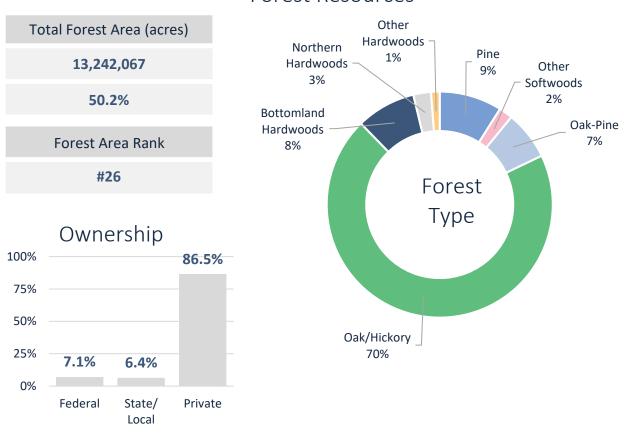


Economic Dependence on Forestry





Tennessee



Forest Resources

	Employment	Labor Income	GDP
Forestry	295	\$20,489,661	\$22,178,242
Logging	2,825	\$185,215,514	\$185,013,700
Wood Energy	82	\$9,749,781	\$47,067,219
Solid Wood Products	13,924	\$919,814,038	\$1,787,758,563
Pulp and Paper	12,393	\$1,267,620,498	\$2,844,171,853
Furniture	9,236	\$506,191,566	\$559,705,743
Totals	38,755	\$2,909,081,058	\$5,445,895,321



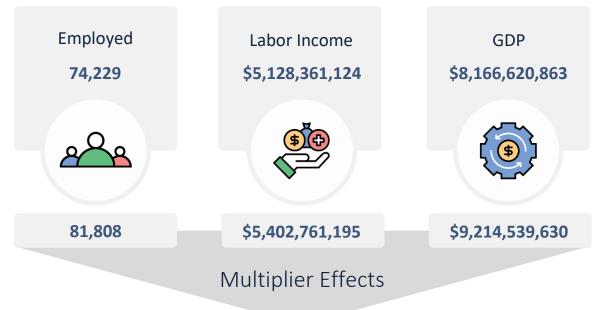


Forestry Economic Contributions



Texas

Forestry Direct Contribution



Forestry Total Economic Contribution

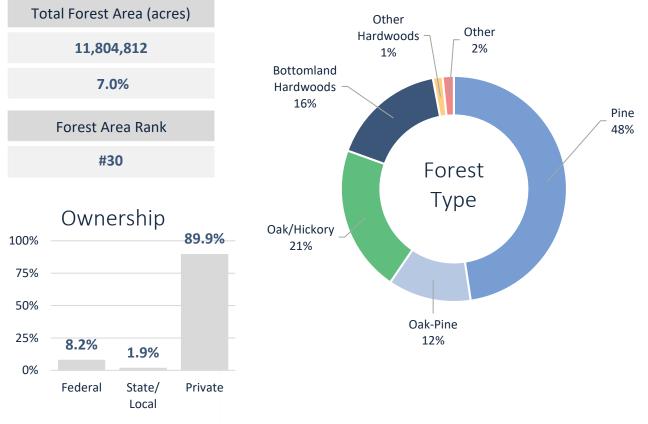
Employed	Labor Income	GDP
156,037	\$10,531,122,319	\$17,381,160,492

Economic Dependence on Forestry



Texas

Forest Resources



	Employment	Labor Income	GDP
Forestry	1,228	\$71,890,975	\$82,148,277
Logging	4,446	\$168,977,443	\$177,717,547
Wood Energy	25	\$4,357,283	\$12,028,485
Solid Wood Products	27,989	\$1,876,341,673	\$3,421,176,164
Pulp and Paper	18,294	\$1,741,587,699	\$2,874,967,256
Furniture	22,248	\$1,265,206,051	\$1,598,583,135
Totals	74,229	\$5,128,361,124	\$8,166,620,863

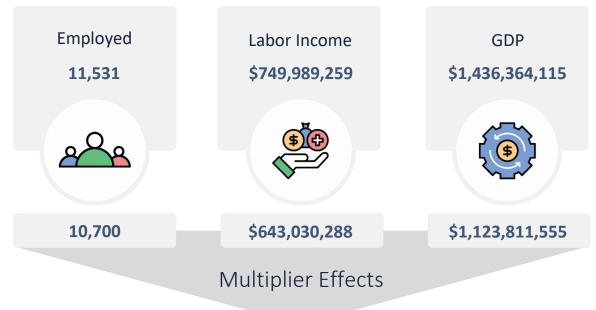






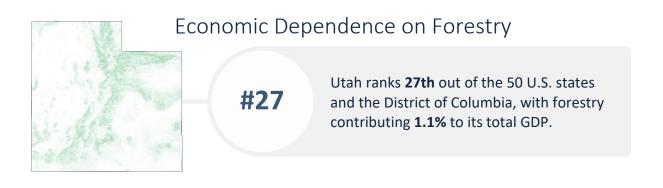
Utah

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
22,231	\$1,393,019,547	\$ 2,560,175,66 9

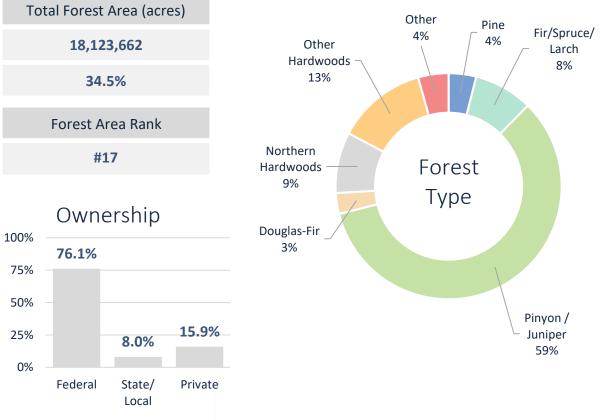


187



Utah

Forest Resources



	Employment	Labor Income	GDP
Forestry	136	\$7,833,340	\$9,216,221
Logging	259	\$10,423,363	\$12,277,883
Wood Energy	0	\$0	\$0
Solid Wood Products	3,385	\$183,942,067	\$300,967,375
Pulp and Paper	2,841	\$275,541,489	\$697,472,472
Furniture	4,910	\$272,249,000	\$416,430,163
Totals	11,531	\$749,989,259	\$1,436,364,115



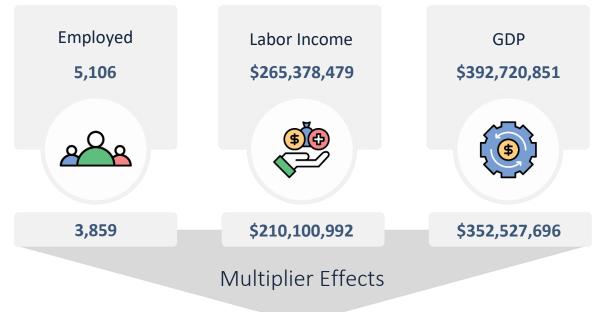


Forestry Economic Contributions



Vermont

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
8,965	\$475,479,471	\$745,248,546

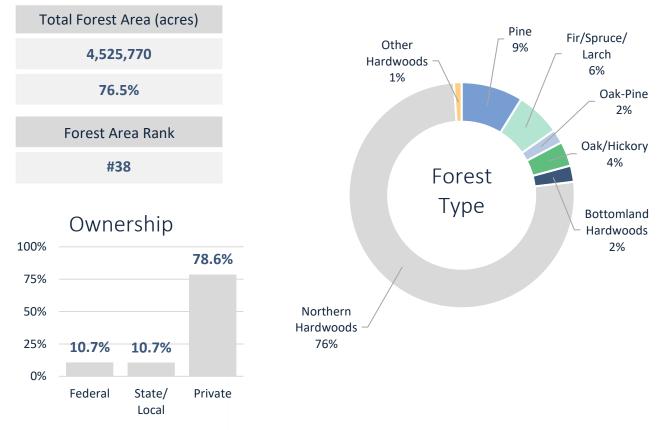
Economic Dependence on Forestry





Vermont

Forest Resources



	Employment	Labor Income	GDP
Forestry	99	\$4,213,141	\$4,491,654
Logging	1,202	\$38,878,087	\$39,485,071
Wood Energy	22	\$3,776,006	\$9,970,101
Solid Wood Products	1,857	\$94,524,229	\$176,439,053
Pulp and Paper	639	\$57,324,578	\$89,281,565
Furniture	1,286	\$66,662,438	\$73,053,406
Totals	5,106	\$265,378,479	\$392,720,851

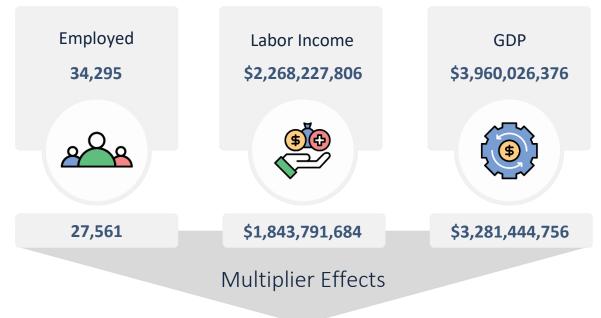




Forestry Economic Contributions

Virginia

Forestry Direct Contribution

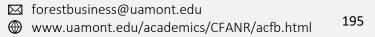


Forestry Total Economic Contribution

Employed	Labor Income	GDP
61,856	\$4,112,019,490	\$7,241,471,132

Economic Dependence on Forestry

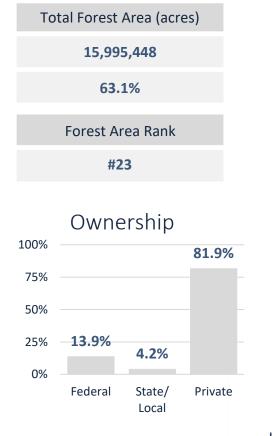
#26Virginia ranks 26th out of the 50 U.S. states
and the District of Columbia, with forestry
contributing 1.2% to its total GDP.

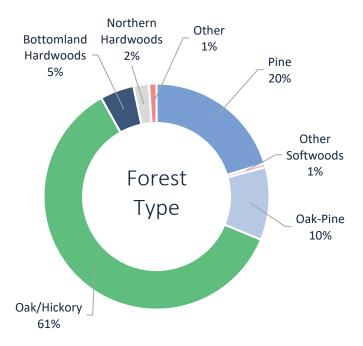




Virginia

Forest Resources





	Employment	Labor Income	GDP
Forestry	611	\$42,551,304	\$46,873,403
Logging	3,482	\$224,706,884	\$224,885,645
Wood Energy	61	\$7,668,141	\$34,837,960
Solid Wood Products	14,389	\$874,054,956	\$2,056,049,037
Pulp and Paper	7,930	\$719,690,465	\$1,066,615,147
Furniture	7,823	\$399,556,057	\$530,765,183
Totals	34,295	\$2,268,227,806	\$3,960,026,376



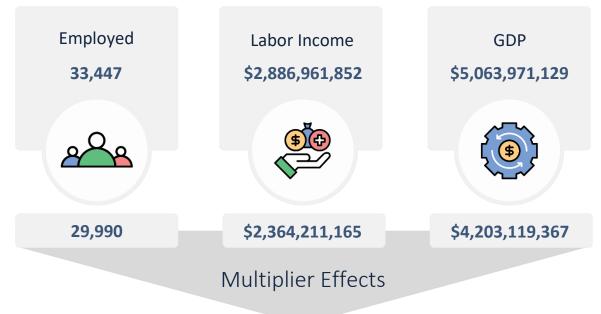
WASHINGTON

Forestry Economic Contributions



Washington

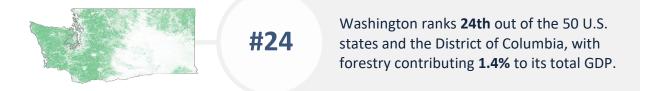
Forestry Direct Contribution



Forestry Total Economic Contribution

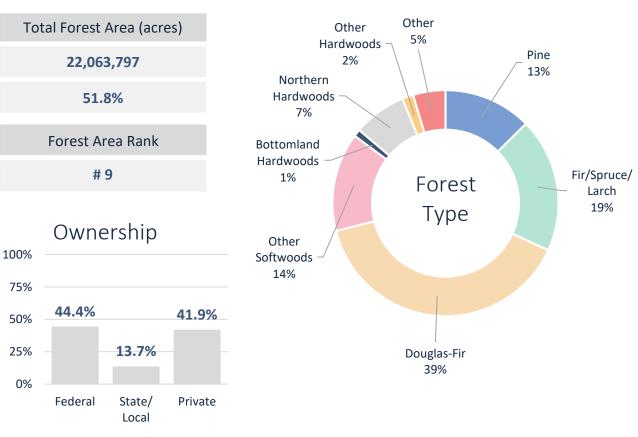
Employed	Labor Income	GDP
63,437	\$5,251,173,017	\$9 ,267,090,49 6

Economic Dependence on Forestry





Washington



Forest Resources

	Employment	Labor Income	GDP
Forestry	667	\$67,718,238	\$71,245,925
Logging	5,101	\$477,018,420	\$477,491,832
Wood Energy	22	\$1,976,130	\$14,676,072
Solid Wood Products	14,031	\$1,163,172,758	\$2,835,078,778
Pulp and Paper	7,537	\$842,688,052	\$1,302,399,921
Furniture	6,089	\$334,388,255	\$363,078,601
Totals	33,447	\$2,886,961,852	\$5,063,971,129



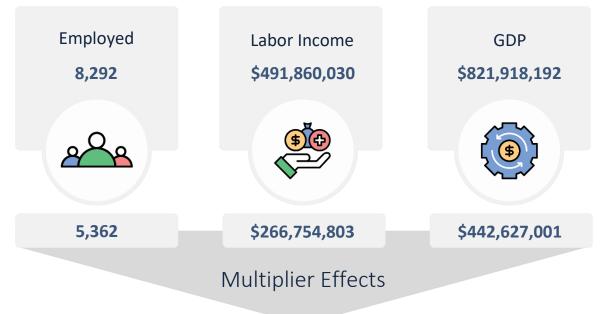
WEST VIRGINIA

Forestry Economic Contributions



West Virginia

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
13,654	\$758,614,834	\$1,264,545,193

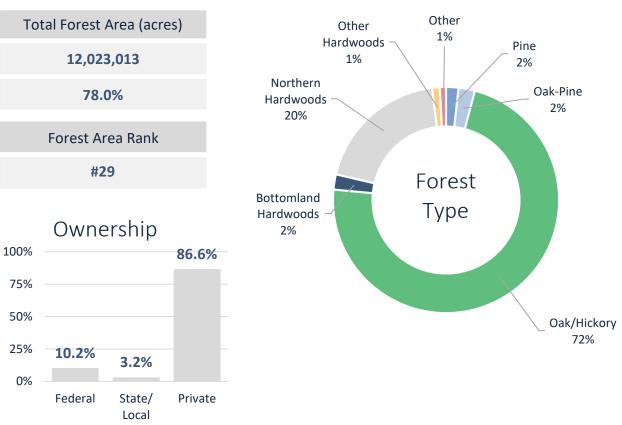
Economic Dependence on Forestry

#22

West Virginia ranks **22nd** out of the 50 U.S. states and the District of Columbia, with forestry contributing **1.4%** to its total GDP.



West Virginia



Forest Resources

	Employment	Labor Income	GDP
Forestry	107	\$6,979,825	\$8,168,490
Logging	1,450	\$100,197,644	\$98,546,252
Wood Energy	0	\$0	\$ O
Solid Wood Products	4,826	\$268,119,956	\$583,323,256
Pulp and Paper	452	\$40,495,138	\$57,512,936
Furniture	1,457	\$76,067,467	\$74,367,259
Totals	8,292	\$491,860,030	\$821,918,192





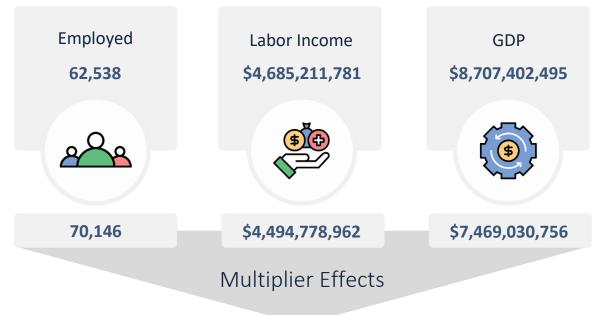
Forestry Economic Contributions



Arkansas Center for Forest Business

Wisconsin

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
132,683	\$9,179,990,742	\$16,176,433,251

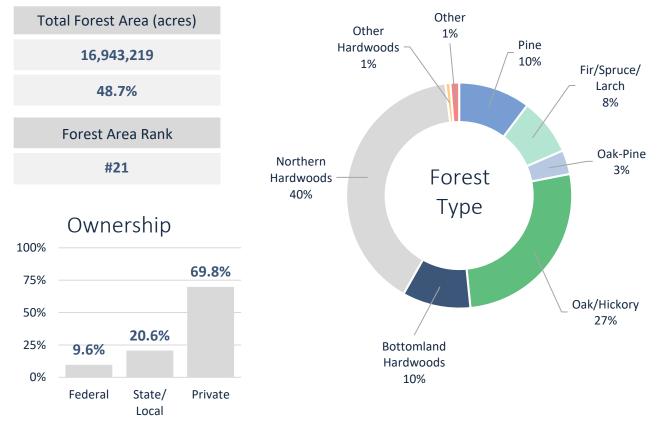
Economic Dependence on Forestry

#1 Wisconsin ranks **1st** out of the 50 U.S. states and the District of Columbia, with forestry contributing **4.4%** to its total GDP.



Wisconsin

Forest Resources



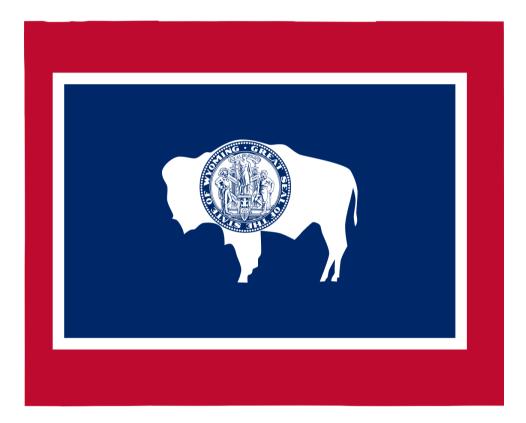
Industry Details

	Employment	Labor Income	GDP
Forestry	272	\$19,543,079	\$22,285,910
Logging	3,844	\$170,406,644	\$177,761,403
Wood Energy	83	\$11,073,958	\$39,268,608
Solid Wood Products	18,334	\$1,121,065,025	\$2,313,954,998
Pulp and Paper	27,724	\$2,628,769,519	\$5,369,194,264
Furniture	12,279	\$734,353,556	\$784,937,313
Totals	62,538	\$4,685,211,781	\$8,707,402,495





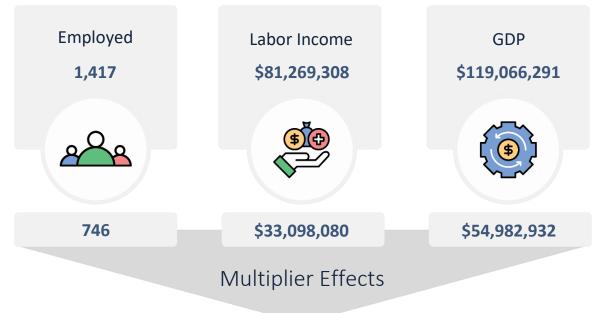
Forestry Economic Contributions



Arkansas Center for Forest Business

Wyoming

Forestry Direct Contribution



Forestry Total Economic Contribution

Employed	Labor Income	GDP
2,163	\$114,367,388	\$174,049,223

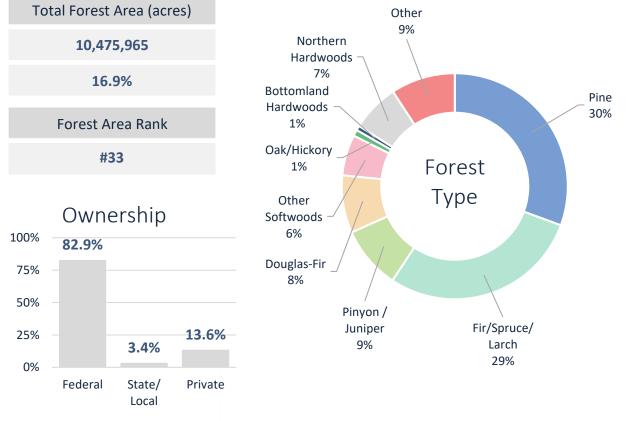
Economic Dependence on Forestry





Wyoming

Forest Resources



Industry Details

	Employment	Labor Income	GDP
Forestry	69	\$5,428,453	\$5,844,693
Logging	398	\$34,677,947	\$36,158,665
Wood Energy	0	\$0	\$ O
Solid Wood Products	639	\$33,567,139	\$68,949,193
Pulp and Paper	0	\$0	\$ O
Furniture	311	\$7,595,770	\$8,113,740
Totals	1,417	\$81,269,308	\$119,066,291



Methods

The data used for these fact sheets comes from two sources, economic data comes from IMPLAN, a private business, and the forest data comes from the USDA Forest Service Forest Inventory and Analysis Unit (FIA). The data sources and methodology are described below.

Economic Data

IMPLAN provides economic data and software to measure economic impacts, and has been in business for more than 40 years. IMPLAN is a cloud-based platform that can be used to define a geographic area of interest, obtain the economic information for that area, and perform impact and contribution analyses for that region.

IMPLAN gathers economic data from the following sources either annually or in 5-year cycles:

- Bureau of Economic Analysis
 (Benchmark Input-Output Tables)
- Bureau of Labor Statistics
- USDA ERS Agricultural Resource
 Management Survey
- USDA National Agricultural Statistics
 Survey
- USDA Census of Agriculture
- US Energy Information Agency
- USDA Forest Service
- US Census Bureau
- US Department of Commerce

Using this data, IMPLAN software can develop models that track shocks to an economy, such as the addition or loss of a portion of an industry (Impact analysis) or the total contribution of an industry sector to a region's economy (Contribution Analysis).

The data reported here are from contribution analyses and show the entire effect that forestry has on the economics of a state. The most recent IMPLAN data was used in this study and comes from the calendar year of 2021. The data is inflated to 2023 dollars using inflation indices from the US Census Bureau.

Forestry sectors were assigned in the manner described by Pelkki and Sherman (2020). IMPLAN aggregates all the North American Industry Code Standard industry sectors into 546 sectors for analysis. The IMPLAN sectors used in this study to define the forest industry are shown in Table 1. Table 1 also shows how the IMPLAN forestry sectors were aggregated into six major forestry sectors.

The IMPLAN contribution analyses all used baseline settings in IMPLAN. There were no adjustments made to industry data the IIA event details, commodities, income, or spending patterns. While the base IMPLAN data and matrices may not reflect specific region's differences, they do provide a comparative and information tool.

For detailed information, one of the best sources is the land-grant university in your state. IMPLAN software is commonly used and widely available, and the precise templates can be provided upon request.

Forest Data

Data on forest area, ownership, and forest types for each state were collected from FIA data for the most recent inventory year available at the time of the analysis, which was May 2023. Typically, the forest inventory data was 2 to 5 years old, though in some cases the most recent inventory was prior to 2018.

All forest area is reported in acres. Data for the total area of each state was obtained from the US Census Bureau for the 118th Congress.

FIA data provides 32 forest type groups that vary widely by region. To condense this data, we aggregated the 32 FIA forest type groups into 13 general groups. For example, all pine cover types were aggregated to a general pine type. Using Table 2, if you are in a western state, the pine cover types would be Ponderosa Pine, Western White Pine, and Lodgepole Pine. If your state is in the southeastern United States, the general pine group would include longleaf, slash, loblolly, and shortleaf pines. Table 2 shows the 32 FIA forest type groups and how they were aggregated into the 13 general forest type groups and maps the most likely FIA forest type into a region of the country where that forest type is predominantly, but not exclusively, found. This was done to make graphs more easily read and still convey the general nature of forest cover in each state.

It should be noted that forest area does not generally include urban forests. While urban forests play an important role in our society, they are not sources of raw material for manufacturing processes. Table 1. IMPLAN sectors used to define the forest industry in the study and the aggregation used to report details in each fact sheet.

IMPLAN Code Number	IMPLAN Forestry Sector Name	Aggregation into Six Major Forest Industry Sectors
15	Forestry, forest products, and timber tract production	Forestry
16	Commercial logging	Logging
45	Electrical Energy Production from Biomass	Wood energy (Electrical energy from biomass)
132 133 134 135 136 137 138 139 140 141 142 143	Sawmills Wood preservation Veneer and plywood manufacturing Engineered wood member and truss manufacturing Reconstituted wood product manufacturing Wood windows and door manufacturing Cut stock, resawing lumber, and planing Other millwork, including flooring Wood container and pallet manufacturing Manufactured home (mobile home) manufacturing Prefabricated wood building manufacturing All other miscellaneous wood product manufacturing	Solid wood products
144 145 146 147 148 149 150 151	Pulp mills Paper mills Paperboard mills Paperboard container manufacturing Paper bag and coated and treated paper manufacturing Stationery product manufacturing Sanitary paper product manufacturing All other converted paper product manufacturing	Pulp and paper
365 366 367 369 370 371 373	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 Showcase, partition, shelving, and locker manufacturing	Furniture

FIA Forest Type Group	Region of the United States where FIA Forest Type Group is predominantly found	State Fact Sheet Aggregation
White / red / jack pine Longleaf / slash pine Loblolly / shortleaf pine Ponderosa pine Western white pine Lodgepole pine	Northeast and Lake States Southeast Southeast Southeast West West West	Pine
Spruce / fir Spruce / fir / mountain hemlock Hemlock / Sitka spruce Western larch	Northeast and Lake States West West West	Fir / spruce / larch
Douglas-fir	West	Douglas-fir
Pinyon / juniper	West	Pinyon / juniper
Redwood	West	Redwood
Other eastern softwoods Other western softwoods California mixed conifers Exotic softwoods	Midwest and east US West West USA	Other softwoods
Oak / pine	Southeast USA	Oak-Pine
Oak / hickory	East USA	Oak/hickory
Oak / gum / cypress Elm / ash / cottonwood	Southeast USA East USA	Bottomland hardwoods
Maple / beech / birch Aspen / birch	North and Lake States North and Lake States and Central West	Northern hardwoods
Tropical rainforest	Hawaii	Tropical rainforest
Alder / maple Tanoak / laurel Other hardwoods Woodland hardwoods Tropical hardwoods Exotic hardwoods	West Southwest and west USA West Southeast coastal states USA	Other hardwoods
Other	USA	Other

Table 2. FIA forest type groups mapped to 13 general groups found in the state fact sheets.

Glossary

Acre	An area of land that is 43,560 square feet in size. 640 acres makes up one square mile. 1 acre is also the minimum size required to define "forestland".
Associated Industries	Industries that interact directly with an industry sector. For example, the solid wood products sectors interact with the logging sector, truck transportation, wholesale merchants, building services, and industrial machinery repair and maintenance. Associated industries produce indirect economic effects.
Coated paper	Paper coated with a mixture of materials such a fillers, waxes, and clays to impart qualities to paper such as weight, printability, smoothness, or reduced liquid absorbency.
Contribution analysis	Analysis calculates only the direct effects of an industry (output) while all other industries in a region experience indirect and induced effects. See Extraction Method below.
Cut stock	Rough lumber that is milled and finished to the exact length, thickness, and width necessary for its end use in a product.
Direct effects	Expenditures or production changes because of an activity or policy. They can be determined by changes in the employment, value-added, or output attributed to an economic sector. For example, a sawmill increases sales of green lumber by 2 million board feet in a year.
Economic dependence	The ratio of the value-added of a sector or group of sectors to the value-added of an entire region over a period. For example, if all forestry sectors combined produced value-added of \$10,000 in a region, and the total value-added of ALL economic sectors in the region was \$100,000, then the region would have a 10% economic dependence on forestry.
Employment	Employment is made up of two components. The first are hourly or salaried workers. The second are proprietors or owners of businesses in the sector.
Engineered wood	A larger beam or board formed from smaller pieces of wood that are compressed and held together with adhesives or other fasteners. Examples include LVL lumber, cross laminated timber (CLT), glulam beams, and panel products such as plywood and oriented-strand board (OSB).
Extraction method	A method of contribution analysis where the entire output of an industry is removed, allowing the determination of all indirect and induced effects supported by that industry in an economy.

Flooring	Milled lumber that is finished for use as flooring attached to some underlying surface. Lumber sources include softwoods (pines) and many hardwoods.
Forestland	Any land that is 10% forested by trees of any size.
Forest type	A forest with similar composition of tree species that describes a broad pattern of forest cover.
GDP	The measure of the total value of goods and services produced in a region or country over a given period. It is calculated by adding personal consumption expenditures, business investments, government spending, and the difference between exports and imports. GDP and value-added are analogous, but calculated differently.
Impact analysis	The modeling of a new firm or a change in output of a given firm.
Indirect effects	The employment, value-added, and output that is used in support of an industry sector. For example, when a sawmill increases its production of lumber, it purchases goods and services from other sectors such as truck transportation, building maintenance services, loggers, and financial management services. These goods and services purchased are outputs of these industries and cause those industries to grow in terms of employment, wages, and profits.
Induced effects	The household income of direct effects and indirect effects employment purchasing goods and services in the general economy. For example, a sawmill increases its production of lumber by 2 million board feet in a year. This requires more employees and wages paid to their families. Likewise, supporting industries (see indirect effects) have hired additional employees. Together, these employees have more household income to spend throughout the economy on goods and services. These household expenditures to various sectors make up induced effects.
Input-output tables	Transaction tables between industry sectors. I-O tables have a use and a make table, showing the total input and output consumption and production of an industry sector to other sectors.
Inventory	The value of raw material and finished products at the end of a period. Inventories a typically valued at cost rather than sale value.

Labor Income	Hourly and salaried wages and proprietor income paid within a sector over a period.
Linerboard	Thick paper boards, typically unbleached, that are used on the outside of paperboard boxes, with corrugated medium between the linerboards.
Manufactured homes	A prefabricated residence that has standardized components and is built on a permanent chassis. Often referred to as a "mobile home", though they are not meant to be moved frequently.
Millwork	A very broad term that can include any wood manufactured in a sawmill, but more specifically refers to flooring, molding, or other decorative construction material that was first processed at a sawmill. Millwork can include things from non-wood sources, though in this report, this does not apply.
Multiplier effects	Also known as the sum of indirect and induced effects. Indirect effects are those involving trade between associated sectors, induced effects are the result of household spending in primary and associated sectors.
Output	This is the total annual production of goods or services, net of inventory changes. If there are no additions/removals of inventory, then output is equivalent to gross revenue.
Pallets	A flat structure made for storing and transporting goods. Pallets can be of a variety of styles and sizes and are typically designed to work with a variety of lifting and stacking equipment.
Paper	A material manufactured from wood pulp or fiber that is typically formed in sheets less than 0.3 mm thick and in various sizes and is used for printing, packaging, and containers.
Paper bag	A bag typically made from unbleached softwood fibers.
Paperboard	A thick paper (> 0.3 mm) that is used for corrugated boxes, food containers, folding boxes and backing for gypsum sheets.
Paperboard containers	Commonly called "cardboard" these are containers with a center corrugated medium covered by two flat sheets of linerboard.

Planing	Smoothing and finishing the surface of wood (lumber) surfacing lumber or other wood products by removing small layers of wood using a rotary knife blade driving mechanically at high speed.
	A wood board that is a composite of an odd number of layers of thin plies of wood that are pressed and glued together. Each ply is oriented at 90% to the others, providing dimensional stability and strength.
	Any building that contains substantial sections or components built and even assembled off-site.
Private forest	Forest land that is owned by individuals, family or non-governmental trusts, tribal organizations, forest products companies, or institutional landowners such as timberland investment organizations, real-estate investment trusts.
Pulp mill	Any manufacturing facility that converts wood from a solid form to a fibrous or pulp form. Paper mills can use mechanical, chemical, and thermal methods to change solid wood into its component fibers.
Reconstituted wood products	Wood beams or boards formed from small veneers, strips, chips, or particles of wood that are held together by an adhesive. Examples include hardboard, particle board, insulation board, medium density fiberboard, wafer board, and oriented strand board.
Resawing ilimner	Changing the dimensions of lumber pieces into the final dimensions for which they will be used in further manufacturing.
Revenue	The income resulting from the total sale of goods or services, and can be similar to the value of shipments and output.
Roundwood	Industrial wood which may be in the form of logs or tree-length wood that has not been reshaped by manufacturing.
	Tissues, paper napkins, toilet tissue, paper towels, disposable diapers, and other fibrous, soft, and absorbent paper.
Social Accounting Matrix (SAM)	A matrix of interactions between industries and institutions and between institutions themselves. For example, sawmills will have interactions with furniture manufacturers, and sawmills may sell lumber to each other for various stages of milling. Both sales interactions are modelled by SAM.

Stationary products	Envelopes, paper sheets, and cards that are finished and often coated for smooth printing or writing.
Timberland	Forestland that is capable of producing 20 cubic feet of wood per acre per year, and is not withdrawn from timber production or associated with urban or rural development.
Trade flows	Shows value of domestic trade in the United States on a county to county basis. The value includes services. The value includes trade from a county to itself – for example when two businesses inside a single county are trading with each other.
Truss	Preassembled framework of rafters, posts, and struts that support a roof, bridges, or other structures.
Value-added	The increase in value of a good or service through the process of converting it through manufacturing, marketing, or processing. When looking at an economic sector, value-added is the difference between output and the cost of all intermediate inputs over a period. Value-added is analogous to GDP.
Value of shipments	The value of goods sold based on net selling values at the point of sale and excluding discounts and allowances.
Veneer	A thin sheet or piece of wood that is either peeled or sliced from a log.
Wood containers	Casks, barrels, boxes that are designed to store and transport material. They are different from paper containers in that wood containers are not made by first changing the wood to a fibrous state.

References

- District Department of Transportation. n.d. Tree Canopy in the District of Columbia: Mapping our progress (2006 to 2011). Retrieved December 5, 2023, from https://ddot.dc.gov/sites/default/files/dc/sites/ddot/publication/attachments/tree_canopy_DC _factsheet_2006-2011.pdf
- FAOSTAT. 2020. Forestry Production and Trade. Food and Agriculture Organization of the United Nations. https://www.fao.org/faostat/en/#data/FO
- IMPLAN. 2020. Economic Impact, Economic Contribution, and Export Base. https://support.implan.com/hc/en-us/articles/360008185474-Economic-Impact-Economic-Contribution-and-Export-Base
- IMPLAN. 2022. Introduction to Industry Contribution Analysis. https://support.implan.com/hc/enus/articles/360025854654-ICA-Introduction-to-Industry-Contribution-Analysis
- Miller, RE and PD Blair. 2009. Input-Output Analysis: Foundations and Extensions. Cambridge University Press. https://doi.org/10.1017/CBO9780511626982
- Pelkki, M and G Sherman. "Forestry's Economic Contribution in the United States, 2016." Forest Products Journal 70 (2020): 28-38.
- Texas A&M Forest Service; USDA Forest Service. 2023. My City's Trees. Retrieved December 5, 2023, from https://mct.tfs.tamu.edu
- USDA Forest Service, Forest Inventory and Analysis Program, Thu, 2023-05-25 17:04:14 GMT. Forest Inventory FIADB-API web-application Version 2.0.3 St. Paul, MN: U.S. Department of Agriculture, Forest Service, Northern Research Station. [Available only on internet: http://apps.fs.usda.gov/fiadb-api/evalidator
- USDA Forest Service. 2023. Forest Inventory and Analysis National Program. https://www.fia.fs.usda.gov/

Arkansas Center for Forest Business

Our Vision

Our vision is to connect people and forests to sustain healthy forests, strengthen a green bio-economy, and support vibrant rural communities.

Our Mission

The Center for Forest Business provides market-based economic solutions to forest resource issues, improves business practices for forest enterprises, and enhances the economic competitiveness of Arkansas' forests in a global economy.

Our Values

- Sustainable and healthy forests are our primary goal.
- Cutting-edge science finds solutions and find opportunities.
- Collaboration with others is a key to success.
- People are the foundation of forest sustainability.
- Forests and people have a natural and common identity.











Arkansas Center for Forest Business Staff



Matthew Pelkki, PhD pelkki@uamont.edu Director of the Arkansas Center for Forest Business: Forest management and operations research



Kevin Boston, PhD boston@uamont.edu Associate Professor: Forest operations, supply chain management, policy and legal issues



Sagar Chhetri, PhD chhetri@uamont.edu

Assistant Professor: Finance, life cycle analysis, forest inventory, and timber supply



Ana Gutierrez, MS gutierrez@uamont.edu

Research Associate: Business cost analysis, logging workforce development, and private forestry



Pipiet Larasatie, PhD larasatie@uamont.edu

Assistant Professor: Forest products marketing and gender equity in forestry workforce



Rebecca Montgomery, MS bec.monty@gmail.com

Economic Data Analyst: Forest management, database development, cost and operations surveys



Elena Rubino, PhD rubino@uamont.edu Assistant Professor: Strategic messaging and communications and social interactions



Pradip Saud, PhD saud@uamont.edu

Assistant Professor: Statistical analysis, remote sensing and forest growth modelling, urban forests



Shaun Tanger, PhD tanger@uamont.edu

Associate Professor: Forest taxation, policy, and timberland appraisal



Nana Tian, PhD tian@uamont.edu Assistant Professor: Forest economics and valuation of timber and non-timber forest values



For more information, contact the Arkansas Center for Forest Business at (870) 460-1949 forestbusiness@uamont.edu www.uamont.edu/academics/CFANR/acfb.html

