# Economic Contribution of the Forest Sector in North Carolina, 2018



- North Carolina has about 18.1 million acres of timberland covering about 58 percent of the state's total land area.
- In 2018, the forest sector in North Carolina—including forestry and logging operations, sawmills, furniture mills, and pulp and paper industries—directly contributed \$20.8 billion in industry output, which was just about 2 percent of the statewide economic output. The forest sector employed about 75,000 people with a payroll of \$4.2 billion and a value added (gross state product) of \$6.3 billion.
- Including direct, indirect, and induced effects, the forest sector in North Carolina had a **total** contribution of **\$33.6 billion** in industry output to the North Carolina economy, supporting more than **150,400** full-time and part-time jobs with a payroll of about \$8.3 billion.
- Compared to 2017, total economic output in 2018 was up 2.6 percent, but total employment dropped slightly less than 0.4 percent. While forestry operations gained about 400 jobs, primary solid wood mills and paper and paperboard mills lost about 5,300 jobs collectively.
- The forest sector was the **top** employer among manufacturing sectors in the state.
- Every job created in the forest sector resulted in another 1.01 jobs in North Carolina.



- On average, every dollar generated in the forest sector contributed an additional 61 cents to the rest of the North Carolina economy.
- The forest sector in North Carolina directly generated about \$274.2 million in state and local taxes and \$850.4 million in federal taxes. Compared to 2017, both state and local taxes and federal taxes increased by 6.1 percent and 0.2 percent, respectively.
- Primary solid wood mills directly generated about \$35.7 million in state and local taxes and more than \$100 million in federal taxes. Compared to 2017, both state and local taxes and federal taxes from the primary solid wood industry decreased by 12 percent and 0.6 percent, respectively.
- International exports from the North Carolina forest sector totaled about \$1.44 billion.



## Economic Contribution of the North Carolina Forest Sector, 20181

	Employment <sup>2</sup> (jobs)	Labor Income <sup>3</sup> (million \$)	Gross State Product <sup>4</sup> (million \$)	Industry Output⁵ (million \$)
Direct Contribution <sup>6</sup>				
Forestry operations	704	37.61	41.43	54.30
Logging	6,171	258.16	272.02	478.76
Primary solid wood mills <sup>7</sup>	8,267	473.27	918.09	2,885.53
Secondary solid wood mills <sup>8</sup>	42,806	2,092.32	2,845.49	8,070.47
Primary paper and paperboard mills	3,977	411.50	777.37	3,106.87
Secondary paper and paperboard mills	13,051	949.44	1,471.89	6,236.39
Total	74,975	4,222.31	6,326.28	20,832.33
Total Contribution <sup>9</sup>				
Forestry operations	926	47.89	60.12	87.07
Logging	8,271	360.74	452.55	798.43
Primary solid wood mills	17,395	967.26	1,761.95	4,462.81
Secondary solid wood mills	77,332	3,951.29	5,911.68	13,775.83
Primary paper and paperboard mills	14,664	1,004.01	1,797.00	5,030.23
Secondary paper and paperboard mills	31,829	1,948.47	3,184.15	9,444.15
Total	150,417	8,280	13,167	33,599
Change in Total Contribution from 201	7			
Forestry operations	77.1%	96.6%	10.0%	22.5%
Logging	1.9%	-0.8%	-1.2%	12.4%
Primary solid wood mills	-10.2%	-9.5%	3.1%	-3.7%
Secondary solid wood mills	5.7%	8.7%	10.5%	7.6%
Primary paper and paperboard mills	-11.1%	-7.1%	-4.1%	-3.4%
Secondary paper and paperboard mills	-4.5%	-2.9%	-3.5%	1.2%
Total	-0.4%	1.2%	3.3%	2.6%

Values, based on multi-industry contribution analysis, are reported in 2018 dollars.

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Economic contribution numbers, based on multi-industry contribution analysis, are reported in 2018 dollars. The method of internal adjustments to the IMPLAN software (IMPLAN 2018) was used. More details about the contribution analysis method can be found at https://bit.ly/2LajYIL. IMPLAN sectors included 15, 16, 19 (partial), 132, 133, 134, 135, 136, 137, 138, 139, 140, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 365, 366, 367, 370, 371, and 373.

<sup>&</sup>lt;sup>2</sup> Employment includes both full-time and part-time jobs.

<sup>&</sup>lt;sup>3</sup> Labor income includes all forms of employment income, including employee compensation (wages and benefits) and proprietor income.

<sup>&</sup>lt;sup>4</sup> Gross State Product (value added) is the difference between industry output and the cost of intermediate inputs. It consists of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus.

 $<sup>^{\</sup>rm 5}$  Industry output is the total annual value of production by industry.

<sup>&</sup>lt;sup>6</sup> Direct contribution is a series of production changes or expenditures made by producers and consumers as a result of an activity.

<sup>&</sup>lt;sup>7</sup> Primary mills, such as sawmills and pulp mills, consume wood in a round or log form before producing a value added product.

<sup>&</sup>lt;sup>8</sup> Secondary mills, such as furniture and paper mills, use wood-based products to produce value added products.

<sup>&</sup>lt;sup>9</sup> Total contribution is the sum of direct, indirect, and induced contribution effects generated by the sector.