

Economic Contribution of the Forest Sector in North Carolina, 2021

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EXTENSION

The forest sector in North Carolina rebounded to the pre-pandemic level, with a total economic size of greater than **\$35 billion**. Compared to 2020, the North Carolina forest sector in 2021 realized nearly a **\$2.5 billion** gain in total economic activities, which was more than the aggregate decline in total economic output in 2020.

- In 2021, the forest sector in North Carolina—including forestry and logging operations, sawmills, furniture mills, and pulp and paper industries—**directly** contributed **\$21.6 billion** in industry output, which was nearly 2% of the statewide economic output. The forest sector directly employed about 72,200 with a payroll of \$4.6 billion and a value-added (gross state product) of **\$6.8 billion**.
- With direct, indirect, and induced effects, the forest sector in North Carolina had a **total** contribution of **\$35.3 billion** in industry output to the North Carolina economy, which supported approximately **139,700** full-time and part-time jobs with a payroll of about **\$8.9 billion**.
- Compared to 2020, **total economic output** in 2021 was up **7.5%**, and **total employment** rose **1.1%**. Solid wood product industries regained over 2000 jobs in 2021 that were lost in 2020.
- The total value-added, equivalent to the gross domestic product, was up 12.6% to **\$14.3 billion**, which occurred predominantly in the primary and secondary solid wood products industries.
- The forest sector in 2021 was back on **top** among manufacturing sectors in the state, which was slightly behind the food manufacturing sector in 2020.
- Every job created in the forest sector resulted in another **0.93** jobs in North Carolina.
- On average, every dollar generated in the forest sector contributed an additional **\$0.63** to the North Carolina economy.
- The forest sector in North Carolina directly generated about **\$184 million** in state taxes and **\$434.4 million** in federal taxes. In 2021, the forest sector received **\$42.3 million** in federal subsidies on production and imports and **\$35.9 million** in state subsidies on personal income taxes.
- International exports from the North Carolina forest sector totaled about **\$1.74 billion**, which was down **43%** from 2020.



Economic Contribution of the North Carolina Forest Sector, 2021¹

(Values, based on multi-industry contribution analysis, are reported in 2021 dollars.)

Contribution	Industry Operation	Employment ² (jobs)	Labor Income ³ (million \$)	Gross State Product ⁴ (million \$)	Industry Output ⁵ (million \$)
Direct Contribution⁶	Forestry operations	774	44.90	49.69	62.88
	Logging	5,091	222.14	235.20	426.35
	Primary solid wood mills ⁷	5,991	434.84	924.24	2,368.64
	Secondary solid wood mills ⁸	42,697	2,400.98	3,242.85	8,935.34
	Primary paper and paperboard mills	4,710	485.48	846.29	3,290.84
	Secondary paper and paperboard mills	12,931	1,046.38	1,553.23	6,522.48
	Total		72,194	4,635	6,852
Total Contribution⁹	Forestry operations	1,003	57.58	73.06	104.36
	Logging	7,023	321.94	411.87	748.50
	Primary solid wood mills	12,619	858.91	1,649.93	3,707.90
	Secondary solid wood mills	73,533	4,361.03	6,614.73	15,135.37
	Primary paper and paperboard mills	14,490	1,134.98	1,977.55	5,407.88
	Secondary paper and paperboard mills	31,010	2,197.02	3,529.63	10,190.50
	Total		139,678	8,931	14,257
Change in Total Contribution from 2020	Forestry operations	-1.6%	13.0%	14.2%	15.0%
	Logging	3.8%	30.8%	37.4%	32.6%
	Primary solid wood mills	3.4%	16.6%	46.1%	29.7%
	Secondary solid wood mills	2.5%	8.5%	13.8%	9.7%
	Primary paper and paperboard mills	-9.0%	-4.9%	-5.2%	-7.0%
	Secondary paper and paperboard mills	1.9%	7.1%	8.1%	5.1%
	Total		1.1%	7.6%	12.6%

¹ Economic contribution numbers, based on multi-industry contribution analysis, are reported in 2020 dollars. The method of internal adjustments to the IMPLAN software was used, and more details about the analysis method can be obtained from Parajuli et al. (2018). 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.

² Employment includes both full-time and part-time jobs.

³ Labor income includes all forms of employment income, including employee compensation (wages and benefits) and proprietor income.

⁴ 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.

⁵ Industry output is the total annual value of production by industry.

⁶ Direct contribution is a series of production changes or expenditures made by producers and consumers as a result of an activity.

⁷ Primary mills, such as sawmills and pulp mills consume wood in a round or log form before producing a value-added product.

⁸ Secondary mills, such as furniture and paper mills, use wood-based products to produce value-added products.

⁹ Total contribution is the sum of direct, indirect, and induced contribution effects generated by the sector.

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