

The Impact of the Forestry Industry on the Maryland Economy

BEACON, the Business Economic and Community Outreach Network at Salisbury University, with the support of the Maryland Agricultural and Resource-Based Industries Development Corporation (MARBIDCO), has completed an economic impact study to measure the importance of resource-based industries (RBI) to the State of Maryland.¹ The resource-based industries represent a significant and crucial segment of the Maryland economy.

The target Resource-based industries, which include agriculture, forestry, seafood, aquaculture, and horticulture, accounted for over \$20.1 billion in economic activity, 88,610 supported jobs, and over \$755 million in State and local tax revenue. This includes only a portion of the estimated \$2.06 billion economic impact of the equine industry.

The forestry industry, a key component of the resource-based industries in Maryland, was one of the focus areas of this study. The research on the forestry sector consisted of timber tract operations/production, commercial logging, sawmills, wood preservations, veneer and plywood manufacturing, engineered wood member and truss manufacturing, reconstituted wood products manufacturing, other miscellaneous wood product and paper product manufacturing.

Using the latest complete pre-COVID available data from 2019, it is calculated that the forestry sector contributed over \$3.3 billion to the State's economy (16.57% of RBI total), supported 12,890 jobs (14.55% of RBI total), and over \$131 million in State and local tax revenue (17.41% of RBI total).

Resource-based Industries	Economy Contribution (\$)	% of total	Jobs Supported	% of total	State & Local Tax Revenue (\$)	% of total
Agriculture (including Agricultural Support industries and Aquaculture)	\$16,526,654,885	82.00%	73,009	82.39%	\$ 610,415,535	80.83%
Forestry	\$3,339,461,946	16.57%	12,890	14.55%	\$ 131,444,964	17.41%
Seafood	\$288,800,382	1.43%	2,711	3.06%	\$ 13,330,173	1.77%
RBI Total	\$20,154,917,213	100.00%	88,610	100.00%	\$755,190,673	100.00%
<i>Equine (partially represented in Agriculture and Support industries, but also included in sectors outside of the scope of this study)</i>	<i>\$2,061,000,000</i>		<i>21,532</i>			

NOTE: The total Equine impact was not included in the Agriculture Industry sector analysis. The value of equine impact includes industry sectors that include many other industries.

Breaking these total impacts down, the forestry sector generated over \$2.5 billion in "direct" economic output in 2019. This equals the value of all of the output of the forestry sector *plus* the value of the Maryland-based supply chain needed by Maryland forestry producers to produce their lumber and paper products. For example, if a timber worker requires

¹ The 2019 IMPLAN dataset was utilized in this study, rather than the 2020 dataset, in order to examine the most recent pre-COVID industry impacts.

outside machinery or repairs to said machinery to produce quality wood products, these supply-chain expenditures would be included in the “direct” output figure. However, to provide these necessary inputs, the supply-chain vendor needs to purchase additional inputs from their supply chains. Continuing with the above example, if a machinery supplier needs to provide more products, they will need to purchase more steel, fuel, insurance services, etc. This second-order (or ripple) effect, whereby input producers purchase more inputs, is known as “indirect” economic input. In 2019, the activities of the forestry sector were responsible for an “indirect” economic output of nearly \$548.4 million. Finally, the above direct and indirect economic effects ignore how the employees in the affected firms/industries spend their additional income. This household spending results in an additional “induced” economic effect. In 2019, the activities of the forestry sector were responsible for “induced” economic output totaling over \$268 million. Summing these economic impacts, Maryland’s forestry industry contributed over \$3.3 billion in total state economic activity,

In addition, the impact of the Forestry industry on the Maryland Economy was analyzed in the report not only at a State level but also at the regional level (i.e., Western Maryland, Central Maryland, Southern Maryland, and the Eastern Shore of Maryland). In addition to regional levels, a further analysis was examined at a sub-regional level for Western Maryland and the Eastern Shore of Maryland. (Please note that *Appalachian Maryland* includes the Allegany, Garrett, and Washington Counties).

In summary,

- Western Maryland contributed over \$1.26 billion to the State economy;
- Central Maryland contributed over \$987 million to the State economy;
- Southern Maryland contributed over \$419 million to the State economy; and
- The Eastern Shore of Maryland contributed over \$666 million to the State economy.

<u>Forestry Industry</u>				
Economy Contribution	Direct	Indirect	Induced	Total
State of Maryland	\$2,522,916,149	\$548,394,854	\$268,150,944	\$3,339,461,946
Western Maryland	\$947,465,175	\$208,082,309	\$110,507,513	\$1,266,054,997
<i>Appalachian Maryland</i>	\$649,361,330	\$142,506,115	\$75,241,305	\$867,108,749
Central Maryland	\$763,467,277	\$151,069,936	\$73,233,321	\$987,770,533
Southern Maryland	\$317,552,225	\$67,458,396	\$34,227,505	\$419,238,126
Eastern Shore of Maryland	\$494,431,472	\$121,784,213	\$50,182,605	\$666,398,290
<i>Upper Eastern Shore</i>	\$51,592,876	\$10,557,358	\$5,180,260	\$67,330,494
<i>Mid Shore</i>	\$239,616,622	\$47,467,530	\$17,237,220	\$304,321,372
<i>Lower Eastern Shore</i>	\$203,221,974	\$63,759,324	\$27,765,126	\$294,746,424

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Concerning jobs, the “direct” economic impact of the forestry sector supported 7,946 jobs in 2019. The resulting ripple effect of these activities supported 3,132 jobs due to “indirect” economic effects and an additional 1,812 jobs due to “induced” economic effects. Summing these economic impacts, Maryland forestry supported a total of 12,890 jobs.

<u>Forestry Industry</u>				
Employment	Direct	Indirect	Induced	Total
State of Maryland	7,946	3,132	1,812	12,890
Western Maryland	3,141	1,181	800	5,122
<i>Appalachian Maryland</i>	2,034	806	547	3,387
Central Maryland	2,268	782	435	3,486
Southern Maryland	1,280	465	230	1,974
Eastern Shore of Maryland	1,257	705	347	2,309
<i>Upper Eastern Shore</i>	207	70	38	315
<i>Mid Shore</i>	617	274	123	1,014
<i>Lower Eastern Shore</i>	433	361	187	980

<u>Forestry Industry</u>					
State & Local Tax	Employee Compensation	Household Expenditures	Corporations	Taxes on Production & Imports	Total
State of Maryland	\$465,083	\$34,319,325	\$4,562,939	\$92,097,617	\$131,444,964
Western Maryland	\$184,796	\$13,636,428	\$1,813,037	\$36,594,034	\$52,228,294
<i>Appalachian Maryland</i>	\$122,221	\$9,018,941	\$1,199,117	\$24,202,777	\$34,543,056
Central Maryland	\$125,765	\$9,280,411	\$1,233,881	\$24,904,445	\$35,544,501
Southern Maryland	\$71,216	\$5,255,170	\$698,703	\$14,102,511	\$20,127,600
Eastern Shore of Maryland	\$83,306	\$6,147,316	\$817,319	\$16,496,628	\$23,544,569
<i>Upper Eastern Shore</i>	\$11,373	\$839,258	\$111,584	\$2,252,190	\$3,214,404
<i>Mid Shore</i>	\$36,569	\$2,698,482	\$358,778	\$7,241,511	\$10,335,339
<i>Lower Eastern Shore</i>	\$35,364	\$2,609,576	\$346,957	\$7,002,928	\$9,994,825

For more information on “The Impact of Resource Based Industries on the Maryland Economy”, including the full report, please visit MARBIDCO’s website: www.marbidco.org.