



The Impact of Resource-Based Industries on the Maryland Economy

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Introduction

This economic impact study measures the importance of resource-based industries (RBI) to the state of Maryland, as well as each county and region (i.e., Western, Central, Southern, Eastern Shore, and sub-regions). The total economic impact of resource-based industries in 2019 equaled nearly \$20.2 billion, supported over 88,600 jobs, and generated almost \$755.2 million in state and local tax revenue (see Tables 1 to 3 for more details).¹ To put these magnitudes into perspective, the economic output of RBI industries is equivalent to 5.2% of Maryland's personal income and 4.7% of Maryland's gross domestic product (GDP).² At the same time, total jobs supported by RBI activities (88,610) equal 2.7% of Maryland's total employment.³ The resource-based industries represent a significant and crucial segment of the Maryland economy.

The combined agriculture and support Industries account for over \$16.5 billion of contribution to the state's economy. Breaking down the RBI economic output total by industry, agriculture contributed over \$3.2 billion to the state economy (15.9% of RBI total), supported 24,142 jobs (27.2% of RBI total), and added over \$88.5 million to the combined state and local tax revenue (11.7% of RBI total). Agriculture support industries, those in-state industries that rely on Maryland's agricultural firms for their supply-chain input (e.g., a Maryland-based canned vegetable manufacturer who relies on Maryland farmers for their fresh vegetable supply), contributed over \$13.3 billion to the state economy (66.1% of RBI total), supported 48,867 jobs (55.1% of RBI total), and added nearly \$521.9 million in combined state and local tax revenue (69.1% of RBI total). Forestry activity and wood derivatives contributed over \$3.3 billion to the state economy (16.6% of RBI total), supported 12,890 jobs (14.5% of RBI total), and added over \$131.4 million in combined state and local tax revenue (14.5% of RBI total). Seafood contributed nearly \$288.8 million to the state economy (1.4% of RBI total), supported 2,711 jobs (3.1% of RBI total), and added over \$13.3 million in combined state and local tax revenue (1.8% of

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

² According to the U.S. Bureau of Economic Analysis, Maryland's seasonally adjusted personal income totaled \$385.385 billion in the fourth quarter of 2019, while Maryland's seasonally adjusted gross domestic product equaled \$425.540 billion over the same period.

³ According to the U.S. Bureau of Labor Statistics, Maryland's total seasonally adjusted employment in December 2019 totaled 3,288,322.

RBI total).⁴ Aquaculture, included in the agriculture impact estimates, contributes approximately \$18.2 million in output, representing 0.8% of the direct agricultural impact⁵. For methodological reasons, these results do not include the total \$2.06 billion economic impact of Maryland's equine industry (as detailed later in this report).

Breaking down the RBI economic impact by region, Western Maryland contributed over \$3.6 billion to the state economy (18.0% of the RBI total), supported 19,186 jobs (21.7% of RBI total), and added nearly \$154.3 million in the combined state and local tax revenue (20.4% of RBI total). Central Maryland contributed over \$9.1 billion to the state economy (45.3% of the RBI total), supported 33,126 jobs (37.4% of RBI total), and added over \$323.4 million in combined state and local tax revenue (42.8% of RBI total). Southern Maryland contributed over \$1.8 billion to the state economy (8.9% of the RBI total), supported 11,078 jobs (12.5% of RBI total), and added over \$96.9 million in combined state and local tax revenue (12.8% of RBI total). Finally, the Eastern Shore of Maryland contributed nearly \$5.6 billion to the state economy (27.7% of the RBI total), supported 25,220 jobs (28.5% of RBI total), and added nearly \$180.6 million in combined state and local tax revenue (23.9% of RBI total).

⁴ This report does not include recreational fishing (only commercial fishing), because such data are not collected and reported by the federal government. Furthermore, most aquaculture activities (NAICS codes 112511, 112512, and 112519) could not be separated from the much broader and primarily agricultural sector "animal production, except cattle and poultry and eggs" (IMPLAN code 14).

⁵ There are additional indirect and induced impact associated with the direct output of aquaculture, however, due to methodological and data limitations, aquaculture cannot be separated from agriculture in this analysis.

**Table 1. Resource Industry Economic Impacts:
Output**

All RBI Industry Sectors

Geographic Entity	Sector Output			Total	% of Total
	Direct	Indirect	Induced		
State of Maryland	15,240,373,981	3,571,435,449	1,343,107,784	20,154,917,213	100.0%
Regions					
Western Maryland	2,693,563,531	661,496,212	272,786,183	3,627,845,926	18.0%
Appalachian Maryland	1,267,106,434	269,171,776	135,515,193	1,671,793,403	8.3%
Central Maryland	7,075,558,261	1,535,470,974	527,514,982	9,138,544,217	45.3%
Southern Maryland	1,390,585,012	287,620,486	125,396,830	1,803,602,328	8.9%
Eastern Shore of Maryland	4,080,667,177	1,086,847,777	417,409,789	5,584,924,742	27.7%
Upper Eastern Shore	706,935,519	185,090,995	62,638,265	954,664,779	4.7%
Mid Shore	1,657,689,394	396,859,958	144,666,750	2,199,216,102	10.9%
Lower Eastern Shore	1,716,042,263	504,896,824	210,104,775	2,431,043,862	12.1%
Counties					
Allegany	400,335,791	75,319,755	43,880,558	519,536,104	2.6%
Anne Arundel	438,453,541	109,007,413	54,834,014	602,294,967	3.0%
Baltimore	1,816,166,384	318,042,677	155,901,185	2,290,110,246	11.4%
Baltimore City	1,930,709,193	402,304,436	96,307,640	2,429,321,270	12.1%
Calvert	135,146,646	22,637,860	7,782,914	165,567,420	0.8%
Caroline	481,720,795	133,709,110	35,980,547	651,410,451	3.2%
Carroll	636,388,476	170,799,700	60,318,765	867,506,941	4.3%
Cecil	226,167,451	42,122,304	21,863,114	290,152,869	1.4%
Charles	90,114,590	21,733,958	5,992,462	117,841,010	0.6%
Dorchester	959,329,288	195,358,945	79,050,883	1,233,739,116	6.1%
Frederick	790,068,622	221,524,736	76,952,224	1,088,545,582	5.4%
Garrett	218,643,810	73,202,795	24,971,929	316,818,534	1.6%
Harford	721,816,790	186,979,244	63,890,272	972,686,306	4.8%
Howard	1,858,343,227	471,032,164	123,095,259	2,452,470,649	12.2%
Kent	194,902,607	63,513,322	16,323,325	274,739,255	1.4%
Montgomery	748,522,666	157,112,454	88,320,625	993,955,745	4.9%
Prince George's	649,142,745	117,057,352	52,149,581	818,349,677	4.1%
Queen Anne's	285,865,461	79,455,369	24,451,825	389,772,655	1.9%
St. Mary's	77,727,491	17,183,904	4,637,859	99,549,253	0.5%
Somerset	317,852,869	58,098,352	26,776,471	402,727,692	2.0%
Talbot	216,639,311	67,791,903	29,635,320	314,066,534	1.6%
Washington	648,126,833	120,649,226	66,662,706	835,438,765	4.1%
Wicomico	906,326,579	334,208,661	140,275,643	1,380,810,883	6.9%
Worcester	491,862,815	112,589,811	43,052,660	647,505,286	3.2%

**Table 2. Resource Industry Economic Impacts:
Employment**

All RBI Industry Sectors

Geographic Entity	Sector Output				% of Total
	Direct	Indirect	Induced	Total	
State of Maryland	58,519	21,222	8,870	88,610	100.0%
Regions					
Western Maryland	12,486	4,751	1,949	19,186	21.7%
Appalachian Maryland	5,627	1,835	971	8,433	9.5%
Central Maryland	21,912	7,998	3,216	33,126	37.4%
Southern Maryland	8,237	2,015	827	11,078	12.5%
Eastern Shore of Maryland	15,883	6,458	2,878	25,220	28.5%
Upper Eastern Shore	4,146	1,404	450	6,000	6.8%
Mid Shore	5,890	2,400	1,022	9,312	10.5%
Lower Eastern Shore	5,847	2,653	1,406	9,907	11.2%
Counties					
Allegany	1,574	450	314	2,337	2.6%
Anne Arundel	2,117	631	343	3,091	3.5%
Baltimore	5,774	1,733	1,008	8,515	9.6%
Baltimore City	5,099	1,772	554	7,425	8.4%
Calvert	701	196	56	953	1.1%
Caroline	1,677	830	250	2,757	3.1%
Carroll	3,066	1,526	446	5,039	5.7%
Cecil	1,987	391	161	2,539	2.9%
Charles	844	241	43	1,128	1.3%
Dorchester	3,194	1,122	556	4,873	5.5%
Frederick	3,792	1,390	532	5,714	6.4%
Garrett	1,296	479	196	1,970	2.2%
Harford	2,429	1,297	447	4,173	4.7%
Howard	4,738	2,371	707	7,816	8.8%
Kent	867	373	112	1,351	1.5%
Montgomery	3,872	825	501	5,198	5.9%
Prince George's	3,319	719	352	4,390	5.0%
Queen Anne's	1,292	641	177	2,110	2.4%
St. Mary's	1,256	228	32	1,516	1.7%
Somerset	873	333	171	1,378	1.6%
Talbot	1,019	448	216	1,682	1.9%
Washington	2,758	907	461	4,126	4.7%
Wicomico	3,348	1,753	944	6,045	6.8%
Worcester	1,626	567	291	2,484	2.8%

**Table 3. Resource Industry Economic Impacts:
State and Local Government Tax Impact**

All RBI Industry Sectors

Geographic Entity	Sources of Tax Revenue					% of Total
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)	
State of Maryland	2,324,150	173,916,489	31,211,486	547,738,548	755,190,673	100.0%
Regions						
Western Maryland	506,237	37,801,707	6,534,901	109,444,904	154,287,750	20.4%
Appalachian Maryland	232,212	17,293,259	2,833,034	48,095,910	68,454,414	9.1%
Central Maryland	944,319	70,668,483	12,747,247	239,048,885	323,408,934	42.8%
Southern Maryland	297,943	22,276,511	3,935,024	70,396,726	96,906,204	12.8%
Eastern Shore of Maryland	575,651	43,169,788	7,994,315	128,848,032	180,587,786	23.9%
Upper Eastern Shore	122,939	9,242,825	1,795,000	24,736,844	35,897,608	4.8%
Mid Shore	227,469	17,042,873	3,118,135	52,462,149	72,850,625	9.6%
Lower Eastern Shore	225,243	16,884,090	3,081,180	51,649,039	71,839,552	9.5%
Counties						
Allegany	75,883	5,623,256	828,202	15,788,089	22,315,431	3.0%
Anne Arundel	85,943	6,429,931	1,153,237	21,123,832	28,792,943	3.8%
Baltimore	223,445	16,691,055	2,901,356	57,232,362	77,048,218	10.2%
Baltimore City	239,359	17,913,341	3,234,636	59,718,781	81,106,116	10.7%
Calvert	25,795	1,925,122	328,928	5,703,292	7,983,137	1.1%
Caroline	62,378	4,671,060	849,495	12,194,977	17,777,910	2.4%
Carroll	128,578	9,618,766	1,721,851	28,413,757	39,882,951	5.3%
Cecil	55,010	4,131,975	793,711	11,291,510	16,272,206	2.2%
Charles	28,961	2,164,621	381,139	6,260,562	8,835,282	1.2%
Dorchester	124,335	9,318,692	1,709,295	31,295,524	42,447,846	5.6%
Frederick	145,447	10,889,683	1,980,017	32,935,237	45,950,384	6.1%
Garrett	53,473	3,977,499	635,235	10,417,673	15,083,879	2.0%
Harford	110,491	8,288,746	1,562,901	27,835,353	37,797,491	5.0%
Howard	224,611	16,827,358	3,102,264	58,725,850	78,880,084	10.4%
Kent	26,432	1,990,334	397,710	5,112,646	7,527,121	1.0%
Montgomery	146,413	10,947,983	1,946,090	35,536,539	48,577,025	6.4%
Prince George's	126,704	9,466,251	1,656,130	30,695,070	41,944,155	5.6%
Queen Anne's	41,497	3,120,516	603,579	8,332,689	12,098,281	1.6%
St. Mary's	30,541	2,290,586	415,590	6,613,971	9,350,687	1.2%
Somerset	25,355	1,908,241	368,275	5,284,379	7,586,251	1.0%
Talbot	40,756	3,053,120	559,345	8,971,648	12,624,869	1.7%
Washington	102,856	7,692,504	1,369,596	21,890,149	31,055,105	4.1%
Wicomico	148,903	11,147,878	2,002,665	34,793,388	48,092,833	6.4%
Worcester	50,985	3,827,971	710,240	11,571,272	16,160,468	2.1%

Agriculture and Supporting Industries

The agriculture sector and supporting industries are the most significant drivers of impact in Maryland’s Resource-based industries. The agriculture sector consists of oilseed farming, grain farming; vegetable and melon farming; fruit farming; greenhouse, nursery, and floriculture production; tobacco farming; cotton farming; sugarcane and sugar beet farming; all other crop farming; beef cattle ranching and farming (including feedlots and dual-purpose ranching and farming); dairy cattle and milk production; poultry and egg production; animal production (except cattle and poultry and eggs); and commercial hunting and trapping. The supporting industries sector consists of in-state industries that rely on Maryland’s agricultural firms for their supply-chain input (e.g., a Maryland-based canned vegetable manufacturer who relies on Maryland farmers for their fresh vegetable supply). These industries include soil preparation; planting and cultivating; farm management services; support activities for animal production; animal food manufacturing; flour, rice, and wet corn milling; fluid milk, creamery butter, and cheese manufacturing; animal slaughtering; breweries; wineries; and distilleries; fertilizer manufacturing; and many others. A portion of the equine industry is included in the agricultural sector, and other parts of the equine industry are included as a portion of support industries. Still, other elements of the equine industry are included in other sectors.

The detailed list of IMPLAN sectors and industries is included in the section of this report that details the industry individually. The industry breakdowns also show the detailed local impact of those sectors. The Figure below show the combined impact of agriculture and its supporting industries.

Figure 1. Maryland Agriculture & Support Industries Impact Estimate

Agriculture & Support Industries					
Sector Output	Direct	Indirect	Induced	Total	
	\$ 12,499,999,242	\$ 2,971,073,626	\$ 1,055,582,017	\$ 16,526,654,885	
Sector Employment	Direct	Indirect	Induced	Total	
	48,427	17,656	6,926	73,009	
Sources of Tax Revenue	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
	\$ 1,827,579	\$ 137,230,339	\$ 26,304,038	\$ 445,053,578	\$ 610,415,535

The total regional output and employment of the agriculture and support industries are summarized below (Figure 2). The economic output of \$16.5 billion is highest in Central Maryland with \$8.1 Billion, followed by the Eastern Shore with almost \$4.7 billion, Western Maryland with \$2.6 billion, and Southern Maryland with \$1.3 billion. The jobs impact was also highest in Central Maryland with 29,283, followed by the Eastern Shore, Western Maryland, and southern Maryland. The tax of over \$610 million was also the largest in Central (47%), followed by the Eastern Shore (24%), Western (17%), and Southern (12%).

Figure 2. Maryland Agriculture & Support Industries Regional Impact Estimate

Resource Industry Economic Impacts:							
Industry Sectors:							
Agriculture + Support Industries	<u>Economy Contribution</u>		<u>Jobs Supported</u>		<u>State & Local Tax Revenue</u>		
Economic Impact:	Output		Employment		State & Local Tax		
State of Maryland	\$	16,526,654,885		73,009		\$	610,415,535
Regions							
<i>Western Maryland</i>	\$	2,361,790,929	14%	14,064	19%	\$	102,059,455
<i>Central Maryland</i>	\$	8,130,486,106	49%	29,283	40%	\$	286,107,915
<i>Southern Maryland</i>	\$	1,363,893,641	8%	8,731	12%	\$	74,941,651
<i>Eastern Shore of Maryland</i>	\$	4,670,484,210	28%	20,931	29%	\$	147,306,514

Agriculture

The agriculture sector consists of oilseed farming; grain farming; vegetable and melon farming; fruit farming; greenhouse, nursery, and floriculture production; tobacco farming; cotton farming; sugarcane and sugar beet farming; all other crop farming; beef cattle ranching and farming (including feedlots and dual-purpose ranching and farming); dairy cattle and milk production; poultry and egg production; animal production (except cattle and poultry and eggs); and commercial hunting and trapping. A complete list of the agriculture industries, IMPLAN industry codes, and corresponding NAICS industries and codes are provided in Table 4. These industries represent the agricultural commodity producers (i.e., the farmers). The immediate “downstream” processors and refiners who rely on these RBI products (e.g., flour milling) are included in the “support industries” sector.

Breaking these total impacts down (see Table 5), the agriculture sector generated nearly \$2.3 billion in “direct” economic output in 2019. This equals the value of all of the output of the agricultural sector *plus* the value of the Maryland-based supply chain needed by Maryland ag producers to produce their crops/livestock. For example, if a dairy farmer requires external feed or veterinary services to produce fluid milk, these supply-chain expenditures would be included in the “direct” output figure. However, supply-chain vendors need to purchase additional inputs from their supply chains to provide these necessary inputs. Continuing with the above example, if a veterinarian needs to provide more care, she will need to purchase more medicine, fuel, insurance services, etc. This second-order (or ripple) effect, whereby input providers purchase more inputs, is known as “indirect” economic output. In 2019, the activities of the agricultural sector were responsible for an “indirect” economic output of nearly \$665.6 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 agricultural sector were responsible for “induced” economic output totaling nearly \$272.1 million. Summing these economic impacts, Maryland agriculture contributed over \$3.2 billion in total state economic activity.

Concerning jobs, the “direct” economic impact of the agriculture sector supported 17,409 jobs in 2019 (see Table 6). The resulting ripple effect of these activities supported 4,877 jobs due to “indirect” economic effects and an additional 1,856 jobs due to “induced” economic effects (see the previous paragraph for an explanation of this terminology). Summing these economic impacts, Maryland agriculture supported a total of 24,142 jobs.

Breaking down the economic impact of agriculture by region, Western Maryland contributed nearly \$651.0 million to the state economy (20.3% of state agricultural impact), supported 6,865 jobs (28.4% of state agricultural job impact), and added nearly \$25.2 million in combined state and local tax revenue (28.4% of state agricultural tax impact). Central Maryland agriculture contributed over \$269.8 million to the state economy (8.4% of state agricultural impact), supported 3,798 jobs (15.7% of state agricultural job impact), and added over \$13.9 million in combined state and local tax revenue (15.7% of state agricultural tax impact). Southern Maryland agriculture contributed over \$140.8 million to the state economy (4.4% of state agricultural impact), supported 2,610 jobs (10.8% of state agricultural job impact), and added over \$9.6 million in combined state and local tax revenue (10.8% of state agricultural tax impact). Finally, Eastern Shore agriculture contributed nearly \$2.2 billion to the state economy (67.0% of state agricultural impact), supported 10,870 jobs (45.0% of state agricultural job impact), and added nearly \$39.9 million in combined state and local tax revenue (45.0% of state agricultural tax impact).

Equine Industry

The economic impact of Maryland's equine industry includes a subset of the agricultural impact as well as the impact of a large variety of support industries. The impact of equine animal production is captured within the agricultural sector.

Beyond animal production, the equine industry generates significant economic activity through related support industries such as racetrack operations, gambling, tourism, and recreation. Like the animal production impacts, the categories include many other industries that drive the overall impact of those sectors. For example, the equine industry is part of IMPLAN Sector 497 - Commercial Sports Except Racing. This sector includes sixty-one industries such as "Baseball teams, professional or semiprofessional" and "Referees and umpires." Among the sixty-one industries, seven relate to the Equine Industry, including "Harness drivers" and "Stables horse racing." Overall the Equine industry contributes to eighteen IMPLAN sectors.

The most significant impact of Resource Based industries in Maryland is in the Supporting Industries, accounting for over Thirteen Billion Dollars (\$13,000,000,000) of impact. The Equine Industry is included in this impact but, as illustrated in the example above, represents a portion of sixteen industries of the one hundred- thirty-five that make up the sector.

The scope of this study did not allow the level of research necessary to evaluate the relative impact of the equine industry in each of the Industry Sectors. While a complete analysis of the equine industry's full impact is beyond this study's scope, the American Horse Council Foundation conducted a comprehensive analysis in 2018 (Economic Impact of the Horse Industry in Maryland)⁶. According to their analysis, the total economic impact of Maryland's equine industry is estimated to be \$2.06 billion (\$1.20 billion in direct impacts and \$866 million in indirect and induced impacts). This economic activity is estimated to support over 21,500 jobs and includes \$859 million in labor income.

It should be noted that a portion of this impact is captured in the Total RBI impact calculation and within the agriculture and support industries. Other equine industry impacts are not included in this report, such as tourism which impacts fuel sales, restaurant sales, and hotels, among others.

⁶ *Economic Impact of the Horse Industry in Maryland*. American Horse Council Foundation, 2018.

Table 4. IMPLAN and NACIS Industries in the Agriculture Sector

Agriculture

NAICS Codes	NAICS Industries	IMPLAN Code	Industry
111110	Soybean Farming	1	Oilseed farming
111120	Oilseed (except Soybean) Farming	1	
111130	Dry Pea and Bean Farming	2	Grain farming
111140	Wheat Farming	2	
111150	Corn Farming	2	
111160	Rice Farming	2	
111191	Oilseed and Grain Combination Farming	2	
111199	All Other Grain Farming	2	
111211	Potato Farming	3	Vegetable and melon farming
111219	Other Vegetable (except Potato) and Melon Farming	3	
111310	Orange Groves	4	Fruit farming
111320	Citrus (except Orange) Groves	4	
111331	Apple Orchards	4	
111332	Grape Vineyards	4	
111333	Strawberry Farming	4	
111334	Berry (except Strawberry) Farming	4	
111335	Tree Nut Farming	4	
111336	Fruit and Tree Nut Combination Farming	4	
111339	Other Noncitrus Fruit Farming	4	
111335	Tree Nut Farming	5	Tree nut farming
111336	Fruit and Tree Nut Combination Farming	5	
111411	Mushroom Production	6	Greenhouse, nursery, and floriculture production
111419	Other Food Crops Grown Under Cover	6	
111421	Nursery and Tree Production	6	
111422	Floriculture Production	6	
111910	Tobacco Farming	7	Tobacco farming
111920	Cotton Farming	8	Cotton farming
111930	Sugarcane Farming	9	Sugarcane and sugar beet farming
111991	Sugar Beet Farming	9	
111940	Hay Farming	10	All other crop farming
111992	Peanut Farming	10	
111998	All Other Miscellaneous Crop Farming	10	
112111	Beef Cattle Ranching and Farming	11	Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming
112112	Cattle Feedlots	11	
112120	Dairy Cattle and Milk Production	12	Dairy cattle and milk production
112310	Chicken Egg Production	13	Poultry and egg production
112320	Broilers and Other Meat Type Chicken Production	13	

112330	Turkey Production	13	
112340	Poultry Hatcheries	13	
112390	Other Poultry Production	13	
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112410	Sheep Farming	14	Animal production, except cattle and poultry, and eggs
112420	Goat Farming	14	
112210	Hog and Pig Farming	14	
112910	Apiculture	14	
112920	Horses and Other Equine Production	14	
112930	Fur-Bearing Animal and Rabbit Production	14	
112990	All Other Animal Production	14	
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114210	Hunting and Trapping	18	Commercial hunting and trapping
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**Table 5. Resource Industry Economic Impacts:
Output**

Industry Sector: Agriculture

Geographic Entity	Sector Output			Total	% of Total
	Direct	Indirect	Induced		
State of Maryland	2,276,555,125	665,558,153	272,097,511	3,214,210,790	100.0%
Regions					
Western Maryland	467,299,465	133,100,068	50,563,001	650,962,533	20.3%
Appalachian Maryland	204,154,407	44,397,654	29,057,604	277,609,664	8.6%
Central Maryland	188,856,273	50,761,343	30,222,007	269,839,624	8.4%
Southern Maryland	107,083,140	21,259,159	12,467,138	140,809,437	4.4%
Eastern Shore of Maryland	1,513,316,248	460,437,583	178,845,365	2,152,599,196	67.0%
Upper Eastern Shore	387,124,776	121,837,725	33,559,820	542,522,322	16.9%
Mid Shore	449,493,595	130,330,902	53,353,182	633,177,678	19.7%
Lower Eastern Shore	676,697,877	208,268,956	91,932,363	976,899,196	30.4%
Counties					
Allegany	6,687,276	1,149,871	140,530	7,977,676	0.2%
Anne Arundel	19,639,340	4,107,622	8,267,331	32,014,293	1.0%
Baltimore	68,389,873	15,724,884	16,814,533	100,929,290	3.1%
Baltimore City	0	0	0	0	0.0%
Calvert	8,967,388	1,781,739	-1,226,864	9,522,262	0.3%
Caroline	247,485,792	72,020,945	23,183,077	342,689,813	10.7%
Carroll	129,434,321	48,340,754	10,981,392	188,756,467	5.9%
Cecil	102,585,147	22,758,594	9,417,491	134,761,231	4.2%
Charles	16,097,627	4,112,781	-648,470	19,561,938	0.6%
Dorchester	133,768,605	29,391,119	20,799,092	183,958,816	5.7%
Frederick	133,710,737	40,361,660	10,524,005	184,596,401	5.7%
Garrett	32,394,994	9,510,054	1,848,415	43,753,463	1.4%
Harford	48,197,807	16,006,260	4,172,198	68,376,264	2.1%
Howard	27,881,253	8,984,947	3,009,913	39,876,113	1.2%
Kent	112,606,251	43,555,659	8,738,589	164,900,500	5.1%
Montgomery	44,387,340	10,045,253	6,225,364	60,657,957	1.9%
Prince George's	35,570,878	5,252,015	7,103,795	47,926,688	1.5%
Queen Anne's	171,933,378	55,523,472	15,403,740	242,860,591	7.6%
St. Mary's	26,807,906	6,005,003	-1,028,654	31,784,255	1.0%
Somerset	212,410,185	38,075,459	18,163,374	268,649,018	8.4%
Talbot	68,239,198	28,918,839	9,371,012	106,529,049	3.3%
Washington	165,072,136	33,737,729	27,068,660	225,878,526	7.0%
Wicomico	228,042,217	99,764,423	52,864,624	380,671,264	11.8%
Worcester	236,245,475	70,429,074	20,904,365	327,578,914	10.2%

**Table 6. Resource Industry Economic Impacts:
Employment**

Industry Sector: Agriculture

Geographic Entity	Sector Output				
	Direct	Indirect	Induced	Total	% of Total
State of Maryland	17,409	4,877	1,856	24,142	100.0%
Regions					
Western Maryland	5,212	1,296	356	6,865	28.4%
Appalachian Maryland	2,147	499	203	2,848	11.8%
Central Maryland	3,168	438	191	3,798	15.7%
Southern Maryland	2,309	222	79	2,610	10.8%
Eastern Shore of Maryland	6,719	2,921	1,230	10,870	45.0%
Upper Eastern Shore	2,592	983	240	3,815	15.8%
Mid Shore	2,104	836	376	3,315	13.7%
Lower Eastern Shore	2,023	1,103	614	3,739	15.5%
Counties					
Allegany	256	10	1	267	1.1%
Anne Arundel	461	25	52	538	2.2%
Baltimore	1,064	117	109	1,290	5.3%
Baltimore City	0	0	0	0	0.0%
Calvert	273	19	-9	284	1.2%
Caroline	1,002	455	161	1,617	6.7%
Carroll	1,428	413	81	1,923	8.0%
Cecil	1,186	266	69	1,521	6.3%
Charles	404	41	-5	441	1.8%
Dorchester	643	184	147	974	4.0%
Frederick	1,638	384	72	2,094	8.7%
Garrett	685	86	15	786	3.3%
Harford	791	127	29	948	3.9%
Howard	490	126	17	633	2.6%
Kent	631	271	60	962	4.0%
Montgomery	823	68	35	927	3.8%
Prince George's	556	37	48	640	2.7%
Queen Anne's	775	446	111	1,332	5.5%
St. Mary's	615	99	-7	707	2.9%
Somerset	485	209	116	810	3.4%
Talbot	459	197	68	724	3.0%
Washington	1,205	403	187	1,796	7.4%
Wicomico	915	585	356	1,857	7.7%
Worcester	17,409	4,877	1,856	24,142	100.0%

**Table 7. Resource Industry Economic Impacts:
State and Local Government Tax Impact**

Industry Sector: Agriculture

Geographic Entity	Sources of Tax Revenue					Total (\$)	% of Total
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports			
State of Maryland	380,898	28,810,565	6,178,527	53,151,988	88,521,978	100%	
Regions							
Western Maryland	108,308	8,192,276	1,756,862	15,113,753	25,171,199	28.4%	
Appalachian Maryland	44,939	3,399,151	728,960	6,271,021	10,444,072	11.8%	
Central Maryland	59,918	4,532,108	971,926	8,361,188	13,925,140	15.7%	
Southern Maryland	41,178	3,114,675	667,953	5,746,197	9,570,003	10.8%	
Eastern Shore of Maryland	171,493	12,971,506	2,781,785	23,930,851	39,855,635	45.0%	
Upper Eastern Shore	60,192	4,552,810	976,366	8,399,380	13,988,748	15.8%	
Mid Shore	52,308	3,956,518	848,489	7,299,295	12,156,610	13.7%	
Lower Eastern Shore	58,993	4,462,178	956,930	8,232,176	13,710,277	15.5%	
Counties							
Allegany	4,213	318,660	68,338	587,889	979,099	1.1%	
Anne Arundel	8,495	642,544	137,796	1,185,415	1,974,249	2.2%	
Baltimore	0	0	0	0	0	0.0%	
Baltimore City	20,355	1,539,656	330,185	2,840,477	4,730,673	5.3%	
Calvert	4,473	338,341	72,558	624,199	1,039,572	1.2%	
Caroline	25,509	1,929,484	413,785	3,559,663	5,928,441	6.7%	
Carroll	30,334	2,294,382	492,038	4,232,856	7,049,611	8.0%	
Cecil	24,004	1,815,594	389,361	3,349,550	5,578,508	6.3%	
Charles	6,951	525,755	112,750	969,955	1,615,411	1.8%	
Dorchester	15,373	1,162,828	249,372	2,145,276	3,572,850	4.0%	
Frederick	33,035	2,498,742	535,864	4,609,875	7,677,517	8.7%	
Garrett	12,396	937,606	201,073	1,729,769	2,880,844	3.3%	
Harford	14,952	1,130,979	242,542	2,086,519	3,474,993	3.9%	
Howard	9,990	755,649	162,052	1,394,081	2,321,772	2.6%	
Kent	15,172	1,147,588	246,104	2,117,160	3,526,023	4.0%	
Montgomery	14,620	1,105,824	237,148	2,040,111	3,397,702	3.8%	
Prince George's	10,105	764,336	163,915	1,410,107	2,348,463	2.7%	
Queen Anne's	21,016	1,589,628	340,901	2,932,671	4,884,217	5.5%	
St. Mary's	11,154	843,699	180,934	1,556,521	2,592,308	2.9%	
Somerset	12,774	966,229	207,211	1,782,574	2,968,788	3.4%	
Talbot	11,425	864,206	185,332	1,594,356	2,655,320	3.0%	
Washington	28,331	2,142,885	459,549	3,953,363	6,584,128	7.4%	
Wicomico	29,292	2,215,614	475,146	4,087,538	6,807,590	7.7%	
Worcester	16,927	1,280,336	274,572	2,362,064	3,933,899	4.4%	

Supporting Industries

The supporting industries sector consists of in-state industries that rely on Maryland's agricultural firms for their supply-chain input (e.g., a Maryland-based canned vegetable manufacturer who relies on Maryland farmers for their fresh vegetable supply). These industries include soil preparation; planting and cultivating; farm management services; support activities for animal production; animal food manufacturing; flour, rice, and wet corn milling; fluid milk, creamery butter, and cheese manufacturing; animal slaughtering; breweries; wineries; and distilleries; fertilizer manufacturing; and many others. A complete list of the support industries, IMPLAN industry codes, and corresponding NAICS industries and codes are provided in Table 8.

In 2019, the support industries sector contributed over \$13.3 billion to the state economy (66.1% of RBI total), supported 48,867 jobs (55.1% of RBI total), and added nearly \$521.9 million in combined state and local tax revenue (69.1% of RBI total). Breaking these total impacts down (see Table 9), the support industries sector generated over \$10.2 billion in "direct" economic output in 2019. This equals the value of all of the output of the support industry sectors *plus* the value of the Maryland-based supply chain needed by Maryland support industry producers to produce their end products. For example, if a malt manufacturer requires additional machinery or equipment to mill more malt, these supply-chain expenditures would be included in the "direct" output figure. However, supply-chain vendors need to purchase additional inputs from their supply chains to provide these necessary inputs. Continuing with the above example, if a malt manufacturer needs machinery, their equipment suppliers will need to purchase more equipment parts, insurance, fuel, etc. This second-order (or ripple) effect, whereby input providers purchase more inputs, is known as "indirect" economic output. In 2019, the activities of the support industries sector were responsible for an "indirect" economic output of over \$1.94 billion. 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 support industries sector were responsible for "induced" economic output totaling nearly \$989.9 million. Summing these economic impacts, Maryland's support industries contributed almost \$12.5 billion in total state economic activity.

Concerning jobs, the "direct" economic impact of the support industries sector supported 31,018 jobs in 2019 (see Table 10). The resulting ripple effect of these activities supported 12,779 jobs due to "indirect" economic effects, and an additional 5,070 jobs due to "induced" economic effects (see

the previous paragraph for an explanation of this terminology). Summing these economic impacts, Maryland support industries supported 48,867 jobs.

Breaking down the economic impact of the support industries sector by region, Western Maryland contributed over \$1.7 billion to the state economy (12.9% of state support industries impact), supported 7,199 jobs (14.7% of state support industries job impact), and added nearly \$76.9 million in combined state and local tax revenue (14.7% of state support industries tax impact). Central Maryland support industries contributed nearly \$7.9 billion to the state economy (59.0% of state support industries impact), supported 25,486 jobs (52.2% of state support industries job impact), and added nearly \$272.2 million in combined state and local tax revenue (52.2% of state support industries tax impact). Southern Maryland support industries contributed over \$1.2 billion to the state economy (9.2% of state support industries impact), supported 6,121 jobs (12.5% of state support industries job impact), and added nearly \$65.4 million in combined state and local tax revenue (12.5% of state support industries tax impact). Finally, Eastern Shore support industries contributed over \$2.5 billion to the state economy (18.9% of state support industries impact), supported 10,061 jobs (20.6% of state support industries job impact), and added nearly \$107.5 million in combined state and local tax revenue (20.6% of state support industries tax impact).

Table 8. IMPLAN and NACIS Industries in Supporting Industry Sectors

Supporting Industries			
NAICS Codes	NAICS Industries	IMPLAN Code	IMPLAN Industry
115111	Cotton ginning	19	Support activities for agriculture and forestry
115112	Soil preparation, planting, and cultivating	19	
115113	Crop harvesting, primarily by machine	19	
115114	Postharvest crop activities (except cotton ginning)	19	
115115	Farm labor contractors and crew leaders	19	
115116	Farm management services	19	
115210	Support activities for animal production	19	Support activities for agriculture and forestry
311111	Dog and cat food manufacturing	63	Dog and cat food manufacturing
311119	Other animal food manufacturing	64	Other animal food manufacturing
311211	Flour milling	65	Flour milling
311212	Rice milling	66	Rice milling
311213	Malt manufacturing	67	Malt milling
311221	Wet corn milling	68	Wet corn milling
311224	Soybean and other oilseed processing	69	Soybean and other oilseed processing
311225	Fats and oils refining and blending	70	Fats and oils refining and blending
311230	Breakfast cereal manufacturing	71	Breakfast cereal manufacturing
311411	Frozen fruit, juice, and vegetable manufacturing	77	Frozen fruits, juices, and vegetables manufacturing
311412	Frozen specialty food manufacturing	78	Frozen specialties manufacturing
311421	Fruit and vegetable canning	79	Canned fruits and vegetables manufacturing
311422	Specialty canning	80	Canned specialties
311423	Dried and dehydrated food manufacturing	81	Dehydrated food products manufacturing
311511	Fluid milk manufacturing	84	Fluid milk manufacturing
311512	Creamery butter manufacturing	85	Creamery butter manufacturing
311513	Cheese manufacturing	82	Cheese manufacturing
311514	Dry, condensed and evaporated dairy product manufacturing	83	Dry, condensed, and evaporated dairy product manufacturing
311520	Ice cream and frozen dessert manufacturing	86	Ice cream and frozen dessert manufacturing
311611	Animal (except poultry) slaughtering	89	Animal, except poultry, slaughtering
311612	Meat processed from carcasses	90	Meat processed from carcasses
311613	Rendering and meat byproduct processing	91	Rendering and meat byproduct processing
311615	Poultry processing	88	Poultry processing
311811	Retail bakeries	93	Bread and bakery product, except frozen, manufacturing
311812	Commercial bakeries	93	
311813	Frozen cakes, pies, and other pastries manufacturing	87	Frozen cakes and other pastries manufacturing
311821	Cookie and cracker manufacturing	94	Cookie and cracker manufacturing
311824	Dry pasta, dough, and flour mixes manufacturing from purchased flour	95	Dry pasta, mixes, and dough manufacturing
311830	Tortilla manufacturing	96	Tortilla manufacturing

311911	Roasted nuts and peanut butter manufacturing	97	Roasted nuts and peanut butter manufacturing
311919	Other snack food manufacturing	98	Other snack food manufacturing
311920	Coffee and tea manufacturing	99	Coffee and tea manufacturing
311930	Flavoring syrup and concentrate manufacturing	100	Flavoring syrup and concentrate manufacturing
311941	Mayonnaise, dressing, and other prepared sauce manufacturing	101	Mayonnaise, dressing, and sauce manufacturing
311942	Spice and extract manufacturing	102	Spice and extract manufacturing
311991	Perishable prepared food manufacturing	103	All other food manufacturing
311999	All other miscellaneous food manufacturing	103	
312120	Breweries	106	Breweries
312130	Wineries	107	Wineries
312140	Distilleries	108	Distilleries
312230	Tobacco manufacturing	109	Tobacco product manufacturing
325311	Nitrogenous fertilizer manufacturing	167	Nitrogenous fertilizer manufacturing
325312	Phosphatic fertilizer manufacturing	138	Phosphatic fertilizer manufacturing
325314	Fertilizer (mixing only) manufacturing	169	Fertilizer mixing
325320	Pesticide and other agricultural chemical manufacturing	170	Pesticide and other agricultural chemical manufacturing
333111	Farm machinery and equipment manufacturing	260	Farm machinery and equipment manufacturing

*Wholesale trade, warehousing, and storage sectors were not included in the analysis as these IMPLAN codes (395 and 416, respectively) capture many industries beyond the resource-based industries.

**Table 9. Resource Industry Economic Impacts:
Output**

Industry Sector: Support Industries

Geographic Entity	Sector Output				% of Total
	Direct	Indirect	Induced	Total	
State of Maryland	10,223,444,117	2,305,515,473	783,484,505	13,312,444,096	100.0%
Regions					
Western Maryland	1,278,798,892	320,313,835	111,715,669	1,710,828,396	12.9%
Appalachian Maryland	413,590,697	82,268,007	31,216,285	527,074,989	4.0%
Central Maryland	6,108,690,815	1,329,254,097	422,701,570	7,860,646,482	59.0%
Southern Maryland	950,578,282	194,763,951	77,741,971	1,223,084,204	9.2%
Eastern Shore of Maryland	1,885,376,128	461,183,590	171,325,296	2,517,885,014	18.9%
Upper Eastern Shore	245,646,454	47,629,355	21,794,662	315,070,471	2.4%
Mid Shore	892,125,947	203,718,825	66,655,147	1,162,499,919	8.7%
Lower Eastern Shore	747,603,728	209,835,409	82,875,487	1,040,314,624	7.8%
Counties					
Allegany	106,338,261	18,356,452	8,431,587	133,126,301	1.0%
Anne Arundel	351,493,517	85,767,973	35,913,349	473,174,839	3.6%
Baltimore	1,537,837,783	261,950,451	119,360,417	1,919,148,650	14.4%
Baltimore City	1,615,790,309	337,127,581	74,621,883	2,027,539,773	15.2%
Calvert	54,403,556	9,512,018	3,814,963	67,730,538	0.5%
Caroline	91,635,241	36,126,936	7,310,241	135,072,419	1.0%
Carroll	334,822,927	91,252,213	31,260,499	457,335,639	3.4%
Cecil	89,870,495	13,850,482	9,335,218	113,056,194	0.8%
Charles	57,379,093	10,365,366	4,569,718	72,314,177	0.5%
Dorchester	687,621,273	139,671,087	46,151,709	873,444,068	6.6%
Frederick	530,385,267	146,793,614	49,238,886	726,417,768	5.5%
Garrett	41,332,227	15,858,705	3,162,912	60,353,843	0.5%
Harford	666,526,628	169,270,719	58,257,690	894,055,037	6.7%
Howard	1,790,425,638	452,515,380	113,245,941	2,356,186,959	17.7%
Kent	77,348,099	19,115,884	6,514,274	102,978,256	0.8%
Montgomery	498,110,457	108,389,966	57,215,640	663,716,063	5.0%
Prince George's	462,993,615	84,952,533	30,747,154	578,693,302	4.3%
Queen Anne's	78,427,860	14,662,990	5,945,170	99,036,020	0.7%
St. Mary's	24,308,501	4,166,060	2,696,787	31,171,348	0.2%
Somerset	56,474,925	10,885,516	3,957,632	71,318,074	0.5%
Talbot	112,869,433	27,920,802	13,193,197	153,983,432	1.2%
Washington	265,920,210	48,052,850	19,621,785	333,594,845	2.5%
Wicomico	483,609,396	167,405,683	64,174,889	715,189,968	5.4%
Worcester	207,519,407	31,544,210	14,742,966	253,806,583	1.9%

**Table 10. Resource Industry Economic Impacts:
Employment**

Industry Sector: Support Industries

Geographic Entity	Sector Employment (Jobs)				% of
	Direct	Indirect	Induced	Total	Total
State of Maryland	31,018	12,779	5,070	48,867	100.0%
Regions					
Western Maryland	4,133	2,274	793	7,199	14.7%
Appalachian Maryland	1,447	529	221	2,197	4.5%
Central Maryland	16,145	6,760	2,581	25,486	52.2%
Southern Maryland	4,314	1,296	511	6,121	12.5%
Eastern Shore of Maryland	6,427	2,450	1,185	10,061	20.6%
Upper Eastern Shore	1,196	295	157	1,648	3.4%
Mid Shore	2,863	1,153	471	4,486	9.2%
Lower Eastern Shore	2,368	1,002	557	3,926	8.0%
Counties					
Allegany	279	128	60	467	1.0%
Anne Arundel	1,375	502	225	2,101	4.3%
Baltimore	4,049	1,401	770	6,220	12.7%
Baltimore City	3,926	1,457	429	5,812	11.9%
Calvert	245	114	28	387	0.8%
Caroline	338	219	51	608	1.2%
Carroll	1,030	930	231	2,191	4.5%
Cecil	666	88	69	823	1.7%
Charles	281	118	33	432	0.9%
Dorchester	2,097	750	324	3,171	6.5%
Frederick	1,657	814	341	2,811	5.8%
Garrett	125	107	25	257	0.5%
Harford	1,589	1,157	407	3,153	6.5%
Howard	4,053	2,172	650	6,875	14.1%
Kent	195	97	45	336	0.7%
Montgomery	2,528	573	324	3,426	7.0%
Prince George's	2,145	516	208	2,868	5.9%
Queen Anne's	336	110	43	489	1.0%
St. Mary's	268	46	19	332	0.7%
Somerset	206	51	25	283	0.6%
Talbot	428	183	96	708	1.4%
Washington	1,043	294	136	1,474	3.0%
Wicomico	1,649	779	432	2,859	5.9%
Worcester	513	172	100	784	1.6%

**Table 11. Resource Industry Economic Impacts:
State and Local Government Tax Impact**

Industry Sector: Support Industries

Geographic Entity	Sources of Tax Revenue					% of Total
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)	
State of Maryland	1,446,681	108,419,774	20,125,512	391,901,590	521,893,558	100.0%
Regions						
Western Maryland	213,133	15,973,003	2,965,002	57,737,118	76,888,256	14.7%
Appalachian Maryland	65,051	4,875,166	904,957	17,622,112	23,467,287	4.5%
Central Maryland	754,487	56,544,088	10,496,044	204,388,157	272,182,774	52.2%
Southern Maryland	181,209	13,580,507	2,520,893	49,089,038	65,371,648	12.5%
Eastern Shore of Maryland	297,852	22,322,177	4,143,573	80,687,278	107,450,880	20.6%
Upper Eastern Shore	48,801	3,657,341	678,897	13,220,075	17,605,114	3.4%
Mid Shore	132,818	9,953,866	1,847,695	35,979,931	47,914,310	9.2%
Lower Eastern Shore	116,233	8,710,970	1,616,981	31,487,272	41,931,456	8.0%
Counties						
Allegany	13,830	1,036,443	192,391	3,746,399	4,989,063	1.0%
Anne Arundel	62,194	4,661,062	865,214	16,848,196	22,436,665	4.3%
Baltimore	172,047	12,893,846	2,393,431	46,606,986	62,066,311	11.9%
Baltimore City	184,138	13,800,015	2,561,639	49,882,484	66,428,277	12.7%
Calvert	11,464	859,140	159,479	3,105,506	4,135,588	0.8%
Caroline	17,999	1,348,889	250,389	4,875,787	6,493,064	1.2%
Carroll	64,853	4,860,337	902,204	17,568,509	23,395,903	4.5%
Cecil	24,370	1,826,406	339,028	6,601,853	8,791,658	1.7%
Charles	12,792	958,663	177,953	3,465,251	4,614,658	0.9%
Dorchester	93,870	7,034,951	1,305,869	25,429,020	33,863,710	6.5%
Frederick	83,229	6,237,500	1,157,841	22,546,496	30,025,066	5.8%
Garrett	7,598	569,422	105,699	2,058,273	2,740,992	0.5%
Harford	93,357	6,996,552	1,298,741	25,290,221	33,678,872	6.5%
Howard	203,528	15,253,191	2,831,386	55,135,236	73,423,342	14.1%
Kent	9,951	745,756	138,432	2,695,660	3,589,797	0.7%
Montgomery	101,416	7,600,483	1,410,846	27,473,229	36,585,973	7.0%
Prince George's	84,918	6,364,064	1,181,335	23,003,983	30,634,299	5.9%
Queen Anne's	14,480	1,085,179	201,437	3,922,562	5,223,658	1.0%
St. Mary's	9,842	737,579	136,914	2,666,103	3,550,437	0.7%
Somerset	8,380	628,018	116,576	2,270,077	3,023,051	0.6%
Talbot	20,949	1,570,026	291,437	5,675,124	7,557,536	1.4%
Washington	43,623	3,269,301	606,867	11,817,441	15,737,232	3.0%
Wicomico	84,636	6,342,914	1,177,409	22,927,536	30,532,495	5.9%
Worcester	23,218	1,740,037	322,996	6,289,659	8,375,910	1.6%

Forestry

The forestry sector consists of forestry, forest products, and timber tract production; commercial logging; sawmills; wood preservations; veneer and plywood manufacturing; engineered wood member and truss manufacturing; reconstituted wood product manufacturing; wood windows and door manufacturing; cut stock, re-sawing lumber, and planning; other millwork, including flooring; wood container and pallet manufacturing; prefabricated wood building manufacturing; all other miscellaneous wood product manufacturing; pulp mills; paper mills; paperboard mills; paperboard container manufacturing; paper bag and coated and treated paper manufacturing; stationary product manufacturing; sanitary paper product manufacturing; all other converted paper product manufacturing; wood kitchen cabinet and countertop manufacturing; non-upholstered wood household furniture manufacturing; wood office furniture manufacturing; and custom architectural woodwork and millwork. A complete list of the agriculture industries, IMPLAN industry codes, and corresponding NAICS industries and codes are provided in Table 12. The industries represent the forestry commodity procedures (e.g., logging) and the immediate “downstream” processors, refineries, and manufacturers (e.g., sawmills).

In 2019, the forestry sector contributed over \$3.3 billion to the state economy (16.6% of RBI total), supported 12,890 jobs (14.5% of RBI total), and added just over \$131.4 million in combined state and local tax revenue (17.4% of RBI total). Breaking these total impacts down (see Table 13), the forestry sector generated nearly \$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 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, supply-chain vendors need to purchase additional inputs from their supply chains to provide these necessary inputs. 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 providers purchase more inputs, is known as “indirect” economic output. 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 nearly \$268.2 million. Summing these economic impacts, Maryland forestry contributed over \$3.3 billion in total state economic activity.

Concerning jobs, the “direct” economic impact of the forestry sector supported 7,946 jobs in 2019 (see Table 14). 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 (see the previous paragraph for an explanation of this terminology). Summing these economic impacts, Maryland forestry supported a total of 12,890 jobs.

Breaking down the economic impact of forestry by region, Western Maryland contributed nearly \$1.3 billion to the state economy (37.9% of state forestry impact), supported 5,122 jobs (39.7% of state forestry job impact), and added over \$52.2 million in combined state and local tax revenue (39.7% of state forestry tax impact). Central Maryland forestry contributed nearly \$987.8 million to the state economy (29.6% of state forestry impact), supported 3,486 jobs (27.0% of state forestry job impact), and added over \$35.5 million in combined state and local tax revenue (27.0% of state forestry tax impact). Southern Maryland forestry contributed over \$419.2 million to the state economy (12.6 % of state forestry impact), supported 1,974 jobs (15.3% of state forestry job impact), and added over \$20.1 million in combined state and local tax revenue (15.3% of state forestry tax impact). Finally, Eastern Shore forestry contributed nearly \$666.4 million to the state economy (20.0% of state forestry impact), supported 2,309 jobs (17.9% of state forestry job impact), and added over \$23.5 million in combined state and local tax revenue (17.9% of state forestry tax impact).

Table 12. IMPLAN and NAICS Industries in Forestry Sector

Forestry and Wood Derivatives			
NAICS Codes	NAICS Industries	IMPLAN Code	IMPLAN Industry
113110	Timber Tract Operations	15	Forestry, forest products, and timber tract production
113210	Forest Nurseries and Gathering of Forest Products	15	
113310	Logging	16	Commercial logging
321113	Sawmills	132	Sawmills
321114	Wood Preservation	133	Wood preservation
321211	Hardwood Veneer and Plywood Manufacturing	134	Veneer and plywood manufacturing
321212	Softwood Veneer and Plywood Manufacturing	134	
321213	Engineered Wood Member (except Truss) Manufacturing	135	Engineered wood member and truss manufacturing
321214	Truss Manufacturing	135	
321219	Reconstituted Wood Product Manufacturing	136	Reconstituted wood product manufacturing
321911	Wood Window and Door Manufacturing	137	Wood windows and door manufacturing
321912	Cut Stock, Resawing Lumber, and Planing	138	Cut stock, resawing lumber, and planing
321918	Other Millwork (including Flooring)	139	Other millwork, including flooring
321920	Wood Container and Pallet Manufacturing	140	Wood container and pallet manufacturing
321992	Prefabricated Wood Building Manufacturing	142	Prefabricated wood building manufacturing
321999	All Other Miscellaneous Wood Product Manufacturing	143	All other miscellaneous wood product manufacturing
Paper Industries			
322110	Pulp Mills	144	Pulp mills
322121	Paper (except Newsprint) Mills	145	Paper mills
322122	Newsprint Mills	145	
322130	Paperboard Mills	146	Paperboard mills
322211	Corrugated and Solid Fiber Box Manufacturing	147	Paperboard container manufacturing
322212	Folding Paperboard Box Manufacturing	147	
322219	Other Paperboard Container Manufacturing	147	
322220	Paper Bag and Coated and Treated Paper Manufacturing	148	Paper bag and coated and treated paper manufacturing
322230	Stationery Product Manufacturing	149	Stationary product manufacturing
322291	Sanitary Paper Product Manufacturing	150	Sanitary paper product manufacturing
322299	All Other Converted Paper Product Manufacturing	151	All other converted paper product manufacturing
337110	Wood cabinet manufacturing	365	Wood kitchen cabinet and countertop manufacturing
337122	Wooden household furniture manufacturing	367	Non-upholstered wood household furniture manufacturing
337211	Wooden office furniture manufacturing	370	Wood office furniture manufacturing
337212	Architectural millwork (including flooring)	371	Custom architectural woodwork and millwork

Table 13. Resource Industry Economic Impacts:

*Economic Impact of Select Resource Based Industries in Maryland
Conducted by BEACON at Salisbury University*

Output

Industry Sector: Forestry

Geographic Entity	Sector Output			Total	% of Total
	Direct	Indirect	Induced		
State of Maryland	2,522,916,149	548,394,854	268,150,944	3,339,461,946	100.0%
Regions					
Western Maryland	947,465,175	208,082,309	110,507,513	1,266,054,997	37.9%
Appalachian Maryland	649,361,330	142,506,115	75,241,305	867,108,749	26.0%
Central Maryland	763,467,277	151,069,936	73,233,321	987,770,533	29.6%
Southern Maryland	317,552,225	67,458,396	34,227,505	419,238,126	12.6%
Eastern Shore of Maryland	494,431,472	121,784,213	50,182,605	666,398,290	20.0%
Upper Eastern Shore	51,592,876	10,557,358	5,180,260	67,330,494	2.0%
Mid Shore	239,616,622	47,467,530	17,237,220	304,321,372	9.1%
Lower Eastern Shore	203,221,974	63,759,324	27,765,126	294,746,424	8.8%
Counties					
Allegany	287,310,254	55,813,432	35,308,441	378,432,127	11.3%
Anne Arundel	65,979,406	18,463,013	10,517,139	94,959,558	2.8%
Baltimore	206,399,506	39,555,024	19,439,319	265,393,849	7.9%
Baltimore City	305,771,001	62,037,155	20,808,741	388,616,897	11.6%
Calvert	71,336,584	11,199,942	5,157,162	87,693,688	2.6%
Caroline	138,941,046	24,935,306	5,327,947	169,204,299	5.1%
Carroll	172,131,228	31,206,733	18,076,875	221,414,835	6.6%
Cecil	33,104,672	5,399,683	3,015,832	41,520,186	1.2%
Charles	16,637,869	7,255,811	2,071,214	25,964,894	0.8%
Dorchester	70,811,936	12,795,752	5,299,352	88,907,040	2.7%
Frederick	125,972,617	34,369,462	17,189,334	177,531,413	5.3%
Garrett	144,916,589	47,834,037	19,960,603	212,711,228	6.4%
Harford	6,455,613	1,511,943	1,327,222	9,294,778	0.3%
Howard	40,036,336	9,531,836	6,839,405	56,407,577	1.7%
Kent	3,431,763	598,529	556,684	4,586,976	0.1%
Montgomery	204,804,821	38,433,977	24,818,634	268,057,432	8.0%
Prince George's	149,358,871	26,630,277	14,238,231	190,227,379	5.7%
Queen Anne's	15,056,442	4,559,146	1,607,743	21,223,331	0.6%
St. Mary's	14,239,495	3,909,353	2,243,758	20,392,607	0.6%
Somerset	6,030,271	422,079	1,204,391	7,656,742	0.2%
Talbot	29,863,639	9,736,472	6,609,921	46,210,032	1.4%
Washington	217,134,487	38,858,646	19,972,261	275,965,394	8.3%
Wicomico	171,862,202	57,598,774	20,697,452	250,158,429	7.5%
Worcester	25,329,500	5,738,470	5,863,283	36,931,253	1.1%

**Table 14. Resource Industry Economic Impacts:
Employment**

Industry Sector: Forestry

Geographic Entity	Sector Output			Total	% of Total
	Direct	Indirect	Induced		
State of Maryland	7,946	3,132	1,812	12,890	100.0%
Regions					
Western Maryland	3,141	1,181	800	5,122	39.7%
Appalachian Maryland	2,034	806	547	3,387	26.3%
Central Maryland	2,268	782	435	3,486	27.0%
Southern Maryland	1,280	465	230	1,974	15.3%
Eastern Shore of Maryland	1,257	705	347	2,309	17.9%
Upper Eastern Shore	207	70	38	315	2.4%
Mid Shore	617	274	123	1,014	7.9%
Lower Eastern Shore	433	361	187	980	7.6%
Counties					
Allegany	1,039	312	253	1,603	12.4%
Anne Arundel	241	102	66	409	3.2%
Baltimore	608	213	127	948	7.4%
Baltimore City	913	302	119	1,335	10.4%
Calvert	170	62	37	269	2.1%
Caroline	329	152	37	518	4.0%
Carroll	609	183	134	925	7.2%
Cecil	121	36	22	179	1.4%
Charles	159	82	15	255	2.0%
Dorchester	171	63	37	271	2.1%
Frederick	498	192	119	809	6.3%
Garrett	486	286	156	928	7.2%
Harford	34	12	9	55	0.4%
Howard	196	73	39	307	2.4%
Kent	20	4	4	28	0.2%
Montgomery	517	182	141	840	6.5%
Prince George's	616	165	96	877	6.8%
Queen Anne's	66	31	12	108	0.8%
St. Mary's	94	55	15	164	1.3%
Somerset	25	4	8	36	0.3%
Talbot	118	58	48	224	1.7%
Washington	509	209	138	856	6.6%
Wicomico	339	321	139	798	6.2%
Worcester	69	36	40	145	1.1%

**Table 15. Resource Industry Economic Impacts:
State and Local Government Tax Impact**

Industry Sector: Forestry

Geographic Entity	Sources of Tax Revenue					% of Total
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)	
State of Maryland	465,083	34,319,325	4,562,939	92,097,617	131,444,964	100.0%
Regions						
Western Maryland	184,796	13,636,428	1,813,037	36,594,034	52,228,294	39.7%
Appalachian Maryland	122,221	9,018,941	1,199,117	24,202,777	34,543,056	26.3%
Central Maryland	125,765	9,280,411	1,233,881	24,904,445	35,544,501	27.0%
Southern Maryland	71,216	5,255,170	698,703	14,102,511	20,127,600	15.3%
Eastern Shore of Maryland	83,306	6,147,316	817,319	16,496,628	23,544,569	17.9%
Upper Eastern Shore	11,373	839,258	111,584	2,252,190	3,214,404	2.4%
Mid Shore	36,569	2,698,482	358,778	7,241,511	10,335,339	7.9%
Lower Eastern Shore	35,364	2,609,576	346,957	7,002,928	9,994,825	7.6%
Counties						
Allegany	57,840	4,268,153	567,474	11,453,801	16,347,269	12.4%
Anne Arundel	14,751	1,088,514	144,724	2,921,081	4,169,070	3.2%
Baltimore	48,162	3,553,938	472,515	9,537,169	13,611,783	10.4%
Baltimore City	34,202	2,523,803	335,553	6,772,751	9,666,308	7.4%
Calvert	9,702	715,948	95,189	1,921,282	2,742,122	2.1%
Caroline	18,705	1,380,294	183,517	3,704,087	5,286,603	4.0%
Carroll	33,392	2,464,046	327,608	6,612,391	9,437,438	7.2%
Cecil	6,449	475,875	63,270	1,277,035	1,822,630	1.4%
Charles	9,218	680,202	90,437	1,825,356	2,605,213	2.0%
Dorchester	9,790	722,406	96,048	1,938,611	2,766,854	2.1%
Frederick	29,183	2,153,441	286,312	5,778,865	8,247,800	6.3%
Garrett	33,479	2,470,471	328,462	6,629,631	9,462,043	7.2%
Harford	1,988	146,694	19,504	393,661	561,846	0.4%
Howard	11,092	818,518	108,826	2,196,533	3,134,969	2.4%
Kent	1,015	74,894	9,958	200,981	286,847	0.2%
Montgomery	30,321	2,237,459	297,482	6,004,332	8,569,594	6.5%
Prince George's	31,627	2,333,806	310,292	6,262,884	8,938,608	6.8%
Queen Anne's	3,909	288,489	38,356	774,173	1,104,928	0.8%
St. Mary's	5,918	436,700	58,062	1,171,907	1,672,587	1.3%
Somerset	1,309	96,577	12,840	259,170	369,896	0.3%
Talbot	8,074	595,783	79,213	1,598,813	2,281,882	1.7%
Washington	30,902	2,280,317	303,180	6,119,345	8,733,745	6.6%
Wicomico	28,808	2,125,767	282,632	5,704,601	8,141,807	6.2%
Worcester	5,248	387,232	51,485	1,039,158	1,483,122	1.1%

Seafood

The seafood sector consists of commercial fishing and seafood product preparation and packaging. A complete list of the seafood and aquaculture industries, along with IMPLAN industry codes and corresponding NAICS industries and codes are provided in Table 16. These industries represent the seafood and aquaculture commodity producers (i.e., fishermen) and the immediate “downstream” processors, refineries, and manufacturers (e.g., marine fuel suppliers). Within IMPLAN, aquaculture is treated as part of the agricultural sector. As such, the economic impact of the aquaculture subsectors is included in the agriculture totals earlier in the report. The economic impact of Seafood is detailed below followed by an estimate of the total Seafood and Aquaculture economic impact.

In 2019, the seafood sector contributed over \$288.8 million to the state economy (1.4% of RBI total), supported 2,711 jobs (3.1% of RBI total), and added over \$13.3 million in combined state and local tax revenue (1.8% of RBI total). Breaking these total impacts down (see Table 17), the seafood sector generated nearly \$217.5 million in “direct” economic output in 2019. This equals the value of all of the output of the seafood and aquaculture sector *plus* the value of the Maryland-based supply chain needed by Maryland seafood and aquaculture producers to produce fish. For example, if a fisherman needs to increase the time spent on the water, this will require more fuel or a new engine from their supplier. These supply-chain expenditures would be included in the “direct” output figure. However, supply-chain vendors need to purchase additional inputs from their supply chains to provide these necessary inputs. Continuing with the above example, if the engine supplier needs to produce more engines, they will need to purchase more iron, engineering, and transportation services. This second-order (or ripple) effect, whereby input providers purchase more inputs, is known as “indirect” economic output. In 2019, the activities of the seafood and aquaculture sector were responsible for an “indirect” economic output of nearly \$52.0 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 Seafood sector were responsible for “induced” economic output totaling nearly \$19.4 million. Summing these economic impacts, the Maryland Seafood sector contributed over \$288.8 million in total state economic activity.

Concerning jobs, the “direct” economic impact of the Seafood sector supported 2,146 jobs in 2019 (see Table 18). The resulting ripple effect of these activities supported 433 jobs due to “indirect” economic effects and an additional 132 jobs due to “induced” economic effects (see the previous

paragraph for an explanation of this terminology). Summing these economic impacts, Maryland seafood and aquaculture supported 2,711 jobs.

Breaking down the economic impact of seafood by region, Western Maryland did not contribute. Central Maryland seafood contributed nearly \$20.3 million to the state economy (7.0% of state seafood impact), supported 357 jobs (13.2% of state seafood job impact), and added nearly \$1.8 million in combined state and local tax revenue (13.2% of state seafood and aquaculture tax impact). Southern Maryland seafood contributed nearly \$20.5 million to the state economy (7.1% of state seafood impact), supported 374 jobs (13.8% of state seafood job impact), and added over \$1.8 million in combined state and local tax revenue (13.8% of state seafood tax impact). Finally, Eastern Shore seafood contributed over \$248.0 million to the state economy (85.9% of state seafood impact), supported 1,980 jobs (70.3% of state seafood job impact), and added over \$9.7 million in combined state and local tax revenue (70.3% of state seafood tax impact).

Based on the USDA Census of Agriculture (2017), the estimated aquaculture output in Maryland is \$18.2 million. aquaculture represents approximately 0.8% of the total agricultural output in Maryland (and 1.2% of all animal-related agricultural output). Using this output, we have estimated the impact of the seafood industry, including the output of the aquaculture sector. It is important to note that these aquaculture impacts are already reflected in the output of the agriculture industry. They are included here to illustrate the total seafood output of the state. Figure 3 below provides an overview of the estimated seafood and aquaculture economic impact. Figure 3 is included to give a more precise measure of the combined seafood and aquaculture industry; the summary tables will not include the aquaculture impacts, only seafood.

Figure 3. Maryland Seafood and Aquaculture Impact Estimate

	Direct	Indirect	Induced	Total
Seafood	217,458,590	51,966,969	19,374,824	288,800,382
Aquaculture	18,232,000	109,496	5,401,638	23,743,134
Total	235,690,590	52,076,465	24,776,462	312,543,516

Table 16. IMPLAN and NAICS Industries in Seafood and Aquaculture Sector

Seafood and Aquaculture

NAICS Codes	NAICS Industries	IMPLAN Code	IMPLAN Industry
114111	Finfish Fishing	17	Commercial fishing
114112	Shellfish Fishing	17	
114119	Other Marine Fishing	17	
112511	Finfish Farming and Fish Hatcheries	14*	Animal production, except cattle and poultry and eggs
112512	Shellfish Farming	14*	
112519	Other Seafood and Aquaculture	14*	
311710	Seafood product preparation and packaging	92	Seafood product preparation and packaging

*IMPLAN Code 14 was not included in Seafood and Aquaculture as this sector code captures many NAICS codes, most of which are more appropriately assigned under Agriculture. Therefore, IMPLAN Code 14 was included in the Agricultural impact models.

**Table 17. Resource Industry Economic Impacts:
Output**

Industry Sector: Seafood

Geographic Entity	Sector Output				% of Total
	Direct	Indirect	Induced	Total	
State of Maryland	217,458,590	51,966,969	19,374,824	288,800,382	100.0%
Regions					
Western Maryland	0	0	0	0	0.0%
Appalachian Maryland	0	0	0	0	0.0%
Central Maryland	14,543,896	4,385,597	1,358,084	20,287,578	7.0%
Southern Maryland	15,371,365	4,138,980	960,216	20,470,562	7.1%
Eastern Shore of Maryland	187,543,328	43,442,391	17,056,523	248,042,243	85.9%
Upper Eastern Shore	22,571,413	5,066,557	2,103,523	29,741,493	10.3%
Mid Shore	76,453,231	15,342,700	7,421,202	99,217,132	34.4%
Lower Eastern Shore	88,518,684	23,033,135	7,531,798	119,083,617	41.2%
Counties					
Allegany	0	0	0	0	0.0%
Anne Arundel	1,341,277	668,805	136,195	2,146,277	0.7%
Baltimore	3,539,222	812,318	286,916	4,638,457	1.6%
Baltimore City	9,147,883	3,139,700	877,017	13,164,599	4.6%
Calvert	439,118	144,161	37,654	620,933	0.2%
Caroline	3,658,716	625,922	159,282	4,443,920	1.5%
Carroll	0	0	0	0	0.0%
Cecil	607,138	113,546	94,574	815,257	0.3%
Charles	0	0	0	0	0.0%
Dorchester	67,127,474	13,500,987	6,800,730	87,429,191	30.3%
Frederick	0	0	0	0	0.0%
Garrett	0	0	0	0	0.0%
Harford	636,743	190,322	133,163	960,228	0.3%
Howard	0	0	0	0	0.0%
Kent	1,516,494	243,250	513,778	2,273,522	0.8%
Montgomery	1,220,048	243,258	60,988	1,524,294	0.5%
Prince George's	1,219,381	222,526	60,401	1,502,308	0.5%
Queen Anne's	20,447,781	4,709,761	1,495,172	26,652,713	9.2%
St. Mary's	12,371,589	3,103,488	725,967	16,201,044	5.6%
Somerset	42,937,487	8,715,298	3,451,073	55,103,858	19.1%
Talbot	5,667,041	1,215,790	461,190	7,344,021	2.5%
Washington	0	0	0	0	0.0%
Wicomico	22,812,763	9,439,780	2,538,678	34,791,222	12.0%
Worcester	22,768,433	4,878,057	1,542,047	29,188,537	10.1%

**Table 18. Resource Industry Economic Impacts:
Employment**

Industry Sector: Seafood

Geographic Entity	Sector Employment (Jobs)				% of Total
	Direct	Indirect	Induced	Total	
State of Maryland	2,146	433	132	2,711	100.0%
Regions					
Western Maryland	0	0	0	0	0.0%
Appalachian Maryland	0	0	0	0	0.0%
Central Maryland	331	18	8	357	13.2%
Southern Maryland	334	33	7	374	13.8%
Eastern Shore of Maryland	1,481	383	117	1,980	73.0%
Upper Eastern Shore	150	56	15	222	8.2%
Mid Shore	306	139	52	497	18.3%
Lower Eastern Shore	1,024	188	49	1,262	46.5%
Counties					
Allegany	0	0	0	0	0.0%
Anne Arundel	40	3	1	43	1.6%
Baltimore	52	3	2	57	2.1%
Baltimore City	260	13	5	279	10.3%
Calvert	13	0	0	13	0.5%
Caroline	9	4	1	14	0.5%
Carroll	0	0	0	0	0.0%
Cecil	15	1	1	16	0.6%
Charles	0	0	0	0	0.0%
Dorchester	283	125	48	456	16.8%
Frederick	0	0	0	0	0.0%
Garrett	0	0	0	0	0.0%
Harford	15	1	1	17	0.6%
Howard	0	0	0	0	0.0%
Kent	21	1	4	25	0.9%
Montgomery	3	1	0	5	0.2%
Prince George's	3	1	0	5	0.2%
Queen Anne's	115	54	11	180	6.6%
St. Mary's	279	28	5	312	11.5%
Somerset	158	69	22	249	9.2%
Talbot	14	10	3	26	1.0%
Washington	0	0	0	0	0.0%
Wicomico	445	68	17	531	19.6%
Worcester	421	50	10	481	17.8%

**Table 19. Resource Industry Economic Impacts:
State and Local Government Tax Impact**

Industry Sector: Seafood

Geographic Entity	Sources of Tax Revenue				Total (\$)	% of Total
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports		
State of Maryland	31,488	2,366,824	344,509	10,587,352	13,330,173	100.0%
Regions						
Western Maryland	0	0	0	0	0	0.0%
Appalachian Maryland	0	0	0	0	0	0.0%
Central Maryland	4,149	311,877	45,396	1,395,096	1,756,518	13.2%
Southern Maryland	4,339	326,158	47,475	1,458,981	1,836,953	13.8%
Eastern Shore of Maryland	23,000	1,728,789	251,638	7,733,275	9,736,702	73.0%
Upper Eastern Shore	2,573	193,417	28,153	865,199	1,089,342	8.2%
Mid Shore	5,774	434,007	63,173	1,941,412	2,444,366	18.3%
Lower Eastern Shore	14,652	1,101,366	160,312	4,926,664	6,202,994	46.5%
Counties						
Allegany	0	0	0	0	0	0.0%
Anne Arundel	503	37,812	5,504	169,140	212,959	1.6%
Baltimore	3,236	243,271	35,410	1,088,207	1,370,124	10.3%
Baltimore City	663	49,867	7,259	223,068	280,858	2.1%
Calvert	156	11,693	1,702	52,305	65,855	0.5%
Caroline	165	12,394	1,804	55,440	69,802	0.5%
Carroll	0	0	0	0	0	0.0%
Cecil	188	14,100	2,052	63,071	79,411	0.6%
Charles	0	0	0	0	0	0.0%
Dorchester	5,302	398,508	58,006	1,782,617	2,244,432	16.8%
Frederick	0	0	0	0	0	0.0%
Garrett	0	0	0	0	0	0.0%
Harford	193	14,520	2,114	64,953	81,780	0.6%
Howard	0	0	0	0	0	0.0%
Kent	294	22,097	3,216	98,846	124,453	0.9%
Montgomery	56	4,218	614	18,868	23,756	0.2%
Prince George's	54	4,045	589	18,096	22,784	0.2%
Queen Anne's	2,092	157,220	22,885	703,282	885,478	6.6%
St. Mary's	3,627	272,608	39,680	1,219,439	1,535,354	11.5%
Somerset	2,892	217,417	31,647	972,559	1,224,515	9.2%
Talbot	307	23,105	3,363	103,356	130,132	1.0%
Washington	0	0	0	0	0	0.0%
Wicomico	6,167	463,583	67,478	2,073,713	2,610,942	19.6%
Worcester	5,592	420,365	61,187	1,880,392	2,367,537	17.8%

Regional Summary Tables

**Table 20. Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	2,276,555,125	665,558,153	272,097,511	3,214,210,790
Support Industries	10,223,444,117	2,305,515,473	783,484,505	13,312,444,096
Forestry	2,522,916,149	548,394,854	268,150,944	3,339,461,946
Seafood	217,458,590	51,966,969	19,374,824	288,800,382
All Resource-Based Industries	15,240,373,981	3,571,435,449	1,343,107,784	20,154,917,213

**Table 21. Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	17,409	4,877	1,856	24,142
Support Industries	31,018	12,779	5,070	48,867
Forestry	7,946	3,132	1,812	12,890
Seafood	2,146	433	132	2,711
All Resource-Based Industries	58,519	21,222	8,870	88,610

**Table 22. Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	380,898	28,810,565	6,178,527	53,151,988	88,521,978
Support Industries	1,446,681	108,419,774	20,125,512	391,901,590	521,893,558
Forestry	465,083	34,319,325	4,562,939	92,097,617	131,444,964
Seafood	31,488	2,366,824	344,509	10,587,352	13,330,173
All Resource-Based Industries	2,324,150	173,916,489	31,211,486	547,738,548	755,190,673

**Table 23. Western Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	467,299,465	133,100,068	50,563,001	650,962,533
Support Industries	1,278,798,892	320,313,835	111,715,669	1,710,828,396
Forestry	947,465,175	208,082,309	110,507,513	1,266,054,997
Seafood	0	0	0	0
All Resource-Based Industries	2,693,563,531	661,496,212	272,786,183	3,627,845,926

**Table 24. Western Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	5,212	1,296	356	6,865
Support Industries	4,133	2,274	793	7,199
Forestry	3,141	1,181	800	5,122
Seafood	0	0	0	0
All Resource-Based Industries	12,486	4,751	1,949	19,186

**Table 25. Western Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	108,308	8,192,276	1,756,862	15,113,753	25,171,199
Support Industries	213,133	15,973,003	2,965,002	57,737,118	76,888,256
Forestry	184,796	13,636,428	1,813,037	36,594,034	52,228,294
Seafood	0	0	0	0	0
All Resource-Based Industries	506,237	37,801,707	6,534,901	109,444,904	154,287,750

**Table 26. Appalachian Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	204,154,407	44,397,654	29,057,604	277,609,664
Support Industries	413,590,697	82,268,007	31,216,285	527,074,989
Forestry	649,361,330	142,506,115	75,241,305	867,108,749
Seafood	0	0	0	0
All Resource-Based Industries	1,267,106,434	269,171,776	135,515,193	1,671,793,403

**Table 27. Appalachian Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	2,147	499	203	2,848
Support Industries	1,447	529	221	2,197
Forestry	2,034	806	547	3,387
Seafood	0	0	0	0
All Resource-Based Industries	5,627	1,835	971	8,433

**Table 28. Appalachian Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	44,939	3,399,151	728,960	6,271,021	10,444,072
Support Industries	65,051	4,875,166	904,957	17,622,112	23,467,287
Forestry	122,221	9,018,941	1,199,117	24,202,777	34,543,056
Seafood	0	0	0	0	0
All Resource-Based Industries	232,212	17,293,259	2,833,034	48,095,910	68,454,414

**Table 29. Central Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	188,856,273	50,761,343	30,222,007	269,839,624
Support Industries	6,108,690,815	1,329,254,097	422,701,570	7,860,646,482
Forestry	763,467,277	151,069,936	73,233,321	987,770,533
Seafood	14,543,896	4,385,597	1,358,084	20,287,578
All Resource-Based Industries	7,075,558,261	1,535,470,974	527,514,982	9,138,544,217

**Table 30. Central Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	3,168	438	191	3,798
Support Industries	16,145	6,760	2,581	25,486
Forestry	2,268	782	435	3,486
Seafood	331	18	8	357
All Resource-Based Industries	21,912	7,998	3,216	33,126

**Table 31. Central Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	59,918	4,532,108	971,926	8,361,188	13,925,140
Support Industries	754,487	56,544,088	10,496,044	204,388,157	272,182,774
Forestry	125,765	9,280,411	1,233,881	24,904,445	35,544,501
Seafood	4,149	311,877	45,396	1,395,096	1,756,518
All Resource-Based Industries	944,319	70,668,483	12,747,247	239,048,885	323,408,934

**Table 32. Southern Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	107,083,140	21,259,159	12,467,138	140,809,437
Support Industries	950,578,282	194,763,951	77,741,971	1,223,084,204
Forestry	317,552,225	67,458,396	34,227,505	419,238,126
Seafood	15,371,365	4,138,980	960,216	20,470,562
All Resource-Based Industries	1,390,585,012	287,620,486	125,396,830	1,803,602,328

**Table 33. Southern Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	2,309	222	79	2,610
Support Industries	4,314	1,296	511	6,121
Forestry	1,280	465	230	1,974
Seafood	334	33	7	374
All Resource-Based Industries	8,237	2,015	827	11,078

**Table 34. Southern Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	41,178	3,114,675	667,953	5,746,197	9,570,003
Support Industries	181,209	13,580,507	2,520,893	49,089,038	65,371,648
Forestry	71,216	5,255,170	698,703	14,102,511	20,127,600
Seafood	4,339	326,158	47,475	1,458,981	1,836,953
All Resource-Based Industries	297,943	22,276,511	3,935,024	70,396,726	96,906,204

**Table 35. Eastern Shore of Maryland
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	1,513,316,248	460,437,583	178,845,365	2,152,599,196
Support Industries	1,885,376,128	461,183,590	171,325,296	2,517,885,014
Forestry	494,431,472	121,784,213	50,182,605	666,398,290
Seafood	187,543,328	43,442,391	17,056,523	248,042,243
All Resource-Based Industries	4,080,667,177	1,086,847,777	417,409,789	5,584,924,742

**Table 36. Eastern Shore of Maryland
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	6,719	2,921	1,230	10,870
Support Industries	6,427	2,450	1,185	10,061
Forestry	1,257	705	347	2,309
Seafood	1,481	383	117	1,980
All Resource-Based Industries	15,883	6,458	2,878	25,220

**Table 37. Eastern Shore of Maryland
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	171,493	12,971,506	2,781,785	23,930,851	39,855,635
Support Industries	297,852	22,322,177	4,143,573	80,687,278	107,450,880
Forestry	83,306	6,147,316	817,319	16,496,628	23,544,569
Seafood	23,000	1,728,789	251,638	7,733,275	9,736,702
All Resource-Based Industries	575,651	43,169,788	7,994,315	128,848,032	180,587,786

**Table 38. Upper Eastern Shore
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	387,124,776	121,837,725	33,559,820	542,522,322
Support Industries	245,646,454	47,629,355	21,794,662	315,070,471
Forestry	51,592,876	10,557,358	5,180,260	67,330,494
Seafood	22,571,413	5,066,557	2,103,523	29,741,493
All Resource-Based Industries	706,935,519	185,090,995	62,638,265	954,664,779

**Table 39. Upper Eastern Shore
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	2,592	983	240	3,815
Support Industries	1,196	295	157	1,648
Forestry	207	70	38	315
Seafood	150	56	15	222
All Resource-Based Industries	4,146	1,404	450	6,000

**Table 40. Upper Eastern Shore
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	60,192	4,552,810	976,366	8,399,380	13,988,748
Support Industries	48,801	3,657,341	678,897	13,220,075	17,605,114
Forestry	11,373	839,258	111,584	2,252,190	3,214,404
Seafood	2,573	193,417	28,153	865,199	1,089,342
All Resource-Based Industries	122,939	9,242,825	1,795,000	24,736,844	35,897,608

**Table 41. Mid Shore
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	449,493,595	130,330,902	53,353,182	633,177,678
Support Industries	892,125,947	203,718,825	66,655,147	1,162,499,919
Forestry	239,616,622	47,467,530	17,237,220	304,321,372
Seafood	76,453,231	15,342,700	7,421,202	99,217,132
All Resource-Based Industries	1,657,689,394	396,859,958	144,666,750	2,199,216,102

**Table 42. Mid Shore
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	2,104	836	376	3,315
Support Industries	2,863	1,153	471	4,486
Forestry	617	274	123	1,014
Seafood	306	139	52	497
All Resource-Based Industries	5,890	2,400	1,022	9,312

**Table 43. Mid Shore
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	52,308	3,956,518	848,489	7,299,295	12,156,610
Support Industries	132,818	9,953,866	1,847,695	35,979,931	47,914,310
Forestry	36,569	2,698,482	358,778	7,241,511	10,335,339
Seafood	5,774	434,007	63,173	1,941,412	2,444,366
All Resource-Based Industries	227,469	17,042,873	3,118,135	52,462,149	72,850,625

**Table 44. Lower Eastern Shore
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	676,697,877	208,268,956	91,932,363	976,899,196
Support Industries	747,603,728	209,835,409	82,875,487	1,040,314,624
Forestry	203,221,974	63,759,324	27,765,126	294,746,424
Seafood	88,518,684	23,033,135	7,531,798	119,083,617
All Resource-Based Industries	1,716,042,263	504,896,824	210,104,775	2,431,043,862

**Table 45. Lower Eastern Shore
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	2,023	1,103	614	3,739
Support Industries	2,368	1,002	557	3,926
Forestry	433	361	187	980
Seafood	1,024	188	49	1,262
All Resource-Based Industries	5,847	2,653	1,406	9,907

**Table 46. Lower Eastern Shore
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				Total (\$)
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	
Agriculture	58,993	4,462,178	956,930	8,232,176	13,710,277
Support Industries	116,233	8,710,970	1,616,981	31,487,272	41,931,456
Forestry	35,364	2,609,576	346,957	7,002,928	9,994,825
Seafood	14,652	1,101,366	160,312	4,926,664	6,202,994
All Resource-Based Industries	225,243	16,884,090	3,081,180	51,649,039	71,839,552

County Summary Tables

**Table 47. Allegany County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	6,687,276	1,149,871	140,530	7,977,676
Support Industries	106,338,261	18,356,452	8,431,587	133,126,301
Forestry	287,310,254	55,813,432	35,308,441	378,432,127
Seafood	0	0	0	0
All Resource-Based Industries	400,335,791	75,319,755	43,880,558	519,536,104

**Table 48. Allegany County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	256	10	1	267
Support Industries	279	128	60	467
Forestry	1,039	312	253	1,603
Seafood	0	0	0	0
All Resource-Based Industries	1,574	450	314	2,337

**Table 49. Allegany County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				Total (\$)
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	
Agriculture	4,213	318,660	68,338	587,889	979,099
Support Industries	13,830	1,036,443	192,391	3,746,399	4,989,063
Forestry	57,840	4,268,153	567,474	11,453,801	16,347,269
Seafood	0	0	0	0	0
All Resource-Based Industries	75,883	5,623,256	828,202	15,788,089	22,315,431

**Table 50. Anne Arundel County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	19,639,340	4,107,622	8,267,331	32,014,293
Support Industries	351,493,517	85,767,973	35,913,349	473,174,839
Forestry	65,979,406	18,463,013	10,517,139	94,959,558
Seafood	1,341,277	668,805	136,195	2,146,277
All Resource-Based Industries	438,453,541	109,007,413	54,834,014	602,294,967

**Table 51. Anne Arundel County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	461	25	52	538
Support Industries	1,375	502	225	2,101
Forestry	241	102	66	409
Seafood	40	3	1	43
All Resource-Based Industries	2,117	631	343	3,091

**Table 52. Anne Arundel County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	8,495	642,544	137,796	1,185,415	1,974,249
Support Industries	62,194	4,661,062	865,214	16,848,196	22,436,665
Forestry	14,751	1,088,514	144,724	2,921,081	4,169,070
Seafood	503	37,812	5,504	169,140	212,959
All Resource-Based Industries	85,943	6,429,931	1,153,237	21,123,832	28,792,943

**Table 53. Baltimore County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	68,389,873	15,724,884	16,814,533	100,929,290
Support Industries	1,537,837,783	261,950,451	119,360,417	1,919,148,650
Forestry	206,399,506	39,555,024	19,439,319	265,393,849
Seafood	3,539,222	812,318	286,916	4,638,457
All Resource-Based Industries	1,816,166,384	318,042,677	155,901,185	2,290,110,246

**Table 54. Baltimore County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,064	117	109	1,290
Support Industries	4,049	1,401	770	6,220
Forestry	608	213	127	948
Seafood	52	3	2	57
All Resource-Based Industries	5,774	1,733	1,008	8,515

**Table 55. Baltimore County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	20,355	1,539,656	330,185	2,840,477	4,730,673
Support Industries	184,138	13,800,015	2,561,639	49,882,484	66,428,277
Forestry	34,202	2,523,803	335,553	6,772,751	9,666,308
Seafood	663	49,867	7,259	223,068	280,858
All Resource-Based Industries	239,359	17,913,341	3,234,636	59,718,781	81,106,116

**Table 56. Baltimore City
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	0	0	0	0
Support Industries	1,615,790,309	337,127,581	74,621,883	2,027,539,773
Forestry	305,771,001	62,037,155	20,808,741	388,616,897
Seafood	9,147,883	3,139,700	877,017	13,164,599
All Resource-Based Industries	1,930,709,193	402,304,436	96,307,640	2,429,321,270

**Table 57. Baltimore City
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	0	0	0	0
Support Industries	3,926	1,457	429	5,812
Forestry	913	302	119	1,335
Seafood	260	13	5	279
All Resource-Based Industries	5,099	1,772	554	7,425

**Table 58. Baltimore City
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	0	0	0	0	0
Support Industries	172,047	12,893,846	2,393,431	46,606,986	62,066,311
Forestry	48,162	3,553,938	472,515	9,537,169	13,611,783
Seafood	3,236	243,271	35,410	1,088,207	1,370,124
All Resource-Based Industries	223,445	16,691,055	2,901,356	57,232,362	77,048,218

**Table 59. Calvert County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	8,967,388	1,781,739	-1,226,864	9,522,262
Support Industries	54,403,556	9,512,018	3,814,963	67,730,538
Forestry	71,336,584	11,199,942	5,157,162	87,693,688
Seafood	439,118	144,161	37,654	620,933
All Resource-Based Industries	135,146,646	22,637,860	7,782,914	165,567,420

**Table 60. Calvert County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	273	19	-9	284
Support Industries	245	114	28	387
Forestry	170	62	37	269
Seafood	13	0	0	13
All Resource-Based Industries	701	196	56	953

**Table 61. Calvert County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				Total (\$)
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	
Agriculture	4,473	338,341	72,558	624,199	1,039,572
Support Industries	11,464	859,140	159,479	3,105,506	4,135,588
Forestry	9,702	715,948	95,189	1,921,282	2,742,122
Seafood	156	11,693	1,702	52,305	65,855
All Resource-Based Industries	25,795	1,925,122	328,928	5,703,292	7,983,137

**Table 62. Caroline County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	247,485,792	72,020,945	23,183,077	342,689,813
Support Industries	91,635,241	36,126,936	7,310,241	135,072,419
Forestry	138,941,046	24,935,306	5,327,947	169,204,299
Seafood	3,658,716	625,922	159,282	4,443,920
All Resource-Based Industries	481,720,795	133,709,110	35,980,547	651,410,451

**Table 63. Caroline County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,002	455	161	1,617
Support Industries	338	219	51	608
Forestry	329	152	37	518
Seafood	9	4	1	14
All Resource-Based Industries	1,677	830	250	2,757

**Table 64. Caroline County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	25,509	1,929,484	413,785	3,559,663	5,928,441
Support Industries	17,999	1,348,889	250,389	4,875,787	6,493,064
Forestry	18,705	1,380,294	183,517	3,704,087	5,286,603
Seafood	165	12,394	1,804	55,440	69,802
All Resource-Based Industries	62,378	4,671,060	849,495	12,194,977	17,777,910

**Table 65. Carroll County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	129,434,321	48,340,754	10,981,392	188,756,467
Support Industries	334,822,927	91,252,213	31,260,499	457,335,639
Forestry	172,131,228	31,206,733	18,076,875	221,414,835
Seafood	0	0	0	0
All Resource-Based Industries	636,388,476	170,799,700	60,318,765	867,506,941

**Table 66. Carroll County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,428	413	81	1,923
Support Industries	1,030	930	231	2,191
Forestry	609	183	134	925
Seafood	0	0	0	0
All Resource-Based Industries	3,066	1,526	446	5,039

**Table 67. Carroll County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	30,334	2,294,382	492,038	4,232,856	7,049,611
Support Industries	64,853	4,860,337	902,204	17,568,509	23,395,903
Forestry	33,392	2,464,046	327,608	6,612,391	9,437,438
Seafood	0	0	0	0	0
All Resource-Based Industries	128,578	9,618,766	1,721,851	28,413,757	39,882,951

**Table 68. Cecil County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	102,585,147	22,758,594	9,417,491	134,761,231
Support Industries	89,870,495	13,850,482	9,335,218	113,056,194
Forestry	33,104,672	5,399,683	3,015,832	41,520,186
Seafood	607,138	113,546	94,574	815,257
All Resource-Based Industries	226,167,451	42,122,304	21,863,114	290,152,869

**Table 69. Cecil County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,186	266	69	1,521
Support Industries	666	88	69	823
Forestry	121	36	22	179
Seafood	15	1	1	16
All Resource-Based Industries	1,987	391	161	2,539

**Table 70. Cecil County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	24,004	1,815,594	389,361	3,349,550	5,578,508
Support Industries	24,370	1,826,406	339,028	6,601,853	8,791,658
Forestry	6,449	475,875	63,270	1,277,035	1,822,630
Seafood	188	14,100	2,052	63,071	79,411
All Resource-Based Industries	55,010	4,131,975	793,711	11,291,510	16,272,206

**Table 71. Charles County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	16,097,627	4,112,781	-648,470	19,561,938
Support Industries	57,379,093	10,365,366	4,569,718	72,314,177
Forestry	16,637,869	7,255,811	2,071,214	25,964,894
Seafood	0	0	0	0
All Resource-Based Industries	90,114,590	21,733,958	5,992,462	117,841,010

**Table 72. Charles County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	404	41	-5	441
Support Industries	281	118	33	432
Forestry	159	82	15	255
Seafood	0	0	0	0
All Resource-Based Industries	844	241	43	1,128

**Table 73. Charles County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	6,951	525,755	112,750	969,955	1,615,411
Support Industries	12,792	958,663	177,953	3,465,251	4,614,658
Forestry	9,218	680,202	90,437	1,825,356	2,605,213
Seafood	0	0	0	0	0
All Resource-Based Industries	28,961	2,164,621	381,139	6,260,562	8,835,282

**Table 74. Dorchester County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	133,768,605	29,391,119	20,799,092	183,958,816
Support Industries	687,621,273	139,671,087	46,151,709	873,444,068
Forestry	70,811,936	12,795,752	5,299,352	88,907,040
Seafood	67,127,474	13,500,987	6,800,730	87,429,191
All Resource-Based Industries	959,329,288	195,358,945	79,050,883	1,233,739,116

**Table 75. Dorchester County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	643	184	147	974
Support Industries	2,097	750	324	3,171
Forestry	171	63	37	271
Seafood	283	125	48	456
All Resource-Based Industries	3,194	1,122	556	4,873

**Table 76. Dorchester County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	15,373	1,162,828	249,372	2,145,276	3,572,850
Support Industries	93,870	7,034,951	1,305,869	25,429,020	33,863,710
Forestry	9,790	722,406	96,048	1,938,611	2,766,854
Seafood	5,302	398,508	58,006	1,782,617	2,244,432
All Resource Based Industries	124,335	9,318,692	1,709,295	31,295,524	42,447,846

**Table 77. Frederick County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	133,710,737	40,361,660	10,524,005	184,596,401
Support Industries	530,385,267	146,793,614	49,238,886	726,417,768
Forestry	125,972,617	34,369,462	17,189,334	177,531,413
Seafood	0	0	0	0
All Resource-Based Industries	790,068,622	221,524,736	76,952,224	1,088,545,582

**Table 78. Frederick County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,638	384	72	2,094
Support Industries	1,657	814	341	2,811
Forestry	498	192	119	809
Seafood	0	0	0	0
All Resource-Based Industries	3,792	1,390	532	5,714

**Table 79. Frederick County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				Total (\$)
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	
Agriculture	33,035	2,498,742	535,864	4,609,875	7,677,517
Support Industries	83,229	6,237,500	1,157,841	22,546,496	30,025,066
Forestry	29,183	2,153,441	286,312	5,778,865	8,247,800
Seafood	0	0	0	0	0
All Resource-Based Industries	145,447	10,889,683	1,980,017	32,935,237	45,950,384

**Table 80. Garrett County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	32,394,994	9,510,054	1,848,415	43,753,463
Support Industries	41,332,227	15,858,705	3,162,912	60,353,843
Forestry	144,916,589	47,834,037	19,960,603	212,711,228
Seafood	0	0	0	0
All Resource-Based Industries	218,643,810	73,202,795	24,971,929	316,818,534

**Table 81. Garrett County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	685	86	15	786
Support Industries	125	107	25	257
Forestry	486	286	156	928
Seafood	0	0	0	0
All Resource-Based Industries	1,296	479	196	1,970

**Table 82. Garrett County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	12,396	937,606	201,073	1,729,769	2,880,844
Support Industries	7,598	569,422	105,699	2,058,273	2,740,992
Forestry	33,479	2,470,471	328,462	6,629,631	9,462,043
Seafood	0	0	0	0	0
All Resource-Based Industries	53,473	3,977,499	635,235	10,417,673	15,083,879

**Table 83. Harford County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	48,197,807	16,006,260	4,172,198	68,376,264
Support Industries	666,526,628	169,270,719	58,257,690	894,055,037
Forestry	6,455,613	1,511,943	1,327,222	9,294,778
Seafood	636,743	190,322	133,163	960,228
All Resource-Based Industries	721,816,790	186,979,244	63,890,272	972,686,306

**Table 84. Harford County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	791	127	29	948
Support Industries	1,589	1,157	407	3,153
Forestry	34	12	9	55
Seafood	15	1	1	17
All Resource-Based Industries	2,429	1,297	447	4,173

**Table 85. Harford County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				Total (\$)
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	
Agriculture	14,952	1,130,979	242,542	2,086,519	3,474,993
Support Industries	93,357	6,996,552	1,298,741	25,290,221	33,678,872
Forestry	1,988	146,694	19,504	393,661	561,846
Seafood	193	14,520	2,114	64,953	81,780
All Resource-Based Industries	110,491	8,288,746	1,562,901	27,835,353	37,797,491

**Table 86. Howard County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	27,881,253	8,984,947	3,009,913	39,876,113
Support Industries	1,790,425,638	452,515,380	113,245,941	2,356,186,959
Forestry	40,036,336	9,531,836	6,839,405	56,407,577
Seafood	0	0	0	0
All Resource-Based Industries	1,858,343,227	471,032,164	123,095,259	2,452,470,649

**Table 87. Howard County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	490	126	17	633
Support Industries	4,053	2,172	650	6,875
Forestry	196	73	39	307
Seafood	0	0	0	0
All Resource-Based Industries	4,738	2,371	707	7,816

**Table 88. Howard County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	9,990	755,649	162,052	1,394,081	2,321,772
Support Industries	203,528	15,253,191	2,831,386	55,135,236	73,423,342
Forestry	11,092	818,518	108,826	2,196,533	3,134,969
Seafood	0	0	0	0	0
All Resource-Based Industries	224,611	16,827,358	3,102,264	58,725,850	78,880,084

**Table 89. Kent County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	112,606,251	43,555,659	8,738,589	164,900,500
Support Industries	77,348,099	19,115,884	6,514,274	102,978,256
Forestry	3,431,763	598,529	556,684	4,586,976
Seafood	1,516,494	243,250	513,778	2,273,522
All Resource-Based Industries	194,902,607	63,513,322	16,323,325	274,739,255

**Table 90. Kent County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	631	271	60	962
Support Industries	195	97	45	336
Forestry	20	4	4	28
Seafood	21	1	4	25
All Resource-Based Industries	867	373	112	1,351

**Table 91. Kent County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	15,172	1,147,588	246,104	2,117,160	3,526,023
Support Industries	9,951	745,756	138,432	2,695,660	3,589,797
Forestry	1,015	74,894	9,958	200,981	286,847
Seafood	294	22,097	3,216	98,846	124,453
All Resource-Based Industries	26,432	1,990,334	397,710	5,112,646	7,527,121

**Table 92. Montgomery County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	44,387,340	10,045,253	6,225,364	60,657,957
Support Industries	498,110,457	108,389,966	57,215,640	663,716,063
Forestry	204,804,821	38,433,977	24,818,634	268,057,432
Seafood	1,220,048	243,258	60,988	1,524,294
All Resource-Based Industries	748,522,666	157,112,454	88,320,625	993,955,745

**Table 93. Montgomery County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	823	68	35	927
Support Industries	2,528	573	324	3,426
Forestry	517	182	141	840
Seafood	3	1	0	5
All Resource-Based Industries	3,872	825	501	5,198

**Table 94. Montgomery County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	14,620	1,105,824	237,148	2,040,111	3,397,702
Support Industries	101,416	7,600,483	1,410,846	27,473,229	36,585,973
Forestry	30,321	2,237,459	297,482	6,004,332	8,569,594
Seafood	56	4,218	614	18,868	23,756
All Resource-Based Industries	146,413	10,947,983	1,946,090	35,536,539	48,577,025

**Table 95. Prince George's County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	35,570,878	5,252,015	7,103,795	47,926,688
Support Industries	462,993,615	84,952,533	30,747,154	578,693,302
Forestry	149,358,871	26,630,277	14,238,231	190,227,379
Seafood	1,219,381	222,526	60,401	1,502,308
All Resource-Based Industries	649,142,745	117,057,352	52,149,581	818,349,677

**Table 96. Prince George's County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	556	37	48	640
Support Industries	2,145	516	208	2,868
Forestry	616	165	96	877
Seafood	3	1	0	5
All Resource-Based Industries	3,319	719	352	4,390

**Table 97. Prince George's County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	10,105	764,336	163,915	1,410,107	2,348,463
Support Industries	84,918	6,364,064	1,181,335	23,003,983	30,634,299
Forestry	31,627	2,333,806	310,292	6,262,884	8,938,608
Seafood	54	4,045	589	18,096	22,784
All Resource-Based Industries	126,704	9,466,251	1,656,130	30,695,070	41,944,155

**Table 98. Queen Anne's County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	171,933,378	55,523,472	15,403,740	242,860,591
Support Industries	78,427,860	14,662,990	5,945,170	99,036,020
Forestry	15,056,442	4,559,146	1,607,743	21,223,331
Seafood	20,447,781	4,709,761	1,495,172	26,652,713
All Resource-Based Industries	285,865,461	79,455,369	24,451,825	389,772,655

**Table 99. Queen Anne's County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	775	446	111	1,332
Support Industries	336	110	43	489
Forestry	66	31	12	108
Seafood	115	54	11	180
All Resource-Based Industries	1,292	641	177	2,110

**Table 100. Queen Anne's County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	21,016	1,589,628	340,901	2,932,671	4,884,217
Support Industries	14,480	1,085,179	201,437	3,922,562	5,223,658
Forestry	3,909	288,489	38,356	774,173	1,104,928
Seafood	2,092	157,220	22,885	703,282	885,478
All Resource-Based Industries	41,497	3,120,516	603,579	8,332,689	12,098,281

**Table 101. St. Mary's County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	26,807,906	6,005,003	-1,028,654	31,784,255
Support Industries	24,308,501	4,166,060	2,696,787	31,171,348
Forestry	14,239,495	3,909,353	2,243,758	20,392,607
Seafood	12,371,589	3,103,488	725,967	16,201,044
All Resource-Based Industries	77,727,491	17,183,904	4,637,859	99,549,253

**Table 102. St. Mary's County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	615	99	-7	707
Support Industries	268	46	19	332
Forestry	94	55	15	164
Seafood	279	28	5	312
All Resource-Based Industries	1,256	228	32	1,516

**Table 103. St. Mary's County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	11,154	843,699	180,934	1,556,521	2,592,308
Support Industries	9,842	737,579	136,914	2,666,103	3,550,437
Forestry	5,918	436,700	58,062	1,171,907	1,672,587
Seafood	3,627	272,608	39,680	1,219,439	1,535,354
All Resource-Based Industries	30,541	2,290,586	415,590	6,613,971	9,350,687

**Table 104. Somerset County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	212,410,185	38,075,459	18,163,374	268,649,018
Support Industries	56,474,925	10,885,516	3,957,632	71,318,074
Forestry	6,030,271	422,079	1,204,391	7,656,742
Seafood	42,937,487	8,715,298	3,451,073	55,103,858
All Resource-Based Industries	317,852,869	58,098,352	26,776,471	402,727,692

**Table 105. Somerset County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	485	209	116	810
Support Industries	206	51	25	283
Forestry	25	4	8	36
Seafood	158	69	22	249
All Resource-Based Industries	873	333	171	1,378

**Table 106. Somerset County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	12,774	966,229	207,211	1,782,574	2,968,788
Support Industries	8,380	628,018	116,576	2,270,077	3,023,051
Forestry	1,309	96,577	12,840	259,170	369,896
Seafood	2,892	217,417	31,647	972,559	1,224,515
All Resource-Based Industries	25,355	1,908,241	368,275	5,284,379	7,586,251

**Table 107. Talbot County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	68,239,198	28,918,839	9,371,012	106,529,049
Support Industries	112,869,433	27,920,802	13,193,197	153,983,432
Forestry	29,863,639	9,736,472	6,609,921	46,210,032
Seafood	5,667,041	1,215,790	461,190	7,344,021
All Resource-Based Industries	216,639,311	67,791,903	29,635,320	314,066,534

**Table 108. Talbot County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	459	197	68	724
Support Industries	428	183	96	708
Forestry	118	58	48	224
Seafood	14	10	3	26
All Resource-Based Industries	1,019	448	216	1,682

**Table 109. Talbot County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	11,425	864,206	185,332	1,594,356	2,655,320
Support Industries	20,949	1,570,026	291,437	5,675,124	7,557,536
Forestry	8,074	595,783	79,213	1,598,813	2,281,882
Seafood	307	23,105	3,363	103,356	130,132
All Resource-Based Industries	40,756	3,053,120	559,345	8,971,648	12,624,869

**Table 110. Washington County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	165,072,136	33,737,729	27,068,660	225,878,526
Support Industries	265,920,210	48,052,850	19,621,785	333,594,845
Forestry	217,134,487	38,858,646	19,972,261	275,965,394
Seafood	0	0	0	0
All Resource-Based Industries	648,126,833	120,649,226	66,662,706	835,438,765

**Table 111. Washington County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	1,205	403	187	1,796
Support Industries	1,043	294	136	1,474
Forestry	509	209	138	856
Seafood	0	0	0	0
All Resource-Based Industries	2,758	907	461	4,126

**Table 112. Washington County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	28,331	2,142,885	459,549	3,953,363	6,584,128
Support Industries	43,623	3,269,301	606,867	11,817,441	15,737,232
Forestry	30,902	2,280,317	303,180	6,119,345	8,733,745
Seafood	0	0	0	0	0
All Resource-Based Industries	102,856	7,692,504	1,369,596	21,890,149	31,055,105

**Table 113. Wicomico County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	228,042,217	99,764,423	52,864,624	380,671,264
Support Industries	483,609,396	167,405,683	64,174,889	715,189,968
Forestry	171,862,202	57,598,774	20,697,452	250,158,429
Seafood	22,812,763	9,439,780	2,538,678	34,791,222
All Resource-Based Industries	906,326,579	334,208,661	140,275,643	1,380,810,883

**Table 114. Wicomico County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	915	585	356	1,857
Support Industries	1,649	779	432	2,859
Forestry	339	321	139	798
Seafood	445	68	17	531
All Resource-Based Industries	3,348	1,753	944	6,045

**Table 115. Wicomico County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	29,292	2,215,614	475,146	4,087,538	6,807,590
Support Industries	84,636	6,342,914	1,177,409	22,927,536	30,532,495
Forestry	28,808	2,125,767	282,632	5,704,601	8,141,807
Seafood	6,167	463,583	67,478	2,073,713	2,610,942
All Resource-Based Industries	148,903	11,147,878	2,002,665	34,793,388	48,092,833

**Table 116. Worcester County
Economic Impact-Output**

	Sector Output			
	Direct	Indirect	Induced	Total
Agriculture	236,245,475	70,429,074	20,904,365	327,578,914
Support Industries	207,519,407	31,544,210	14,742,966	253,806,583
Forestry	25,329,500	5,738,470	5,863,283	36,931,253
Seafood	22,768,433	4,878,057	1,542,047	29,188,537
All Resource-Based Industries	491,862,815	112,589,811	43,052,660	647,505,286

**Table 117. Worcester County
Economic Impact-Employment**

	Sector Employment			
	Direct	Indirect	Induced	Total
Agriculture	623	309	141	1,073
Support Industries	513	172	100	784
Forestry	69	36	40	145
Seafood	421	50	10	481
All Resource-Based Industries	1,626	567	291	2,484

**Table 118. Worcester County
Economic Impact-Tax Revenue**

	Sources of Tax Revenue				
	Employee Compensation	Household Expenditures	Corporations	Taxes on Production and Imports	Total (\$)
Agriculture	16,927	1,280,336	274,572	2,362,064	3,933,899
Support Industries	23,218	1,740,037	322,996	6,289,659	8,375,910
Forestry	5,248	387,232	51,485	1,039,158	1,483,122
Seafood	5,592	420,365	61,187	1,880,392	2,367,537
All Resource-Based Industries	50,985	3,827,971	710,240	11,571,272	16,160,468