



# ECONOMIC IMPACT

**OF THE MARITIME ASSOCIATION OF SOUTH CAROLINA  
SPRING 2019**



Charleston Metro  
Chamber of Commerce

Compiled by the Center for Business Research,  
Charleston Metro Chamber of Commerce

# The Economic Impact of the Maritime Association of South Carolina

## Executive Summary

South Carolina's maritime history has been foundational since its establishment as one of the United States' thirteen original colonies. The Maritime Association of South Carolina (MASC) was officially formed in 1926 as a member-based trade association to formally connect local maritime industry entities and those who support maritime commerce.

Today, MASC serves as a platform for information dissemination, collaboration and partnership within its membership, advocating for issues impacting the industry, as well as advancing, promoting and protecting the interests of the maritime community across South Carolina. As of February 2019, MASC has more than **210 member firms and organizations**. These firms **directly employ 30,000** people and provide more than **\$2 billion in income** to these workers across South Carolina.

When a company creates a job, there is an economic multiplier effect beyond the job itself. An organization's jobs spur demand for goods and services from suppliers, they stimulate economic activity when employed workers spend their paychecks, and they support public sector employment by generating tax revenue in these aforementioned transactions. The business-to-business increase in demand or economic activity is called the *indirect* effect or impact, and the business-to-households effect (i.e. employer-paid wages spent by workers) is called the *induced* effect or impact. Together with the direct effect created by the original company in this sample scenario, these economic activities make up the total economic impact of an organization.

Thus, the 30,000 direct jobs of MASC member firms support (or create demand for) another 50,000 jobs statewide, for a **total employment impact of 80,000 statewide**. This represents **1 out of every 25 jobs in South Carolina**, based on the U.S. Bureau of Labor Statistics' total employment count of 2.126 million for the state for 2018.

Further, MASC member firms contribute **\$29 billion annually** into the state's economy (total statewide economic impact). This represents **13% of South Carolina's gross domestic product**, based on the state's latest available GDP of \$221.7 billion in 2017 from the U.S. Bureau of Economic Analysis.

**\$29 billion**  
**Annual Economic Impact**

**1 out of every 25 jobs**  
**in South Carolina**

The Maritime Association of South Carolina's economic impact statewide is summarized in the table below:

Impact Summary	Employment	Labor Income (\$)	Economic Output
Direct Effect	29,968	\$2,405,041,180	\$21,307,824,360
Indirect Effect	26,603	\$1,506,723,959	\$5,062,698,773
Induced Effect	23,420	\$912,560,483	\$3,024,902,682
<b>Total Impact</b>	<b>79,991</b>	<b>\$4,824,325,623</b>	<b>\$29,395,425,815</b>

It should be noted that the scope of this study is to estimate the economic impact of the member firms of the Maritime Association of South Carolina, not necessarily the impact of all maritime firms in the state. Not all maritime businesses in the state are members of MASC, and some businesses who *are* members operate in

industry sectors which may not traditionally be considered maritime-related. This distinction is important when attempting to compare the results of this analysis with other studies. Considering this, the following statewide reports, while differing in scope from this MASC analysis, may still provide additional context:

- [South Carolina's tourism industry](#) has an annual economic impact of **\$22.6 billion**, according to the U.S. Travel Association's study published in 2019.
- A 2017 study of the [South Carolina's logistics cluster](#) measured its economic impact at **\$32.9 billion** statewide.
- The [South Carolina Ports Authority's](#) most recent economic impact study from 2015 cites its **\$53 billion** total economic impact statewide. Because the SCPA is one of MASC's member organizations, its *direct* employees and impact are included in the MASC membership impact estimate, as well as are *some* but *not all* of the other firms included in the Port study. For example, the 2015 SCPA study included 3,350 direct employees in South Carolina at 129 trucking firms ([NAICS Code 484122](#)) who engaged with the Port, while this current MASC analysis includes 1,700 direct employees statewide at 19 trucking firms who are MASC members. Therefore, there is some overlap in what's measured in both studies, but the two studies have different scopes and are not directly comparable.



## MASC Economic Impact by Sector

As previously mentioned, the Maritime Association of South Carolina was formed in 1926 as a member-based trade association to formally connect local maritime industry entities and those who support maritime commerce.

Today MASC has more than 210 member firms. Some are 100% maritime-focused such as a shipyard, while others may not be fully maritime-oriented but they have a strong vested interest in the industry, such as logistics firms involved in both maritime and non-maritime commerce, or manufacturers who export the goods they produce. Finally, some members are vendors or suppliers which may or may not have a maritime specialty but which have a maritime interest by way of their relationship with maritime-oriented companies.

Some member firms may technically operate in multiple NAICS sectors listed below, but for purposes of this study, these were classified into the sector which aligns best with their primary operations in South Carolina. Employment levels statewide were determined via member survey or estimated based on publicly available databases and government sources. Employment levels of government agencies and other business or professional associations which are MASC members were kept at one per organization to maintain conservative figures.

**210+**  
**Member Firms and**  
**Organizations**

**30,000**  
**Direct Jobs**

Employment and economic activity generated by several other maritime-affiliated agencies which partner with MASC -- such as the U.S. Coast Guard, Customs and Border Protection, and the Army Corps of Engineers-- were not encapsulated in this study, further demonstrating the conservatism of these results.

Below is a table summarizing the MASC member organizations' direct employment statewide by sector:

**MASC Member Firms' Direct Employment by Sector**

North American Industrial Classification System (NAICS) Codes		# of firms	Employment
23: Marine-related Construction		7	193
31-33: Manufacturing		13	13,530
42: Maritime-related Wholesale Trade		12	253
44: Maritime-related Retail Trade		4	60
48-49: Transportation, Warehousing, Logistics		80	4,690
52-53: Financial, Insurance and Real Estate Activities		27	1,674
54-56: Professional, Technical and Business Services		45	2,071
61-62: Education & Health Services		5	5,768
71-72: Leisure & Hospitality		5	102
81: Other Services (includes repair/maintenance services, labor / business / civic organizations, and others not elsewhere classified)		10	1,621
92: Government/Public Administration		6	6
Total	All Sectors	214	29,968

Whether 100% maritime-focused or not, these firms have demonstrated a direct association with the industry by investing in membership with the Maritime Association of South Carolina. In total, their 30,000 direct employees support (or create demand for) another 50,000 jobs statewide, for a total employment impact of 80,000 statewide.

This represents 1 out of every 25 jobs in South Carolina. Further, MASC member firms have a total statewide economic impact of \$29 billion, representing 13% of South Carolina's 2017 gross domestic product. This statewide impact is summarized in the table below:

**MASC Member Firms' Total Economic Impact**

Impact Summary	Employment	Labor Income (\$)	Economic Output
Direct Effect	29,968	\$2,405,041,180	\$21,307,824,360
Indirect Effect	26,603	\$1,506,723,959	\$5,062,698,773
Induced Effect	23,420	\$912,560,483	\$3,024,902,682
<b>Total Impact</b>	<b>79,991</b>	<b>\$4,824,325,623</b>	<b>\$29,395,425,815</b>

**\$29 billion**  
Annual Economic Impact

**13% of**  
South Carolina's GDP

In separating the total impact results above by industry sector, the economic significance of MASC member firms can be seen across all industry sectors as shown in the following table:

**MASC Member Firms' Economic Impact by Sector**

Total Economic Impact Breakdown by Sector	Employment	Labor Income	Economic Output
11-21: Forestry, Fishing, Agriculture & Mining	403	\$4,324,625	\$34,607,543
22: Utilities	195	\$23,086,351	\$195,809,833
23: Construction	913	\$45,015,793	\$139,489,430
31-33: Manufacturing	16,130	\$1,581,943,420	\$19,686,781,205
42: Wholesale Trade	6,721	\$483,286,945	\$1,528,007,177
44-45: Retail Trade	4,552	\$136,013,327	\$359,172,057
48-49: Transportation, Warehousing, Logistics	8,828	\$478,423,505	\$1,639,815,461
51: Information	686	\$45,991,625	\$302,261,683
52: Finance and Insurance	4,630	\$304,330,457	\$911,386,662
53: Real Estate, Rental and Leasing	2,774	\$75,173,974	\$1,014,403,217
54: Professional, Scientific & Technical Services	4,759	\$321,120,791	\$635,332,722
55: Management of Companies and Enterprises	1,339	\$109,906,365	\$266,771,549
56: Administrative Support & Waste Management & Remediation Services	6,089	\$215,024,399	\$439,116,561
61: Educational Services	831	\$25,529,664	\$45,145,990
62: Health Care & Social Assistance	9,719	\$621,679,777	\$1,319,822,444
71: Arts, Entertainment and Recreation	1,026	\$17,317,520	\$64,834,474
72: Accommodations and Food Services	4,426	\$97,071,486	\$274,407,056
81: Other Services (excluding Government)	4,805	\$163,648,133	\$357,732,872
92: Government / Public Administration	1,164	\$75,437,465	\$180,527,880
<b>Total All Sectors</b>	<b>79,991</b>	<b>\$4,824,325,623</b>	<b>\$29,395,425,815</b>

Though this study's primary purpose is to estimate the economic impact of MASC member firms, contextual data on the entire maritime cluster in South Carolina is reported in the next section of this document to provide a

more comprehensive picture of the importance of this industry statewide. For purposes of this study, data presented are *based on the types of firms which are members of the Maritime Association of South Carolina*.

## Maritime Industry in South Carolina

South Carolina’s maritime history goes back to its establishment as one of the United States’ thirteen original colonies, and its coastal cities have served as important seaports for international trade since then.

Today, the maritime industry in South Carolina continues to be integral to the state’s economy and serves as an important economic link between South Carolina and the rest of the world. South Carolina exporters sold \$34.6 billion in products in 2018 to more than 195 countries across the globe. Further, a total of [\\$70 billion worth of goods](#) made all over the world were shipped through Charleston’s seaport district in 2017 (\$25 billion in exports; \$45 billion in imports), ranking it in the nation’s top ten seaports and solidifying the state’s significance in global maritime commerce.

As described earlier, this study not only estimates the MASC’s economic impact but also exhibits pertinent data on all South Carolina establishments which are or may be engaged in maritime commerce in some fashion. Sector data exhibited are based on the types of firms which are members of MASC. The statewide data below are aggregated into two groups: 1) **maritime-intensive** sectors (such as ship building) and 2) **secondary or support** services (those which engage in or support maritime-related business activities at least part of the time). Some individual firms in the secondary or support sectors may actually be maritime-intensive, as they provide maritime-supporting services or products 100% of the time, but the data available by NAICS code for these sectors are not separable beyond what is reported below.

**Maritime-intensive firms** in South Carolina total at least 2,300, with more than 32,000 direct employees and \$1.5 billion in payroll:

<b>South Carolina Maritime-intensive Sectors (NAICS Codes)</b>	<b>S. C. Firms</b>	<b>S.C. Employment</b>	<b>Total Annual Wages in S.C.</b>
1125: Aquaculture (Fish farms, Shellfish farming, etc.)	4	12	\$311,596
1141: Commercial Fishing	7	10	\$410,429
3117: Seafood Product Preparation and Packaging	3	not disclosed	not disclosed
336611: Ship Building and Repairing	12	521	\$32,292,939
336612: Boat and Yacht Building and Repair	23	2,477	\$107,078,193
424460: Fish and Seafood Merchant Wholesalers	22	170	\$7,440,338
441222: Boat Dealers and Retail Marine Suppliers	100	1,155	\$46,062,100
445220: Fish and Seafood Retailers	58	331	\$8,529,410
483: Water Transportation (including freight and passenger)	45	340	\$25,616,119
484: Truck Transportation	1,661	21,422	\$1,005,316,865
4872: Scenic and Sightseeing Transportation via Water	48	245	\$7,169,456
4883: Support Activities for Water Transportation (including but not limited to port and harbor operations and marine cargo handling)	52	2,178	\$110,397,249
4885: Freight Transportation Arrangement	203	2,766	\$139,179,223
713930: Marinas and Boat Clubs	76	748	\$17,638,210
<b>Total</b>	<b>2,314</b>	<b>32,375</b>	<b>\$1,507,442,127</b>

*Source: U.S. Bureau of Labor Statistics’ 2017 Census of Employment and Wages for South Carolina.*

South Carolina firms in **secondary maritime sectors or support services** total more than 27,000 and employ more than 370,000. In addition, there are more than 6,000 manufacturers statewide who export their goods, engaging in maritime activities as they make their products available to overseas markets (see tables on next page). Though not all of these firms are members of the MASC, this additional data helps to demonstrate the far-reaching significance of maritime commerce across the state of South Carolina.

<b>Secondary Maritime Sectors and Support Services (NAICS Codes) Based on Types of Firms which are MASC Members</b>	<b>S. C. Firms</b>	<b>S.C. Employment</b>	<b>Total Annual Wages in S.C.</b>
237990: Other Heavy & Civil Engineering Construction (including bridges and other marine facilities)	179	2,146	\$115,902,436
23899: Other Specialty Trade Contractors (including shoring construction and crane rental with operators)	1,111	5,054	\$229,760,622
423830: Industrial Machinery and Equipment Merchant Wholesalers (including commercial fishing equipment and supplies, cranes, etc.)	480	4,423	\$311,551,837
423860: Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers (including ship and marine supplies)	36	152	\$13,311,852
423910: Sporting and Recreational Goods and Supplies Merchant Wholesalers (including recreational boating and fishing supplies)	108	889	\$45,080,388
48211: Rail Transportation	# not disclosed	1,000+	\$70,000,000
4931: Warehousing and Storage	336	21,344	\$795,068,622
522 & 523: Banking and Financial Services	4,334	39,973	\$2,726,409,236
524126: Direct Property and Casualty Insurance Carriers (including marine)	153	1,663	\$126,921,049
524130: Reinsurance Carriers (including marine)	20	207	\$17,453,782
531: Real Estate and Property Management	4,421	21,137	\$923,369,954
5411: Legal Services	2,706	14,297	\$1,025,032,550
54133: Engineering Services (including marine and maritime technology)	1,243	16,022	\$1,330,178,756
5415: IT/Technical Support Services	3,268	15,461	\$1,432,806,728
5416: Specialty Consultants	3,519	16,880	\$1,185,415,340
541990: Other Professional and Technical Services (including marine surveyors)	1,265	4,017	\$240,630,021
5613: Staffing Firms	1,667	72,604	\$2,072,553,024
5629 Remediation, Materials Recovery and Other Waste Management Services	227	1,544	\$71,094,166
611310: Colleges, Universities and Professional Schools/Training	141	10,795	\$446,979,426
621999: Ambulatory Healthcare Services	165	1,036	\$46,494,081
712110: Museums (including naval and maritime)	34	600	\$14,000,819
8139: Other Associations and Organizations	676	4,357	\$200,857,518
92: Public Administration/Government (local, state and federal)	1,849	114,483	\$1,209,948,167
<b>Total</b>	<b>27,938</b>	<b>370,084</b>	<b>\$14,650,820,374</b>

Source: U.S. Bureau of Labor Statistics' 2017 Census of Employment and Wages for South Carolina.

South Carolina Manufacturing Exporters	Firms	Direct Export-supported Jobs	2018 Export Value
NAICS 31, 32, 33: Manufacturing	6,119	44,609	\$34.6 billion

Sources: International Trade Administration Exports Report and Brookings Export Monitor for South Carolina, 2018.

## **Methodology**

Using survey results from Maritime Association members regarding the size of their organization, plus publicly available databases and government sources, the Charleston Metro Chamber of Commerce’s Center for Business Research was able to estimate the Maritime Association of South Carolina’s impact statewide with the IMPLAN model customized for South Carolina. All estimates are conservative due to various methods such as using only known local employment levels when statewide levels were unknown, as well as other explicitly mentioned assumptions expressed within the main study text.

To accurately measure the total economic impact of any entity or event, any “leakage” of dollars or expenditures outside the geographical area for which the impact is being measured must be taken into account. The resulting impact or “output” is the total net value of *direct* economic contribution of an entity or occurrence in a geographic location in terms of the value of goods and services produced in a given time period, plus the *indirect* and *induced* value of goods and services demanded by that region’s economy as those *direct* expenditures “turn over” in a region.

For example, Company A pays wages to its employees who in turn, use those wages to pay for housing, food, entertainment, auto repair services, etc. within the region (*induced spending*). A portion of those wages spent for rent/mortgages, at grocery stores and restaurants, at entertainment venues and at auto repair shops, in this example, then go toward paying those establishments’ employee wages as well as other company expenditures, and the dollars continue to “turn over” this way within the region’s economy until leakage occurs—i.e. the dollars are eventually spent outside the region during travel, catalog purchases, etc. Similarly, Company A may incur other local spending besides its own payroll such as at local office supply stores, caterers, accounting firms, etc. (*indirect spending*). Company A’s spending translates into more local demand (spending) as those dollars “turn over” in the local economy or are used to pay for wages and operational expenditures at other local firms. The sum of these effects prior to leakage include the *direct* spending plus the *indirect* and *induced* spending, or *total output* of the economic event being examined.

IMPLAN uses federal sources such as the U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis, and others, which supply local data and relational matrices updated at least annually and which estimate how sectors are interconnected and how they interact with each other during local economic activity (More detail here: <http://blog.implan.com/economic-data-sources>). Huntersville, N.C.-based IMPLAN’s input-output modeling system is currently used by more than 2,000 private and public entities, and thus is the most widely employed and accepted regional economic analysis software for predicting economic impacts (<http://implan.com/>).

## **The Center for Business Research**

The Center for Business Research, founded in 1990 as a department of the Charleston Metro Chamber of Commerce, compiles, analyzes and distributes economic information on the Charleston region (Berkeley, Charleston and Dorchester counties) of South Carolina. Conducting both primary and secondary research, the CBR is a resource for unbiased statistics in the business and economic arena. The work of the CBR has been recognized nationally through numerous awards and presentations. For more information, please contact the Center for Business Research at the Charleston Metro Chamber of Commerce at (843) 577-2510.

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